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**Yaqona (*kava*) and education in Fiji:  
Investigating ‘cultural complexities’  
from a post-development perspective.**

A thesis presented in partial fulfilment of the requirements for the degree of

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## *Ai Vakananumi (Dedication)*

*Na vakadidike ogo sa votai kivei ira na turaga na Tui Rauni (Turaga ni Yasana: Natokalau, Korovou kei Busa, Yawe, Kadavu) sa bale, Sivorosi Tomasi Vasu (1927-2009), na turaga au vakatokai ira me ra tamaqu, sa ka levu kina na noqu rokova na nodra i tutu vakatama. Na nodra bula sa i yaloyalo titobu ni veivakaturagataki kei na i vakarau ni bula dina vakaViti.*



This thesis is dedicated to the late *Tui Rauni* (sub-district chief: Yawe, Kadavu, Fiji) Sivorosi Tomasi Vasu (1927-2009), a father figure I greatly respected and a man who demonstrated to me what it is to be chiefly and Fijian.

## *iVakamacala Taumada (Abstract)*

*Na gunu yaqona se tiki ni itovo vakavanua e Viti ena gauna qo. Ia e vica na itukutuku se bera ni vakadeitaki e vakaraitaki kina ni gunu yaqona vakasivia e dau vakaleqa na cakacaka kei na toso ena levu ni sikele. Na leqa qo e tara sara na vuli, na ka e okata na matanitu me gacagaca bibi ena veivakatorocaketaki. Sa mani lomalomaru a kina na Tabana ni Vuli ni dau dokai kina na yaqona ena itovo, qai leqataki tale de vakataotaka na toso ni vuli ni qaravi vakaca kina na veivakavulici. Qo gona na vakadidike ni veidre vou ni gauna qo.*

*Na vakadidike qo era a dikevi kina na qasenivuli nira se qai curu yani i valenivuli ena mataka ni oti mai na gunu ena bogi. Ni salavata kei na itukutuku tale eso ni noda itovo sa via macala kina ni gunuvi sivia ni wainivanua qo e vakaleqa na cakacaka, vakavuna vakalevu tale ga na bera kei na vakalutu cakacaka. Qo e rawa ni tukuni ni vakaleqa na inaki raraba ni veivakatorocaketaki. Ia e veicalati kei na nodra ivakamacala eso ra vakatarogi ena vakadidike qo, mana ni veivakavulici e vakatau ena yaqona baleta ni wainivanua qo e yavu ni noda itutu vakavanua, koya e gadrevi me mana kina na vuli, qai tokona tale ga na veiwekani ni matanitu kei na vanua (State/Community partnership), na veitauriliga e yavutaki vakabibi ena cau ni vanua ena cakacaka kei na ilavo me cici kina na koronivuli.*

*E taurivaki ena vakadidike qo e dua na yavu vou me dikevi kina na veidre ni itovo vakavanua kei na tosoiliu. Sa biu na rai makawa eso me vaka na ‘modernisation’, na ‘alternative development’ kei na ‘neo-liberalism’, me golevi na ‘post-development’ – na veivakatorocaketaki e yavutaki e dokai kina na vuku ni vanua, kauaitaki kina na domodra na lewenivanua kei na nodra itovo. Na rai vou qo e sega ni baleta na saumitaro se me togoraki ni iwali ni leqa, se ganita dina se sega, na tikina au vakabauta ni malumalumu kina na itovo makawa ni veivakatorocaketaki sa mai matau tu. Na vakadidike qo e lewena na vua ni vakadidike me mana kina na ivakarau ni lewa e so, salavata kei na kerekere ni Tabacakacaka ni Vuli me tosoi na vakadidike ni veiwekani ni itovo kei na vuli. E vakaraitaki tale ga e ke na leqa e rawa ni yaco ni yali na noda itovo, baleta ni dikevi ga na mataqali veidre qo ena rai vakavalagi.*

## Abstract

Embedded practices and systems associated with the consumption of *yagona* (known Pasifika wide as *kava*) continue to express and demonstrate culture in contemporary Fiji. However, a number of untested reports suggest the over-consumption of *yagona* manifests a physical hangover effect which inhibits productivity and development. This concern extends to the education arena where the Fiji Islands Government has embraced this development input to aid their national development agenda. This has created a unique challenge for the Fijian Ministry of Education (MoE) which both acknowledges the cultural importance of *yagona*, but questions whether the over-consumption of this indigenous substance is impeding academic achievement through impacts to quality education delivery. This study investigates this unique traditional/contemporary tension.

To explore these hangover assertions, teachers in this research were cognitively assessed as they entered the classroom to teach in the morning following *yagona* consumption. Together with ethnographic reports, the findings suggest that the over-consumption of this indigenous substance does inhibit work performance and increases the likelihood of lateness, absenteeism and presenteeism. From a development perspective this is argued to negatively impact on national development goals. However, the achievement and delivery of education was conversely described by research participants as dependent on *yagona*. This is because the indigenous substance is critical to the identity reinforcement which aids academic accomplishment, while also underpinning the State/Community partnership – a union that relies heavily on community labour and financial input for school survival.

This study utilises *Vanua* Research – a post-development aligned framework – to investigate this unique traditional/contemporary tension. In contrast to the development approaches of modernisation, “alternative development” and neo-liberalism, post-development endorses locally conceived and driven development systems by recognising and legitimising traditional knowledge systems, local voices and

culture. Moreover, post-development is not about coming up with answers or imposing a way ahead, an aspect deemed to be a key weakness of many of the conventional one-size-fits-all hegemonic development approaches. Instead, this study presents the findings to aid local decision-making processes under the MoE's call for further research on the relationship between culture and education. Further, this investigation highlights the dangers to socio-cultural stability from cultural loss and displacement when complexities of this nature are considered purely from a Eurocentric development perspective.

## Vakavinavinaka (Acknowledgement)

*Na vakadidike oqo e dikeva na bula vakaivakarau ni yaqona, kena gunuvi na yaqona mai vei ira na qasenivuli, kei na kena vakilai e na gauna ni veivakatavulici e koronivuli. Oqo e dua na ulutaga titobu ka na rogoci kina na domodra era tokona ka vaka talega kina o ira era saqata na uto ni vakasama oqo. Au vakatutusa raraba vei kemuni kece sara o ni nanuma niú na vakalewai kemuni me baleta na nomuni dau gunuva na yaqona. E sega ni o koya qori na i naki ni vakadidike qo. Na i naki levu ni i vola qo me vakarabailevutaka e dua na ulutaga ka se sega soti ni levu na kena vakadikewi me yacova mai ni kua, vaka talega kina me na solia vei ira na lewe ni vanua e so na i vakamacala dina me vukena na kena veitalanoataki mai vei ira era vakaitavitaki ira se taleitaka na veika e baleta na veivakatorocaketaki ena veika vakavuli.*

*Era vakaitavi ena ena vakadidike qo e so era solia wale tuga na nodra gauna, ia ena vuku ni veivakadonui taumada ena maroroi na kedra I tukutuku. Ke a sega na nodra lomasoli, veivakabauti kei na dina ke a sega ni rawa na vakadidike oqo.*

*Au via cavuta talega na noqu vakavinavinaka vua na Minisita ni Vuli e Viti, Mr. Filipe Bole, na i vukena ni Vunivola Tudei ni Tabacakacaka ni Vuli vakacegu, Mr. Filipe Jitoko, kei Qasenivuli Joji Qaranivalu, ena tabana ni vakadidike ni Tabacakacaka ni Vuli (MoE), ena nodratou solia na nodratou veitokoni ena vakadidike oqo. Au via vakavinavinakataki ira talega na noqu i tokani voleka ena nodra veivosakitaka ka vakaraitaka rawa vei ira na nodra qasenivuli liu na veika e baleta na noqu veisiko, ni'u vulagi ga, ka'u vakataroga e so na taro dredre na kena i sau. Au na sega sara ni guilecavi kemuni rawa. Na noqu vakavinavinaka ceckia talega vei kemuni kece sara na Qasenivuli Liu ena nomuni lomasoli ena kena dolavi tu na nomuni koronivuli, nomuni veitokoni ena dikevi ni ulutaga bibi oqo ka tiki ni nomuni bula vakaivakarau. Na vakavinavinaka levu talega vei kemuni kece sara na maroroi au voli ena nomuni dui vale kei na loma ni bai ni koronivuli ena noqu moce, kana ka vakauasivi e na noqu vakagunuvi ena wai ni vanua, dina ga ni so e vica walega na auwa ka so tale e vica vata sara na siga.*

*Na noqu vakavinavinaka ceckia vua na Dauraivuli Liu (SEO), Qasenivuli Serupepeli Udre (Mau, Namosi) kei Qasenivuli Sekove Degei (Visama, Nakelo) ena School of Language, Arts & Media, Universiti ni Ceva ena nomudrau veivakaitaukeitaki, veikauwaitaki, yalovinaka kei na veidusimaki, sega ni guilecavi kina na veigauna ni dau vakavulici au kina ena I vakarau duidui, na i tuvatuva kei na itovo e okati ena bula vakaitaukei e Viti. Au via kacivaka talega e ke na veivuke levu nei Ro Misiwaini Qerequeretabua (Navolau, Naitasiti), na i Liiliu vakacegu ni iTaukei Institute of Language and Culture qai lai liiliu ni Fiji National Archives yacova nona mai leqa. E dau tu vakarau ena gauna tauoko me dau vuksi au ka'u na guiguilecava dredre na nodra i vakasala momona kei na veitokani vinaka.*

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# Glossary<sup>1</sup>

<i>arevareva</i>	Term for <i>kava</i> dermopathy in Tahiti (Oliver, 1989:302). See <i>kanikani</i> .
<i>'ava</i>	Name for <i>kava</i> in Sāmoa and Tahiti. See <i>yaqona</i> .
<i>'ava-ava</i>	One of several names for <i>kava</i> in Tahiti. See <i>yaqona</i> .
<i>'awa</i>	Name for <i>kava</i> in Hawaii. See <i>yaqona</i> .
<i>bachelor</i>	See <i>cauravou</i> .
<i>badge of honour</i>	A colloquialism referring to <i>kanikani</i> (the skin condition that manifests as a result of high <i>yaqona</i> consumption). This term infers a sense of masculinity, and can indicate a person's stature in being able to competitively consume vast quantities of <i>yaqona</i> , or simply indicates that a person has the ability to drink large amounts of the beverage (Aporosa, 2008:78-9). Also see <i>kanikani</i> .
<i>bati</i>	Literally meaning 'warrior', a traditional soldier of the chief.
<i>Bantu beer</i>	See <i>kaffir</i> .
<i>Bauan Fijian</i>	The dialect of those from the chiefly island of Bau, a term frequently and incorrectly used to mean the common/national dialect of Fiji. See <i>vosa vakabau</i> .
<i>bete</i>	Traditional priest.
<i>betel</i>	Also known as betelnut and <i>buwa</i> . This reddish-yellow fruit grows on the areca palm tree ( <i>Areca catechu</i> ) and is an indigenous substance of Papua New Guinea (PNG).
<i>bilo</i>	A cup made from a coconut shell. Called a <i>shell</i> in Vanuatu.
<i>black-belt</i>	See <i>grog swiper</i> .
<i>bole</i>	Literally meaning 'to challenge'. The word has historical origins in challenging rituals performed between warriors prior to combat (Clunie, 1977:40). One of its uses in contemporary Fijian society is to describe playful challenging during <i>yaqona</i> sessions. Also see <i>grog fighting</i> .
<i>bolei</i>	Literally meaning 'to be challenged'. See <i>bole</i> .
<i>buai</i>	See betel.
<i>buli</i>	Cowry shells attached to the <i>magimagi/sau</i> . <i>Buli</i> denotes 'chiefliness'.
<i>bush-beer</i>	An alcohol brewed by from oranges Raratongan's and used in a pseudo-traditional practice which carries with it many of the appearances of traditional <i>kava</i> use.
<i>cauravou</i>	Literally meaning 'bachelor', an unmarried male over 18 years old.
<i>chemotype</i>	The chemical composition of a plant.

<sup>1</sup> This glossary contains a large number of *vosa vakabau* (common Fijian language) words that I know and use. In a small number of cases words were sourced from Capell (1991), *A new Fijian dictionary*.

<i>cobo</i>	Clapping as a mark of respect.
<i>coca</i>	The leaf of the <i>Erythroxylum</i> plant, chewed for centuries by the Indians of the Peruvian and Bolivian Andes (Cherry, 2002:59).
<i>dabe</i>	Literally meaning ‘sit’.
<i>dari</i>	<i>Tanoa</i> ( <i>kava</i> bowl) made from <i>lapita</i> pottery.
<i>din maaro</i>	A <i>Fiji Bāt</i> word literally meaning ‘to relax, killing time, socialising’ (Prasad, 2009:171).
<i>Diwali</i>	Hindu festival of lights.
<i>dokadoka</i>	A person with an arrogant and/or condescending attitude.
<i>drau ni kau</i>	Literally meaning ‘sorcery, witchcraft’. Also see <i>vakatevoro</i> .
<i>drug half-life</i>	The amount of time it takes for the potency of a drug in the body to fall to half its strength (Julien, 2001:17).
<i>dry isevusevu</i>	The exclusion of the consumption of aqueous <i>yaqona</i> that typically follows the traditional presentation of <i>waka</i> (Aporosa, 2008:37).
<i>elimination half-life</i>	The time it takes for the potency of a drug to decrease by half in the bloodstream (Julien, 2001:19-20).
<i>'evava</i>	One of several names for <i>kava</i> in Tahiti. See <i>yaqona</i> .
<i>faikava</i>	<i>Kava</i> consumption by Tongan commoners, or denotes purely recreational consumption.
<i>Fijian</i>	Person of Indian decent formerly known as Fiji-Indian or Indo-Fijian (Government of Fiji, 2010).
<i>Fiji Bāt</i>	Also known as ‘Fiji Hindi’, the common/national <i>Fijian</i> dialect, comprising a blend of Indian Hindi, Tamil, Teluga and Malayalam and developed during the indenture period (Mugler, 2004:247).
<i>gámada</i>	One of several names for <i>kava</i> in Papua New Guinean. See <i>yaqona</i> .
<i>Girmityas</i>	The indenture period, 1879 and 1916, when over 60,000 Indian labourers were brought to Fiji (Mugler, 2004:247).
<i>gonedau</i>	The traditional role of fisherman, belonging to the fisherman clan. Also be known as <i>kai wai</i> .
<i>grog</i>	A colloquialism referring to aqueous <i>yaqona</i> , adapted from the <i>grog</i> (rum) ration given to the sailors who visited Fiji prior to colonization (Norton & Ruze, 1994:10; Geraghty, 1996).
<i>grog-doped</i>	A colloquialism referring to <i>yaqona</i> intoxication (Aporosa, 2008:38). It is also used when referring to the lethargic effects of a <i>yaqona</i> hangover. Also see <i>mateni</i> , <i>lomaloma ca</i> .
<i>grog fighting</i>	A colloquialism referring to competitive, non-aggressive <i>yaqona</i> drinking (Aporosa, 2008:69,82). Also see <i>bole</i> .
<i>grog swiper</i>	A colloquialism referring to a person who habitually consumes large quantities of <i>yaqona</i> (Aporosa, 2008:22). Also known as a <i>heavyweight</i> or <i>black-belt</i> .
<i>Gujarati</i>	The free migrants who entered Fiji after the indenture period to pursue business opportunities (Brison, 2011:232).
<i>gunu</i>	Literally meaning ‘to drink’.

<i>gunu sedi</i>	Literally meaning ‘drinking [ <i>yaqona</i> for] cash’ (Toren, 1999:37-8).
<i>gunu taudua</i>	Solo <i>yaqona</i> consumption, believed to comprise an act of witchcraft. Also see <i>vakatevoro</i> .
<i>heavyweight</i>	See <i>grog swiper</i> .
<i>hot-stuff</i>	A colloquialism referring to alcohol.
<i>ibe</i>	Mat woven from the <i>voivoi</i> plant.
<i>ibou</i>	A fibrous strainer made from the branch of the <i>vau</i> ; Hibiscus tree, and use for straining aqueous <i>yaqona</i> .
<i>i cake</i>	Literally means ‘up’. At <i>yaqona</i> sessions often refers to ‘up in the chiefly position’.
<i>'ilo kava</i>	<i>Kava</i> consumption by Tongan nobility.
<i>isevusevu</i>	The formal presentation of <i>yaqona</i> . <i>i sevu</i> literally means “first fruits, a libation of a small quantity of <i>yaqona</i> poured from the first <i>bilo</i> as an offering to the <i>Vu</i> [ancestral gods]” (Vunidilo, 2006:4).
<i>itovo</i>	<i>iTaukei</i> culture and practice.
<i>iTaukei</i>	“Replaces the word ‘Fijian’ or ‘indigenous’ or ‘indigenous Fijian’... when referring to the original and native settlers of Fiji.” (Government of Fiji, 2010).
<i>kaffir</i>	A traditional beer made from corn and brewed by the South Africa Bantu people (Steinkraus, 1996:408). Also known as <i>Bantu beer</i> .
<i>kahuna</i>	Traditional Hawaiian priest (Titcomb, 1948).
<i>kailoma</i>	A person of mixed European <i>iTaukei</i> ancestry.
<i>kaivalagi</i>	A visitor from overseas.
<i>kai Viti</i>	A person/people of Fiji.
<i>kanikani</i>	Also called <i>kani</i> , referring to <i>kava</i> dermatopathy, a ichthyosis or dry scaly condition of the skin that results from excessive <i>yaqona</i> consumption (Norton, 1998:383). Also see <i>badge of honor</i> .
<i>Kamohoali'i</i>	Hawaiian shark god (Kepler, 1998:8).
<i>Karisito</i>	The Christian Godhead. Also see <i>Kalou Vu</i> .
<i>kastom</i>	Pigeon ( <i>Bislama</i> ) meaning custom (Young, 1995:61).
<i>káu</i>	One of several names for <i>kava</i> in Papua New Guinean. See <i>yaqona</i> .
<i>kava</i>	See <i>yaqona</i> .
<i>kava circle</i>	See <i>yaqona</i> session.
<i>kerekere</i>	Reciprocal system of exchange, traditional form of purchase and transaction.
<i>kavalactones</i>	The active constituent in <i>yaqona</i> (MediHerb, 1994a:1-2).
<i>kawakawa</i>	Also known as <i>Māori kava</i> and <i>kavakava</i> ( <i>Macropiper excelsum</i> ), an indigenous substance of enormous sacred significance to <i>Māori</i> (Bock, 2000:176-7).
<i>kéu</i>	Papua New Guinean name for <i>kava</i> . See <i>yaqona</i> .

<i>kila na iyatu</i>	Literally meaning ‘knowing ones place in the community’, an aspect of <i>vakaturaga</i> .
<i>komatua</i>	<i>Māori</i> elder.
<i>koro</i>	Literally meaning ‘village’.
<i>kosa</i>	<i>Waka</i> ( <i>yaqona</i> root) after being pounded in a <i>tabili</i> , or the ‘leftover’ <i>yaqona</i> once mixed into the aqueous beverage.
<i>kuma-kuma</i>	A gourd made by <i>Māori</i> who boiled and hollowed out a marrow.
<i>kumete</i>	Tongan <i>kava</i> bowl.
<i>lewena</i>	The basal stump of the <i>yaqona</i> plant, considered second (quality) grade <i>yaqona</i> after <i>waka</i> .
<i>lomaloma ca</i>	<i>Yaqona</i> hangover, refereeing to the post-consumptive bodily effects of laziness, lack of energy, decreased motivation, heightened impassivity, generalised carelessness and occasionally interrupted memory recall .
<i>lose</i>	Literally means ‘to mix’, as in mix aqueous <i>yaqona</i> .
<i>lovo</i>	Traditional ground oven.
<i>lua</i>	Literally meaning ‘to vomit’.
<i>maca</i>	Literally meaning ‘finish/finished’, or ‘drained’ when use in conjunction with a fully consumed <i>bilo</i> ( <i>yaqona</i> cup).
<i>mada</i>	A particle used to soften a request or a direction, or as part of seeking permission, similar to ‘please’.
<i>madua rarawa</i>	Literally means ‘shame/hurt feelings’.
<i>magimagi</i>	The plaited coconut fibre rope attached to the <i>matanitanoa</i> (front of the <i>kava</i> bowl). Also called <i>sau</i> .
<i>mana</i>	Power of effect. See Footnote 21.
<i>manuia</i>	Sāmoan term expressing ‘good fortune’. Often said prior to <i>kava</i> consumption (Kallen, 1982:42).
<i>Māori</i>	The indigenous people of <i>Aotearoa</i> New Zealand.
<i>mataisau</i>	Traditional carpenter.
<i>matanigasau</i>	A formal apology accompanied by <i>yaqona</i> .
<i>matanivanua</i>	Herald or spokesman for the chief (Abramson, 1999:270).
<i>matanitanoa</i>	Literally meaning the ‘face of the <i>tanoa</i> ’, the small triangular shaped piece of wood on a <i>tanoa</i> that faces the ‘high’/chiefly position during <i>yaqona</i> consumption.
<i>mataqali</i>	“An agnatically related” group forming part of the larger clan (Ravuvu, 1983:119).
<i>mateni</i>	Short for <i>mate ni yaqona</i> , meaning <i>yaqona</i> intoxication or drunkenness (Hocart, 1929:58). Also see <i>grog-doped</i> .
<i>meke</i>	Traditional Fijian dance.
<i>mesini</i>	An offering of <i>kava</i> made by warriors to deities prior to combat or competition in pre-colonial Tonga (Gifford, 1971:318).
<i>mix</i>	See <i>lose</i> .
<i>myristicin</i>	Chemical found in nutmeg and <i>kawakawa</i> capable of causing psychoactive effects (Bock, 2000:176-7).
<i>na batini tanoa</i>	Literally meaning the ‘edge of the <i>tanoa</i> ’ ( <i>kava</i> bowl), denoting sitting around the <i>tanoa</i> . See <i>yaqona</i> session.

<i>nakamal</i>	A designated area or structure for <i>kava</i> consumption in Vanuatu (Lindstrom, 1987:99).
<i>namaloku</i>	Name for <i>kava</i> in northern Vanuatu. See <i>yaqona</i> .
<i>nekava</i>	Name for <i>kava</i> in southern Vanuatu. See <i>yaqona</i> .
<i>Pasifika</i>	Refers to both the people of the Pacific islands and their “unique cultural perspectives and beliefs embodied in the values, customs, rituals, dance, song, language and cultural expressions” (CreativeNZ, 2012:n/a).
<i>Pasifikan</i>	Term coined by Massey University’s <i>Pasifika</i> division, <i>Pasifika@Massey</i> , and refers to a person/people of Pacific origin.
<i>piala</i>	A small enamel bowl used by <i>Fijians</i> to consume <i>yaqona</i> , similar to a <i>bilo</i> . Also spelt <i>pyala</i> .
<i>pyala</i>	See <i>piala</i> .
<i>qaciqacia</i>	Literally meaning to ‘show off’.
<i>qaravi tavi</i>	Fulfilling obligations, an aspect of <i>vakaturaga</i> .
<i>qito vakaViti</i>	Traditional Fijian games.
<i>qwua</i>	Solomon Islands name for <i>kava</i> . See <i>yaqona</i> .
<i>raupo</i>	Also called bulrush ( <i>Typha angustifolia</i> ), a plant commonly used by <i>Māori</i> for weaving.
<i>rihumae</i>	A Solomon Islands ceremony of remembrance held approximately six months following a death (Fox, 1924:216-17).
<i>rongoa Māori</i>	Traditional <i>Māori</i> medicine (McGowan, 2009).
<i>saka</i>	Literally meaning ‘sir’.
<i>sakau</i>	Name for <i>kava</i> in Phonpei. See <i>yaqona</i> .
<i>sau</i>	See <i>magimagi</i> (as used in this study – can also refer to ‘value’ or ‘power’).
<i>sauturaga</i>	Executives to the chief, the clan that appoints the chief.
<i>seka</i>	Name for <i>kava</i> in Kosrae. See <i>yaqona</i> .
<i>shell</i>	Term used in Vanuatu for <i>kava</i> cup. See <i>bilo</i> .
<i>sosoko</i>	In reference to <i>yaqona</i> means concentrated strength, ‘thick mix’.
<i>sova yaqona</i>	Literally meaning ‘to pour <i>yaqona</i> ’. The ‘pouring’ is a libation to give efficacy to the malevolent spirit/s. Also see <i>vakatevoro</i> .
<i>spoiling</i>	A colloquialism for joking or teasing. Also see <i>veiwali</i> .
<i>steady-state concentration</i>	The achievement of a predicted level of drug accumulation in the body following regular doses (Julien, 2001:19-20).
<i>swiper</i>	See <i>grog swiper</i> .
<i>tabua</i>	Whales tooth as used in ceremonial exchange.
<i>taki</i>	Literally meaning ‘serve’ when used in connection with <i>yaqona</i> .
<i>talanoa</i>	The meeting together of two or more people where information is shared.
<i>Talatala</i>	A consecrated church minister, Reverend.
<i>tanoa</i>	Wooden bowl for mixing <i>yaqona</i> , serving <i>yaqona</i> from.
<i>tanoa poi</i>	<i>Tanoa/kava</i> bowl made from a plastic fishing float.
<i>tatau</i>	Traditional Sāmoan tattooing.

<i>taumafa kava</i>	Ceremonial <i>kava</i> , or <i>kava</i> use in Tonga involving the Tongan Royal Family.
<i>tauvū</i>	A political and social linkage between villages and regions based on traditional religious observance. Those who make up these relational connections frequently refer to each other as ‘Tau’, and their relationships are often “marked by mutual assistance, license, and joking” (Tomlinson, 2002:39).
<i>tavale</i>	Cross-cousin.
<i>tigwa</i>	One of several names for <i>kava</i> in Papua New Guinean. See <i>yaqona</i> .
<i>tikina</i>	Literally meaning ‘district’.
<i>Tui</i>	A king, person holding a chiefly title.
<i>tuki</i>	Literally meaning to ‘pound’, as in crush, when used in relation to <i>yaqona</i> .
<i>tuki na kosa</i>	Literally meaning ‘to pound or re-pound <i>yaqona</i> ’ allowing it to be used again to mix aqueous beverage, although subsequent use reduces the potency (Tomlinson, 2004:657).
<i>turaga</i>	A chief, a respectable term used to address a male or group of males.
<i>'umeke</i>	Sāmoan ‘ava ( <i>kava</i> ) bowl.
<i>vakatevoro</i>	Literally meaning ‘witchcraft’. This is a spiritual mechanism used to bring about a curse and often involves the use of <i>yaqona</i> (Katz, 1993:24). Also see <i>drau ni kau</i> , <i>gunu taudua</i> and <i>sova yaqona</i> .
<i>vakamarama</i>	See <i>vakaturaga</i> .
<i>vakamavoataka</i>	See <i>madua rarawa</i> .
<i>vakarokoroko</i>	Literally meaning ‘humility’, an aspect of <i>vakaturaga</i> .
<i>vakaturaga</i>	“The central [Fijian] ethos” and value system that includes, behaving in a chiefly manner irrespective of ones status, respect, knowing ones place in the community, fulfilling obligations, sharing and caring, and a quiet disposition (Ravuvu, 1987:18-19,319-320). <i>Vakaturaga</i> refers to the observance and practice of this ideal by the male gender: <i>turaga</i> meaning chief/male position holder. <i>Vakamarama</i> is the female equivalent: <i>marama</i> equating to the feminine version of <i>turaga</i> .
<i>vakavinavinavinaka</i>	Literally meaning ‘to show appreciation’.
<i>vanua</i>	Literally meaning ‘the land, its people and traditions’.
<i>Vanua Research</i>	A research methodology developed by Nabobo-Baba (2006:24-36) and employed when the research focus has implications for the <i>vanua</i> .
<i>veidokai</i>	Literally meaning ‘respect’, an aspect of <i>vakaturaga</i> .
<i>veikauwaitaki</i>	Literally meaning ‘caring’, an aspect of <i>vakaturaga</i> .
<i>veitabani</i>	Insinuating ‘retaliation’. When used in reference to relational connections, indicates former enemies. In the contemporary culture the relationship is characterised with gaming, trickery,

	joking, competition, <i>bole</i> , and <i>grog fighting</i> , although this never descends into aggression or confrontation (Tomlinson 2006:13).
<i>veitalanoa</i>	Literally meaning ‘to discuss, discussion’. See <i>talanoa</i> .
<i>veivosoti</i>	Literally meaning ‘forgiveness’, an aspect of <i>vakaturaga</i> .
<i>veivukei</i>	Literally meaning ‘helpfulness’, an aspect of <i>vakaturaga</i> .
<i>veiwali</i>	Literally meaning joking or teasing. Also see ‘ <i>spoiling</i> ’.
<i>veiwasei</i>	Literally meaning ‘sharing’, an aspect of <i>vakaturaga</i> .
<i>vesi</i>	Fijian hardwood used to make <i>tanoa</i> .
<i>voivoi</i>	Leaves of the <i>Pandanus</i> plant used to weave <i>ibe</i> (mats).
<i>vosa vakabau</i>	Literally meaning ‘generalised’ <i>iTaukei</i> language, the common/national dialect. This is often incorrectly referred to as ‘ <i>Bauan Fijian</i> ’, which gives the inference that the national dialect originated from the Fijian chiefly island of <i>Bau</i> (Geraghty, 2007:385) – note uncapitalised letter ‘ <i>b</i> ’.
<i>Vu</i>	Ancestral gods, ancestors and spirits (Katz, 1993:20-21).
<i>waka</i>	The prized root crop of the <i>yaqona</i> plant which contain the greatest levels of kavalactones.
<i>waka kari</i>	<i>Yaqona</i> root with skin scrapped off, removed.
<i>wainivanua</i>	See <i>yaqona</i> .
<i>yalo malua</i>	Literally meaning ‘a quiet demeanor’, an aspect of <i>vakaturaga</i> .
<i>yaqona</i>	A plant, botanically named <i>Piper methysticum</i> (Singh & Blumenthal, 1997:36), and more commonly known as <i>kava</i> in the wider Pacific. <i>Yaqona</i> is considered sacred and can be mixed into an intoxicating beverage creating Fijian’s national indigenous substance. <i>Yaqona</i> is also commonly referred to as <i>wainivanua</i> , literally meaning ‘water of the’ ( <i>waini</i> ) people, land and culture ( <i>vanua</i> ) (Tomlinson, 2009:109).
<i>yaqona circle</i>	See <i>yaqona</i> session.
<i>yaqona session</i>	Also referred to as a <i>yaqona</i> circle, “ <i>kava</i> circle” (Lindstrom, 2004:17; Tora, 1986:30) or <i>na batini tanoa</i> . This is a gathering of two or more persons where <i>yaqona</i> is consumed. This reference is used irrespective of the time duration, or whether the consumption is done for formal or informal reasons.
<i>yavusa</i>	Genealogically, largest kinship group in Fiji.

## List of Abbreviations

CIB	Criminal Investigation Bureau
<i>FNNS</i>	<i>Fiji National Nutrition Survey</i>
GDP	Gross National Product
HOD	Head of Department
IMF	International Monetary Fund
LQA	Labour Quality Index
mgs	milligrams
MoE	Fijian Ministry of Education
MUHEC	Massey University Human Ethics Committee
NGO	Non-Governmental Organization
NLTO	Native Land Trust Ordinance
PMS	Performance Management System
PNG	Papua New Guinea
PSC	Public Service Commission
RPEIPP	<i>Rethinking Pacific Education Initiative for and by Pacific Peoples</i>
SEO	Senior Education Officer
SPSS	<i>Statistical Package for the Social Sciences</i>
UNESCO	<i>United Nations Educational, Scientific and Cultural Organization</i>
US	United States (of America)
USP	University of the South Pacific
VAT	Value Added Tax
WAIS-III	Wechsler Intelligence Scale 3 <sup>rd</sup> Edition
WB	World Bank
WHO	World Health Organisation

# Chapter 1

## The Teacher Who Couldn't Be Bothered

*It was 2005, first period in the morning, and I was standing before 21 eagerly staring faces, fourth formers (year 10) at a school in rural Fiji, as their temporary geography teacher. The students were keen to hear from someone who had actually been to their country of study, New Zealand, unlike their usual teacher who had only read about the place. I stood there mostly staring, caught up in my own dream-world. Although Fiji has embraced education as a key input to their national development and economic growth strategy, with teachers playing a critical role in the delivery of quality education to support that goal, such thoughts and responsibilities were low down in my mind. I had more simple issues to deal with.*

*And so I stood there just staring. I probably could have continued like that all period. None of the students would have said anything. They wouldn't have become agitated or even talked to their neighbour. This is because they had grown up in an isolated, highly traditional environment, where values of respect and hierarchy had not yet been influenced by teen role-models unafraid to openly voice their opinions, let alone challenge their teacher for staring blankly at them.*

*While I stood there I could clearly feel that something was wrong with me. I could distinguish the students' features and recognize most by name. However my vision was slightly distorted, lacking focus especially in the peripheral regions. I could stand ok although that felt slightly surreal, like I was in a semi dream-state. When I moved, my reflexes and motor-skills felt dulled, as though I was walking through water. I could feel a slight tingle in my nerves, kind of like they were clogged; or maybe just fighting to pass information. I could speak if I had to, capable of retrieving simple information like my name, address and my wife's date of birth, but anything deeper was too much of a chore. Basically I couldn't be bothered struggling or trying to push through the foggy haze.*

*I didn't feel euphoric or over emotional; not extra loving or alternatively angry, just nonchalant. Then occasionally I felt as though something had irritated me; just a fleeting sensation, a slight surge of frustration, although this would quickly dissipate. In my case this never heightened to anger like I had seen with others in my condition. I recall thinking, 'if I had only prepared some sort of lesson plan, even a simple guide, it would be enough to get me started... I'm soooo tired! Bed, just for ten minutes; then I'd be ok.' But at the same time I couldn't be bothered walking the sixty odd meters to the three roomed house I shared with the school Chaplin, his wife, their two sons and two relatives. I wasn't hungry either, but not because I felt nauseous. I could eat if I had to, but like teaching and walking, I couldn't really be bothered, which is generally not like me because I'm a healthy eater.*

*Throughout my foggy self-examination the students continued to watch and wait. It wasn't really that surprising to them, they knew the cause of my problem just as I did. I had experienced acute lomaloma ca many times in the past and would do so on innumerable occasions in the future. Both the students and I also knew that I would 'pick-up' around lunchtime, just as long as I didn't return to the 'source' of lomaloma ca before then.*

*The source of this condition that resulted in lomaloma ca was the previous night's activities, just as it had been the three nights prior to that. I, together with a group of teachers, friends and several of my Fijian relatives, had sat cross-legged for approximately six hours in the school hall. In the center of our meeting area had been a large tanoa (wooden kava bowl). At designated intervals we were all served a bilo (coconut shell cup) from this traditional receptacle which had contained the indigenous soporific and sedative-inducing beverage yaqona (kava). I later calculated that on that previous night I had consumed approximately 30 bilos, or around three and half liters of the beverage.*

*This drinking session was not unusual. Yaqona use is a central aspect of my Fijian culture and its related practices, and a daily occurrence in both rural and urban*

*Fiji. In my case I usually tried to finish drinking yaqona before midnight, especially if I had to teach or work the following day. This intention though could be difficult to adhere to for two reasons. Firstly, cultural obligation connected to the use of this indigenous substance prevents consumers from simply leaving at will. Therefore sessions can easily run into the small hours. Secondly, yaqona manifests relaxing effects, masking time and urgency with ideas that ‘tomorrow will look after itself’.... Then, following a peaceful sleep, you stir, not quite fully awake. In your unorganised haze you dress, and together with your peers - some who have been drinking with you only a few hours before - you walk to the classroom, tasked with the responsibility of imparting quality education to your students, young minds who in a few years will be relied upon to aid the country’s national development goals and increase economic growth.*

*People often say, “it’s easy, just stop teachers from drinking yaqona on nights before they teach”. But some things just aren’t that simple...*

## Introduction

There are more than 11,000 plant species currently used for medicinal purposes, with many having their origins in “highly ritualized and ceremonial context[s]” (Beyer, 2007:1; also see Zhou, 2006). Garibaldi & Turner (2004:5) explain that plants and their derivatives that shape cultural identity through spiritual, dietary, medicinal and/or material use are termed “cultural keystone species”. *Yaqona*, more commonly known throughout *Pasifika*<sup>2</sup> as *kava*, is undoubtedly Fiji’s cultural keystone species (Steinmetz, 1960:3). The plant, together with the relaxant soporific substance derived from it, continues to play a critical keystone role in the cultural life-ways in Fiji just as it has done for thousands of years (Aporosa, 2011b). Early colonial policy was instrumental in the continuance of culture in Fiji (Tavola, 1991:152-3; White, 2001:310-11) together with the ongoing use of *yagona*. This is interesting, considering that ‘modernist’

<sup>2</sup> In this study *Pasifika* refers to both the people of the Pacific Islands and their “unique cultural perspectives and beliefs embodied in the values, customs, rituals, dance, song, language and cultural expressions” (CreativeNZ, 2012:n/a). Additionally, this can be alternated with the word *Pasifikan* which refers solely to the Pasifika peoples.

thinking<sup>3</sup> has been a key influence to Fiji's national development agenda. In most other settings the modernist paradigm overtly sought the elimination of "primitive" cultural practices (including indigenous substance use) in favour of "right values" aimed at individuality, capitalist modernity and "economic initiative" (Rostow, 1956:27; also see Durkheim & Pickering, 1975:107-8; Escobar, 1995:43). This led, in many instances, to indigenous substances being singled out and banned in cases where their use was deemed to interfere with or inhibit productivity (see Chapters 2 and 3).

Modernist thinking has also been a key driving force behind education, an input argued to be a "crucial feature" (Webster, 1990:98) to the development of a "healthy, independent, and economically surviving country" (St. Clair Skeet, 2007:31-2). Today education plays a dominant role in Fiji's national development agenda (Subramani, 2000:1), with the Fijian Ministry of Education (MoE) seeking greater educational effectiveness to aid "the total socio-economic and political development of the country" (Williams, 2000:179). Therefore, in light of my opening narrative, which explained the impacts of *yagona* on my ability to teach, colonial policy in Fiji could be criticised for failing to fully apply modernist principals and therefore eliminate cultural practices such as the use of *yagona*. What is more interesting though is that it has only been over the past 15 years that concerns regarding *yagona* use and impacts upon education have been formally raised.

In 2000 the MoE completed a "comprehensive review of Fiji's education system" (Pene, Tavola, & Croghan, 2000:i). This included discussion on a variety of factors believed to both aid and hinder "Fijian Academic Achievement", discussion

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<sup>3</sup> For the purpose of this study modernity and modernist thinking draws in part on Peet & Hartwick's (2009:1) definition in which they explain that "modernity is that time in Western history when rationality supposed it could change the world for the better... [and includes] modern advances in science and technology." Therefore this research broadly considers modernity as having commenced with the industrial revolution and the focus on individuality, capitalist modernity and economic progress (as discussed above), a time marker that stands in opposition to 'traditional', representing the former pre-industrial Westernised agrarian lifeway or the non-industrialised communal subsistence living systems of the countries and nations who were subsequently colonised by the Western industrialised countries.

which included “cultural” values (Williams, 2000:186-8). On one hand, culture was accused of displacing educational importance which led to academic under-achievement. However the report also acknowledged that culture and its associated values play an important role in educational attainment. The association between culture and academic achievement is not unique to the Fijian setting. Academics have argued this link for some time (Oetting & Beauvais, 1990-91:673-4; LaFromboise, Coleman & Gerton 1993:403-4; Oetting, 1993:36; Shaffer & Kipp 2010:407-8) with Teasdale & Teasdale (1992a:1), suggesting that “the loss of culture is at the heart of our educational and social problems”. These conflicting reports regarding culture and educational attainment prompted the MoE to request further research on the “relevance of Fijian values and... culture to the current education system” (Williams, 2000:188). This thesis is, in part, a response to that request.

## What this Study Will Do

This study will focus on the relationship between two specific elements identified within the MoE’s review as having a negative impact on education. These are “*yaqona* drinking” and “bad teaching” (Williams, 2000:187). In their report, the MoE categorised “*yaqona* drinking” under the broader heading of “Cultural” factors. While this study will also consider some of the wider cultural aspects, these will specifically be those related to *yaqona* use and practice. In the case of “bad teaching”, the MoE classified this under “Institutional” factors. This study will enlarge on this and reconceptualise “bad teaching” from the broader perspective of *quality education delivery*. This complies with wider discussion in the MoE review, which suggested “quality of teaching” (Williams, 2000:215) could be disrupted by a variety of aspects which included cultural factors (such as *yaqona* drinking), which in turn had led to “bad teaching”. This study will not however solely consider the negative perspectives, but will also investigate positive aspects of *yaqona* and its related culture to quality education delivery.

Academics have shown quality education delivery is foundational to academic

achievement (Fraser, 2008:1; Hall, 2008:221,225; Sewell & St. George, 2008:204). As such, successful education, which is “deemed the strongest driving force of development” (St. Clair Skeet, 2007:31; also see Voigt-Graf, 2003:163), has a critical role in Fiji’s national development agenda (see Chapter 4). For the purpose of this study I regard quality education delivery as an invention of modernity (as defined in footnote 2) utilised to assist the achievement of national development. Alternatively, *yaqona* – Fiji’s “cultural keystone species” and its related use systems – is deemed to fall under the rubric of ‘traditional’, with its foundations in several thousand years of *Pasifika* tradition (see Chapters 3 and 5).

Throughout this thesis, these two elements, *yaqona* use and quality education delivery, will be discussed as representing a tension between traditional Fijian cultural practice and the contemporary pursuit of development informed by education. The MoE allude to the existence of this traditional/contemporary tension in their 2000 review. They stated, “*Yaqona* drinking is important in ceremonial Fijian culture and social gatherings” but then followed this statement with concern that “excessive consumption of *yaqona* is becoming a problem... it substantially inhibits performance of duties in non-traditional professional environments, including the civil service and teaching” (Tavola, 2000:169, emphasis added). In this comment the MoE reflect the complexities discussed in my opening narrative, where I briefly mentioned the central role *yaqona* plays in culture, together with the related aspects of obligation. That narrative also exemplifies the tension that has resulted from the use of *yaqona* and attempting to teach following usage of the traditional substance. Finally, my narrative suggested that remedying this tension was not “*simple*”, an aspect also acknowledged by the MoE, who recognise the cultural importance of *yaqona* while simultaneously reporting concerns regarding its impact on education.

This is both an important and complex topic, one that could be argued to result in a no-win situation. For instance, if the ‘culture of *yaqona*’, or the traditional practices that inform the use of this “cultural keystone species”, were to be given priority over education, this would potentially hamper quality education delivery,

promote academic under-achievement and ultimately inhibit national development. Alternatively, if *yaqona* was to be nationally prohibited or banned within the educational arena for the explicit purpose of preventing impacts on education delivery in order to facilitate academic achievement and concomitantly national development, this would subjugate the cultural expression and identity which academics have argued is vital to academic achievement and successful development (UNESCO, 1995:20; Eade, 2002:x-xi; Schech & Haggis, 2008:50). This again illustrates the complexities associated with this traditional/contemporary tension.

Additionally, this apparent no-win situation serves as an example of why the MoE requested further research on the “relevance of Fijian values and... culture to the current education system”. However, it was not until several years later that the specific theme of *yaqona* and education was first examined. That inquiry comprised my 2008 Master’s study. According to a senior Fiji-based academic, previous attempts had been considered although had met with opposition from a number of quarters, including the MoE. The informant stated that such an investigation was deemed “contentious” as it had the potential to present *yaqona* and its users in a negative light, a finding that was considered inappropriate due to *yaqona*’s cultural keystone position (cited in Aporosa, 2008:22). This again highlights the complexities associated with investigating this traditional/contemporary tension, intricacies that have implications for both culture and development in Fiji. My Master’s study utilised *Vanua* Research (Nabobo-Baba, 2006; see Chapter 6), an indigenous Fijian methodological framework and focused on a rural school. The MoE received a copy of my study in 2008. This resulted in a request for a nation-wide study investigating the themes of this tension from the perspective of all teaching environments in Fiji (see p.170). The present study is a response to that request and as stated, focuses specifically on the themes of *yaqona* and education delivery. Therefore this investigation is not intended to solve academic under-achievement in Fiji, seek cause-and-effect conclusions and outcomes or provide a wide-sweeping investigation of all of the factors identified by the MoE in their 2000 review. Rather, it focuses solely on the tension that appears to have resulted between *yaqona* (and the related *yaqona*

culture) and education delivery in Fiji. In the next section I will introduce the theoretical rationale that supports this approach.

## Untangling the ‘Tension’

Key to investigating the traditional/contemporary tension which focuses on *yaqona* and education is again the indigenous Fijian research framework of *Vanua* Research, which resonates with the evolving ideology of post-development. Some proponents of post-development argue that all introduced development paradigms are little more than hegemonic systems aimed at subjugating local culture and traditional knowledge systems through power inequities and control structures (Peet & Hartwick, 2009:226-7). They suggest effective development is more likely to occur when initiated and theorised through local cultural systems (Escobar, 1995a:98, Horn, 2000:34; McEwan, 2009:229) with external processes utilised and managed solely at the discretion and under the control of the local (Radcliffe, 2006:17-8). Essentially post-development is concerned with local-level empowerment, self-determination and decision-making, aspects that counter hegemony and power inequities argued to be prevalent within the conventional development agenda (Anacleti, 2002:168; Kakimow, 2008:321; Peet & Hartwick, 2009:197-8). Guided by a *Vanua* Research framework and post-development theory, this study will provide research on the “relevance of [an aspect of] Fijian values and... culture to the current education system” to assist local-level decision making processes. This in turn supports a primary aim of post-development, namely self-determination and empowerment by emphasising local systems, knowledge and priorities.

Although this thesis focuses on *yaqona* and education from the Fijian context, it nevertheless has wider application. *Yaqona, kava, ‘ava, ‘awa, sakau, tigwa, kava qwua, kèu, káu, gámada, namaloku* and *nekava* are used widely across the Pacific from Papua New Guinea (PNG) to Hawaii. This includes New Zealand, a place where some of my *Pasifikan* teacher friends regularly consume large quantities of the indigenous substance on nights prior to work (personal observation, 2000-2012). Additionally, this

study offers insights into the use of culturally embedded substances from a post-development perspective which, to date, has been silent on this theme. This is surprising considering the importance post-development places on culture and local systems. While I will explain this fully in Chapter 3, modernist thinking sought the complete eradication of, or situational bans on, indigenous substances which were viewed as a hindrance to modernist pursuits and believed to negatively impact productivity and socio-cultural stability. Conversely, alternative development practitioners recognise the usefulness of indigenous knowledge and substances in facilitating aspects of Western-initiated and -directed development processes (Slikkerveer & Slikkerveer, 1995:25-6; McEwan, 2009:198). Similarly, the value of local herbal medicines have also been acknowledged in “World Bank-promulgated neoliberal health care reform[s]” (Winkelman, 2009:323).

### **Research Questions**

The following research questions will be used to aid in untangle the traditional/contemporary tension:

1. What are the *yaqona* consumption habits of Fijian teachers, and what role does culture play in this?
2. Does *yaqona* impact teacher cognition, sickness and absenteeism and if so, what effect does this have on education delivery?
3. Does *yaqona* play other positive roles in the school environment and if so, what action should be taken regarding teacher *yaqona* use, considering that *yaqona* is central to culture?

### **The Language of the Thesis**

#### **Kava, Yaqona and Kava**

The terms *yaqona* and *kava*, the latter both italicised and un-italicised, are used throughout this thesis. *Kava*, in most cases, refers to the plant, indigenous substance or pharmacological derivative outside of the Fijian setting. *Yaqona* refers to *kava*

within the Fijian environment, although is occasionally substituted with the word *kava* and/or *grog* (the Fijian colloquialism for *yaqona*) by some research participants and commentators. *Kava* (un-italicised) tends to be the predominant style used in literature as opposed to *kava* or *yaqona* (italicised). When quotes have been drawn from literature, *kava/kava* will be presented in its original format. Further, *yaqona*, *kava* or the other traditional preparations discussed in this study will not be referred to as ‘drugs’. It is believed that this terminology gives a negative connotation and is often associated with ‘drug abuse’. This thesis focuses on *yaqona* and, to a lesser extent, four other indigenous substances and their use primarily within their cultural settings. Durrant & Thakker (2003:52) argued use patterns of these substances do not equate to contemporary understandings of drug abuse, a theme I will expand on in Chapter 3.

### **Fijian, *iTaukei* and *Fijian***

Ethnic identifiers will comply with the 2010 Fiji Public Service Commission memo which “effectively replaces the word ‘Fijian’ or ‘indigenous’ or ‘indigenous Fijian’, with the word ‘*iTaukei*’... when referring to the original and native settlers of Fiji.” (Government of Fiji, 2010, see Appendix A). Although the decree stipulates that all other citizens of Fiji will now be called ‘Fijians’, the italicised form of *Fijian* used in this study will indicate those Fijians of Indian decent formerly known as Fiji-Indians or Indo-Fijians. The non-italicised word *Fijian* will be used in the generic, referring to all ethnicities collectively whether *iTaukei*, *Fijians* or others.

### ***iTaukei* and *Fijian* Linguistics**

In this study the *iTaukei* language is termed *vosa vakabau* (meaning ‘generalised’ *iTaukei*) as opposed to ‘*Bauan Fijian*’ which gives the inference that the national dialect originated from the Fijian chiefly island of *Bau* (Geraghty, 2007:385). *Fijian* is termed *Fiji Bāt* instead of ‘*Fiji Hindi*’, which comprises a blend of Indian Hindi, Tamil, Teluga and Malayalam that developed during the *girmityas*, an indenture period when over 60,000 Indian labourers were brought to Fiji between 1879 and 1916 (Mugler, 2004:247). This study relies heavily on observations and comments by those working at the education coal-face in Fiji. For most, English is their second language.

Comments have been presented as stated with grammatical errors and/or the use of mixed English, *vosa vakabau* and/or *Fiji Bāt* retained. Interpretation is included where necessary.

*Vosa vakabau* is frequently used throughout this study. To aid pronunciation, standard orthography as formulated by the early missionary-linguist David Cargill (Schütz, 2003:3-8) is as follows:

<i>b</i> , which represents <i>mb</i> ,	as in	<i>member</i> .
<i>d</i> , which represents <i>nd</i> ,	as in	<i>Monday</i> .
<i>q</i> , which represents <i>ng+g</i> ,	as in	<i>finger</i> .
<i>dr</i> , which represents <i>n(d)r</i> ,	as in	<i>Andrew</i> .
<i>g</i> , which represents <i>ng</i> ,	as in	<i>singer</i> .
<i>c</i> , which represents <i>th</i> ,	as in	<i>father</i> .

*Yaqona* is the most common *vosa vakabau* word used throughout this dissertation, but one also commonly mispronounced. This “cultural keystone species” and beverage is pronounced *young*(as in youthful)-*on-a*, said with a clipped and almost silent *y*.

## Outline of the Thesis

The following chapter is the first of four themed literature review sections. It discusses development theory and culture. It commences by reviewing modernisation theory and explains its foundations particularly in regard to its focus on productivity and ideologies regarding culture and its related practices. I will then summarise alternative development and neo-liberalism – the latest ideology to dominate contemporary development thought. In this study modernisation, alternative development and neo-liberalism are often referred to collectively as the dominant development approaches (Brohman, 1995:126; Simon, 2008:87; Appleby, 2010:25). This discussion leads to a detailed description of post-development, the core theoretical influence to this study. While post-development is pioneering new directions in development thinking, thus far post-development writers have been silent concerning indigenous substances. As will be explained, post-development aligns with the *Vanua* Research framework which is used in this research to examine

whether it is possible to “tap... indigenous traditions... as a resource... to solve contemporary problems caused by modernization and development” (Schech & Haggis, 2000:124). This is the core theme of this thesis.

Chapter 3 draws on a large volume of literature to discuss the cultural importance and physiological effects associated with five indigenous substances. Discussion of each of these traditional preparations concludes with comment on how modernists thinkers and development practitioners throughout history have viewed their use. In most cases this has been as a threat to modernity, civility, productivity and industrialised capitalism (Coomber & South, 2004:18). In the closing section of this chapter I discuss control measures on indigenous substances and then draw on themes from Chapter 2, citing the importance of culture and indigenous substances to cultural identity and the achievement of development. This chapter reiterates my earlier comment – to suggest that traditional users simply forgo their indigenous substances is just not “*that simple*”.

The theme of education as a “critical feature” to achieving modernisation-styled development (Webster, 1990:98) opens the discussion in Chapter 4. This is followed by a debate on the possibilities and structure of a post-development informed education system, one that would be highly reliant on and informed by culture and local processes. The development of education in Fiji is then detailed. This has conspired in creating academic disparity between *iTaukei* and *Fijians*, with *iTaukei* under-achievement being accused of threatening the “total socio-economic and political development of the country” (Williams, 2000:179). Critical to this chapter is the MoE’s 2000 *Learning Together* report, which suggests a number of factors believed to influence this under-achievement. Two factors are singled out: “bad teaching” and *yaqona*. By discussing these two opposing elements – one traditional and the other an aspect related to contemporary development – the complexity of the traditional/contemporary tension is delineated, while focusing the direction of the study.

Chapter 5, which examines *yaqona* together with its use within the educational arena, adds to the concerns of the MoE by citing media reports critical that the over-consumption of this indigenous substance is having a negative impact on productivity in Fiji. Although such reports are presented as fact, they are actually unsubstantiated assertions as no research has been completed on the specific link between productivity and *yaqona* use. The nearest study to this theme is my 2008 Master's research, which focused on rural *yaqona*-consuming teachers and impacts on education delivery. This has necessitated that I draw on my previous research to aid commentary in this chapter. This will include *yaqona* consumption volumes and durations by ethnicity, intoxication and *lomaloma ca* (*yaqona* hangover), factors believed to promote and increase drinking levels, and, most importantly, the significance of *yaqona* to identity, form and cultural construction. Finally, the major threads from the preceding chapters are drawn together with the elements of this section to reassert the uniqueness and complexity of the traditional/contemporary tension.

The research methodology used to investigate the three research questions is presented in Chapter 6. Critical to this is a discussion of *Vanua* Research and its alignment with post-development which influenced the ethics and methods used throughout the field research. My role and its challenges as both an 'insider' and 'outsider' are presented. This is followed by the reasoning for, and application of, the psychometric tests as part of the research methodology. I argue that these quantitative tests bring new understandings to *yaqona* use and effects while showing how such tests can complement *Vanua* Research and post-development.

Chapter 7 is the first of three findings and discussion chapters and draws on data obtained during the field research to answer the first research question. This investigates Fijian teacher *yaqona* consumption habits and questions the role that culture play in this drinking. In presenting *yaqona* consumption habits obtained during the field research, several misconceptions by *iTaukei* teachers regarding the drinking of their indigenous substance by their *Fijian* counterparts are uncovered. Further, this

leads to comment on the role *yaqona* plays in the cultural identity of both *iTaukei* and *Fijians*. The chapter finishes by discussing consumption by gender, and *yaqona's* unique function in facilitating ethnic unity among teachers.

The focus of Chapter 8 is the second research question which investigates the impact of *yaqona* consumption on teacher cognition, sickness and absenteeism, and asks what effect this has on education delivery. Although the psychometric test results, together with the ethnographic reports, suggest heavy *yaqona* use contributes to cognitive impairment, sickness and absenteeism, I briefly draw on cultural and academic themes from Chapter 2 and 4 to again illustrate the complexity of this issue. This acts as an introduction to the final findings and discussion chapter, which considers alternatives to the predominantly negative outcomes discussed here.

Chapter 9 commences by briefly summarising the earlier themes and findings to restate the complexities of the traditional/contemporary tension. It then investigates whether *yaqona* plays other positive roles – over-and-above aiding academic achievement through notions of self worth based on cultural identity – in the school environment and what action should be taken regarding teacher *yaqona* use. New understandings are presented from the ethnographic data that suggests education in Fiji would suffer with the removal of *yaqona* from the school campus. Additionally, local reports concerning *yaqona* use and its importance to cultural systems indicate that simplistic prescriptions such as bans and prohibition become difficult to imagine. The chapter concludes with a suggestion for the way ahead, an option influenced by post-development thinking.

The final chapter restates the influences that led to this study followed by the aims and findings. These summarise the main points of the three research questions before defining the contributions this study has made. Further areas for research are suggested followed by a number of concluding statements. These highlight what is at stake for the people of Fiji should they pursue development based solely on a Eurocentric model.

# **Chapter 2**

## **Development and Culture**

### **Introduction**

The point of this chapter is to discuss development theory as it relates to culture in order to enable a theoretical foundation for the study proper. This chapter commences by discussing modernisation theory in regards to productivity, culture and indigenous substances. The changing ideologies in development thought, from modernisation to neo-liberalism and finally post-development, is then explained. This culminates in a discussion on the virtues and short-coming of post-development, an evolving ideology that will be practically applied to the latter investigative portions of this study.

### **Culture and the Theory of Modernisation**

Although modernisation was not conceptualised until the 1950s and 1960s, its foundations lay in early “Enlightenment notions... of the modern... improvement of human existence” (Peet & Hartwick, 2009:2-3) and a collection of ideologies and capitalist processes utilised over the previous 150 years as part of the industrialisation of Europe (McMichael, 2000:296; Nederveen Pieterse, 2010:5). The theory postulated that if these same principles (enlightened modernity, industrialisation, capitalism, education) were linearly applied, all societies could gain a state of development that reflected Western systems, standards and ideals (Webster, 1990:42-3; Nederveen Pieterse, 2010:64). Therefore, undeveloped societies, often referred to during the colonial era as “lower [and] primitive” (Durkheim & Pickering, 1975:107), child-like (Nederveen Pieterse, 1992:153), “tribal” (Hall, 1992:10), “inferior” (Firth, 1997:262) and “traditional” (Webster, 1990:44), needed only follow the modernisation process and capitalist modernity that was within their grasp (Hall, 1992:9-10; Schech & Haggis, 2000:11,30). Modernisation theorists saw ‘primitive’ thinking as an impediment to development (Van der Grijp, 2004:22,188).

In order to gain the utopian state of ‘developed’, a change was prescribed away from the “primitive” ideologies of the “lower societies” (Durkheim & Pickering, 1975:107-8). Cultural confinement, reinforced by a collectivist mentality and spirituality based on “crude myths”, was argued to limit individuality and “economic initiative” (Rostow, 1956:27), and therefore inhibited the implementation of the modernisation processes which led to the developed state. They charged that a change in this primitive thinking would open the way for undeveloped societies to adopt “‘right’ values, namely those held by the white minority or... the cultivated European” (Escobar, 1995:43; Nederveen Pieterse, 2010:16). Van der Grijp (2004:22,188) puts this plainly, stating that "Within the modernization perspective, 'traditional' culture was seen as an impediment for development". He added, "In the Canberra Agreement of 1944 Australia and New Zealand had proclaimed 'to encourage the native peoples of the South Pacific to assimilate the benefits of the... more advanced people'" (p.20). Because culture is strongly influenced by internal values, practices and belief systems (Bocock, 1992:232; Rosman & Rubel, 1995:5-6), early modernisation informants were, in effect, seeking the eradication of culture which often includes indigenous substances. As I will explain, culture and indigenous substances frequently go hand-in-hand.

An example of early modernisation influence on culture can be seen within the tenants of the *The Tohunga Suppression Act*. This regulation, enacted in Aotearoa New Zealand in 1907, sought to encourage Māori to forsake their religious practices and healing systems. This was driven by the belief that traditional systems together with indigenous substances did little more than reinforce superstitious gullibility (Lange, 1999:242,247,249-250,281-2). The removal of these then would lead the indigenous peoples of Aotearoa toward modern enlightenment. It could be argued that this modernisation approach, enforced through *The Tohunga Suppression Act*, was highly successful as its intended purpose was mostly realised. The Act resulted in the extinction of some traditional substances, the almost complete eradication of *kawakawa*, and the loss of a vast amount of traditional Māori knowledge (see p.61; Durie, 2003:51,71). Loss of traditional knowledge was a common occurrence during

the period of modernisation (Veitayaki, 1995:104; Stedman-Edwards, 2000:18; Soselisa, 2007:143).

Although a principal goal of modernisation was the elimination of traditional belief systems which often included traditional substances, this aim could also be modified and selectively manipulated if the colonial agents believed they could gain financially from a particular traditional system or practice. For example Courtwright (2001:9) stated that in some regions, indigenous substances were selectively eliminated. Traditional preparations that had value as a commodity, such as opium, certain fermented beverages, cannabis and tobacco, were commercialised by the colonials for monetary gain with the indigenous owner rarely reaping any benefits (Courtwright, 2001:9,30). Alternatively, Szasz (2003:125) commented that a number of early European medical practitioners deliberately influenced colonial administrators to legislate against traditional healing systems, or alternatively discredited them, if it meant that the indigenous population would seek out and therefore pay for colonial medical services.

Similarly, indigenous substance use would be encouraged if they were deemed advantageous to developmental process<sup>4</sup>. Shaw (2002:48,122) stated that the use of traditional preparations which enhance “productivity or counteract unfavorable effects from work” were often tolerated or overlooked until the consumer’s use “violate[d] the law” or breached an organisational regulation.

<sup>4</sup> Bradburd & Jankowiak (2003c), in their edited publication entitled *Drugs, Labor, and Colonial Expansion*, examine the exploitative relationship between the early colonial agents, which they define as the merchants, traders and settlers, and the indigenous populace of 94 colonies (2003a:12,21; 2003b:182,186). They argue that in order for these colonial agents to expand trade and build their systems of capitalism, “inducers” and “enhancers”, such as cannabis, tobacco, opium, caffeine, cocaine and alcohol were extensively used (2003a:3-4,8,11,13,21-22). The “inducers” were employed in order to deliberately develop drug dependency, which lured indigenous labourers and encouraged them to return to the workplace, while the “enhancers” aided productivity levels by artificially eliminating fatigue and increasing alertness – a form of exploitation (2003b:186). Interestingly, where these same substances did not aid colonial expansion, they were considered ‘primitive’ and an encouragement to superstitious gullibility (as discussed in an earlier section in this chapter). Moreover, the use of certain substances was prohibited within the work environment if deemed a threat to productivity. As new technology evolved and understandings regarding effective productivity developed, not to mention the regulatory bodies beginning to take into account increasing public opinion, such overt exploitative practices lost favour (2003a:26-7).

### **Productivity: The Basis of Modernisation**

Modernisation theorists prescribed the capitalist process as necessary to bring about economic growth. Key to this was productivity (Worsley, 1988:82; Hettne, 1990:60; Peet, 1999:1,17,25; Todaro & Smith, 2006:15-6). Modernisation proponent and economist Professor Kwan Lie (1971:v,25) argued that the cultural values of a society influence beliefs surrounding productivity. Cultures that excel in production which increases economic development, he purported, tend to have higher “achievement motivation” (Lie, 1971:32). In addition, Lie (1971:v) suggested that productivity that does not lead to economic development, notably the labour undertaken by traditional societies for their own insular systems, could not be aligned with “the real meaning of productivity, [instead it had to] be termed Partial Productivity”. As such, Lie implicitly suggests that ‘undeveloped’ cultures or societies slowly moving toward industrial capitalist development lack, or have lower, “achievement motivation”. This in turn tends to imply that these same societies are either non, or partially productive members of the human race. This type of argument fails to consider the raft of conditions, priorities, values and circumstances that exist between different people groups. Jared Diamond’s (1998) well-publicised work on the reasons why humans developed at different rates over the past 13,000 years is an example<sup>5</sup>.

The difference in values between traditional collectivist cultures and their imperialist colonial administrators concerning what comprised productive process was often a point of contention and frustration, especially for the administrators. Contemporary scholars argue that the colonials possessed stereotypical beliefs regarding the productive capacity of indigenous peoples, often referring to them as “lazy natives” (Nederveen Pieterse, 1992:90,91,153,199; Said, 1993:151,245-6). Firth (1997:263) quoted a colonial-era naval officer who stated that Pacific Islanders “had no concept of progress and no sense of industry or diligence.” Instead, he felt they

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<sup>5</sup> Diamond (1998), asking why Europeans ‘developed’ at a greater pace than other races dispels the myth that it was based on racial superiority. Instead he argues the reason was based on geography, with many of today’s developed nations being those who, in their original settings, had natural resources such as barley and wheat and domesticable animals such as cows, pigs, sheep and goats; resources unavailable to most of the less developed, or developing nations (Nederveen Pieterse, 2010:111-2).

had “common traits, [typical] of tropic peoples; lewd customs, barbarity, laziness and debauchery”. Additionally Thomas (1997:40), discussing missionary and colononic stereotypes, stated that Pacific indigenites were considered “tribal ‘savages’... heathen... children in the dark... [lacking] social and domestic habits”. With colonial administrators further believing they had a “moral duty to ‘civilize the natives’ by introducing development to them” (Gegeo, 1998:298; also see Said, 1993:225), there was a push for increased levels of productivity within developing nations as part of changing local paradigms and values. Overall, the message was clear –, culture was little more than a hindrance to productive process (Van der Grijp, 2004:22,188).

## Modernisation, Productivity, Threats and Indigenous Substances

Nineteenth-century economists during the era of industrialisation attributed capitalist development to mechanisation and new productivity techniques (Lie, 1971:14-5). This paradigm is based on the ideas of Adam Smith (1852:327). He suggested in 1776 that economic growth resulted not from a generalised knowledge of productivity, such as those of the “hunters [and] sheep-herd[ers] in barbarous societies”, but instead developed out of worker specialisation more commonly termed the *division of labour*. The input of human labour comprises a key aspect of the productive process (Whiteside & Salais, 1998:5-6) and therefore forms a central theme in the theory of productivity.

### Productivity Defined

Theorists broadly define production as "any transformation process" involving human participation that will produce something of greater value "than the original input elements" (Frisch, 1965:3,8). Both resources and materials are included as part of these input elements with the former encompassing the human component (Tisdell & Ward, 1981:73-5). The general theory of production recognises that the inputs of *quality* and *time* comprise part of, add value to, and are vitally important to any output (Frisch, 1965:29-30). Therefore, when human participation as part of the production process is considered independently from material inputs, the superiority of that

human input, both physically and mentally, are necessary factors in achieving quality output (Kelly, Foltin & Fischman, 1990:131). Physically, quality output relies on appropriate input levels of dexterity, flexibility, agility, and strength. Mentally, executive functioning, or the cognitive elements of alertness, creativity, spatial and perceptual awareness, coordination, linear processing, multitasking, abstraction, judgment, recall and communication are requirements of quality output (Passer & Smith, 2001:105; Sadock & Sadock, 2003:280-7). It was not until the industrial era that these human inputs were considered instrumental to productivity.

### **Threats to Productivity**

Since the Industrial Revolution, production analysts have examined both contributors and threats to productivity. In 1996 three leading Taiwanese academics were appointed by the Taiwan Council of Labour Affairs to develop a Labour Quality Index (LQI) in order to aid productivity in the manufacturing industry (San, Huang, & Huang, 2006:65). Using data collected over a ten-year period the researchers were able to identify a number of primary factors conducive to quality productivity. With each factor, variables were identified that indicated potential threats to each of these primary factors. For the purpose of this investigation only “Factor Five: Worker health and safety”, will be investigated from the perspective of indigenous substances.

Within the worker health and safety factors, four variables or threats to productivity were identified: sickness, injury, inappropriate habits that impacted work and/or health, and the loss of working hours due to work-related accidents (San, Huang, & Huang, 2006:67). Loup (1994:19-20) stated that a major contributory to these same variables are the use and abuse of indigenous substances, such as alcohol, by employees. The designation of alcohol as an indigenous substance is deliberate. Alcohol is potentially the ‘original indigenous substance’ (Patrick, 1952:12-3; Durrant & Thakker, 2003:14-15) (see p.48) which, together with five other traditional preparations, will be discussed in the following chapter to justify this terminology. Loup added that substance users are both dangerous and expensive to the work place and systems of productivity. For instance, he claims that those who use these

preparations are four times more likely to suffer a work-related accident, are three times more likely to arrive late compared with the average worker, and account for up to 80% of sick leave (Loup, 1994:19-20).

### **Sickness, Lateness and Absenteeism as Threats to Productivity**

Taiwanese data collected from 1990 to 1999 revealed that tobacco smokers took an average of 6.4 sick days annually compared with 3.5 sick days for non-users (Tsai, Wen, Hu, Cheng, & Huang, 2005:i34). This amounted to US\$184 million per annum in lost revenue (Tsai *et al.*, 2005:i34). Similarly, Patterson & Smith (2007:839,846) report that alcohol hangover is responsible for 40% of workplace lateness and absenteeism in the US and resulted in an estimated \$119 billion in lost productivity in 1995. Further, "alcohol and workplace accidents are highly correlated", often related to the hangover effect which "manifests [as] sluggish psychomotor responses, memory and cognition disturbances, and generalized feelings of malaise" (Peterson & Smith, 2007:839,846). Finally, Adbel-Ghany & Silver's 1998 research, "which investigated [Canadian] alcohol consumption rates by occupational categories, established that teachers, on average, consumed more alcohol than any other group" (p.81). Clearly, sickness, lateness and absenteeism have implications for discussion on indigenous substances.

### **Productivity, Indigenous Substances and their Derivatives**

Workplace drug tests conducted in the US in 2004 established that 6.2% of workers had recently used illicit opium derivatives such as morphine and codeine, 17.7% had tested positive for cocaine and 54.8% for marijuana (Caplin, 2008:5). The impact of the use of these types of substances, when combined with the work environment, can be considerable. For example, in 1987 a locomotive driver and his assistant, who had recently smoked marijuana, failed to heed a stop sign, resulting in a head on rail smash in Maryland, USA (Railway Safety Act Review Committee, 1984). They cost Conrail and Amtrak US\$17 million in property damage, not to mention the costs related to the loss of 16 lives and injuries to a further 174.

An additional concern regarding indigenous substances, and one that also has

the ability to impact productivity, is drug interaction. Fugh-Berman and Ernst (2001:587-588) commented that the use of natural remedies is becoming increasingly popular in Western societies, resulting in an increase of physiological interaction due to indigenous substances clashing with conventional medicines. However, the long-term effects of these interactions are unclear, prompting Fugh-Berman & Ernst (2001:587) to call for extensive ongoing research in this area. A number of interaction cases have also surfaced within the South Pacific associated with the use of local substances. For instance, Deahl (1989:331) found that when betelnut was combined with Procyclidine based anti-psychotic medications, it resulted in acute Parkinsonian-type tremors (Sadock & Sadock, 2003:497). Researchers also established that the soporific relaxant *kava* enhances the intoxicant affects of alcohol (Foo & Lemon, 1997:155) and potentiates benzodiazepines, barbiturates and central nervous system depressants (Chanwai, 2000:960; Zhou, 2006:46). Additionally, when *kava* is taken together with *Cimetidine*, a treatment for stomach ulcers, this was found to cause “disorientation [and] addictive effects” (Fugh-Berman & Ernst, 2001:587-8).

Substance addiction is also recognised as contributing to productivity loss. According to Cherry, Dillon & Rugh (2002:ix), the “user’s preoccupation with the substance” together with its effects on performance and mood often contributes to “poor work performance and job dismissal”. Although this will be discussed in the following chapter, it is worth noting at this point the main responses governments have had to substance addiction when this has manifested as a threat to productivity and/or socio-cultural systems – predominantly in the form of prohibitions.

### **Prohibition to Aid Productivity**

The idea of prohibition most often tends to be linked with the *Noble Experiment*, or America’s alcohol prohibition of 1920–1933. However, the first targeted response to substance abuse and addiction occurred 30 years earlier, with American legislation prohibiting the use of opium and opium smoking dens (Cherry *et al.*, 2002:xiii; Williams, 2004:114-5). Williams (2004:114-5) argues that this 1878 prohibition was influenced by the “Traditional theory of economics... [which] dictated that cutting the

supply of a particular commodity will eventually decrease demand”, a notion that proved, in most cases, to have been ineffective.

Burton-Bradley (1966:744) asked if “it was indeed possible to eliminate [a widely used indigenous substances], what then would take its place?” Denoting that prohibition is often ineffective, he suggested that traditional preparations, especially those with a recreational aspect, are constantly in “competition with one and other”. He cited a situation in India where alcoholics substituted wine for betelnut to mitigate problematic and addictive use. While it could be argued that a substance switch to betelnut is the ‘lesser of two evils’ (due to betel’s arousal properties and potential to enhance productivity; also see p.65,67), chewing still has the potential to inhibit productivity as the culture associated with it tends to encourage users to congregate therefore drawing workers away from responsibilities (see p.67,69).

Williams (2004) suggested a further difficulty concerning prohibition. He argued this measure does little more than create “lucrative underground trade” that promotes tension between groups seeking to dominate illicit markets (p.116). Anderson, Beckerleg, & Hailu *et al.* discussed the prohibition of *khat* (an African hallucinogenic<sup>6</sup>) in Canada and Sweden in 2006, noting that following the *khat* interdict, heavy users mirrored the behaviours of other prohibited substance users, investing significant time and resources in sourcing their substance of choice, often at the expense of relationships, study and work. They added that a substance that once had customary and traditional significance as part of the “rhythm of daily life slip[ped] into a dysfunctional obsession that [was] exacerbated by stringent control measures” (p.206). Additionally, they were critical of the impacts the prohibition had on the socio-collectivist culture of its users. The chewing of *khat* is critical to identity, communication and relational connections among the predominantly Somalian users –

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<sup>6</sup> The chewing of *khat* (also spelt *qat*, *qhat*, *gad*, *tschat*) leaves has traditional and cultural significance in East Africa and the Arabian peninsula. “Users report increased levels of energy, alertness and self-esteem, sensations of elation, enhanced imaginative ability and capacity to associate ideas. They also report and improved ability to communicate, which explains the tendency to group interaction and social contact while under the influence of the drug.” (Kalix, 1987:47-8).

cultural attributes that suffered under the prohibition (p.197-8).

### **Reflection**

It has been explained that early modernisation theorists suggested development was readily attainable by rejecting traditional collectivist ideals, “primitive” cultural practices and insular systems of production by instead pursuing “cultivated European” individualism, industrialisation, and capitalist productivity. What many of these proponents failed to recognise was the depth, importance and saturation of many of the practices they deemed a hindrance to this pursuit. The use of indigenous substances such as those discussed above is one such example. To mitigate the impacts of traditional preparations on a critical element of development (namely productivity), prohibition has been recommended. However, this has had little impact. In some situations it had created new problems in the form of substance switch, black market economies and socio-culture upheaval. From a simplistic perspective, what unfolded is an example of a contemporary/traditional tension. In this situation the tension illustrates the contention between the use of indigenous substances with their origins based in ‘traditional’ settings and that of productivity, an element critical to the pursuit of ‘contemporary’ development. It is this contemporary/traditional tension that broadly encapsulates the focus of the overall study. As the thesis unfolds, the interconnecting relationship between the indigenous substance *yaqona* (*kava*) and another input to development, education, will be investigated.

## **Changing Ideologies in Development Thought**

The change from modernisation thinking to one that embraces culture rather than opposing it, is an exhaustive topic (Rao & Walton, 2004:9). From as early as the 1950s, a number of changes occurred concerning how development related to culture, which resulted from theorists and practitioners questioning why development had failed within nations that were strongly influenced by traditional practices and a collectivist culture (Briggs, 2008:107). This included debate on how culture and the ‘culture of development’ should best interact (Schech & Haggis, 2008:50). The United Nations

Educational Scientific and Cultural Organisation (UNESCO) (1995:c) contributed to commentary on the ‘culture of development’. Development practice, they argued, is characterised by the “industrialized market economy” of the developed nations, and represents a set of values and approaches which often manifests as societal dis-cohesion in developing nations. According to Ishemo (2002:33), the disruption to socio-cultural systems from the ‘culture of development’ is the result of development’s impact on “the symbols of people’s identity”, or their culture. Identity is important to this study, and is a theme I will return to later.

Nederveen Pieterse (2010) adds to the the commentary on what prompted the change in development thinking by suggesting, “conventionally development has been a monocultural project. Modernisation and Westernization were virtually synonymous... In the context of decolonization struggles, this began to change: along with the indigenization of politics and administration, indigenous culture and knowledge became an additional *topos*” (p.16). For example, independence in several Pacific Island nations during the early 1970s was followed by cultural renaissance that in turn encouraged further debate, both internal and external, regarding the role of tradition when combined with economic development. This included discussion on gender equality and democracy (Linnenik, 1997:414), with local initiatives both encouraged and deemed necessary. For example *ni-Vanuatu* were inspired to consume their indigenous substance *namaloku* and *nekava* and embrace local styles of music (Davis & Brown, 1999:8).

In the Solomon Islands and PNG, national councils were appointed and presided over by chiefly figures who advised on matters of custom (Linnenik, 1997:414). Further, colonial withdrawal often impacted resource availability requiring some developing nations to renew indigenous substance use as part of healthcare requirements (McGowan, 2000:29-30).

Another influence that prompted academics to reconsider culture as a valuable input to development was the massive economic growth that had occurred in East Asia

between the 1960s and 1990s (Haggis & Schech, 2002:xix). Park (1993:125-6) argued that the economic success of Taiwan, Korea, Singapore and Hong Kong was not purely based upon economic factors, but could also be attributed to the cultural principles and moral teachings of Confucianism (also see Haggis & Schech, 2002:xix). In these economically successful nations, Park argued (1993:125) that, Confucianism “emphasizes faith, loyalty, filial piety, harmony, and intellectualism..., a social ethic that the ruling class used to achieve political and social stability”, which subsequently aided economic growth.

The most prominent situation that led to culture being reconsidered in development discourse occurred during the 1980s. This was initiated by what Sarah Radcliffe (2006:3-4) described as the “widespread disillusionment” among development actors due to the large “failure [rate] of projects on the ground.” This stalemate in development was designated by academics as the ‘impasse in development studies’ (Booth, 1985:776). According to Schuurman (2002:12-3), this ‘impasse’ was the result of three sequential processes. The first was development’s failure in the Third World resulting from the absence of local gains from the “trickle-down process”, human rights violations, substandard housing, poverty, unemployment and land loss, that were related to underdevelopment. The second was the examination of development by post-modernists within the social sciences generally, most notably in the area of development studies, who sought an alternative to the inequities caused by Westernisation or imperialism. The third was the advancement of international investment and financial markets that evolved as a result of improved communication and deregulation. This spurred a range of new perspectives and ideas about development (Schuurman, 2002:12-3) influenced by “cultural studies, post-colonial studies and globalization” (Schech & Haggis, 2008:51) under designations such as “anti-modernist development, alternative development, reflective development, and [more recently] post-development” (Schuurman, 2000:7-8).

A fourth influence on how culture was perceived emerged in the conference arena, with the first major venue being Mexico City in 1982 where UNESCO hosted the

*World Conference on Cultural Politics*. During this conference it was ratified that the ten-year period between 1988–1997 was to be the *World Decade for Cultural Development*, with a mandate to acknowledge “the cultural dimension of development” (UNESCO, 1995:13; Nederveen Pieterse, 2010:16). UNESCO (1995:21) stated that the 1980s had been a time of great “transition, [when] culture was no longer defined as a subsidiary or even ornamental dimension of development, but the very fabric of society in its overall relation with development and as the internal force of that society”. It was suggested the *World Decade for Cultural Development* would bridge the divide between the quantifiable aspects of development and the intangible aspects of culture such as collectivism, ambition, creativity, apprehension, prohibition, identity etc. (UNESCO, 1995:13). The second venue that influenced the culture / development debate, and one that followed the *World Decade for Cultural Development*, was a Harvard initiated symposium convened in 1999, entitled *Cultural Values and Human Progress*<sup>7</sup>. Attendees of this symposium outlined a number of factors that should be incorporated within development planning, policy and programmes in Third World nations (Harrison, 2000:xxiv-xxxii). These elements were mostly centred on understanding cultural attitudes and values as positives to development, and enabling the development process to be maneuvered in order to lessen disruption in meeting development goals (Harrison, 2000:xxxii-xxxiv).

It would appear though that there is a level of disagreement between these groups. On one hand, UNESCO believed the 1980s to be a time of transformation, where culture was lifted from the ‘display cabinet’ and placed squarely within the “fabric of society”. On the other, the 1999 Harvard *Cultural Values* conference appeared to have tempered UNESCO’s enthusiasm. What resulted in practice tended to reflect the beliefs voiced at the *Cultural Values* conference, an ongoing *alternative* approach to development. Alternative developmental approaches evolved as a challenge to modernisation. Instead of development simply adhering to conventional practices measured by the growth of Gross National Product (GDP) (Pieterse,

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<sup>7</sup> *Cultural Values and Human Progress symposium*. American Academy of Arts and Science, Cambridge, Massachusetts. April 23-25,1999.

1998:344), which epitomised modernisation, alternative development considers “basic-needs” (Brohman, 1996:202) bottom-up approaches, and rural forms of development as an answer to poverty reduction, income disparity and underemployment (also see Nederveen Pieterse, 2010:117). The virtues and merits of this approach continue to be espoused today and were reinforced by academics who discussed alternative development in a 2004-edited collection of papers on culture and development (Rao & Watson, 2004). The contributors to the publication suggested that alternative development, which acknowledges culture within the development process, is a “moderate middle ground” situated midway between that of modernisation, which they argue aims to reconstruct culture to be more conducive to the demands of economic growth, and the “extreme” opposite – post-development.

This alternative “moderate middle ground”, according to Rao & Watson (2004:30), is where practitioners undertake development aided by local participation. They add that ‘development in partnership’ with the local populace has been pivotal in moving the process on from its former top-down modernisation formula (p.28). Eade (2002:ix) however, is not convinced. Although she acknowledges that “cultural identity and traditional practices [have become more] acceptable” under an alternative development approach, practitioners and policy-makers nevertheless continue to view all cultures as homogeneous, and deem culture “acceptable provided... [it does] not interfere with economic progress or with the conventional development indicators” (p.ix). Harrison (2000:xxxii), a strong proponent of embracing culture in development, is a little more excusing. He argued that culture is a difficult concept both to measure and define, preventing the identification of “cause-and-effect relationships” when associated with institutions, policies and economic development.

Although alternative development continues to play a key role in many development projects (Nederveen Pieterse, 2010:84), at the national level development thinking has evolved toward a neo-liberal model. Brohman (1995:125) and Simon (2008) explain that neo-liberalism has similarities with modernisation in that it retains many of the economic growth driven ideals of its predecessor having its

“historical roots” (200:87) in the ideas of early theorists such as Adam Smith who argued the need for worker specialisation and the importance of productivity (also see Deraniyagala, 2005:102; Onyemelukwe, 2005:20). The neo-liberal development agenda is primarily concerned with the deregulation of local markets aimed at the promotion of ‘free-trade’, a system of economics that seeks privatisation in which businesses determine and set prices and in turn create competitiveness with very little restriction as part of growing and building a world market, contributing to what is commonly referred to as ‘globalisation’ (Brohman, 1995:134; Peet & Hartwick, 2009:83-4). Therefore, this theory is underpinned by modernisation economics and ideals from classical liberalism such as freedoms, liberties and limited role for governments – in other words “neoclassical economics – hence neo(new)liberalism” applied on a global scale (Simon, 2008:87; Wilm, 2011:61). Hettne (2008:9) adds, “Globalisation, as influenced by neoliberal economic policies, has become the new word for mainstream development”. Moreover, neo-liberalism has become the development focus of many developing countries. This is often not so much out of choice, but rather as a conditional requirement of multi-national finance organisations such as the International Monetary Fund (IMF) and the World Bank (WB) (Brohman, 1995:135)<sup>8</sup>.

Fiji, strongly influenced by traditional “beliefs and values, rituals and ceremonies” (Ravuvu, 1983:v; van Fossen, 1998:93), is an example of a developing country<sup>9</sup> forced to embrace a neo-liberal development agenda as a requirement of the IMF and WB (Tuinamuana, 2005:202). Wood & Naidu (2009:156-7), and more recently Barr (2012:12), explained neo-liberal reforms in Fiji can be seen in the marked cost increases associated with utilities and services, increased food costs and the

<sup>8</sup> Peet & Hartwick (2009:85-6) list the neo-liberal “set of ‘policy instruments’... applied to (mainly Third World) borrowing countries by the World Bank and the IMF... [which] include: *Fiscal discipline... Reducing public expenditure... Tax reform... Interest rates... Competitive exchange rates... Trade liberalization... Encouraging direct foreign investment... Privatization... Deregulation... [and] Securing property rights*”.

<sup>9</sup> The Bureau of East Asian and Pacific Affairs (BEA&PA, 2012) country profile for Fiji reports in 2011 report Fiji had a population of just over 850,000 comprising 57% iTaukei, 37% Fijian and 6% other, with 67% of the workforce engaged in agriculture, much of this subsistent, 7% unemployment, GDP per capita \$3,805, primary industry being tourism, sugar, garments, exports of US\$851.6 million and imports of US\$2.063 billion, and a Government net debt of an estimated \$1.92 billion.

introduction of Value Added Tax (VAT), and the devaluation of the dollar, which was suggested “to improve foreign reserves”. Although these measures were prescribed as an aid to development, some commentators are highly critical of their effectiveness and argue the opposite. In Bargh’s (2001:252) opinion, “neoliberalism... is an ideology which reinforces a re-colonisation in the Pacific... As Neoliberalism colonises it replaces indigenous structures with its own... [forms of hegemonic] institutional, state, corporate and intellectual pressure” (also see Brohman, 1995:127).

Although neo-liberalism does not seek the complete elimination of culture in the manner of its predecessor, modernisation, Cockley (2010:151-2) asserts it is just as destructive in alternative ways. For instance, he argues that neo-liberalism infers those who do not engage the market economy – such as subsistence farmers, a vocation common in Fiji (Clammer, 1979:110; Shoup, 2008:109) – are without entrepreneurship, are poor and lazy, and therefore lack work desirability and motivation (p.149-50). These factors strongly mirror the economic aspects of modernisation theory, including the importance of productivity and productive process. Further, neo-liberalism, asserts Cockley, “favors large multi-national corporations” which perpetuates a “subordinating... [of] indigenous cultures” (p.151). This in turn forces these subordinate cultures to mould to “market strategies... [and forfeit] peer-to-peer transfer” including reciprocal processes – which again is a common form of economy within Fiji’s communal kinship structure (p.167 this study; Ryle, 2010:115) – and rely “on profitability instead of the needs of the society” (Cockley, 2010:152).

Additionally, “neoliberal policies... endorse... the privatization of communal lands” (Chase, 2002:8), an ideology that stands in opposition to Fiji’s situation – 83% of the land is communally owned –, which Vanualailai (2008:242) argued makes private-sector land development extremely difficult. Moreover, “Free markets potentially bring an ever-increasing number of products and images to bear on the population, escalating the rate of change and pushing anything known as indigenous culture to the wayside” (Cockley, 2010:152). As Cockley (2010:152) explained, this in turn subjugates

cultural identity, a theme that has great applicability to *iTaukei* who are currently struggling to cope with the change that is conflicting with their anti-materialistic value system (see p.219; Howard, 1991:54).

### **Reflection**

This discussion highlighted changes in development thinking, particularly its transition from enlightened modernity and modernisation to neo-liberalism, with an emphasis on culture. Although neo-liberalism, with its underlying framework of ‘free trade’ and globalisation, does not intentionally seek cultural elimination in the manner of modernisation, it nevertheless aids this aim (Sardar, 1997:296-7). Culture essentially remains a state of ‘other-ness’ – it is considered anti-entrepreneurial, anti-industrialised, anti-transformative, anti-progressive, anti-modern, anti-developed and anti-Western (Cockley, 2010:149-52) – but this time under a new development paradigm.

The embracing of neo-liberalism by the Fijian Government as part of its national development agenda hints at the traditional/contemporary tension. In this case the ‘traditional’ aspect of the tension refers to a strong sense of ‘other-ness’ in Fiji, represented in the “beliefs and values, rituals and ceremonies” derived from its traditional culture (Ravuvu, 1983:v; Van Fossen, 1998:93). This ‘other-ness’ includes traditional practices such as subsistence agriculture, an economy that utilises reciprocity, communal land ownership, and a cultural system that values anti-materialism that stands in opposition to the ‘contemporary’ tenets of neo-liberalism and its entrepreneurship, industrialisation and transformative processes. However, at the same time this is far from simplistic as the Government also recognise that the traditional values and aspects of its culture can be valuable to the developmental process, as will be discussed later. Essentially the traditional/contemporary tension is the contentious interplay between aspects of the development agenda embraced at Fiji’s national level to increase economic advancement and cultural values.

Although development practitioners still have some way to go before the

culture/development chiastic axis is successfully united (Radcliffe, 2006:2), academics and practitioners continue to wrestle with these issues. Eade (2002) suggested that there are an increasing number of development thinkers, which include those who have traditionally aligned themselves with the more conventional development approaches, who have become “sensitive to the relationship between culture and development, [understanding that] development is itself a cultural construct, a basis for inter-cultural engagement” (p.x). On the other hand, Escobar (1992:27) – who along with Esteva, have been referred to as post-development “purists” or extremists (McGregor, 2007:160) – cannot imagine successful development being united in any format, with external developmental systems, and therefore calls, for a complete alternative to development. While Eade and Escobar may differ regarding certain aspects of development theory and practice, they also share several commonalities. It is these commonalities that unite such development thinkers under the umbrella of post-development.

## Post-development Thought

In his summary on post-development, Ziai (2007:13) describes how the ideology arose out of a disappointment by scholars and theorists over a lack of developmental achievement promised to the developing world during the 1980s. Jakimow (2008:321) and Nederveen Pieterse (2000:176,181; 2010:111) acknowledge that post-development is not a clear and consistent paradigm in the manner of development theories such as modernisation (Saunders, 2002:24). Peet & Hartwick (2009:227) add that although post-development thinking may appear ambiguous and fail to have marked boundaries as a discourse, it nevertheless has an obvious central theme. That theme, the core thesis that unites academics (such as Eade and Escobar) from different disciplines is the criticism of external hegemonic development systems and the importance of culture, traditional knowledge, and self-determination at a local level to bring about successful development in developing nations (Peet & Hartwick, 2009:226-7).

Discourse on these power/knowledge hierarchies is drawn from post-structuralism, post-modernism and post-colonial critique (Scheyvens, 2011:42). For example, post-development draws on a thread within post-colonialism (also known as “anti-colonial theory”, McEwan, 2009:74), which critiques colonial economic, cultural and political practices by highlighting power injustices and imperialism with the aim of abolishing negative stereotypes (McEwan, 2009). Much the same as structuralism, a Marxist/Southern approach using economic discourse to critique capitalism and imagine human liberation resulting from localised development processes, post-structuralism notes power injustices and systems of control existing within this framework (Peet & Hartwick, 2009:197-8). Simply, it is these key themes of external dominance and power hierarchies that constrain local systems of development through a form of Western-centric hegemony (Gibson-Graham, 2005:4; Jakimow, 2008:321; McEwan, 2009:104; Peet & Hartwick, 2009:227; Nederveen Pieterse, 2010:119) which chiefly inform post-development. However, proponents of post-development (who I will refer to as post-developmentalists) have then added to these *post-* critiques and asked a key question of development practitioners and scholars with the aim to giving a voice to developing communities. They ask, “by what right and on whose authority do [you as external, non local people] claim to speak?” This is an important question when contextually defining what is, and how, development should be done (McEwan, 2009:243-4)? Additionally, it is this question and this ideology that sets post-development apart from alternative development.

The argument for self-determinism and the rejection of external development inputs, unless requested by the local, has resulted in post-development being designated “anti-development” in some sectors (Simon, 1997:184; McKinnon, 2008:281; Nederveen Pieterse, 2010:111). Post-developmentalists argue that development, in order to be effective, must be initiated, theorised and outworked from within by social movements (Escobar, 1995a:98, Horn, 2000:34; Verhelst & Tyndale, 2002:11; McEwan, 2009:229), with external systems utilised at the discretion of the local community (Radcliffe: 2006:17-8). Ziai (2007:5) states that alternative forms of economy, such as alliance and exchange, dominate in a post-development

ideology. Localised democracy replaces centralised forms of governance and traditional knowledge has legitimacy (Ziai, 2007:5, Peet & Hartwick, 2009:230). Post-developmentalists argue that this approach is at variance with conventional development practice in which indigenous “peoples are rarely asked what type of development they want”, and instead have been treated as “objects of various models” (Anacleti, 2002:168). Again, this reiterates that post-development is essentially about local power and knowledge, development that is formulated from within and advised by culture (Jakimow, 2008:321). This, Anacleti (2002:172) suggested, is what constitutes ‘real’ development, when “people participate in decisions that affect their lives, start[ing] from what they are and with what they know. What most people know is their own culture and values” (p.172). Additionally, Radcliffe & Laurie (2006:103) argue that this ingredient is necessary in order to motivate people in grassroots development. This creates empowerment among those living at the coal-face, and is fundamental to post-development thought.

Ziai (2007:4-6) states that post-development is informed by three prominent academic publications. The first is Sachs’ (2000) *Development Dictionary*, a collection of papers criticising modernisation and its goal to eliminate culture. In the introduction to his book, Sachs (1992:1-2) sets the scene for later contributors by stating that “development” – which he argued ‘officially’ commenced in January 1946 when Harry S. Truman labelled developing nations “underdeveloped” – “does not work”. He suggested that this “development”, based on an industrialised First World model that urges all people groups to pursue a prescribed path toward the “state of [developed] maturity”, has weakened diversity and created a monoculture striving to imitate the West (p.2-4). This, in turn, has corrupted the evolution of culture and subjugated alternative development styles that are more likely to function and ‘work’ within developing nations (p.4). Sachs argued that cultural salvation and a “post-development era” are possible once the misconceptions and power relations that exist within the industrialised First World development model have been critically exposed – the aim of the subsequent chapters in this book (p.4). Robert (1992:187), another contributor to the book, is highly critical of the impacts of the conventional

development model on traditional cultures. She stated that in the case of medical services, instead of increasing development, it acted in a counter-productive manner by introducing new illness and restricting financial benefits to the prestigious medical elite. Esteva (1992:19), in an earlier chapter, reviewed some of the literature which analysed cultural groups who have re-established themselves in opposition to the conventional development model. This, he asserted, has removed their reliance on counter-productive externally driven medical services which have also created dependence, and reinstated and legitimised traditional healing systems including the use of indigenous substances (p.20).

According to Ziai, the second prominent work to influence post-development is that of Arturo Escobar. Escobar (1995a:9; 1997:92-3) stated that the predominant development approaches, including “alternative development”, are based on unequal power relations dominated by the First World. He posits that this knowledge/power inequity can only be rectified, if and when, the knowledge base is shifted to the developmentee, or the grassroots community (Escobar, 1992b:415-6). Essentially this means that when the knowledge/power base shift occurs, development is then dominated by local cultural paradigms. Escobar is a leading “anti-development” voice calling for grassroots self-determination.

The third academic publication, described by Peet & Hartwick (2009:227) as a “manual of postdevelopmental thought”, and cited as a critical text influencing the rise of this ideology, is Rahnema and Bawtree’s (1997) *Post-Development Reader*. This collection of papers criticised the conventional development approach as being a First World ideology containing a subliminal cause-and-effect message that traditional culture was responsible for underdevelopment (Ziai, 2007:5). One of the book’s contributors, Ramonet (1997:179), suggested this ideology was manufactured by the leading financial and economic institutions. These structures, which he argued included the International Monetary Fund, the World Bank and the European Commission, propelled a heretic doctrine promoting capitalism which benefited the First World, but stifled alternative processes of development in developing nations

(p.179). Additionally, Rahnema (in Ki-Zerbo, Kane, Archibald, Lizop, & Rahnema, 1997:158) purported that the promotion of education as a principle development strategy within developing nations by the same First World hierarchies was in actuality a deception. He added that it simply acts as a means to discredit local systems and traditional knowledge while promoting capitalist processes that benefit the First World. In the concluding chapter of the book Rahnema (1997:391) suggests that for “the post-development era” to exist, First World deceptions that “pervade the development world” must cease, and those same unethical structures must change to encourage and assist developing nations in self-determination.

### **Post-development: The Critics**

Critical debate surrounding post-development is widespread (Jakimow, 2008:313), with critics frequently accusing the ideology of being little more than a focused attack on development and failing to detail the specific ways this evolving ideology will achieve development (Corbridge, 1998:143; Ziai, 2007:6; Jakimow, 2008:313). Nederveen Pieterse (2010) suggested post-development lacks longevity because its “major limitation... is that it offers no significant future prospective beyond local autonomy, so the most likely future of post-development is localism” and is also critical of this lack of practical application (p.186). He argues that post-development is simply “discourse analysis applied to development... [that] has been turned into an ideological platform” (p.115).

During the early years of post-development, this criticism that post-development lacked practical application did have merit. For example, post-developmentalism Arturo Escobar (1995b), in his article in which he “imagin[es] a post-development era” (p.211), essentially reasserts his benchmark beliefs concerning the deliberate deconstruction of the Third World by the hegemonic West and the influence of post-structuralism, post-modernism and post-Marxism on social movements in Latin America (p.212-4). Without detailing any specifics, Escobar concludes his paper by imagining post-development as the era in which social movements are empowered by defining development from their own terms, free of

the “dominant policies of knowledge and organization of the world” (p.225-7). In limiting his comments to this vision, he neglects to list the methods of achieving his imagined utopia.

A second example fuelled the debate – Schech & Haggis’s (2000) book entitled *Culture and Development*. This also explored and criticised conventional development approaches and identified that overall there is a lack of connectedness between development and culture outside of its relationship to economic process (p.15,53). It is from the anthropological discipline they argued that the wider aspects of culture as a ‘discourse’ are explored (p.22). This is followed by a discussion of culture as a theme within evolving development thinking, and briefly touches on post-development by again unfolding Escobar’s theories of targeted inequity and hegemony by the First World over the Third (p.79-82). The remaining four chapters of the book investigate the themes of tradition and identity in opposition to modernity, focusing on evolving thought regarding feminism, human rights and the information revolution. With the exception of a few lines in which Schech & Haggis discuss the use of modern technology by two indigenous communities as part of traditional knowledge transfer (p.80), there are no designs, approaches, or developmental methods discussed.

In 2008 Schech & Haggis were given a second opportunity to add to the themes of their 2000 book and address the critics of post-development in the second edition of *The Companion to Development Studies*. Although they cited more recent research, they again followed a similar investigative path by discussing why culture is important to development without detailing methods or systems. This could well be a deliberate ploy by Schech & Haggis, excused by way of a comment made in their 2000 book. Their earlier argument was that the aim of post-development and its engagement with culture and development was to prompt further discussion regarding “what is meant by development and in whose interests it operates” (p.29), discussion which did not include practical applications. Additionally, they asserted that post-development offers the potential to “tap... indigenous traditions... as a resource... in order to solve contemporary problems caused by modernization and development – problems such

as environmental destruction and loss of community" (p.124) as opposed to detailing development practice. Although critics argue that post-development is more discourse-orientated than practically based, some are nevertheless engaging the latter.

### **Post-development in Action**

Several scholars have taken up the challenge to address the criticism that post-development is vastly more than an attack on development without detailing practical application. Gibson-Graham (2005:12) discussed a project in the Philippines, which they<sup>10</sup> argued challenges conventional hegemonic developmental approaches. Although acknowledging that this venture has "a thin veneer of capitalist economic activity", it is nonetheless "underlain by a thick mesh of traditional practices and relationships of gifting, sharing, borrowing, volunteering, and reciprocated individual and collective work" (p.16). This they suggest provides an example of post-development in action. In the closing sections of their paper, Gibson-Graham essentially speak to the critics. By echoing those such as Schech & Haggis, they suggested that the principal challenge for post-development is not the formulation of new strategies and theories, but is instead the empowerment of those who are subjugated by conventional development practice through acknowledging socio-cultural dynamics such as "shared traditions and knowledges" (p.20).

McKinnon (2008) is another author who counters the criticism that post-development lacks of practical application. She details the use of post-development as an analytical tool when considering a development project in Northern Thailand (p.283-4). In her paper she explains that by using a post-development methodology, namely a genealogical approach to analyse "hierarchies of power"<sup>11</sup>, she was able to identify how highlanders in the northern regions of Thailand "came to be characterised as a problematic population in need of development assistance" (p.282) following the identification of several socio-economic, ecological and border security threats by the

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<sup>10</sup> J.K. Gibson-Graham is a *nom de plume* of sorts used by geographers Julie Graham and Katherine Gibson.

<sup>11</sup> McKinnon's (2008:282) methodology was informed by the work of Michel Foucault, whose later works influence post-development thought.

Thai Ministry for the Interior (p.284). McKinnon states, “the discourse of a ‘hill tribe problem’ provided the rationale for development interventions, and a means... for highlanders to become subjects... under the formal authority of development programs” (p.286) by having development imposed upon them.

What is of greatest interest regarding McKinnon’s research is a closing comment that echoes Gibson-Graham and Schech & Haggis. McKinnon suggests that, although she was able to use post-development in a practical manner, the importance of the ideology is its basis as a critique which challenges hegemonic practices within development processes (p.291). In other words, McKinnon argues that post-development was never meant to be a linear or prescriptive method of development. Rather, it means to act as a critical lens which challenges power inequities within the conventional development agenda. Ziai (2007:232) adds to this when he states that this ideology does not have all of the answers, instead what it has done is “ask the right questions and carry on the debate about ‘development’”. Additionally, Storey (2000:45) asserts that the strength of post-development is reflected in the way it highlights the negative aspects of development rather than attempting to codify development practice.

Curry (2003) and McGregor (2007) are two further academics who have considered the practicalities of post-development. Curry (2003) for example draws on fieldwork data obtained from oil palm farms in PNG (p.413), and explains how harvesting cycles have been manipulated to coincide with cultural practices and events that require financial assistance (p.414). This he suggests demonstrates the value of “nonmarket economic relations associated with gift exchange and the social embeddedness of economies” (p.420). In another case, McGregor (2007) reviewed the restructuring and adaptation of conventional aid programmes in Timor-Leste to conform with “post-development futures” (p.168). He explained that where these aid programmes had traditionally been externally designed and driven, experimentation and modification to comply with local systems and processes not only encouraged self-determination and empowerment, but also complied with “post-development ideals”

(p.167-8). Essentially Curry and McGregor show the agency and resistance of communities and how locals co-opt and contest development processes to meet their own needs. Additionally, they add to the view point that development interventions are not inherently destructive or problematic.

Finally, post-development does not completely prohibit outsider involvement but rather influences how that involvement should be applied, further exemplifying hybridity as demonstrated by the likes of Curry. What is importance is that any external collaboration is locally initiated, placing local systems, the importance of cultural issues and the knowledge/power disparity at the center of that union, which also aims to encourage development theorists and practitioners to consider new understandings and learning capacities. Where grassroots organisations call upon external agents to collaborate in development, post-developmentalists contend that these outsiders could simply assist with knowledge to facilitate understanding under the direction of the local.

The work of Verhelst & Tyndale (2002) is an example of such a collaborative approach. They comment that successful development can only happen when there is “truly participative methodology [and the] ability... of the development professional to listen to and incorporate local wisdom and experience” (p.8). Although they suggest that this approach will not necessarily eliminate complexities, it will give understanding to the issues that form the basis of people’s lives, while also revealing that culture is not some problem that needs to be overcome (p.19). Anthropologists have been attempting to give meaning and understanding to culture and traditional practices for several hundred years (Rosman & Rubel, 1995:301), and more recently they have been advisors to development (Gardner & Lewis, 2005:352; Peet & Hartwick, 2009:215; Nederveen Pieterse, 2010:72). However, in most cases, especially within conventional development, the intricacies concerning modes of understanding, ways of behavior and traditional practices have been resisted by development practitioners (Edelman & Haugerud, 2005:31). This, as I argued above, is because practitioners favour tangible forms of development and struggle with the ethereality

of culture (Nederveen Pieterse, 2010:64). Nevertheless, as it has already been explained, post-development is attempting to lead by example, acknowledging the importance of culture and highlighting that for development to work it must be defined and initiated by the local. Additionally, post-development thinking, by accepting that flexibility in development is necessary, also understands that cultures may reject modern systems, or only embrace them in part (such as in the form of email, television, electricity), without abandoning culture (Huntington, 2002:29).

### **Post-development and Indigenous Knowledge**

The final strength of the post-development ideology – an idea that will inform later discussions in this study – is the active engagement of indigenous knowledge, spirituality, and socio-cultural systems. Admittedly, the use of indigenous knowledge in development is not new (Berkes, 1999:251; McEwan, 2009:198) although it “has often been associated in the Western context with the primitive, the wild, the natural” (Semali & Kincheloe, 1999:3). For example, alternative development and neo-liberalism have embraced aspects of local understanding, notably in the areas of empowerment (Dove, 2000:236; Berkes, 2008:258), agriculture (Alcorn, 1995:6,11) and Primary Health Care (Finau, 1992:93-4; Slikkerveer & Slikkerveer, 1995:25-6,28; Biber-Klemm & Berglas, 2006:50; Guite & Acharya, 2006:99; Winkelman, 2009:323; Talbot & Verrinder, 2010:3) – especially midwifery (Scheepers, 2004:259; Negin, Roberts, & Lingam, 2010:15) – in order to facilitate areas of Western-initiated development (McEwan, 2009:198). McEwan (2009:198) suggests that the value of indigenous knowledge by conventional development structures is situational. Traditional understanding that does not lead to capitalist development, he argues, tends to be ignored. This in turn demonstrates subversive Western hegemonic systems over the local community.

The understanding and active engagement of post-development with indigenous knowledge has gone further than simply considering its value as an aid to externally initiated development (Hart, 2002:45). Post-developmentalists recognise that traditional systems of understanding result from the practices and applications of

those who are situated within a given environment and its socio-cultural systems (Escobar, 1995a:170), knowledge that is pivotal to local developmental process (Watson, 2006:61) because it has evolved over generations (Briggs, 2008:107). Additionally, traditional knowledge “forms the information base which facilitates communication and decision-making” (Warren, Slikkerveer & Brokensha, 1995:xv). Many in developing nations are semi-illiterate, necessitating that indigenous knowledge and local processes be disseminated orally. According to Anacleti (2002:168), this makes it vitally important that those called upon by local communities to assist with development they understand the cultural complexities surrounding dialogue, or in the Pacific context, the *talanoa* dialogue process (see p.170). If this “starting point” is overlooked by practitioners, collaboration and the understanding of local needs will be misinterpreted (Anacleti, 2002:168).

Alongside the dialogue process is spirituality – an often avoided/overlooked aspect of culture and local systems – that is critical to post-development.

### **Indigenous Knowledge and Spirituality**

Indigenous knowledge systems go hand-in-hand with spirituality (Bodeker, 2007:24). Nabobo-Baba, Naisilisili, Bogitini, *et al.* (2012:23) state that indigenous spirituality has often been “misinterpreted by outsiders... as worshiping the devil... or sorcery... the fear of sorcery and particularly its lack of understanding have been used as an excuse to dismiss a whole field of indigenous knowledge by colonial and neo-colonial settler administrations with their imposed monotheistic religious beliefs.” Nabobo-Baba *et al.*’s comment also included discussion on the use of *yagona* and the fears of some that this is linked to *vakatevoro* (literally meaning witchcraft, see p.133,141).

Spirituality and development was a theme discussed in *Just Change* (2006)<sup>12</sup>. Although much of the publication discusses the role of religious organisations as

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<sup>12</sup> *Just Change* (2006) magazine is a publication of Global Focus Aotearoa, a New Zealand based non-governmental organization (NGO) committed to resourcing development practitioners and researchers - <http://www.globalfocus.org.nz>.

partners in development practice, it also included a collaborative article voicing the opinions of development practitioners and academics concerning spirituality *in* development (Strelecek, Duckworth, Symonds & Ball, 2006:6). Duckworth and Symonds (in Strelecek, Duckworth, Symonds & Ball, 2006:6) argue that spirituality and the person are one and the same; they cannot be separated and worked with as individual entities in development. This clearly demonstrates the importance of spirituality to post-development. Within the same article, Ball added that the collective spiritual belief system of a community is the key in unified development decision-making, while Strelecek suggested that development that ignored indigenous belief systems is simply “colonialism”.

In a later article in the same publication, Kousary (2006:22) comments that the challenge now is to develop “spiritual indicators” to assist and assess the development process. I would suggest that unless these indicators were developed and conceived of by the local this would simply reflect the power/knowledge differential criticised by post-developmentalists. Sanderson (2006:7), another contributor, reflects this belief when she comments that it has tended to be the external development agenda that has defined and valued spirituality within the development process. She continues by describing an alternative participatory development project she assisted with in Fiji which, she argues incorporated local spiritual expression and practice. Through a participatory methodology, Sanderson established that *vanua* (literally meaning the land, the people and the culture, see p.132), *lotu* (meaning church and spirituality) and *matanitu* (government and governance), were a unified and inseparable concept for *iTaukei*. Sanderson makes an interesting point when she concludes that for *iTaukei*, “material needs and community and culture [are] pictured *inside* spirituality” (p.7), therefore development cannot exist or unfold in isolation from culture.

Kousary (2006:22) adds that spirituality is an area which many development practitioners have shied away from, although is an area that Verhelst & Tyndale (2002:7) argues needs to be considered in order to understand culturally based development systems. Ver Beek (2002:60-1) suggests that spirituality often shapes the

decision-making processes of many in the developing world. He comments that when development practitioners neglect this aspect of culture, it threatens local identity, empowerment, and collaboration, and therefore, hinders mutuality between the local and the development ‘expert’, a necessity to successful development (p.74). This type of engagement with an invisible non-materialistic dimension of culture is a mammoth shift in thought from that of the development perspectives discussed earlier. Where these perspectives considered spirituality as being little more than a “primitive” ideology based on “crude myths” which stifled “economic initiative”, here it is considered an important part of the decision-making process in cultural development.

## Conclusion

This chapter began with a critical overview of modernisation theory and its marginalisation of culture. New approaches and paradigms were discussed, culminating with post-development. The key strength of this evolving ideology is the elimination of hegemony by embracing and acknowledging local culture and traditional knowledge systems. A second strength is the importance the ideology places on cultural systems and difference (Radcliffe, 2006:4). By pointing out that each culture embraces alternative practices, beliefs and modes of understanding, post-developmentalists argue that all development must start with what the people know. According to Anacleti (2002:172), “what most people know is their own culture and values”. Escobar (1995a:98,222) adds weight to this by warning development practitioners and academics that cultures are not homogenous. Therefore ‘development’ must resist formulating approaches that purport a ‘one-size-fits-all’ ideology (Nederveen Pieterse, 2010:16) and instead ask ‘what do the people want?’ These parameters provide some answers for the critics of post-development who complain that the ideology lacks practical application. That is, if post-development was to prescribe development practice, it would then be doing exactly what it states is the weakness of the other approaches, which in turn disempowers the local by removing their decision-making capacities (Storey, 2000:42).

In recent times, academics such as Gibson-Graham (2005), McKinnon (2008), Curry (2003) and McGregor (2007) have further challenged post-development critics by involving themselves in grassroots led development projects. Essentially, their roles were guided by “shared traditions and knowledges” (Gibson-Graham) and the exposure of hegemonic practices (McKinnon). These writers also demonstrate the use of co-opting and hybridity as part of the post-development approach, showing that not all development interventions are necessarily problematic or destructive. It must be acknowledged though that the approaches of these academics are at the moderate end of the post-development scale, application that post-development purists such as Escobar and Esteva would potentially question. The work of Gibson-Graham and company is important to this thesis as post-development acted as a primary influence which guided the field research methodology and analysis of the findings of this study.

Post-development, when compared with the dominant development theories (including modernisation, alternative development and neo-liberalism) is another example of the traditional/contemporary tension introduced in the first chapter. In this case, post-development is informed by ‘traditional’ cultural systems and processes of ‘other-ness’ whereas the dominant development theories represent the ‘contemporary’ pursuit of economic development. The ideals and ethos of ‘other-ness’ that underpin post-development contrast, or are in tension with, the development mandates of the predominant theories.

The following chapter will present five indigenous substances, their importance to the cultures in which they exist, and how conventional development systems, especially modernisation and its predecessor modernity paradigms have impacted their use. These themes will investigate the traditional/contemporary tension between development systems and culture, and, as such, the ‘problematic’ relationship between *yaqona*, education delivery and national development in Fiji. Borrowing from Schech & Haggis (2000:124), this study intends to embrace a post-development approach in order to “tap... indigenous traditions... as a resource... in order to solve [a] contemporary problem caused by modernization and development”.

## Chapter 3

# Indigenous Substances and ‘Modern’ Systems of Development

### Introduction

This chapter investigates the impacts of ‘modern’ systems of development on the use of five indigenous substances. Indigenous substances can be found within almost all cultures (Cherry, Dillon, & Rugh, 2002:xiii; Rumbold & Hamilton, 2002:130-1; Szasz, 2003:19). Garibaldi & Turner (2004) make a valuable comment concerning indigenous substances. They state—

there are plants and animals that form the contextual underpinnings of a culture, as reflected in their fundamental roles in diet, as materials, or in medicine. In addition, these species often feature prominently in the language, ceremonies, and narratives of native peoples and can be considered cultural icons. Without these ‘cultural keystone species’, the societies they support would be completely different (p.1)... ‘cultural keystone species’... [are] culturally salient species that shape in a major way the cultural identity of a people, as reflected in the fundamental roles these species have in diet, materials, medicine, and/or spiritual practices... Keystone species may serve a particular culture materially in a host of different ways: as a staple food or a crucial emergency food, in technology, or as an important medicine. As well, such a cultural keystone species may be featured in narratives or have important ceremonial or spiritual roles. It would also likely be highly represented in a culture’s language and vocabulary... although the specific role a particular species plays in a culture may vary considerably, its designation as a cultural keystone species lies in its high cultural significance (p.5).

Used for millennia as conduits in spiritual communication, medicinal aids, emblems of exchange, in recreation, and in some cases as productivity enhancers (Durrant & Thanner, 2003:20-3; Beyer, 2007:1; Babor, Caulkins, Edwards, *et al.*, 2010:3), it has only been over the past 200 years that major changes have come about in the use patterns of “cultural keystone species” or indigenous substances. Previously I discussed how the last 200 hundred years of development has been an era undermined by colonisation, imperialism, urbanisation, industrialisation and modernisation, with various associated values. For the purpose of this chapter I term this pursuit ‘modernist’. This process is in contrast to the life-ways of pre-industrialised agrarian European and developing nations dominated by subsistence living, traditional forms of spirituality, collectivism, reciprocity and indigenous

substance use; systems of living considered undeveloped, “primitive” and “tribal” by ‘modern’ systems of development (p.15).

In the previous chapter I also discussed that new perspectives and ideas regarding development, especially those from the alternative development and neo-liberalism perspective, evolved in the latter half of the 20<sup>th</sup> century (p.24). Under these perspectives, “cultural identity and traditional practices [became more] acceptable” (Eade, 2002:ix) and in some areas the use of indigenous substances even comprised aspects of Primary Health Care systems (p.41). However hesitancy remains concerning the use of traditional preparations. This is often because their use is deemed ‘problematic’ to productivity which is seen to be required by modern systems of development (p.24,153).

This chapter expands on that supposed problematic use by investigating five cultural keystone species and describes how modern systems of development have changed their use patterns. Each indigenous substance is prefaced by discussion on the origins, historical context, traditional-use pattern and physiological effects of the traditional preparation. For some of these, evidence of use change was readily available. In other cases very little supporting literature could be located, causing me to draw on related themes from literature to suggest how modern systems of development have caused a use change. Further, although a wide variety of indigenous substances could have been selected for discussion, two criteria were applied. First, over and above medicinal, spiritual and/or religious use, each substance had to also have been used, or continues to be used, recreationally. Second, some of the indigenous substances had to originate from the South Pacific region, the locus of this study. This second criteria limited the number of substances available for discussion.

The chapter begins by investigating alcohol and coca, two indigenous substances that Courtwright (2001:3) argues are numbered among *The Big and Little Three*, or “the world’s principal psychoactive resources”. Three South Pacific

indigenous substances, *kawakawa*, betel, and finally, *kava* are then presented.

This chapter has two purposes. First, it aids in addressing a lack I voiced in the closing section of the previous chapter, namely post-development's silence to date regarding indigenous substances. Second, this chapter informs the study proper, as an investigation on the cultural importance of the indigenous substance *yaqona* and its relationship with education as an input to modern systems of development. The present discussion begins by investigating the most common and widely used indigenous substance alcohol.

## Alcohol

### **Origins, Historical Context and Traditional Use<sup>13</sup>**

Of all the traditional preparations, alcohol appears to be the most widely used (Mandelbaum, 1979:14; Jolly, 2009:27) and has the earliest documented history (Durrant & Thakker, 2003:34,64). It is therefore considered the 'original indigenous substance' (Patrick, 1952:12-3; Durrant & Thakker, 2003:14-15). The reason for its widespread use, I would suggest, is because alcohol is very easy to produce (de Garine, 2011:139; McGrew, 2011:13; Thomas, 2011:37). Heron (2003:2) comments that, "almost any natural product containing sugar or starch can be turned into beverage alcohol. For centuries in Asia, Africa, South America, and Europe, producers turned fermented fruits or vegetables into beer or wine." Archeologists date the first intentional fermentation of alcohol back to the Neolithic period, some 10,000 years before the birth of Christ (Patrick, 1952:12-3).

From its earliest times, alcohol has had great religious importance (Mandelbaum, 1979:14; Hanson, 1995:7). In ancient Greece, for instance, fermented beverages were offered to the gods, with Greek mythology understanding that the god Dionysus consumed alcohol as an aphrodisiac, a practice that the Grecians religiously observed during the 4<sup>th</sup> century BC. In the 5<sup>th</sup> Century BC, Bacchus, the god of wine, was

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<sup>13</sup> The presentation style together with the use of some terms in the subheadings has been borrowed from Marshall (1987).

worshiped in Rome (Nordegren, 2002:90), while the Vikings maintained that a lack of alcohol made the Norse gods angry (Sournia, 1990:6; Hornsey, 2003:263). The early Egyptians believed that a special beer was consumed by the 12 guardian gods who watched over the Osiris shrine (Hornsey, 2003:37), and the Mesopotamians, who considered “intemperance a sign of masculinity” (Hanson, 1995:3) worshiped and made offerings to wine deities (Hornsey, 2003:78). Historical texts excavated from the Hittite era (1400-1200 BC) describe the use of alcohol at the funeral of a person of nobility when “they extinguish the [cremation] fire with ten jugs of beer” (Gurney, 1959:164).

Use of the phytomedicinal properties of alcohol also has a lengthy history (Darby, Ghalioungui, & Grivetti, 1977:534; Insel, Turner, & Ross, 2006:368). The ancient Egyptians added spices to beer to make medicinal preparations (Wilson, 1975:639; Hornsey, 2003:358); in 410 AD, a Latin medical text reported the benefits of a salt and beer mixture (Wilson, 1975:641); in the 10<sup>th</sup> century the English used hops as a medicinal plant (Wilson, 1975:638; Grieve, 1977:414); during the Crusade era wine formed the basis of a drug concoction used as an anesthetic during post battle surgery (Mitchell, 2004:200); and the consumption of vast quantities of alcohol was believed to be a preventative against the Black Death in the 14<sup>th</sup> century (Hanson, 1995:8). Hornsey (2003:379-80), in his 700-plus page volume on beer and brewing, reviewed a number of historical writers who reported the medicinal properties of alcohol. The early poet John Taylor (1578 – 1653), for instance, claimed alcohol was a curative for a multitude of diseases and complications from tumors to gout (Holt, 2006:1). While it would be easy to condemn alcohol’s early medicinal use as quackery, some of these uses have been endorsed by modern scientists. For example, they have linked the moderate use of red wine to reduced incidences of cardiovascular disease (German & Walzem, 2000:581-2; Wollin & Jones, 2001:1403).

Prior to industrialisation, the consumption of fermented beverages was “regarded an essential part of one’s diet” (Loue, 2003:37) and a “food [item] viewed as an important source of calories” (Durrant & Thakker, 2003:40). Pendergrast (1999:13)

reported that in 17<sup>th</sup> century England, alcohol was drunk in “Falstaffian proportions” – levels that would be considered excessive “by current standards” (Loue, 2003:37). A second reason for such high consumption rates over and above its use as a “food”, was that historically alcohol was often a replacement for, or comprised part of the purification process of water (Willis, 2002:44; Blocker, Fahey, & Tyrell, 2003:21; Insel, Turner, & Ross, 2006:368; Jolly, 2009:39). For example, Philbrick (2007:3) explains, “the notoriously bad quality of the drinking water in [the] seventeenth-century” citing the concerns of the Pilgrims aboard the *Mayflower* enroute to the New World in 1620. Concern was voiced when the barrels were almost drained and “the slimy bottoms of their water casks” were observed. Additionally, Fremont-Barnes & Noon (2005:27) state that Royal Navy sailors in Nelson’s fleet were issued–

with a gallon of beer every day, a staggering rate of consumption that amounted to ten times the annual national average for civilians. It was considered safer than water, which was stored in barrels for months at a time. Once the supply of beer was exhausted, the men received other forms of alcohol according to a formula that equated 1gal of beer with 1pt of wine or ½ pint of spirits<sup>14</sup>.

When Captain James Cook set sail in the *Endeavour* in 1768, a journey that would result in the discovery of *Aotearoa* New Zealand, he carried with him an astounding 4,542 litres of beer and 6000 litres of spirits, and took on a further 11,477 litres of wine at Madira (Cook, 1955:8,613). Additionally, for the non-seafarer of this period, high alcohol consumption rates were not considered problematic, with ingestion levels left to the discretion of the consumer rather than state instituted regulatory measures (Harari & Legge, 2001:39).

The non-problematic use of alcohol as a staple in the diet, especially when the effects of inebriation are factored in, is a difficult concept to comprehend from a contemporary vista. Additionally, Warner (1992:409), in his paper entitled *Before there was ‘alcoholism’*, states that descriptors suggesting alcohol overuse and abuse are “modern” constructs first appeared in the late 1800s where it was initially “labeled ‘a disease of the will’ that could be cured only by complete abstinence from spirits” (Loue, 2003:38). Davis (2002:90) writes that “stereotypes plague popular and

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<sup>14</sup> One gallon (1gal) is 4.54 litres and one pint (1pt) is slightly more than half a litre (0.56).

theoretical understandings of alcohol problems”, especially among indigenous societies. Citing the Aboriginal community, a sector of Australian society “perceived as [having] significant” substance abuse problems “similar to those of other indigenous groups, especially *Māoris* and American Indians” (p.87), Davis argued that prior to European contact, this people group brewed and used alcohol<sup>15</sup> in a manner that did not disrupt social cohesion (p.90). Gossop (2007:42-3) concurs with this report, adding that it was the heavy consumption patterns of the Europeans, which the natives subsequently mimicked, that led to alcohol-related social disruption and resulted in prohibitions against indigenous alcohol consumption.

Medina-Mora (1998:267-8) reports a similar occurrence among the Mexican Indians. Prior to Colombian contact in the 16<sup>th</sup> century, this group adhered to strict codes regarding alcohol consumption, and excess that could lead to intoxication was restricted to a small number of religious occasions. One such example was the annual celebration of Izcali, where all members of the community, from children to the elderly, were allowed to freely indulge, and inebriation was encouraged. This regulated form of alcohol use among the indigenous populace “changed from occasional use limited to festivals, to indiscriminate secular use” with the arrival of the Spaniards (p.267).

Although the spiritual and medicinal aspects of alcohol are noteworthy, it is the use of fermented beverages as a “social lubricant” within social systems that has been uniform across all societies (Porter, 1990:x-xi). This has not been limited to the technically advanced ‘modern’ societies of Europe but also within ‘traditional’ tribal communities. For instance the Bantu people of South Africa have been brewing and using a traditional beer made from corn, called *Kaffir* or *Bantu beer*, for centuries as part of social interaction (CUS, 1957:116; Steinkraus, 1996:408). Similarly, the Mexican Indians fermented alcohol and used it as part of festival events prior to Spanish contact (Medina-Mora, 1998:267-8). The use of fermented beverages in social systems, or as

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<sup>15</sup> “The Corkwood Tree is a tall shrub or small tree found in New South Wales and Queensland. It has a thick corky bark. Indigenous Australians used to make a hole in the tree’s truck, pour water into it, and then plug the hole. Overnight this would produce a strong liquor. Drinking this liquor apparently produced a ‘stupor’ in the Aborigines, causing them to experience hallucinations.” (Goldberg & Dillon, 2005:11).

“agents of hospitality” (Hornsey, 2003:3) reflects a universal trend that continues to this day (also see Porter, 1990:x-xi).

Demossier (2005) makes a number of interesting comments concerning alcohol and identity construction. Explaining “the complex position of wine in France” (p.129), she found that “drinking is often central to French senses of individual identity, beliefs and collective representation (p.130)... [and] despite the modernization of their society, wine remains a ‘cultural expression’” (p.148). Garibaldi & Turner (2004) discuss the general link between traditional preparations and identity within their work on “cultural keystone species”. I will later explain the importance of identity formation to the attainment of development (p.104,119-20). However the point I wish to make here is that even in contemporary culture alcohol continues to play a “cultural keystone” role over and above social facilitation, one that aids identity formulation and continuance.

### **Physiological Effect**

Dr William Butler, physician to James I in the 17<sup>th</sup> century, professed his "*Dr Butler's Ale*" aided brain function and memory (Hornsey, 2003:379-80). This claim, when compared with scientific understanding, would appear to be an exaggeration. Alcohol is categorised as a biphasic, affecting the central nervous system by inhibiting cognition, impairing vision and inducing imbalance (Loue, 2003:26-7; Davison, Neale, & Kring, 2004:363), functionalities that Loup (1994:19) argues are necessary for productivity. Additionally, alcohol impairs “memory, abstracting, problem-solving, perceptual analysis and synthesis, speed of information processing, and efficiency” (Parsons, 1998:954; also see Davison, Neale, & Kring, 2004:363), both immediately following consumption and many hours after cessation, depending on the amount consumed (Jobs, Fiedler, & Lewis, 1990:161; Kelly, Foltin, & Fischman, 1990:142; Sadock & Sadock, 2003:399). Although alcohol and its impacts on productivity were discussed in the previous chapter (see p.21), what is clear at this stage is that the literature identifies a point in history when a major change took place concerning the use pattern of alcohol.

## **Use Change**

The two examples cited above from South America (altered alcohol use under the conquistadorian form of “socioeconomic development”) and Australia (Aboriginal mimicry of colonial alcohol consumption habits) demonstrate the negative influence that external systems of development can bring to the non-problematic use patterns of an indigenous substance. This is a reoccurring theme throughout this chapter. While many of the latter examples discuss use change in developing settings with strong traditional values, what is of interest here is that major alterations in alcohol use patterns also occurred within the ‘modern’ European cultural setting, a change that contrasts the traditional arena. As previously stated, alcohol had been frequently consumed in large quantities for many centuries as part of the diet in ‘modern’ Europe. Admittedly, alcohol did have enforced periods of prohibition and moderation during this time, often influenced by religious structures and temperance movements (Darby, Ghalioungui, & Grivetti, 1977:58; Porter, 1990:xi-xii). However, it was not until the advent of industrialisation that major change came about (Matza & Morgan, 2003:136).

Industrialisation, a key input in ‘modern’ systems of development, changed traditional alcohol use in three ways. First, it brought with it vastly improved systems of water sanitation. This offered greater levels of protection against water-borne viruses which in turn created a general attitudinal change regarding alcohol consumption levels (Porter, 1990:xii; Iontchev, 1998:184; Goodrich, 2002:236; Nordegren, 2002:32; Willis, 2002:44; Insel, Turner, & Ross, 2006:368, Thomas, 2011:35). Second, industrialisation caused mass urban migration (Pendergrast, 1999:16), increasing patient load in hospitals, where doctors gained new understandings on how the over-consumption of alcohol affected the human body (Sournia, 1990:23). Finally, and most importantly in regards to this study, effective industrialisation required a sober, punctual, reliable, disciplined workforce in order to meet productivity needs. As earlier discussed, productivity was deemed by modernists as a key element (together with economic growth) in bringing about development. With human labour input being a core element in the productive process (p.19),

inebriated employees were considered a threat to industrial growth (Kelly, Foltin, & Fischman, 1990:129; Porter, 1990:xii; Sournia, 1990:139; Courtwright, 2001:178-9; Jolly, 2009:38). This was an influencing factor in the introduction of the *Noble Experiment*; America's alcohol prohibition of 1920-1933. As Rumbarger (1989) explains, the "temperance ideology was based both on obsessions concerning the effects of drinking and middle-class fantasies about capitalism" (p.xxii) which advocated that "successful industrialization required national prohibition" (p.xxiv). A spokesperson at the time "declared that national economic prosperity 'depends in very large part on the intelligence and sobriety of the worker'" (p.175). Regulatory systems regarding the consumption of alcohol during working hours and the sobriety of workers at the commencement of work to ensure productive process and aid modern systems of development initiated change in alcohol use patterns that continue today.

Where alcohol use change was linked to industrialisation and its need for productivity, another indigenous substance, coca, underwent quite a different use change.

## Coca

### **Origins, Historical Context and Traditional Use**

For centuries, the Indians of the Peruvian and Bolivian Andes have chewed coca leaves plucked directly from the *Erythroxylum* plant, a shrub that grows in the mountainous regions (Figure 3.1) (Johnston, 1859:118-9; McElroy & Townsend, 1989:189; Cherry, 2002:59). Both the leaf and plant are highly sacred. The leaves have been chewed for generations in religious ceremonies (Brecher, 1972:269), as part of socialisation (Johnston, 1859:225-6; Blejer-Prieto, 1965:700-1; McElroy & Townsend, 1989:190; Cherry, 2002:59), by agropastoral workers as a labour enhancer (Cassman, Cartmell, & Belmonte, 2003:157), and used reciprocally and economically (Cassman, Cartmell, & Belmonte, 2003:149-51). Spedding (2004:52) stated that although coca is still widely chewed and continues to form an integral part of most Bolivian social gatherings, there is never pressure to indulge. She contrasts this with alcohol within the same cultural

setting. She describes the pressure and obligation frequently imposed upon participants at festivities where the beverage is present, an environment where deep inebriation is encouraged.



**Figure 3.1**

Peruvian Indian chewing coca leaf.

(Source: Cocagrowers.org)

Medicinally the leaves are chewed as a dietary supplement, for anti-nausea purposes, as a curative for irritability, asthma and colic, and as a combatant to the symptoms of hunger and altitude sickness (Blejer-Prieto, 1965:702; McElroy & Townsend, 1989:190; Cassman, Cartmell, & Belmonte, 2003:151). Johann Jakob von Tschudi, the famous Swiss explorer and naturalist who visited Peru in 1838 stated, “at fourteen thousand feet above the level of the sea, I drank always, before going out to hunt, a strong infusion of coca leaves. I could then, during the whole day, climb the heights and follow the swift-footed wild animals, without experiencing any difficulty” (cited in Johnston, 1859:128).

### **Physiological Effect**

Although von Tschudi and others describe coca as having a stimulant effect, this reportedly includes feelings of tranquil euphoria, bodily warmth that combats cold and appetite suppression (Johnston, 1859:119-20; Blejer-Prieto, 1965:701; McElroy & Townsend, 1989:190-1; McKenzie, 2002:n/a; Jolly, 2009:56). Additionally, academics argue that the active ingredients within coca leaves are non-addictive and chewers do not manifest withdrawal when supply ceases (Brecher, 1972:269; McElroy & Townsend, 1989:190; Spedding, 2004:55). For the uninformed, such comments can be hard to comprehend. This is often due to a misconception propagated by a number of

foreign governments who have categorised coca leaves alongside cocaine and heroin (Spedding, 2004:61). While cocaine is produced from coca, Spedding (2004:61) categorically states that, “Coca is not cocaine... coca does not have the same effects as snorting cocaine... [or] smoking crack.”

### **Use Change**

Shortly after the Spanish landed in South America in 1532, they enforced a prohibition on the use of coca, attributing its stimulant properties to “the devil” (Johnston, 1859:129) and its use an impediment to the advancement of Catholicism (Durrant & Thakker, 2003:73). Although the prohibition was officiated in 1567 by a decree handed down from the Spanish Catholic Church (Johnston, 1859:29; Blejer-Prieto, 1965:701), the conquistadors quickly realised the substance could be exploited as a productivity aid (Brecher, 1972:269) and therefore ignored their own edict (Durrant & Thakker, 2003:73). For example, the Incan slaves, forced to work long hours in “unimaginably difficult conditions” at altitude in the cold tin and silver mines, were encouraged to use the traditional substance to induce warmth (Brecher, 1972:269; McElroy & Townsend, 1989:190; McKenzie, 2002:n/a; Bradbury & Jankowiak, 2003a:22). Blejer-Prieto (1965:701) states that due to “the effects of the coca leaf, the Indians worked harder, longer, and with less food”.

With the exception of the conquistadors’ initial hesitation regarding coca, the use of the substance was considered non-problematic until the 1800s when European pharmacologists first isolated the active ingredient within the leaf and produced cocaine, the addictive local anesthetic and euphoric drug (Brecher, 1972:267; Jolly, 2009:55). This rapidly led to the abuse of a coca derivative and, as previously stated, a misinterpretation regarding the effect and use of coca leaf in its natural state (McElroy & Townsend, 1989:189-90). The manufacture of cocaine increased the demand for coca leaf, an opportunity enthusiastically embraced by financially struggling rural farmers who also wished to be participants in a capitalist process. However, by the 1970s coca farming lost much of its financial benefits and appeal, as peasant farmers were forced to deal with abusive and exploitative “drug lords, paramilitary units and

revolutionary groups [who] weakened traditional ties to the land” (Cherry, 2002:60).

## Indigenous Substances of the South Pacific

The previous sections investigated two of the more common substances that Courtwright (2001) categorised as part of the “big three” (p.9) and “little three” (p.31) – these being most common and widely used indigenous substances. Upon concluding his investigation, Courtwright (2001:53-4) asks, why did some substances “become global products while others... [such as] *kava* drinking remain largely confined to the Pacific Islands... [along with] betel chewing”? Courtwright cites two key reasons. The first is that historically, for a substance to be embraced at a global level, it must have appealed to European traders, seafarers, and colonisers for medicinal, trade or recreational purposes as it was these people that possessed the means to distribute favorable substances during the 17<sup>th</sup> to 20<sup>th</sup> centuries. The second reason was taste. He stated that *kava* was considered to have a chalky, musty flavour and betel an “acrid” taste (Durrant & Thakker, 2003:94).

In the following sections I will examine *betel* and *kava*, preceded by two *Aotearoa* New Zealand indigenous substances, *kawakawa* and *tutu*. In the case of *kava*, this examination will focus on the broader physiological effects in geographical areas outside Fiji. *Yaqona* (*kava*) use in Fiji will be discussed specifically in Chapter 5. These sections will also include comments linking substance use with ‘modern’ systems of development.

### *Kawakawa*

#### **Origins, Historical Context and Traditional Use**

The use of traditional substances for medicinal purposes was widespread among *Māori*, the indigenous peoples of *Aotearoa*, prior to colonial contact in the late 1700s (Brooker, Cambie, & Cooper, 1981:14-19; Beattie, 1994:82-87). Joseph Crocome (1811-1874), an experienced medical practitioner and graduate of the London Royal College of Surgeons who worked extensively throughout *Aotearoa*’s lower South Island from 1831 until his death, recognised the validity of these traditional preparations

from a curative perspective. Fulton (1922:7-10) reports that Crocome frequently, and without hesitation, turned to these medicinal substances when his own Western stocks were low in order to treat a wide variety of sicknesses and life-threatening injuries.

In terms of the use of traditional substances by *Māori* for purely recreational purposes, very little comment has been published on the topic, and what has is contentious among the few scholars who have authority to comment. For instance, McGowan (2000; 2009), an expert in *Rongoa Māori* (traditional *Māori* medicine), commented that this is a subject that he has discussed on numerous occasions with *komatua* (*Māori* elders) (pers. comm, March 7, 2008). He stated that although hallucinogenics were available, notably from several species of native mushroom (*psilocybin*), “*Māori* did not use [any] plant as a recreational substance in pre-European *Māori* society”.

In contrast, Bock (2000:176-7) details the use of *kawakawa* or *Māori kava* (*Macropiper excelsum*) by the *Aotearoa* indigenents, arguing that the plant was used not only medicinally, but also recreationally. Botanically, *kawakawa*, a leafy shrub with tiny berries clustered on stick-like spikes which grows to almost six meters tall (Figure 3.2) (Byant, 1999:553). It is a close relation of *kava* (Brooker, Cambie, & Cooper, 1981:77; Brunton, 1989:21), the traditional soporific of the Pacific islands which will be discussed at length shortly. This botanical and visual similarity is the reason a number of scholars argue *Māori*, who arrived in *Aotearoa* around the 12<sup>th</sup> century from the Pacific Islands, named the plant *kawakawa*, or *kavakava* in some indigenous dialects, and attributed enormous sacred significance to it (Taylor, 1848:xii; Lester, 1941:100; Singh, 1981:61-2; Bock, 2000:175). Similarities between *kawakawa* and *kava* – Bock (2000:176-7) suggests – would naturally have led to its recreational use. Taylor wrote in 1848 (p.100) that *kawakawa* was consumed as “*cava*” when *Māori* first arrived in *Aotearoa*. Further, it is believed they gave place names (such as

*Kawaranga* near Thames<sup>16</sup>) to reflected their meeting together and the drinking of *kawakawa*, mirroring their traditional consumption of *kava* prior to sailing south to *Aotearoa*. Others though argue that the roots of the *kawakawa* cannot be prepared and consumed in the same manner as *kava* (Dieffenbach, 1843:426; Goldie, 1905:72; Lester, 1941:100).



**Figure 3.2**

*Kawakawa* leaves with small spikes

(Source: Riley, 1994:99)

Reverend Richard Taylor (1805-1873) (n/d:221), a missionary to *Aotearoa* and prolific writer regarding early *Māori*, recorded that the chewing of substances among the indigenents for pleasure was part of “general custom”, a practice that included *kawakawa*. Similarly, three additional early-New Zealand writers also present observations on the chewing of a wide variety of substances for pleasure by *Māori*, with one stating that their “mouths are almost always going, whether at work or at play: if they have no news to tell... they will chew” (Yate, 1970:110; also see Wade, 1842:58; Beattie, 1994:499).

Riley (1994:195) commented that *Māori* used *kawakawa* as part of acknowledging “the life cycle from birth to death”. Sprigs of *kawakawa* were kept close during intercourse to invoke blessing and were used during every significant ceremony, from the delivery of a child, to anointing new houses, canoes, food and conflict pursuits, and as well as being “a symbol of mourning... carried at funerals”

<sup>16</sup> Anderson (2000:393) suggests that the *Māori* place names of *Parikawakawa* and *Te Kawakawa* are also linked to the pre-migrational use of *kava*.

(Riley, 1994:195)<sup>17</sup>. Additionally, the potent leaves and the fruit were used medicinally as a curative for a wide variety of injuries, digestive complaints, in the management of pain, and as a stimulant, both motivationally and sexually (Taylor, 1848:24,83; Goldie, 1905:59,67,72,85,118; Faulkner, 1958:223; Brooker, Cambie, & Cooper, 1981:77-8; Beattie, 1994:485; Bock, 2000:176; Moon & Kereopa, 2004:156-7). Subsequent pharmacological “analysis supports much of this usage” (Brabyn, 2003:n/a) with a New Zealand-based company recently manufacturing several different products from the plant including a “1<sup>st</sup> Aid” gel, “Anti-septic balm”, “Anti-fungal cream” and decongestant (Earth Energies NZ, 2011).

### **Physiological Effect**

The physiological effects of *kawakawa* as part of recreational use are highly subjective. This is because very little material exists on this topic and, as has already been discussed, most academics are adamant that *kawakawa* was not used in a recreational manner. Therefore, to discuss the physiological effects of *kawakawa*, this section will also include limited discussion on use patterns to support effect arguments.

As stated above, commentators argue that *Māori* would have used *kawakawa* in a similar manner to *kava*, use that included the chewing of the substance. When chewed, *kava* is extremely astringent, causing a burning sensation (Baessler, 1895:247-8; Titcomb, 1948:118), although as numbness sets in, this subsides and would explain why *Māori* also used *kawakawa* to combat toothache (Neil, 1889:293; Goldie, 1905:118). This would suggest that in order to gain an appreciation of the psychoactive effects of *kawakawa* one simply needs to understand the anesthetic soporific relaxant effects of *kava*, a theme that will be discussed later in the chapter.

Bock (2000:176-7) adds another perspective concerning the possible physiological effects of *kawakawa*. He draws on the work of Shulgin (1966:381) and Van Gils & Cox (1994:124) who established that the seeds of nutmeg contain

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<sup>17</sup> Overall *kawakawa*'s contemporary use is limited to selected ceremonial purposes. For instance the leaves were worn by women as a head adornment and a mark of respect during the funeral of the late *Māori* Queen, Te Arikinui Dame Te Atairangikaahu, in August 2006.

*myristicin*, a chemical also contained in *kawakawa*, and one capable of causing psychoactive effects in approximately 60% of its users (Bock, 2000:176-7; Beyer, 2007:3). The effects experienced from the consumption of nutmeg seeds are described as mildly sedative and calming (Van Gils & Cox, 1994:123). Stafford (2005:164) adds that “when consumed in high doses” – as in several teaspoons – nutmeg “can bring on an intense hallucinogenic high”. Therefore, Bock argues many *Māori* would have experienced this psychoactive attribute from *kawakawa* ingestion and would therefore have utilised the substance for pleasure.

### **Use Change**

Brooker, Cambie & Cooper (1981:16,18), drawing on the writings of authoritative colonial commentators, argue that the early period of colonisation generated confusion among *Māori* regarding the use of their indigenous substances. On one hand the missionaries – believed by *Māori* to be the mouthpiece of the Creator – dissuaded traditional forms of cultural practice and spiritual communication and medicinal use while extolling the virtues of modern European medicines (McGowan, 2000:17-19). On the other, *Māori* understood that to pursue these ‘modern’ systems would mean turning their backs on familiar cultural practices that had created and influenced life-ways for generations.

Academics argue that it was during this period of confusion, further complicated by the introduction of *The Tohunga Suppression Act* of 1907, that *kawakawa* disappeared as part of medicinal and spiritual use patterns and was virtually eliminated from ceremonial systems (Brooker, Cambie, & Cooper, 1981:17; Bock, 2000:178, McGowan, 2000:11). *The Tohunga Suppression Act* had its foundations in the *Criminal Code Act* of 1893. This sought to extinguish *tohunga* (traditional priests and medicine men) practices, including their use of indigenous plants and substances. The colonial authorities and missionaries believed *tohunga* did little more than reinforce superstitious gullibility and incite a “reversion to paganism” among *Māori* (Lange, 1999:247; also see p.242,249-250,281-2). This was followed by the *Quackery Prevention Act* (1908). According to Lange (1999:247), the *Quackery*

*Prevention Act* was intended to quell the medical practices of “Pakeha [people of European descent] charlatans” who had been accused of being “even more reprehensible than *tohunga*”. He adds that a reduction in activity by both *tohunga* and “Pakeha charlatans” was welcomed by the colonial administrators who deemed this a necessary factor in bringing about modern systems of development such as health reform (p.247).

Beattie (1994:485) commented that the introduction of the *Tohunga Suppression Act*, reinforced by a number of successful prosecutions (Lange, 1999:250-3), was the impetus for the loss of a large quantity of traditional *Māori* knowledge. Durie (2003:51) explains this as a loss of “*Māori* methodologies and the legitimacy of *Māori* knowledge in respect of healing, the environment, the arts, and the links between the spiritual and the secular – *te kauae runga* and *te kauae raro*”<sup>18</sup>. I would argue that this loss also extended to the use of indigenous substances for recreational purposes.

## Betel

### **Origins, Historical Context and Traditional Use**

According to Burton-Bradley (1966:744) the chewing of betel “has persisted since earliest recorded time, and most certainly existed even before this”. The explorer Herodotus described betel in 340BC, although Marco Polo was the first European to document betel chewing in India in 1298 (Raghavan & Baruah, 1958:316-7). Betelnut, roughly the size and shape of a hen’s egg, has a reddish-yellow husk-like shell with a fleshy center and hangs in bunches from vine like extensions from the core of the areca palm tree (*Areca catechu*). The palm can grow as high as 30 metres on a very slim trunk and thrives throughout South East Asia, including India, Pakistan, Malaysia, and pockets of the Western Pacific and Papua New Guinea (Raghavan & Baruah, 1958:316-7; Nelson & Heischober, 1999:239). Betelnuts are chewed with betel vine leafs, “slack lime obtained from shells, coral or mountain lime” (Burton-Bradley,

<sup>18</sup> In 2009 the New Zealand current affairs programme *Campbell Live* (May 11) reported renewed interest in the phytomedicinal properties of *kawakawa* and several other traditional *Māori* preparations suggesting an indigenous substance renaissance.

1966:744) (Figure 3.3). The lime is necessary as a reactant, causing the fleshy centre of the nut or the leaf to release the active ingredient arecoline, an alkaloid that affects the central nervous system (Riley, 1997:197; Chu, 2001:231-2; Ghelardini, Galeottin, Lelli, *et al.*, 2001:383). The reddish-coloured juice produced from chewing betel is spat out with the active ingredients being absorbed through the oral tissue, although naturally small quantities of the juice are swallowed (Burton-Bradley, 1966:744).



**Figure 3.3**

Whole and half (cut) betelnut s, lime (in plastic bag) and betel leaf.

(Source: Author, 2008)

The contemporary use of betel is widespread with Atal, Dhar and Singh (1975:265) estimating in the 1970s that over one-third of the world's population 'chewed' this indigenous substance. However, for the purpose of this study, and specifically this section which focuses on the Southern Pacific region, comment regarding the chewing of betel and its related traditional systems will be confined to Papua New Guinea (PNG). In PNG, betel, also called *buai*, is considered a "national cultural symbol" (Foster, 2002:20, also see p.31-2) and is often referred to as *Papua bia* (Papuan beer) (Lepowsky, 1982:335; Connell, 1984:57).

Betelnut chewing has a lengthy history in the coastal areas of PNG and has been used for generations as part of religious and spiritual observation with many practices still surviving today (Burton-Bradley, 1966:745-6). Lepowsky (1982:337) details the use of betel by sorcerers. Necromancers are believed to possess the power to imbue betelnut with curses in order to induce sickness or death, or alternatively charm objects by spraying them with betel saliva which are then used to lure a partner

(Burton-Bradley, 1966:745-6). Additionally, sorcerers offer the nuts to the dead and to spirits during funerals and religious ceremonies and betel is believed to possess powers capable of protecting loved ones, especially children (Lepowsky, 1982:338). Betel juice and lime are also mixed together to create a cosmetic that is worn at ceremonies (Burton-Bradley, 1966:746). Further, chewers will temporarily abstain from betel consumption as an act of respect following a death, or during a period of special significance (Pearson-Chinnery, 1922:25).

Betelnut is also used traditionally for medicinal purposes. The juice of the nut contains antihelminthic, a chemical that aids in the elimination of intestinal worms and stomach parasites in both humans and animals (Lepowsky, 1982:335; Riley, 1997:197; Nelson & Heischober, 1999:238). The leaves contain a mild analgesic and antiseptic healing agent and are applied to wounds and abscesses, while pregnant women chew the nut to alleviate morning sickness (Grieve, 1977:96; Riley, 1997:197; Nelson & Heischober, 1999:241). It is also used as a breath sweetener (Chu, 2001:231-3).

While some espouse the medicinal benefits of betel, others report health concerns. Burton-Bradley, writing in the 1960s, expressed a concern that the chewing of the substance was possibly linked to oral cancer, a connection since confirmed by contemporary researchers (Fu, Kan, & Liu, 2001:135-6; Liang, Kuo, & Wang, 2002:147; Warnakulasuriya, Trivedy, & Peters, 2002:799-80). For instance Lu, Yen, Ho, *et al.* (1996:246) report that 58.4% of Taiwanese betel users suffer some form of oral malignancy as a result of their substance use. Additionally, contemporary researchers warn against the chewing of betel by pregnant women, arguing that this increases the risk of “spontaneous abortion” and fetal abnormality, while the swallowing of the juice can incite “symptoms such as headache, anorexia, nausea, muscle pain or conscious disturbance” (Fu, Kan, & Liu, 2001:135-6).

Both historically and contemporarily, betel has played a central role in ceremonial and social systems (Pearson-Chinnery, 1922:25; Nelson & Heischober, 1999:239). Betel use and its significance comprised cultural learning and is taught

from childhood. Most begin using the indigenous substance during adolescence (Nelson & Heischober, 1999:242). This “national cultural symbol” has great strength “as a facilitator of peaceful social relations” (Lepowsky, 1982:340). For instance, during warfare betelnuts were used to broker an interlude in conflict in which combatants would chew together before hostilities were resumed (Pearson-Chinnery, 1922:25). Betel is also consumed by negotiating parties to acknowledge agreements at the conclusion of business deals (Nelson & Heischober, 1999:239). Although the nuts have commercial value as a cash crop, their true value is considered from a cultural perspective rather than as a commodity (Lepowsky, 1982:338; Connell, 1984:57).

The consumption of betel is seldom an individual pursuit, rather it is an activity done with others signifying bonds of friendship and trust, with travellers frequently taking a “generous supply” (Lepowsky, 1982:339) with them as an offering to hosts (also see Schwimmer, 1982:322; Nelson & Heischober, 1999:239). Additionally, Lepowsky (1982:340) described the use of limesticks, used to measure lime from special receptacles during the preparation of the betel for chewing. These form part of the chewing accessories which are often accorded sacredness (Burton-Bradley, 1966:744-5). At ceremonies and gatherings, limesticks are rhythmically tapped against the pots as an accompaniment to the singing of traditional songs. The use of betel is not confined to the traditional setting and has recently been embraced within the contemporary business arena, an idea I will return to shortly.

### **Physiological Effect**

The physiological effects of betel have been widely recorded (Burton-Bradley, 1966:744). For the first time user, betel chewing causes feelings of nausea, vertigo, dizziness and diaphoresis similar to that experienced by a novice cigarette smoker (Burton-Bradley, 1966:745). The reddish juice produced when betel is chewed contains psychoactive chemicals that impact the central nervous system and stimulate the alpha and beta waves in the brain (Chu, 2001231-3). This produces a feeling of contented well-being, increased sociability and humour, reduced thirst, hunger and fatigue, and motivates work desirability (Burton-Bradley, 1966:744-6; Lepowsky,

1982:337; Riley, 1997:197). Researchers suggest that heavy betel consumption does not produce aggressive behaviour (Schwimmer, 1982:323) and that when used in moderation is “fairly harmless” (Burton-Bradley, 1966:746) and does not appear to impact socio-cultural structures (Schieffelin, 1982:49). Hirsch (1990:25) adds that the physiological effects of betel are vastly different to that of alcohol, which is recognised as being socially disruptive in PNG.

On the other hand, Chu (2001:234) argues that betel chewing is “mild to moderate[ly]” addictive, with withdrawal symptoms that include agitation, lethargy, depression, paranoia and a difficulty with concentration. However, Burton-Bradley (1996:744) asserts that betel addiction appears to only affect those who have personalities predisposed to habituation. He adds that people who chew betel as an aid to their work come to rely on it and if one runs out, “he is compelled to down tools and proceed to the market to replenish his stocks. He runs the risk of losing his job, and often does.” (p.745)

While betel is believed to increase motivation and work desirability, in 1982 Schwimmer espoused a different opinion. He argued that betel chewing caused “an apparent forgetfulness [that] leads to a state of mild benevolence as well as imaginative awareness slightly freer than otherwise” (p.322). No clinical assessments were administered to verify this claim. It wasn’t until 1996 clinicians conducted what is believed to be the first cognitive examination of betel chewers, in order to test a hypothesis that chewing was a factor in workplace accidents. 28 “experienced betel-chewing [heavy] vehicle operators” were tested. The results established that “chewing betelnut did not facilitate reaction time, neither did it impair reaction time... or short-term memory” (Wyatt, 1996:460). Although an increase in heart rate was noted, clinicians believed that this potentially indicated an improved “state of arousal [aiding] alertness” and therefore deduced betel chewing was not a contributory to work place accidents, although it was acknowledged that further testing was required (Wyatt, 1996:461-2; Chu, 2001:231-2). These tests tended to support the long-held notion that betel aids productivity and worker output, although Burton-Bradley would suggest

that such productivity can be interrupted when users leave their workplace seeking fresh supplies.

### **Use Change**

Unlike the substances previously discussed, the use of betel as a traditional spiritual, ceremonial, medicinal and social substance has changed very little. Additionally, medical evidence that argued chewing increases levels of oral cancer has mostly been ignored (Connell, 1984:58), which the *British Medical Journal* (Warnakulasuriya, Trivedy, & Peters, 2002:799-80) reports is because betel is so “culturally bound and... an integral aspect” of several indigenous societies that it comprises “part of their identity”. Where use change has occurred though is in the modern work environment.

Starting in the 1980s, posters began appearing in government offices warning consumers that “The chewing of betelnut in working hours is strictly prohibited: Failure to observe this rule could result in instant dismissal” (Foster, 2002:33). Similar prohibitions were also reported at a number of mine and building sites (pers.comm, Banks, 2009, March 10; Richards, 2010, Jan. 17). This is interesting, considering reports that betel has the potential to increase productivity. In an attempt to identify motives and reasons behind these prohibitions, a literature search was conducted. In 1984 Connell reported that a ban introduced by the PNG Ministry of Defense was aimed at bringing a stop to the spitting of betel juice, a by-product of chewing, and a habit they deemed a health hazard (p.58). Then in the early 1990s the Government’s prohibitory stance appeared to change when the Deputy Prime Minister, Akoki Doi, invited members of parliament to attend a “Parliamentary Betelnut Club” (Foster, 2002:33).

In 2002 Foster stated that the chewing of the nut created an “obstacle to the achievement of technically and economically efficient self rule” (p.33). Unfortunately, he did not expand on or justify this comment. In October 2007 police officers were warned that they were to stop chewing betel while on duty as the practice was “contrary to good behavioural conduct” (Per, 2007:10). No further reasons or

clarification regarding how chewing was “contrary to [such] conduct” were given, although interestingly the Police Commander who had issued the regulation did acknowledge that each indiscretion would be dealt with on a case-by-case basis.

It was not until August 2008, and after a report that appeared in *The National* newspaper, that a work-place ban on chewing betel appeared to have reasoned merit and unambiguous application. The head of Human Resources at Telikom PNG (the national telecommunications provider) was reported as having warned staff that “employee[s] found chewing betelnut during working hours and on company premises” would be sacked, as the practice promoted a “high unproductive culture... high incidents of absenteeism, [a] lack of punctuality for duties, and poor grooming standards including betelnut stained teeth” (Korugl, 2007:6). This aligns with earlier comments about modernisation and how indigenous substances are deemed threats to productivity (p.20). In much the same way, “poor grooming standards” hint at colonial attitudes associated with the ‘aesthetics of modernity’, or are seen as observable demonstrations of ‘primitive-ness’ in contrast to ‘proper’ modern civilised behaviour<sup>19</sup>. Supposedly, red teeth are not ‘proper’ or a demonstration of aesthetic modernity such as the ‘gleaming white dentures’ of the developed European. As Howitt (1865:286-7) and Speiser (1996:64) allude, “spitting” is deemed a ‘primitive’ aesthetic demonstration associated with a lack of “cleanliness” among “rude savages” – practices contrary to ‘modern’ systems of development.

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<sup>19</sup> For examples of ‘aesthetics of modernity’ or observable demonstrations of ‘primitive-ness’ in contrast to ‘proper’ modern civilised behaviour, it is worth consulting academics such as Firth (1997:262) who argued that ethnocentrism during the colonial period propagated the notion that the “natives” were less intelligent – as was demonstrated by behaviour such as the non-wearing of shoes. Alatas (1977:52-3) suggested that ‘native’ traits are aesthetically demonstrated through activities such as not closing doors (after opening them), not returning borrowed items and mixed gender washing in the river – ‘primitive’ activities that (apparently) ‘modern civilised’ people would never consider doing. Watt (1896) presents further examples of the ‘aesthetics of modernity’ in which “the heathens... [go about] naked” (p.78) and the ‘native’ women do not wear “girdles” (p.197), this being in contrast to the colonial “in his clean white suit” who – together with his ladies – portrayed a “picturesque group” (p.97). Brigham (1908) adds, their “huts are of the rudest construction hardly as neatly built as a skilled woodsman would build his temporary camp... As the people become more civilized... the houses share in the change” aesthetically demonstrated through details such as a “definite doorway” (p.62). Concerning the aesthetics of modernity and indigenous substance betel, Kasaipwalova (1987:69-77) presents a sad yet humorous, situationally ironic, PNG English stylised story written for secondary school students and reproduced in an anthropology text that is worth consulting.

Several weeks after the Telikom PNG article appeared I made inquiries with the telecommunications company seeking more details on the ban. After what appeared to be a large amount of hesitation, I was finally advised that the HR Manager had “left the company” and no one was available to comment on his leaving or the directive (pers.comm., 2008, July 4). Shortly after this I discussed betel bans, and more specifically the Telikom PNG situation, with a Master’s student and former PNG school teacher attending a New Zealand university. They appeared amused and replied in a ‘knowing’ manner that the former Telikom HR Manager “must have upset some [betel chewers] at the top” and had therefore been ‘forced’ to leave the company (IQ001). They added that betel bans and prohibitions were forever being instituted in PNG, although almost all were ignored. The informant stated that teachers in the schools they had taught at were forever being warned to desist chewing, especially during recesses. The practice of betel chewing is a collectivist activity, they explained, and this caused teachers to arrive, or return late to the classroom, or was the reason some teachers left their students unattended during the teaching period. The informant concluded, “See, everyone is doing it including the people making the regulations. It’s part of our culture, so I don’t know if they can ever stop it.” When the informant was asked whether the PNG Ministry of Education (MoE) had issued a policy regarding betel chewing during work hours they replied “no, coz even the people at the top of the Ministry do it”. These comments were also substantiated by a senior academic (Associate Professor: IQ002) within PNG, although when I approached senior staff at the PNG MoE for comment, I was continuously stone-walled and referred from one staff member to another. After several days of this it became clear that MoE staff simply did not want to discuss this issue.

In the next section I discuss *kava*, which has similarities with betel, both through cultural embeddedness and as a substance deemed problematic to productivity. In a similar manner to betel, *kava* remains in use despite the modern systems of development that deem it unproductive.

## *Kava*

The final indigenous substance to be presented is *kava*, “the most important psychoactive plant in Oceania” (Beyer, 2007:4). As stated earlier, this will discuss geographical areas other than Fiji. Because the wider scope of the study is focused on Fiji, detailed discussion on *yagona* (*kava*) in Fiji will be presented in Chapter 5.

### **Origins, Historical Context and Traditional Use**

*Kava* is a leafy shrub with approximately six to ten segmented and noded branches protruding from a central basal stump (Figure 3.4). It can grow up to three metres tall and is asexual, meaning that it must be propagated manually (Singh, 2004c:29). *Kava* was well known across a large expanse of the southern Pacific, from Papua New Guinea (PNG) in the west, to Hawaii (Lebot, Merlin, & Lindstrom, 1997:1; Marshall, 2004:201) in the east – with the exception of Australia and New Zealand<sup>20</sup> – when it first received its botanical name *Piper methysticum* f. from Captain James Cook’s naturalist (Steinmetz, 1960:3; Singh & Blumenthal, 1997:36). Brunton (1989:28-35), in his authoritative account of the investigation into the geographical distribution of *Piper methysticum*, argues that all *kava* cultivars originated from a few primary sources in northern Vanuatu. Crowley (1994:88,97) adds to this theory and presents two useful maps which illustrate the “distribution of kava-drinking areas in the Pacific [and] suggested routes for the introduction of kava on the basis of linguistic and non-linguistic evidence”. These maps are presented in Appendix B. This offers a contrasting explanation to the mythological and cultural understandings of *kava*’s arrival in each traditional locality (Lindstrom, 2004:12-14).

The term *kava* also applies to the consumptive beverage made by pounding and straining the roots and/or lower basal stem through water. A more detailed description (which includes photographs) of the cultivation, harvesting, mixing, and consumption of the beverage can be found in my earlier study (Aporosa, 2008:31-5).

<sup>20</sup> “The first Polynesian migrants in New Zealand probably also brought kava with them, though it failed to grow in the colder climate. However, the plant *kawakawa* of the related *Macropiper excelsum* [see p.58] from a different genesis (which the Māori used for medicinal purposes) is found there. The word *kawa* in Māori is also used to mean ‘marae protocol’, which would accord with kava having been previously used in a ceremonial context as we find in Polynesia today.” (Crowley, 1994:95)

What is important in this section is the mythical, spiritual and cultural value attributed to *kava* by most indigenous societies in the southern Pacific area. In this area *kava* is believed to be imbued with *mana*<sup>21</sup>, or spiritual powers, and is recognised as a “plant of the gods” (Merlin & Raynor, 2005:241). As with previous indigenous substances, there will also be a discussion on *kava*’s physiological effect and use changes influenced by ‘modern’ systems of development.



**Figure 3.4**

*Kava (Piper methysticum f.)* at three years of age.

(Source: Author)

(Source: Singh, 2004:61)

In Papua New Guinea, where it is called *kéu*, *káu*, *tigwa* or *gámada*, *kava* has grown and been used traditionally for centuries (Haddon, 1916:146,147; Lebot, Merlin, & Lindstrom, 1997:1) – although it holds a secondary position to betelnut (Singh & Blumenthal, 1997:42). Hannon (1916:148) reports that *kéu* or *káu* was commonly used to appease spirits who were then expected to assist in a bountiful harvest or as an instrument of peace. Warring tribes would come together, consume the beverage and sprinkle the substance over one another, declaring that all conflict had ceased.

<sup>21</sup> According to Tomlinson (2006:174), this word defies a simplistic meaning. However, “*mana*” in Fijian is often best translated into English as ‘work’, ‘succeed’, ‘achieve’, or the like – that is, as a verb denoting effective action. Like ‘work’, ‘*mana*’ is a verb that can be used nominally or adjectivally without altering its form. It can also be reduplicated and given affixes (e.g., *vakamanamanataka*’, meaning ‘make *mana*’ or ‘make effective’) and used in conjunction with other words.” (Also see Capell, 1938).

There is some conjecture regarding the traditional use of *kava*, known as *kava qwua*, in the Solomon Islands. Lebot, Merlin, & Lindstrom (1997:32,213) report that *kava qwua* was introduced following colonial contact, whereas Fox (1924) – who researched burial practices – received reports that prior to colonial contact *kava qwua* was used and consumed traditionally (p.216-7). Fox writes that libations were poured out as an offering during the *rihumae*, a ceremony of remembrance held approximately six months following a death. He adds that when he enquired about contemporary *kava qwua* use, he was informed that it had ceased with the coming of betel (p.216-7).

In Pohnpei (formerly known as Ponape), an island within the Federated States of Micronesia, the plant is commonly referred to as *sakau* (Petersen, 1995:36). In a highly detailed study of the indigenous substance, Balick & Lee (2009:165) report that the plant and its associated practices are so intricately interwoven with Pohnpeian society that “no palpable boundary [exists] between culture and plant”. They added that *sakau* stems, leaves and roots are used medicinally both physiologically and supernaturally (p.175). *Sakau* is presented and consumed as part of acknowledging authority, honouring guests, seeking forgiveness, aiding birth celebrations and funerals practices, and in spiritual communication (McGrath, 1973:66; Hanlon, 1988:114; Petersen, 1995:34,49; Merlin & Raynor, 2005:243-4). This is believed to only be possible due to the spiritual attributes, or *mana*-related properties, of *sakau* (Balick & Lee, 2009:174-5). These characteristics also apply to *sakau*’s power as a tool of mediation and social unity. Balick & Lee (2002:97) state that it is an emblem that “holds the culture together in the most difficult of times” (Poyer, 1990:140).

*Kava* is known in the northern regions of Vanuatu as *namaloku* and *nekava* in the south, and has been an integral part of the social and cultural system for centuries (Lebot & Cabalion, 1988:21-2). *Ni*<sup>22</sup> Vanuatu believe *kava* possess *mana* which is then transferred internally and externally as one drinks or mixes the beverage, ensuring ongoing health and prosperity to the consumer and the land (Brunton, 1989:111).

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<sup>22</sup> The prefix *ni* literally means ‘the people of’.

Each afternoon, as they have done for centuries, men gather at designated structures or areas called *nakamal* (Gregory, Gregory, & Peck, 1981:300; Lindstrom, 1987:99), where *kava* comprises the centrepiece for planning, conflict resolution, the discussion of upcoming events and swapping news, outworking *kastom* and a “symbol of national identity” (Young, 1995:61; also see Lindstrom, 1990:376,378-9; Lipp, 1998:n/a). Lindstrom (1987:99,102) described these social interactions as non-consumer and non-economic forms of exchange, where adolescent boys also learn *kastom*, hierarchy and notions of masculinity in settings that are strictly off-limits to females. Brunton (1989:106-7) adds that although women are forbidden at the *nakamal*, they nevertheless play a vital behind-the-scenes role, both spiritually and practically, that is understood to ‘complete’ the activities of the men. In contemporary *ni* Vanuatu culture the *nakamal* has become the site of business negotiations and networking. The *Nakamal of the Malvatumauri (National Council of Chiefs)*, which is situated next to Parliament Buildings in Port Vila, is considered Vanuatu’s leading environment for this type of activity, “the place where people do more business than at the office” (IQ003)<sup>23</sup>.

Holmes (1967:107) states that in Samoa “formal or informal meetings of chiefs wouldn’t be complete without the distribution of... *kava*”, or ‘ava as it is commonly referred to, and that all discussion is preceded by an ‘ava ceremony (Amituana'i, 1986:36). Unlike Vanuatu, Sāmoan women are not forbidden from drinking the substance and will often engage in female-only consumption sessions (Holmes, 1967:110). ‘Ava, in both its raw and beverage form is steeped in Sāmoan mythology and linked to traditional spiritual practices, warfare and social and political structures.

<sup>23</sup> In 2008 I spent several days in Port Vila observing contemporary *kava* consumption styles. On two occasions I consumed *kava* at the *Nakamal of the Malvatumauri (National Council of Chiefs)* accompanied by a local lawyer friend and observed parliamentarians and businessmen in conversation and negotiation. Further to this comment, my informant explained that business ideas posed in the office were often ‘fleshed out’ at this venue with final decisions being ‘culturally’ ratified and legitimised due to the chiefly authority of that particular *nakamal*. However, in contrast to the *yaqona* consumption I am familiar with (a venue in which discussions are conducted throughout the drinking session), *ni* Vanuatu tend to discuss prior to drinking. I would suggest this is because they mix their *kava* highly concentrated. Following a single *shell* of *ni* Vanuatu *kava* I noted accelerated feelings of intoxication that quickly led to a decreased desire to speak. In comparison, *yaqona* is a more diluted mix which causes the effects to come on gradually, allowing in-depth conversation over longer periods.

‘Ava was consumed by warriors prior to battle and chiefs during the conflict to encourage the gods to bring success (Holmes, 1967:110). The substance was, and continues to be, used to bless labour related pursuits such as the building of a house or canoe, and as part of the welcoming of and reciprocity between host and guest (Marshall, 1987:22-28). Additionally ‘ava plays a significant role in *tatau*, the traditional tattooing practice marking a youth’s step from adolescence to manhood (Tapu, 1986:166-7). Throughout the preparation and consumption of ‘ava, the ancestral gods are frequently acknowledged. For example, just prior to the consumption of every cup of ‘ava consumers pour a small amount of the beverage onto the ground in front of them and pronounce “*Manuia*” (good fortune) as a libation to the spirits (Kallen, 1982:42; also see Holmes, 1967:112,114,116).

Unlike Sāmoa, there is very little contemporary use of *kava* in Rarotonga (Cook Islands). What is consumed tends to be engaged in by immigrant Fijian workers (pers.comm., Nov. 20, 2008). Additionally, very little is known about the traditional use of the substance within pre-colonial Rarotonga. In a very brief account written in 1920, Te Ariki-tara-are recalled an incident where a traditional priest slapped a tribesman with *kava* leaves as part of spiritual healing (p.50). Gilson & Crocombe (1980:15) adds that only scant references survive regarding the use of *kava* at chiefly ceremonies. This was because “the beverage was suppressed so quickly and thoroughly by the mission[aries] that no observations were made of its importance” (Lemert, 1967:328).

In contrast, *kavatonga* is considered Tonga’s national drink, and according to the Tongan Royal Family, “provides a necessary seal of approval on virtually all Tongan events” (Urbanowicz, 1975:46). In former times warriors would make offerings of *kava*, called *mesini*, to deities prior to combat or competition (Gifford, 1971:318). Regardless of Christianity’s strong influence on Tonga, both the early and contemporary churches appear to have little concern regarding *kava*’s link with the traditional religious system as they did in some of the other Pacific Islands. In 1927, Collocott (p.44) described Tongan Methodist ministers consuming *kava* with the King,

and today an extremely large *kumete* (Tongan *kava* bowl) comprises part of the altar decoration at the St. Mary's Cathedral in the Tongan capital (Davis, & Brown, 1999:12).

In some areas *kavatonga* continues to be used as a conduit for communication with spiritual entities. However its greatest significance is within ceremonial systems, where it has been used traditionally for centuries to symbolise and validate hierarchy (Lemert, 1967:332; Lipp, 1989:n/a; Perminow, 1993:44). This *kavatonga*-related observance is designated *taumafa kava*, a term used to define consumption related to ceremonies involving the Tongan Royal Family, or in pre-colonial times, high chiefs. *'Ilo kava* refers to consumption by nobility, whereas *faikava* is that which is engaged in by commoners, or denotes purely recreational consumption. Finau, Stanhope, & Prior (1982:35) report that *kavatonga* and its recognition of hierarchy reflect the idea that traditional use patterns are vital to maintaining "cultural identity". Van der Grijp (2004) states, "Tongan identity is composed of... four features", with *kava* playing "a predominant part" (p.3; also see p.7-8,56). Finau (2002:59) adds that *kava* use is a way in "which Tongan's have maintained their cultural identity".

Very little is known about *kava* in Tahiti (French Polynesia), where it was called '*ava*', '*ava-ava*', or '*evava*'. Its demise foreshadowed that of Rarotonga (Cuzent, 1867:305). Lewin & Wirth commented in 1931 that due to the influence of the missionaries, who imposed bans on the consumption of the indigenous substance in the early 1800s, "it was no longer possible to find a single specimen of the plant and many Tahitians no longer even knew it by name" (p.218). Again, in a similar manner to Rarotonga, very little has been recorded regarding early Tahitian '*ava*' use and what has been recorded tends to be scant. Parkinson (1972:xvii,1,37), a surveyor aboard Captain Cooks *Endeavour* in 1769, reported the use of '*ava*' by locals, and Ferdinand (1981:128-9) explains its use as part of a human sacrificial ritual conducted in order to seek the aid of ancestral gods in upcoming battles. Consumption levels among those who did consume must have been high – "early European visitors to Tahiti reported seeing individuals suffering from *arevareva*" (Oliver, 1989:302; also see Cuzent, 1867:308), or *kava* dermatopathy, a dry flakiness of the skin that results from high rates

of consumption (Ruze, 1990:1442).

Hawai'i was another nation to see the demise of 'awa use in the 1800s as a result of Christian missionary influence (Kanahele, 1995:108). However unlike Rarotonga, a little more historical detail exists regarding its traditional use. Hawaiian mythology reports that 'awa was brought to the island nation by the great ancestor Oilikukaheana (Lebot, Merlin, & Lindstrom, 1997:125), and a number of very early plant specimens have been located at several archaeological dig sites (Brunton, 1989:27). Academics report on 'awa's significance within ceremonial, spiritual, medicinal and reciprocal systems (Emerson, 1903:134; Krauss, 1993:102; Lebot, Merlin, & Lindstrom, 1997:96; Kepler, 1998:28; Norton, 1998:382). Titcomb (1948), in his detailed account on the traditional uses of 'awa in pre-contact Hawai'i, states that the "importance and sacredness of 'awa in the life and thought of Hawaiians" (p.157) is due to the interconnectedness of 'awa consumption and the ancestral gods. As one drinks, it is believed they unify with those same gods through their own consumptive act. This union between the spiritual world and 'awa is a reoccurring theme in Titcomb's work – she also describes how *kahuna* (Hawaiian priests) use 'awa to divine illnesses and the sex of unborn babies by inspecting "the movement of bubbles in the 'awa cup". Kepler (1998:8) discusses the use of 'awa by *kahuna* in séances, the invoking of curses and the appeasement of spiritual entities, and how 'awa was placed with the bodies of stillborn children and set adrift upon the sea as an offering to *Kamohoali'i*, the shark god. Singh (2004b:53) states that it was "customary for chiefs to drink ['awa]... before meals, commoners also if it was available". Finally, Kepler (1998:7) explains 'awa's vital position in hosting and celebrations, and as part of chiefly leisure.

Although use-styles may vary across the Pacific, the plant and its related practices are key elements to general *Pasifikan* cultural identity. For example Lebot, Merlin & Lindstrom (1992:198), the authors of *Kava: The Pacific Elixir*, states "kava plays a unique role in the social life of many Pacific societies" as part of "asserting their cultural identity". They appear to acknowledge the Pacific elixir's link with *iTaukei*

cultural identity – the cover of their foundational text displays men in traditional dress serving *yaqona* (*kava*). Pollock (1995:2) adds, “In Tonga, Samoa, Futuna, Fiji and Pohnpei *kava* usage persists as an ‘external symbol’ of both current and past ideologies”.

Medicinally, *kava* was and is in wide use across the Pacific (Piscopo, 2002:2). Scientists have established that *kava* contains antimycotic (antifungal) properties (Aalbersberg & Sotheeswaran, 1991:559; MediHerb, 1994a:2), and mild antibiotic attributes useful in healing urinary tract infections and gonorrhoea<sup>24</sup> (MediHerb, 1994b:2; Singh & Blumenthal, 1997:49). Wiener (1969:39) adds that the value of the indigenous substance as a curative for the sexually transmitted disease was also recognised by pre-World War I Europeans. Lebot & Cabalion (1988:23-29), drawing on a large collection of published work, present a geographically detailed list of medical symptoms together with comment on how *kava* has been used curatively. These included “menstrual problems, lactation problems, headache, general weakness, rheumatism, tuberculosis, leprosy, insomnia, asthma, certain skin conditions and migraine” (Piscopo, 2002:2), as well as an aid to “child weaning” (Kepler, 1998:8) and abortion (Stafford, 2005:149).

Lee, Yee & Naing (2007:88) stated that *kava* is also useful in aiding and managing symptoms associated with benzodiazepine withdrawal. Additionally, since 2002 scientists have been investigating the link between the low-occurrence rates of specific cancers (ovarian, bladder cancer and leukaemia) and the consumption of *kava* (Sotheeswaran, 2002:17; Tabudravu & Jaspars, 2005:26; Zi & Simoneau, 2005:3485-6). Much of this research was influenced by Steiner (2000:422) who compared cancer rates between *kava*-consuming and non-drinking countries, establishing that *kava*

<sup>24</sup> Tabureguci (2012:16) reports “Traditional knowledge in the Pacific also links kava to medicinal use. Western medicine caught on to its potential as early as the 1800s, where kava-containing preparations were then available in German herbal shops. [Citing] American ethnobotanist... Chris Kilham [he added] ‘In the early 1900s, kava-based remedies made their way into the British pharmaceutical codex. In 1914, kava was listed in the British Pharmacopoeia under the name kava rhizome... In 1920, kava appeared in European dispensaries as a sedative and hypotensive. Kava also appeared in the U.S. Dispensatory as a treatment for chronic irritations of the urogenital tract. In 1950, the U.S. Dispensatory listed kava for the treatment of both gonorrhea and nervous disorders, under the drug names Gonosan and Neurocardin, respectively.’”

users were 25–33% less likely to contract the condition. However, it is *kava*'s calming anxiolytic properties, first recognised by indigenous users, that have been embraced by the pharmacological community.

### **Physiological Effect**

When consumed in its aqueous form as a traditional beverage, active properties within *kava* called kavalactones dull receptors in the central nervous system, numbing and slowing the response time in muscles, limbs and the brain, and cause a relaxed, peaceful, lethargic feeling (MediHerb, 1994a:1-2). This state is often referred to as '*kava* intoxication' although it is experienced differently to alcohol intoxication<sup>25</sup>. Unlike alcohol, *kava* does not produce feelings of euphoria or aggression (Kilham, 1996:64). Ward (2005:125-142) explains in her book entitled *You Cannot Hate with Kava in You*, *kava*'s effects come on slowly and subtly, relaxing the muscles and bringing on a feeling of casual contentment combined, in the initial stages, with a clear-headedness that promotes conversation (Lewin, 1964:223-4; Singh, 2004a:5; Keltner & Folkes, 2005:522).

Saletu, Grünberger, Linzmayer, *et al.* (1989) potentially offers an explanation for this initial clear-headedness. They conducted a double-blind, placebo-controlled study involving 15 participants, who received EEG brain mapping scans following the administration of 200mg, 400mg and 600mg single oral doses of extract kava at weekly intervals. They found that a 200mg extract seemed "to exert... an initial vigilance-promoting effect [whereas] the larger doses of 400 and 600mgs [were] sedative" (p. 170). Therefore this "vigilance" in the early stages of consumption possibly aids discussion although once larger doses are ingested the soporific effects increase (also see Lewin, 1964:223-4; Aporosa, 2008:38).

When large amounts of *kava* are consumed, the drinker experiences double

<sup>25</sup> "Although we use the terms *intoxication*, *drunkenness*, *inebriation* to describe human physiological reaction to the plant, the state differs from that induced by ethanol or other familiar drugs found in the Western world" (Lebot, Merlin, Lindstrom, 1997:3). For a detailed comparison between *kava* and alcohol, together with a simplistic description on how *kava* works in the central nervous system, see *Is kava alcohol?: The myths and the facts* (Aporosa, 2011a:158-160).

vision, imbalance, stupefaction and a desire to sleep (MediHerb, 1994a:1-2; Singh, Singh & Singh, 2004:154). Chanwai (2000:957) gave a simplistic although insightful description when he said *kava* induces “a warm, pleasant and cheerful, but lazy feeling, making people sociable, though not hilarious or loquacious, and not interfering with the reasoning”.

Scientists have identified that kavalactones are cross-dependant (Davison, Neale, & Kring, 2004:G4), indicating that they work on the same brain receptors and in a similar manner to another substance. *Kava*'s chief cross-dependency is with the Benzodiazepine family of drugs (Raduege, Kleshinski, Ryckman, *et al.*, 2004:305-11; Thompson, Ruch, & Hasenohrl, 2004:248). This has resulted in the creation of pharmacological 'galencial extracts'<sup>26</sup> – making *kava* into tablet and syrup form. Extracts are widely available through medicinal herbalists and marketed as 'nature's Prozac' (Knishinsky, 1998:103; Sadock & Sadock, 2003:1022-9). This has added an export value to the importance of this traditional icon (Dragull, Yoshida, & Tang, 2003:193).

In a recent clinical trial, the first of its kind using aqueous *kava* and human participants, scientists tested 41 subjects using 250mg doses of kavalactones to measure antidepressant and anxiolytic efficacy (Sarris, Kavanagh, Byrne, *et al.* 2009:4,6,7). The researchers found that “aqueous *kava* was a safe and efficacious anxiolytic in participants with elevated, stable generalized anxiety and may also have antidepressant effects” (p.8). Additionally, this study added rigour to earlier trials which had tested WS 1490 (a pharmacological extract of kava-kava), finding that it was a safe, viable and “effective” alternative to conventional anti-anxiety and anti-depressant medications such as tricyclics and Benzodiazepine (Tonks, 2003:700-1; also see Mediherb, 1994a:1; Voltz & Kieser, 1997:1,4). O'Reilly, Carr, & Bolitho (2005:482) state that the “long term use [of *kava*] does not appear to be associated with any brain

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<sup>26</sup> “A galencial extract is a traditional pharmacopeial extract of an herb... [using an] extracting solvent which was usually a combination of ethanol and water... Galenical extracts are usually in liquid form, typically tinctures and liquid extracts... examples of... galencial extracts... include *kava*” in its pharmacological form (Bone, 2003:9-10).

damage" and unlike many of the Benzodiazepine-based drugs, *kava* is not believed to cause addiction (Bilia, Gallori, & Vincieri, 2001:2592; Mediherb, 2004b:1; Keltner & Folkes, 2005:524; Lebot in ABC News, 2008).

Mediherb (1994b:2), a professional newsletter produced for licensed and registered herbal practitioners, recommends that no more than 200mgs of 'nature's Prozac' be consumed daily. These recommendations are based on safety constraints that prevent mental impairment, potentiation with alcohol and physiological tolerance (Mills & Bone, 2005:484,488). This dosage is vastly less than the kavalactone levels ingested by consumers of the traditional beverage – an ethnographic study conducted in Vanuatu reported indigenous consumers drinking up to 2000mg of kavalactones per sitting (Kilham, 1996:108).

That said, Lintzeris & Spry-Baily (2002:238) assert that a "hangover"... is often experienced after heavy consumption of sedative drugs such as benzodiazepines" – of which *kava* is cross-dependant – producing "poor concentration and cognitive functioning... [that] may impair the individual's performance at work, study or other pursuits". The understanding that *kava* can produce a hangover that effects performance is a new and developing area of concern, with some calling for a change in *kava* use (Nagalu, 2007:9; Aporosa, 2008:14,102; Raicola, 2008:2) – the foundation of this thesis.

### **Use Change**

The use of *kava* throughout the Pacific remained unchanged until the early 1800s (Steinmetz, 1960:3; Lebot & Levesque, 1989:224), when it almost consciously manifested the prediction of 18<sup>th</sup> century philosopher Denis Diderot (1713-1784) (Schutz, 1994:9), who warned Pacific Islanders that "One day they [the Christians] will come with the crucifix in one hand and the dagger in the other to cut your throats or to force you to accept their customs and opinions". It was most often the missionaries that first impacted *kava* use practices (Finau, 1992:83,86,87; Aporosa, 2011a:160-1), as demonstrated in each of these locations.

Haddon (1916:147-8) reported that early missionaries to the coastal village of Mawata in PNG were unsuccessful in prohibiting the consumption of *kéu*, *káu*, *tigwa* or *gámada* (*kava*). Their reason for seeking the removal of the indigenous substance was based on the belief that it “sapp[ed] the energies of the natives”; or considered from a development perspective, hindered productive process. This resulted in “quite a little conflict” on the part of the villagers, who linked the consumption of *gámada* with a prosperous food supply. The locals appealed to the missionaries, reminding them that local food loss also meant missionary food loss, which resulted in a reprieve on the indigenous substance. This stalemate did not last though, and a general alcohol and *kava* ban was instituted in 1911. This formed part of a raft of restrictions proposed to bring about guidance and a “civilizing mission... [among] a primitive and dependant people” by the colonial administration (Wolfers, 1975:46,125; also see Marshall, 1987:45). Although some “secretive” *tigwa* consumption continued during the ban (Serpenti, 1965:49) which did not cease until 1962 (Wolfers, 1975:137), ultimately the reduction in its use caused it to be superseded by betel chewing (Foster, 2002:20,31-2).

As discussed earlier, some conjecture exists regarding the traditional use of *kawa qwua* in the Solomon Islands. In 1925 the Melanesian Catholic Mission (p.134-5) to the Solomons reported their objections regarding the use of the substance. They believed *kawa qwua* had been “introduced from Fiji” and argued the indigenous church members “were tending to put this before Holy Communion, and [were] inclined to neglect Christian duties because of it”. Although it is unclear exactly what caused the elimination of *kawa qwua* from the Solomon Islands, it appears that the missionaries played a role in this.

On both Pohnpei and its island neighbour Kosrae, where *kava* was known as *seka* (Lebot, Merlin, & Lindstrom, 1997:38), missionaries saw *sakau* and *seka* “as the ultimate symbol of the island’s dark ways”, holding the indigenous people back from the ‘one true religion’ that led to enlightenment and civilisation (Hanlon, 1988:144). Influence and pressure by the missionaries upon the chiefly system on Kosrae resulted

in the complete elimination of *seka* (McGrath, 1973:64; Marshall & Marshall, 2002:131). On Pohnpei the missionaries managed to markedly decrease use levels, although found it impossible to completely eradicate the practice – even among those “converted to Christianity” – due to the strength of “social cohesion” (Petersen, 1995:39). The use of *sakau* on Pohnpei was threatened a second time when the Japanese took over the island nation in 1914. The Japanese placed punishable restrictions on the use of *sakau* (Merlin & Raynor, 2005:245), believing it “interfered with the attendance and proficiency of labourers” as a result of the hangover it produced (Ashby, 1984:40; also see Poyer, Falgout, & Carucci, 2001:205). However following the end of World War II, the cultivation and consumption of *sakau* on Pohnpei has steadily increased, reestablishing the indigenous plant as Pohnpei’s “cultural keystone species” (see Balick & Lee, 2009:165). This created a major export commodity and promoted its use traditionally (Merlin & Raynor, 2005:245) and in “licensed *sakau* bars” (Petersen, 1995:55). A recent survey conducted in Pohnpei revealed that 83.6% of males and 53.2% of females drink *sakau*, with males reporting that on average they consume the beverage for 5.4 hours per week (Balick & Lee, 2009:189-90).

Young’s (1995) detailed article on the influence of early missionaries on *namaloku* and *nekava* use in Vanuatu is extensive. He comments that during the latter half of the 19<sup>th</sup> century Presbyterian missionaries preached against the indigenous substance in an attempt to erase it, although they were met with an oscillation of success and failure. The failures were often perpetuated by Vanuatuan traditionalists, who actively enticed indigenous Christians away from apostasy with the offering of *namaloku* and *nekava* (Brunton, 1981:372; Young, 1995:64). The missionaries’ abhorrence of the substance was due to what they considered poor hygiene during the preparation of the beverage<sup>27</sup> and its link with the “heathen” traditional spiritual system (Gregory, Gregory, & Peck, 1981:302-3; also see Bastin, 1981:341). However, Gajdusek (1967:119-20) reports that ultimately the ferocity of the missionaries toward

<sup>27</sup> Gregory, Gregory & Peck (1981:302) report that *namaloku* and *nekava* was traditionally prepared by young boys who were responsible for chewing the raw plant material into a pulp, which was then mixed and strained through water.

*namaloku* and *nekava* backfired. *Ni* Vanuatu, believing the missionaries were threatening their traditional practices and identity rebelled, vigorously renewing their consumption of the substance – a practice that continues to this day (Gajdusek, 1967:119-20; Brunton, 1981:371-2; Crowley, 1994:90).

Contemporary *ni* Vanuatu use-change is highly evident in urban areas. In rural settings, consumers sit cross-legged on mats and share *namaloku* and *nekava* from a communal bowl. However, in the capital of Port Vila, men (and occasionally women) regularly gather on a daily basis to purchase and consume *namaloku* and *nekava* from one of several hundred *nakama'*s, or privately owned and operated bars. In these establishments, customers sit on chairs, with some *namaloku* designed to include contemporary décor and electronics. Nevertheless I did notice during my visit to a variety of urban *nakamal* in August 2008 that a number of *ni* Vanuatu consumers did adhere to elements of culture, incorporating traditional practices such as offering libations to the ancestral gods and pronouncing incantations as part of consumption. Additionally, *ni* Vanuatu have embraced the economic opportunities of *namaloku* and *nekava* and developed a highly successful export industry. Moreover, in a similar manner to many other Pacific nations, *kava* continues to be a symbol of national identity for most *ni* Vanuatu (Crowley, 1995:13,12; 2004:3).

The arrival of the missionaries in Sāmoa did not impact ‘ava to the extent of many other Pacific Island nations (Steinmetz, 2007:305). Keesing (1934:410) reported, "Instead of accepting Christianity and allowing it to remould their lives... the Samoans [embraced] the religious practices taught to them and fitted them inside Samoan custom, making them a part of the native culture." In a 1973 Sāmoan Roman Catholic publication, the Archbishop of Sāmoa Cardinal Poi Taofinu'u described the significance of ‘ava to Sāmoan religious practice as part of the Eucharist and identified “Jesus Christ as a Heavenly Kava Root at Bethlehem” (p.1-2). This embracing of a traditional practice within Sāmoan Catholicism, one deigned ‘backward’ and ‘heathenistic’ in other Pacific settings, was not limited to the 1970s. In 1995 the Church republished the booklet with an updated forward by the Archbishop of Sāmoa (Taofinu'u, 1995)

who reaffirmed ‘ava’s importance to the religion. Sāmoan Catholics are not alone in their linking of ‘ava with the divinity of God’s Son – Sāmoan Methodists also believe that liquid ‘ava has redemptive significance in the same manner as the Blood of Christ. Bargatzky (1997:93-4) argues that Sāmoans, instead of being “passive [recipients] of foreign missionary activity”, actively participated in moulding Christianity together with their traditional ‘ava systems”. It is interesting that while Sāmoan ‘ava use was not change free, what change did occur had a great deal of local input and control, thus reducing levels of disruption and cultural upheaval. This is highly suggestive of post-development as discussed in the previous chapter.

More recently Sāmoa has reasserted its cultural stance in contrast to externally introduced development systems. Figure 3.5 shows a set of stamps commissioned to celebrate the 30<sup>th</sup> anniversary of diplomatic relations between Sāmoa and China (Government of Sāmoa, 2005). Three of the four stamps are the epitome of development under modernisation, displaying men wearing European-styled business suits, modern architecture and space travel. In what some would suggest is an incongruous inclusion, the fourth stamp is of a ‘umeke (‘ava bowl), an icon that both asserts Sāmoan culture and its identity, ‘stamping’ this as equally important as modern systems of development.

Another Pacific nation that withheld missionary efforts to restrain or prohibit *kava* use was Tonga, although it is clear that the missionaries initially resented the traditional substance (Perminow, 1993:44). Urbanowicz (1975:34) identifies four factors that aided resistance: [1] the consumption of *kava* was intrinsically linked to identity; [2] *kava* consumption provided a setting for the dissemination of issues and problems; [3] *kava* was considered a "necessary seal of approval [in] all Tongan events" and [4] *kavatonga* stood in opposition to the consumption of alcohol (which is deemed non-Tongan). Although the missionaries brought mass Christianity to the locals, they failed spectacularly in prohibiting their traditional drink, and today aspects of *kava* ritual are combined with Christian practices (Perminow, 1993:44). Bargatzky (1997:93-4) states that it was common throughout the Pacific for Christianity and *kava*

practices to be moulded together and was accepted, albeit reluctantly, by the missionaries. However, Bargatzky's comment is a serious overstatement when Rarotonga, Tahiti and Hawaii are considered.



**Figure 3.5**

Stamp set celebrate the 30<sup>th</sup> anniversary of diplomatic relations between Sāmoa and China.  
(Source: Government of Sāmoa, 2005)

Missionary influence in Rarotonga, Tahiti and Hawaii had a major impact on 'ava use. Concerning Rarotonga, Mangos & Utanga (2011:58-60) stated, "by the end of the [19<sup>th</sup>] century Christianity had thoroughly replaced the traditional belief systems and practices... For a culture founded on oral traditions, this was a body blow akin to the burning of libraries in Western culture". Crocombe (1983:194) reports that in the early 1860s, Ernest Krause, a German missionary stationed in Rarotonga, drafted an edict prohibiting the consumption of both alcohol and 'ava by the indigenous populace. This created such a swift and pervasive eradication of 'ava that very little was recorded about the cultural practices surrounding its use (Gilson & Crocombe, 1980:15). In a desire to replace their traditional substance, the Rarotongans learned the art of *bush-beer* making from Tahitian immigrants, an alcohol produced by fermenting oranges (Lemert, 1979:194; Kautai, 1984:74-5). Interestingly though, aspects of 'ava consumption practice can be seen in *bush-beer* drinking. For instance, consumers sit cross-legged in a circle drinking from half-coconut shells and participating in a pseudo-traditional practice which carries with it many of the appearances of traditional 'ava use (Kautai, 1984:74-5). *Bush-beer* and its adapted

culture are still common today<sup>28</sup>.

Literature detailing the reasons that led to the eradication of ‘ava from Tahiti is limited. Lester (1941:100), without giving specifics, states simply that it had been “forbidden... by the early missionaries”. Williamson (1939:88-9), reviewing the observations of several commentators who were present in Tahiti during the visits of Captain Cook, described the habitual “self-indulgent... boozing over kava” by locals. He added that the “priests were often so intoxicated [with *kava*] that they could not adopt the attitudes of devotion when engaged in their sacred duties” (p.89). The use of language such as “attitudes of devotion” would suggest that these priests were “engaged in [Christian] sacred duties”. Lemert, Lemert & Winter (2000:145-6) state that missionaries to Tahiti were gravely concerned about drunkenness among the “natives”. Between 1815 and 1819 the missionaries assisted in the drafting of a “code of laws... which prescribed penalties for drunkenness”, resulting in the prohibition of all intoxicating beverages by 1829. This prohibition had such a major impact upon ‘ava consumption that cultivation of the plant ceased (Lewin & Wirth, 1931:218) and is a major factor in why ‘ava is no longer consumed in Tahiti.

Similarly, missionary influence was a clear a factor in the demise of ‘awa in Hawai’i (Titcombe, 1948:105; Cox & Davenport, 1988:21; Kanahele, 1995:108). Academics wrote that early missionaries led an active crusade against the cultivation of ‘awa, along with the consumption of both ‘awa and alcohol by the indigenous

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<sup>28</sup> Bush-beer consumption which reflects pseudo-traditional practices based on ‘ava drinking can be seen in a photograph which appeared in a 2003 internet travel blog (TravelPod, 2003). This depicts a Rarotongan presenting a “bush beer ceremony” using a custom made receptacle and half coconut shell drinking vessel, mimicking aspects of traditional kava consumption. The blogger acknowledges that “the drinking of bush beer... has its roots in the Kava ceremony”.

populace (Brown, 2003:94-5; Woolley-Compton, 2005:92-7)<sup>29</sup>. Brown (2003) states that the missionaries believed ‘awa use and intoxication was linked with Hawaii’s “natural inferiority” (p.96) and traditional religious structures, an ideology that comprised “part of a broader colonial discourse that suggested that Hawaiians were irresponsible and incapable of governance of the self or, for that matter, political self-governance” (p.95). This campaign resulted in a use and cultivation prohibition in the 1850s that finally “stripped ‘awa of its traditional role in Hawaiian religion” (p.102; also see Lebot, 1991:182).

Since the 1970s Hawaii has seen a cultural renaissance that includes a renewed interest in ‘awa (Linnenik, 1997:405; Cummings, 2008:198; Winter, 2004:12). This has included the opening of ‘awa bars (Winter, 2004:22-3) and the annual *Kava Festival* hosted by the *Hawaiian 'Awa Development Council*. During the opening address at the 2005 festival held at the University of Hawaii on Manoa, the Lieutenant Governor of Hawaii, James Duke Aiona, stated that in the days leading up to the event he had received a number of emails questioning "whether I was partaking in something illegal or suspect... [due to the] mythical perception of what 'awa represents" ('Awa Development Council, 2005:n/a). He added that he wholeheartedly supported the event and encouraged the attendees to "try to understand what 'awa stands for, [and] cultural and medicinal purposes that [were] used by ancestors here and in the Pacific for centuries. I hope you come away with the spiritual and intellectual understanding of what 'awa stands for here in Hawaii".

In an alternative setting, academics at the University of Hawaii regularly meet

<sup>29</sup> "In 1865 Mormon missionaries bought approximately 6,000 acres with the hope of creating a gathering place for Hawaiian converts to settle in. (p.v)... Frederick Mitchell arrived... in June of 1873... as mission president/plantation manager. It was under his tenure that serious conflict emerged regarding 'awa. Harvey Cluff recorded that 'President Mitchell considered the 'awa condemned in the 'Word of Wisdom' as well as liquors and with inthusiam [sic] he set his face against the propogation [sic] and use of it.' When Mitchell decided to prohibit the cultivation of 'awa, he placed himself in opposition to Native Hawaiians' desire to control their own work and to support their families. (p.92)... The Word of Wisdom is a health code for Mormons that includes counsel against the use of drugs such as alcohol and tobacco... A greater emphasis was placed on the Word of Wisdom, and Mitchell included 'awa as a prohibited substance" (Woolley-Compton, 2005:92-3). The Church of Jesus Christ and Latter Day Saints (Mormons) prohibition on alcohol and drug use (which includes caffeine) continues today, although "kava use is permitted for medicinal and cultural purposes" (Aporosa, 2011:158).

to sample and discuss ‘awa varieties at the “*kava lab*”<sup>30</sup>. Anthropologist Dr. Matt Tomlinson (pers. comm., 2008, April 22, May 6) described his experiences at the “*kava lab*” in several emails. He commented that this is a weekly event that incorporated both scientific aspects and a social structure, although negated any ritualistic observances. Tomlinson added that ‘awa varieties consumed are both local and imported with the root stock often frozen to maintain freshness. These are mixed in a purposely built “*kava machine*” with the prepared beverage discussed in a similar manner to viticulture. Contemporary expressions of ‘awa use such as bars which “provide the opportunity for sharing experiences of ‘Awa traditions’ together with the annual *Kava Festival* and ‘*kava lab*’, aid local understanding regarding their traditional substance (Winter, 2004:23). This, Winter (2004:19) argues, is vital “if contemporary Hawaiians are truly going to regain a unique sense of identity”. Hawaii though is not alone – several commentators have asserted that over the past 30 years *kava*, ‘awa, ‘ava, ‘ava-ava and ‘evava etc. have added to the symbols of indigenous identity in many Pacific countries (Lipp, 1989:n/a; Lebot, Merlin, & Lindstrom, 1997:208, Kate & Laird, 1999:104).

## Reflection

Colonial contact and modern systems of development brought major change to many indigenous substances worldwide, five of which were discussed above. In the case of alcohol – the ‘original traditional substance’ (Patrick, 1952:12-3) – this was in the form of the Industrial Revolution. Mechanisation required a sober, punctual, reliable and disciplined workforce capable of meeting new styles of productivity, capitalism and economic prosperity, a system that contrasted the former ‘traditional’ agrarian feudal lifestyle in which alcohol use comprised part of work and was deemed non-problematic.

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<sup>30</sup> Baker (2012), a regular at the “*kava lab*”, described this setting as part of what he termed the “quasi-traditional consumption” of *kava*, or the increasing recreational use of this substance by non-Pacific users aimed at experiencing its psychotropic effects (p.244-5). He also explained the growth of the “*kava-containing foods*” market in which manufacturers have developed products such as “*kava smoothies*; *kava butter*; *kava batter* (used to coat foods prior to frying); *ginger-flavored kava-extract-containing drinks*; and *kava bread*... *kava java drink*... *kava brownies* and *popsicles*; *kava-infused coffee beans*” and carbonated *kava* drinks. The aim is to provide a delivery mechanism without the taste, an aspect that many westerners struggle with (p.249-252; also see Aporosa, 2008:35).

Concerning coca, early conquistadorian contact brought a brief disruption to indigenous use patterns aimed at encouraging the “natives” to embrace ‘modern’ religion, namely Catholicism (Durrant & Thakker, 2003:73). However, when the colonials recognised that coca had the ability to increase activity and therefore productivity, they overlooked their earlier prejudices and actively exploited the use of the indigenous substance for their own gain. Although contemporary coca use is often (incorrectly) associated with heroin and cocaine use, the leaves continue to be used as part of traditional systems and as a productivity aid among local agropastoral workers. In a similar manner to coca, *kawakawa* was also targeted by the colonials who viewed its use by *Māori* as amounting to superstitious paganism. Legislation in the form of the 1907 *Tohunga Suppression Act* markedly restricted *kawakawa* use adding to the loss of a large amount of traditional knowledge by *Māori* (Durie, 2003:51,71).

Betel use – from the perspective of modern systems of development – is contradictory as it is deemed both complementary to productivity (Wyatt, 1996:461-2; Chu, 2001:231-2) while simultaneously “unproductive” (Korugl, 2007:6); or in the words of Foster (1992:41), the chewing of betel is “incompatible with the goals of modern development” as it draws chewers away from work. Further, chewing in Government offices has been banned whereas attendance at a “Parliamentary Betelnut Club” was encouraged. Academics, as discussed above, suggest the reason for these ambiguities and a lack of specific direction concerning the use of this indigenous substance is due to betels depth of importance to the social, cultural and business fabric of PNG. Connell (1984:58), almost 30 years ago, believed that “social policies [aimed at banning betel, would] stand little chance of dampening” its use.

*Kava* use across the South Pacific remained chiefly unchanged until the arrival of the missionaries who, in a similar manner to coca and *kawakawa*, saw its use as a “symbol of the... dark ways” (Hanlon, 1988:114) and its consumption a “heathen” practice (Gregory, Gregory, & Peck, 1981:303), leading to mixed results. In the case of the Solomons, Kosrae, Rarotonga and Tahiti, the missionaries were able to completely eradicate the traditional preparation.

Although the missionaries failed to eliminate *kava* in PNG, Pohnpei, Vanuatu, Sāmoa and Tonga, their influence nevertheless brought about change. For PNG, bans between 1911 and 1962 saw use decreased, eventually being mostly replaced by betel chewing and alcohol consumption. Missionary influence and the later Japanese occupation of Pohnpei saw a marked decrease in *sakau* consumption. However, since the end of World War II consumption has returned with renewed vigour including the cultivation of *sakau* for economic advantage – an activity that contrasts traditional styles of exchange based solely on reciprocity. Similarly, missionary influence in Vanuatu sought although failed to eradicate this traditional substance. *Ni* Vanuatu have also realised the economic opportunities offered through modern systems of trade and export<sup>31</sup> while also meeting local demand through *nakamal* (kava bar) sales.

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<sup>31</sup> Although some Vanuatu *kava* is exported to Fiji to aid local demand (Fiji Times, 2009a:12), the majority supplies the pharmaceutical industry, a partnership that has been far from problem free. In 2001 *kava* was banned in a number of European countries after pharmacological preparations were reportedly linked with liver toxicity (Moulds & Malani, 2003:451; Singh & Singh, 2002:739; Richardson & Henderson, 2007:418-9). This markedly impacted the substance's value as an export commodity (Singh, 2004c:46). This is in contrast to traditional *Pasifika* use where "kava hepatotoxicity has not been observed" (Provino, 2009:104; also see Beyer, 2007:4). Some argue that the ban was "a vile plot devised by the multinational drug companies to strangle competition" (Keith-Reid, 2002:15) as "kava was starting to eat into [their] profits" (Moulds & Malani, 2003:451; also see Lindstrom, 2009:303). In the World Health Organisation (WHO) 2007 *Assessment of the risk of hepatotoxicity with kava products*, researchers determined that these "rare" cases of liver toxicity resulted from "kava-drug interactions, excessive alcohol intake, metabolic or immune mediated idiosyncrasy, excessive dose or pre-existing liver disease" and a conflict between the chemical structure of *kava* and the use of ethanol and acetone in some pharmacologically preparations (Coulter, Tamaya & Soheeswaran, 2007:iv). For further information on this, Dr. Vincent Lebot, "the worlds leading *kava* expert" according to ABC News (2008) Australia, explains this topic in an ANC News documentary available online (starting at 04.05 minutes). The WHO report, together with strategies such as Teschke, Sarris and Lebot's (2010:100-2) "six point plan", have sought to prevent future cases of hepatotoxicity and renew European confidence in *kava*. Over the past 24 months exports have increased although an element of suspicion lingers, especially among the uninformed. What is known is that *kava*'s link with liver toxicity and fear among European users has had very little impact within the traditional use arena (Singh, 2004c:48). Tabureguci (2012:16-7), reporting on "the high level validation workshop in Port Vila, Vanuatu, in March [2012, stated that since the ban]... volumes of scientific research... [have] all vindicated *kava*. And that's really where the 'dirty politics' started because despite the scientific evidence... to prove *kava*'s effectiveness through updated clinical trials, the goalposts were always shifting." As previously discussed, *kava* is seen as a threat to pharmacologically manufactured anxiolytic medications (Moulds & Malani, 2003:451; Lindstrom, 2009:303). Discussion in my Master's thesis further supports the assertion that the ban is driven by competition and profits with concerns over safety comprising "dirty politics" and a smokescreen to the real issue (Aporosa, 2008:53-4). There I discussed Schmidt, Morgan & Bone *et al.* (2005), who investigated 83 alleged toxicity reports and found that "only three cases could be attributed to *kava* with high probability" and in those cases it is suspected that other factors were responsible for the negative reactions (p.182). They added that 12 "probable" cases had been confirmed responsible for liver failure, this would account for a toxicity rate of "0.23 cases per 1 million daily doses" (p.187). At the same time though, the researchers reported that consumers in Germany – one of the European country's who initiated the... (cont. p.91)

In the case of Sāmoa and Tonga, missionary contact cost both the colonial and local, with the missionaries forced to compromise on their usual hard-line approach and blend aspects of the *kava* culture with Christianity. Although the locals lost ‘ava and *kavatonga*’s link with the traditional gods, they were able to relocate that union to the Christian God-head.

Finally, missionary contact in Hawaii greatly impacted ‘awa use in a similar manner to the Solomons, Kosrae, Rarotonga and Tahiti. Although a lot of traditional knowledge was lost regarding the indigenous substance and its practices, a recent cultural renaissance is attempting to reestablish ‘awa’s legitimacy through events such as the *Kava* Festival and the daily meeting of the ‘kava lab’, contributing to the regaining of a “sense of identity” among the Hawaiian people (Winter, 2004:19).

This discussion shows that the interaction of modern systems of development and indigenous substances has been mostly detrimental to traditional practices and knowledge. While prohibition was achievable in a few limited cases, overall complete restriction was ineffective. This is not surprising considering the “miserable failure” of America’s *Noble Experiment* – the alcohol prohibition of 1920–1933 (Deitch, 2003:141) – together with other examples presented in Chapter 2 (p.22). What then is considered the most appropriate alternative? This will now be discussed.

### **Harm Reduction as an Alternative to Prohibition**

Researchers and policy developers are increasingly utilising harm reduction (Cherry *et al.*, 2002:xviii; Rumbold & Hamilton, 2002:131) as the alternative to the strict confines of prohibition, an approach that takes into account wider perspectives. According to Loue (2003:73-4), the theory of harm reduction understands “addiction as a continuum, with abstinence at one end”. This framework is wide in scope and allows

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(cont. from p.90) ...ban – were reportedly taking *Diazepam* (a commonly prescribed pharmaceutically manufactured anxiolytic) with a toxicity rate of 2.12 cases per million daily doses (p.187). However *Diazepam* continues to be widely prescribed in Germany together with the other European country’s observing the *kava* ban (Aporosa, 2008:54). Baker (2011) has written a valuable and detailed account of the factors that led to the ban, together with the varied responses to it (including that of the traditional users).

for a variety of approaches that take into account location, the type of substance being used, socio-cultural connections and any political and legal applications (also see Rumbold & Hamilton, 2002:133-4,136-7). The central theme of the theory acknowledges that societies will never be drug free, although “recognizes that the [substance] user has the ability to act responsibly and to make choices to stop or modify risky behavior” (Loue, 2003:74; also see Williams, 2004:117). Additionally, harm reduction attempts to gauge the potential risk of a substance and investigates measures that are required to reduce or minimise the harm surrounding its use, while avoiding idealistic judgments as to whether the use of a substance is ‘good’ or ‘bad’ (Rumbold & Hamilton, 2002:135-6,138).

In Australia, argued Rumbold & Hamilton (2002:141), harm minimisation has significantly improved “cooperation and collaboration across various sectors and services”, especially in relation to the needle swap programme. This programme is a prime example of harm reduction – it encourages substance users to exchange their used syringes and needles for clean items with the aim of reducing the transmission of HIV/AIDS (Loue, 2003:74; McDermott, 2005:414). Similarly, downgrading a substances control class in order to allow law enforcement officials to focus attention on preparations deemed a greater threat is also an example of harm reduction. This was exemplified in Britain in 2004, when the possession of small amounts of cannabis was de-criminalised, allowing police to reallocate resources and focus on substances such as cocaine and heroin (McDermott, 2005:152). Mexico undertook a similar law change in 2009, “decriminalizing the possession of marijuana, cocaine and other drugs in amounts small enough ‘for personal and immediate use’. The law, which officials hope will free up resources... mandates addiction counselling for any user caught more than three times.” (Time Magazine, 2009:7)

Loue (2003:153) described harm reduction as a “cultural-centric approach” arguing that cultural factors such as social class, ethnicity and religion are determinants in applying harm reduction measures to a substance. She added that in some cultural settings, substances are deemed unproblematic, whereas in others they

are regarded as destructive and therefore minimisation approaches are applied accordingly. One such example is *kava*, which among Pacific communities is mostly deemed unproblematic, while its use by Aborigines in Australia's Northern Territories is deemed 'questionable' (see Chapter 9, footnote 72). Although the topic of harm reduction and the cultural setting will be examined again later in this study (p.304), this present discussion suggests that the acknowledgement of culture is an important consideration in substance abuse and harm reduction policy. This is a major shift from that of the modernisation approach, which as discussed earlier, considered culture as 'primitive' and a hindrance to development.

## Conclusion

The five substances covered in this chapter have looked at traditional use perspectives, cultural importance and physiological effects. There has been additional discussion on how these cultural keystone species have seen change in use patterns or, in some cases, how these substances have been eradicated. These five substances have each been impacted by Eurocentric systems of development, often with negative results. This discussion has key relevance to my analysis of *yaqona* and education.

Essentially this chapter has illustrated the idea of a traditional/contemporary tension at its most fundamental level by describing the polemic interaction between traditional substance use and contemporary notions of development based on modernity. This tension between traditional and contemporary is further demonstrated in a central theme that runs through the discussion of all of these five substances. Academics are mostly united in the belief that the use of these substances was non-problematic to socio-cultural and productive systems when used within their traditional settings (Rumbold & Hamilton, 2002:132). However, when these same substances were used in a changed setting due to colonisation, early missionaries, notions of Enlightenment, the monetary economy or the industrial revolution, their status altered and use was deemed a hindrance and a threat to modernity, productive process and economic growth. In the case of the traditional/contemporary tension, the contemporary aspect of modernity frequently gained the upper hand. This was

regardless that these traditional preparations had been central to cultural systems for generations and that in some cases they offered value to the developmental pursuits of the colonials in the form of medicines, productivity aids, business facilitation and conflict resolution (Fulton, 1922:7-10; Lepowsky, 1982:340; Naidu, 1983:37; Alcorn, 1995:2; Nelson & Heischober, 1999:239; Szasz, 2003:75; Aporosa, 2008:59).

Although the 1970s saw cultural renaissance in the Pacific (p.25) followed by development approaches that were more friendly toward indigenous substances (p.46), the influence of modernisation and more recently neo-liberalism have remained. For instance, in 2001 Rates (p.603) commented that although “the importance of natural products [for therapeutic use] is clearly enormous... the Industrial Revolution and the development of organic chemistry [has] resulted in a preference for synthetic products”. He adds that this is driven by “the economic power of the pharmaceutical companies... [whose] approach was... the new *modus vivendi* of the industrialised western societies, in which drugs from natural resources were considered either an option for poorly educated or low income people or simply as religious superstition” (p.603). A few years later Coomber & South (2004) reported that contemporary Western development discourse – which Hettne (2008:9) and Wilm (2011:61) argued was simply a reconstituted form of modernisation termed neo-liberalism – continues to link the use of traditional preparations with abnormal behaviours, “backwardness or underdevelopment” (p.18). Therefore, if discourse influenced by the ideals of modernisation and neo-liberalism continues to be the predominant lens through which these substances are viewed and valued, indigenous preparations will potentially be prohibited and possibly eradicated. This is despite what commentators such as Rates (2001) argue is the enormous “importance of natural products” (p.603) to “the preservation of indigenous knowledge” (p.611) which is in turn valuable to sustainable development (Hall, 1990:225; Teasdale & Teasdale, 1992a:1; Escobar, 1995a:98; Horn, 2000:34; Verhelst & Tyndale, 2002:11; Radcliffe: 2006:18; McEwan, 2009:229).

Post-development, as discussed in Chapter 2, is highly critical of modernisation

and its economic-development-focussed successors. Generally post-development deems these development systems as little more than colonially based hegemony aimed at invalidating the use and potential of local systems. These systems (life-ways) include the culture and traditional knowledge that is connected to, and often evolves out of, the use of these indigenous substances. Further, the predominant development approaches, with their mandate *for* development, fail to understand that if self-determination at the local level is added to the factors of traditional knowledge and culture, these have the potential to bring about successful development within developing nations (Gibson-Graham, 2005:4).

This creates a major challenge in environments where the developmental agenda is heavily influenced by productivity, economic growth and educational attainment, and have indigenous substances as key elements of culture. PNG is an environment wrestling this traditional/contemporary tension. Betel is a "national cultural symbol" (Foster, 2002:20; also see p.31-2) while being simultaneously regarded a hindrance to productive process (Korugl, 2007:6). Similarities are also observed with *kava*, where the traditional soporific is critical to the culture and identity of most *Pasifikans* (Lebot, Merlin & Lindstrom, 1992:198; Pollock, 1995:2), although is argued to produce a hangover effect that is believed to hinder productivity and in turn contemporary systems of development.

How then do these societies both manage modernisation-inspired development while embracing their traditional preparations? And how do they regulate the associated cognitive impairment and hangover effects that reportedly accompany some indigenous substances, when contemporary systems of development require a sober, alert and punctual workforce in order to bring about productive process and development? These are key themes that defy simplistic prescriptions or remedies but are critical to the study of *yagona* (*kava*) and education delivery in Fiji.

The next chapter will discuss education in Fiji and the importance of this input to national development.

# Chapter 4

## Education, Development and Fiji

### Introduction

This chapter is chiefly concerned with education as an input to the national development of Fiji. Discussion opens with comment on education as a “critical feature” of modernisation (Webster, 1990:98). Modernisation and its top-down teaching methodology continues to have an influence on contemporary teaching practice. To contrast this, the characteristics of what a post-developmental education framework might look like are postulated with comment on this ideology’s use within the Fijian teaching environment. The history of education in Fiji is then presented considering influences of modernization and neo-liberalism. This discussion is intended to give context to themes that follow, notably the circumstances that led to academic disparities based on ethnicity which in turn have hindered the country’s goal of development aided by education.

This then deliberately funnels the discussion toward themes contained in the Fijian Ministry of Education’s (MoE) “comprehensive review”, *Learning Together* (Pene, Tavola, & Croghan, 2000:i<sup>32</sup>). This review presents a variety of factors believed to cause academic under-achievement in Fiji. Two specific elements are selected from this list. The first is “bad teaching” (Williams, 2000:188,214-5), a topic that will be expanded on and discussed from the inverse perspective of quality education delivery and qualities of professional teacher practice. This will also include comment on cultural identity as an aid to academic achievement. The second is the use of *yaqona* (*kava*) – the *Pasifika* “cultural keystone species” (Garibaldi & Turner, 2004:5) – within the teaching environment. This will include discussion on aspects of the ‘culture of *yaqona*’ to identity formation and continuance. In their *Learning Together* review, the MoE acknowledge the cultural importance of *yaqona* while expressing concern that it

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<sup>32</sup> The Fijian Ministry of Education’s *Learning Together* review comprises 28 chapter by a variety of authors. The authors will be referenced throughout this study as opposed to the MoE.

is impacting negatively on quality education delivery. Recent policy initiatives aimed at mitigating this problem will also be presented. This discussion will again illustrate the traditional/contemporary tension as discussed in the previous chapters. While previously this term was used to illustrate the often polemic interaction between traditional use systems associated with indigenous substances and contemporary systems of development, in this case it includes education and – more specifically – *yaqona*'s impact on quality education delivery.

## Education Inspired by Modernisation

Chapter 2 commenced with a discussion of modernist processes and philosophies embraced since the late 1700s that essentially industrialised Europe and influenced the development agendas of most countries today. A key focus of that discussion was modernisation's prescribed change away from the "primitive" (Rostow, 1956:27) collectivist ideologies and practices of the "backward" (Youngman, 2000:52-4) to individuality and "economic initiative" (Rostow, 1956:27). Huntington (2002:21) neatly encapsulates this developmental approach while also mentioning the importance of education—

Modernization involves industrialization, urbanization, increasing levels of literacy, education, wealth, and social mobilization, and more complex and diversified occupational structures. It is a product of the tremendous expansion of scientific and engineering knowledge beginning in the eighteenth century that made it possible for humans to control and shape their environment in totally unprecedented ways. Modernization is a revolutionary process comparable only to the shift from primitive to civilized societies, that is, the emergence of civilisation in the singular... The attitudes, values, knowledge, and culture of people in a modern society differ greatly from those in a traditional society. As the first civilisation to modernize, the West leads in the acquisition of the culture of modernity. As other societies acquire similar patterns of education, work, wealth, and class structure, the argument runs, this modern Western culture will become the universal culture of the world.

Webster (1990) adds that education is a "crucial feature" (p.98) in modernisation, providing "basic skills, such as literacy and numeracy, and... specialised technical knowledge... [T]heorists also believe that the specific direction of education is tied into the occupational demands of industry" (p.119). Williams (2004:133) states, "Basic education is the most effective development tool there is", which he justifies by drawing on literacy rates and per capita GDP statistics. Citing 2004 figures, he explains

that in countries where the adult literacy rate is 40%, GDP averages \$210. Conversely, in countries where it is 80%, GDP was over \$1,000 per capita. Further, farmers with four years of education were 10% more productive when compared with those who completed less, and girls who attended school often married later and had fewer children. St. Clair Skeet (2007:31-2) admirably summarises the supposed contribution of education to development when she asserts–

Education is seen as not only the tool for development, but the key to such betterment. The impacts of education on developing countries are plentiful. Stretching from the mythical increase in national economic output to the westernized perception of increased social well-being of entire populations; education is deemed the strongest driving force of development... the reality remains that every healthy, independent, and economically surviving country today has an educated population. Education allows individuals to develop within their community and country, and allows nations to compete and survive in the global economy.

The education arena is also considered the key setting for the creation of “human capital” (Youngman, 2000:56), or the growth of people with “modern cultural values” (Peet & Hartwick, 2009:223) and productivity skills necessary to increase capital output and therefore aid economic growth (also see Mincer, 1958:301). Human capital places education at the centre of development while simultaneously attributing it with investment opportunities (Fägerlind & Saha, 1983:17-8,44,68; Carmen, 1996:61-2). Farrell (2007:130) states that human capital and public expenditure “increase the availability of education [to] produce net social benefits, increasing the total amount of wealth in a society and improving its distribution”. It is worth briefly pointing out here that the union between “humanistic concerns” or human capital and “economic rhetoric” are, according to Tuinamuana (2005:204), evidence of increased neo-liberal influence within the education area, an idea I will continue to expand on in the coming sections.

The human capital mandate is not without its critics (Fägerlind & Saha, 1983:46), prompting some to seek an alternative ‘education for empowerment’ approach. The central theme here is a greater sense of democracy with education deemed to ‘empower’ individuals in decision making and facilitate increased involvement in the social, political, cultural and economic forces within society

(Carmen, 1996:64-7). Gould (1993:209) argued modernisation and the human capital approach continue to be the primary influence in education planning, with “hierarchical, bureaucratic and centralised” systems dominated by economic strategies being the norm (also see Fägerlind & Saha, 1983:47).

Although modernisation appears simplistic, prescriptive, easily achievable and widely applicable, this is not the case. Commencing in the 1960s, “ferocious... political and intellectual... attacks were launched on all aspects of [modernisation] theory”, most notably from dependency theorists who criticised everything “from its original base in structural functionalism to the politics of its policy prescription” (Peet & Hartwick, 2009:132). This highlighted a variety of shortcomings, notably modernisation’s one-size-fits-all “policy prescription” (Peet & Hartwick, 2009:132), criticism that Fägerlind & Saha (1983) state is also a key “weakness” (p.49) in education strategies (also see p.57-8). Such debate may have brought an element of doubt to the theory, but as Peet & Hartwick (2009:140; also Gould and Fägerlind & Saha above) explain, it did not halt its influence—

The notion that there is a proven path to development that can be read from the experience of the West is so embedded in modern culture that mere academic critique is relatively powerless. Modernisation can be countered only through alternatives that are more convincing and persuasive, alternatives summoned up from the perspective of excluded groups or ones based on criticisms of the very concept of development.

In Chapter 2 I explain that “the 1980s saw a rapid growth in support for a revamped form of modernisation theory known as neoliberalism” (Scheyvens, 2002:24), an “economic orthodoxy” (Simon, 2008:87) driven from the global perspective that also influenced education in developing countries (also see Brohman, 1995:125:134). Hill & Kumar (2009) summarise neo-liberal education in practice. Essentially this focuses on student education that will lead to future workplace “capitalist enterprises” (p.2). Additionally, it includes school environments that are business centres capable of creating profit from private activity (p.2) together with increased partnership between government, school and the community (p.3). Tooley (2001) presents a “profile” (p.44-48) illustrating a competent, profitable and effective

neo-liberal ‘education company’. Of particular interest to the present discussion, he describes a number of “small but nevertheless significant public-private partnerships” (p.177) that have aided educational growth in developing countries. These include the *Delhi Public School Society* funded by an educational research centre (p.53-4), the growth of *Educor* – a multi-faceted teaching system in South Africa that has led to the organisation listing on the Johannesburg Stock Exchange (p.57-8), and an educational model in Colombia that utilises private sector financial and business advisors allowing school reproduction. In more recent cases, Burke (2012:6) describes Catholic schools in the US which have pursued private sponsors and donors to support an education business model, whereas Dahlstedt (2012:12-13) discusses schools in Sweden which have embraced corporate styled branding and service provision as part of promoting themselves as unique and specialist and therefore more desirable as education facilities. Finally, Ball’s (2012:24) explanation of the neo-liberal school or university as an entrepreneurial business, generating non-state sourced finances, reminded me of a similar example I had witnessed in Fiji in 2009. At a rural school home economic students had made household items such as decorative pillows, curtains, bedware and mats, while woodwork pupils had built food-safes, kitchen dressers, and tables and chairs, items they had sold at their fund-raising event. This had been termed “enterprise education”.

Neo-liberal discourse first began appearing in MoE policy documents just prior to the new millennium. Tuinamuana (2005) discusses this at length by analysing rhetoric within policy documents such as the *Education Fiji 2020* and the *Strategic Plan 2000 – 2002*. Of most interest though is her observation that while–

Fiji is currently going through an unprecedented phase of educational policy document production (p.201)... [which express an] emphasis on the principals of neo-liberalism (p.202)... there is very little meaningful or willing engagement concerning how this new policy might be usefully applied to Fiji’s education system. Rather, the policy seems to just ‘sit there’, on display as it were, and the main function that it has served to date has been to do with planning for future teacher requirements, and for bureaucratic functions of resource allocation. These functions are of course very important, but it is clear that further steps have not been taken to ensure a closer link between official policies and context-bound settings (p.212).

Although this suggests a disconnect between policy and practice, there is nevertheless

hints of neo-liberalism in the daily operations of Fijian education, a theme I will discuss shortly.

Another aspect of Chapter 2 was the criticism of modernisation and the suggestion that post-development provides a good alternative. It is worth deviating briefly to pose a question: what would an education system based on a post-development approach look like?

## A Post-development Approach to Education

In Chapter 2 post-development was explained as an evolving grassroots driven and controlled development paradigm (p.32). Key to this ideology is the elimination of hegemony and the legitimisation of local culture and traditional knowledge systems, including dialogue processes and spirituality (Peet & Hartwick, 2009:226-7). Unlike modernisation and neo-liberalism, very little has been written about what an education system informed by post-development would look like. In Chapter 2 it was explained that post-development is informed by post-colonial critique (p.32-3). Post-colonialism has discussed the theme of education, which aids in considering potential post-development education forms. Essentially post-colonialism seeks to counter inequality by providing opportunity for non-Westerners to expose power imbalances (McEwan, 2008:126). The relationship between knowledge and power is directly linked with education. According to post-colonial education commentators Risvi, Lindgard and Lavia (2006:257), educational institutions are environments for hegemonic inculcation, but also places where resistance to the dominant discourses can be contested. Lavia (2006:291) stated that local teachers who are courageous in the face of colonial and globalised agendas through a commitment to their indigenous practices and knowledge are critical to such resistance.

In the case of post-development-styled education, Janzen (2008:12) suggests undertones of this are evident within local forms of indigenous knowledge transfer. Rancière (1991:45-9), in his interestingly titled text *The Ignorant Schoolmaster: Five*

*Lessons in Intellectual Emancipation*, also hints at post-development. He suggests that equality in education must be the starting point rather than a future goal. He states that all people are equally intelligent and that intelligence is situational to given settings. Further, no one culture or education system has the right to suggest they are the qualification standard authority, therefore intellectual emancipation is freely available to all.

Freire's (1997) *Pedagogy of the Oppressed* suggests a post-development-influenced education framework in which he repositions the top-down teaching methodology to one that views the learner as the knower (p.77-8,89-96). This creates "dialogical education" (p.78) between people, theorising education in contrast to hegemony. Freire argues for an approach based on "problem-posing" (p.85), where students and teachers collaborate in the creation of knowledge through meaningful dialogue – an approach that recognises the legitimacy of student knowledge, which in turn promotes empowerment at the local level (also see p.85,90-1,105). Janzen (2008:22) is not convinced though, questioning the value of Freire's thesis and its links to a post-development education framework.

Janzen's (2008:22) study on the pursuit of education by grassroots Ugandan women is interesting in that he initially appears to support a post-development approach, but by presentation's end has done a 180 degree turn-around. Concerning Freire's wider education argument, Janzen highlights a key principle of post-development – the rejection of external systems as being little more than hegemonic interference (Jakimow, 2008:321, McEwan, 2009:104; Nederveen Pieterse, 2010:119). He adds that post-development would prevent his grassroots research participants from accessing external resources such as "formal education opportunities" (p.22), potentially restricting them from an asset (p.23,26-7). What Janzen fails to appreciate is that post-development recognises that external resources have their place, but only if requested by the local as part of aiding their local knowledge systems and the building of empowerment (Escobar, 1995a:98).

With limited discussion in the literature to explain what constitutes a post-development education framework, further comment concerning this requires the identification and interpretation of related themes within emerging educational approaches in addition to those identified under a post-colonial approach. For the purpose of this I will draw on work by *Rethinking Pacific Education Initiative for and by Pacific Peoples* (RPEIPP), an indigenous *Pasifika* collective formed in 1990. The group has a strong post-development focus, seeking to encourage “Pacific peoples to rethink education in and for their own communities. Its [RPEIPP] stated aim is to enable the Pacific to redefine education on their terms so that it becomes a process that belongs to the Pacific, and more fully reflects their vision” (USP News, 2009:n/a)

RPEIPP member Nabobo-Baba (2006), as part of making suggestions to improve *iTaukei* education and learning, unknowingly presents what could be termed a post-development education framework. Her central thesis is the utilisation of teaching staff skilled in traditional knowledge, *vakaturaga* (the *iTaukei* respect-based ethos, see p.166) and indigenous methods of ‘curricula’ delivery and transference (p.130-1). The building of students “to belong or strongly identify” with their education environment is an essential attribute (p.130). “Schools emphasise individual achievement, competition and the like” – characteristics that Nabobo-Baba asserts contrast *iTaukei* importance of *vanua*, collectivism and reciprocity (p.130).

In 2009 the RPEIPP published *Re-thinking Education Curricula in the Pacific: Challenges and Prospects* (Sanga & Thaman, 2009), a collection of papers by “14 Pacific scholars”. One of those scholars, Bakalevu (2009:58), argues that the current maths curriculum is foreign to *iTaukei* students and therefore inhibits their ability “to conceptualise, relate to and make sense of the subject”. Instead she suggests utilising local concepts such as the 10-cycle counting system, which quantifies in traditional ‘lot’ amounts, as opposed to individual items (p.65). Bakalevu (2009) also encourages the use of indigenous measuring values, which, in the case of *iTaukei*, comprises “measure using their body parts” (p.6). Additionally, *kerekere*, or a traditional form of purchase and transaction process, more closely related to reciprocity rather than cash-up-front,

could be used as part of shopping-related math (p.65). These culturally based processes, Bakalevu suggests, legitimise local systems while offering a recognised reference point to aid greater levels of understanding (p.69).

In another chapter, Taufe'ulungaki (2009:125) explains the importance of local values, suggesting the inclusion of these in curricula is vitally important to a redefined *Pasifika* education system. In the *iTaukei* context, value of place or *vanua*, is the core principal of identity. She adds that a sense of identity is vital for increased social capital which in turn is "critical to their survival and prosperity" (p.134). This theme of identity, also raised by Nabobo-Baba, will be discussed in greater depth later in this chapter. In another chapter of the RPEIPP publication, Nabobo-Baba (2009:137-9) states that rethinking curriculum requires the reexamination of local processes, pedagogies, traditional values and indigenous knowledge. These must then be incorporated into learning processes to improve the education environment and its curricula. Having a stable cultural-based reference point to work from, Nabobo-Baba suggest, will better aid students as they face externally imposed change (p.155).

In a final example that suggests a post-development approach, Brison (2011) discusses kindergarten education since the adoption of a new 2009 curriculum by the MoE. This curriculum utilises cultural examples and the children's own dialects as part of the learning processes (p.230,232). The head teacher at one preschool commented–

knowing their own language and culture empowers children... It is important to be identified as a Fijian [*iTaukei*], to be somebody. We are empowered with it when we go to other cultures. We have differences, so it's compulsory to teach them about Fijian [*iTaukei*] tradition" (p.236).

Put simply, these commentators argue the need for several requisites, namely local processes, structures, values and self-determination. These principles answer my question, what would a post-development framework look like? However, one qualifier is necessary. Under post-development, external systems can be utilised, but this must be at the discretion and under the direction of the local community (Radcliffe: 2006:17-8).

## Education in Fiji

Pre-contact Fiji was an oral culture where traditional forms of education were aimed at ensuring “cultural transmission and continuity” (Nabobo, 2000:4<sup>33</sup>; also see Tavola, 1991:7; Dakuidreketi, 2004:26-8). The education ‘curriculum’ focussed on the child’s role within their *mataqali* (clan) such as *turaga* (chiefly responsibilities), *sauturaga* (executives to the chief), *matanivanua* (spokesmen of the chief), *bete* (priests), *gonedau* (fisherman), *bati* (warrior) and *mataisau* (carpenter) (Deane, 1921:118; Geddes, 1945:36; Derrick 1946:8; Bole, 1972:1; Veitayaki, 1995:70) together with appropriate behavioural expectations that comprise the *vakaturaga* ethos (Tavola, 1991:6; Nabobo & Teasdale, 1995:697). Therefore, according to Nabobo (2000:4), academic failure did not exist.

In 1836 education took on a marked change with the opening of mission schools (Wood, 1978:145-6). Tavola (1991:7-22) discusses at length this development of early education in Fiji. She states, “By 1839 there were 564 pupils in mission schools... [where] all reading material was religious... [therefore] evangelising and education were inextricably linked” (p.7). With many of these early schools overseen by Methodist missionaries, “Methodism... became grafted to Fijian [*iTaukei*] culture, rather than displacing it” (p.9). The missionaries procured “Chiefly decrees [that] were not subject to question; thus, school soon became a normal part of Fijian [*iTaukei*] childhood” (p.9). Unlike the missionaries of the period, the British colonial rulers were less interested in advancing education (p.11-2). Instead they focused their attention on sugar cane production which led to the indenture of labourers from India in 1879 and resulted in approximately 60,000 arrivals by 1909 (p.10-11). Although a third of this number were eventually repatriated, those who remained went on to be known as Fiji Indians or Indo-Fijians, and more recently *Fijians* (Government of Fiji, 2010). They now comprise 37.5% of the population<sup>34</sup>. Methodist missionaries together with the Marist Brothers, started the first schools for *Fijians* in 1898 although “the prevailing

<sup>33</sup> Shortly after this publication, Associate Professor Unaisi Nabobo changed her name to Nabobo-Baba following her marriage to Fijian academic and politician Professor Tupene Baba.

<sup>34</sup> The (latest) 2007 Fijian Government census reports a total population of 837,271 comprising 475,739 *iTaukei*, 313,798 *Fijians* and 47,734 other ethnicities (Fiji Islands Bureau of Statistics, 2011).

colonial attitude was that it would be self-defeating to educate Indians [*Fijians*] as they had been taken to Fiji to be an unskilled work force” (p.11).

The abolition of the indenture system in 1920 brought both freedom and limitations to the *Fijians*. On one hand they were now free from their rurally isolated bonds. However, restrictions on land availability due to the Native Land Trust Ordinance<sup>35</sup> limited agricultural-based economic prospects. White (2001:311) noted that many *Fijians* resettled in urban areas, opening shops and small businesses, focussing their attention on education to further their economic and social prospects. She went on to say—

Indian mission leaders inspired the pursuit of political rights, economic opportunities, and formal education as a vehicle of upward mobility and to restore *izzat*, or honor, and thus erase the humiliation of indenture in the colony. Fiji Indians [*Fijians*] actively lobbied for qualified teachers and an academic curriculum, while the government emphasized a vocational curriculum for both Fijian [*iTaukei*] and Fiji Indian [*Fijian*] schools. By the 1940s, Fiji Indian [*Fijian*] rural primary schools were described as providing formal education of a higher standard than that of Fijian [*iTaukei*] primary schools and offering, on average, 2 more years of schooling.

This initiated a disparity in *iTaukei Fijian* educational attainment that persists to this day.

The “colonial attitude... that it would be self-defeating to educate Indians [*Fijians*]” also applied to *iTaukei*. Tavola (1991:13) stated that *iTaukei* “were considered a dying race in the 1920s as they had suffered heavy losses from introduced diseases. Gillion (1977:10) adds that the colonial government of the day

<sup>35</sup> The Native Land Trust Ordinance (NLTO) came into effect in 1880 (Donnelly, Quanchi, & Kerr, 1994:41). Belshaw (1964:186-7) stated that the NLTO was “One of the earliest acts of enlightened administration in Fiji”. This was aimed at bringing order to previous “flexible ‘chaos’”. He added that the NLTO was aided by the identification of “various persons who occupied the appropriate chiefly roles for each [land] unit. Each named block of land was also identified, its boundaries described, and later surveyed and plotted on a detailed map. Each block was associated with a mataqali [clan] (in some cases a tokatoka [sub-clan]), which was then and there registered as the ‘owner’ in perpetuity... [This] registration system is the foundation of Fijian official land administration... and contained in the Native Lands Ordinance, Chapter 103 [and 104] of the Laws of Fiji” preventing the sale of that land “registered... in perpetuity” and setting out land lease restrictions. Today land is classified into three categories. “Mataqali (native) land” accounts for a total of 83.6% of all land in Fiji. 9.0% is “State (previously crown) land” with the remaining 7.4% “Freehold land... Mostly bought before 1874”, that being prior to the enactment of the NLTO (Donnelly, Quanchi, & Kerr, 1994:144).

regarded Fijians [*iTaukei*] “at best, as irrelevant to the progress of Fiji as their part in the mainstream of economic life was minimal.” Tavola (1991:19) goes on to cite an early “despatch from [the] Governor to [the] Secretary of State for the Colonies (CO83/225/8)” (original not dated) who stated “the Fijians [*iTaukei*] are an agricultural people. There is, therefore, nothing in the racial composition of the Fijians [*iTaukei*] to warrant their education in European schools either in or out of Fiji”.

By the 1930s colonial attitudes began to temper. The Government introduced grant-in-aid schemes to selected schools and assisted in the conversion of many mission schools to secular establishments governed by local communities, heralding the introduction of the State/Community partnership (Tavola, 1991:20-1; Tavola, 2000:24-29; White, 2001:310). Education provision based on a “partnership between the state and the community” (Subramani, 2000:6; also see Bray, 2003:37) is important to later themes in this study (p.274-5). The majority of schools in Fiji continue to be owned, maintained and managed by village communities or religious organisations who receive financial contributions from the State in order to deliver educational services (Subramani, 2000:6; Nabobo-Baba *et al.*, 2012:386). The State ensures appropriate levels of academic standard, sets the curriculum, pays teacher wages and provides teaching resources (Nabobo, 2001:68; Bray, 2003:37; Nabobo-Baba *et al.*, 2012:253,386). Additional costs such as wages for administrative staff and school labourers, staff accommodation in rural areas and utilities, are the responsibility of the school and can create a heavy financial burden (Subramani, 2000:28). Nabobo-Baba *et al.*, (2012:253) explains that essentially “it is their [the *vanua*’s] school. *Vanua* schools, built and owned by the *Vanua* – financed largely by it, like... [most] schools in Fiji with the exception of the handful owned by the Government”. She adds that these schools therefore “enjoy the economic capacities and other capacities of its communities; conversely they mark as well, community struggles and difficulties” (p.253). To assist, schools rely on voluntary assistance from the students’ parents, alumni and local community, who provide manual labour for the building of new facilities and the maintenance of existing structures together with the installation of services and provision of food items for boarding school meals. This is often undertaken at

considerable personal cost, however without this voluntary assistance, most schools would fail to operate. Therefore well developed and maintained relationships with the community are critical to the successful operation of schools in Fiji. The State/Community partnership, while introduced over a half century before the term neo-liberal was coined, nevertheless hints at this theme, a discussion presented earlier in this chapter (p.99). I will return to this again in Chapter 9 where I describe the importance of community involvement in Fiji as part of facilitating education.

Colonial attitudinal changes in the 1930s also brought modification to the curriculum, shifting it away from its original proselytising function to a focus on agriculture. White (2001:310-11) adds that this was done—

in order to prepare the Fijian [*iTaukei*] population for a rural village life steeped in subsistence farming... Thus, a curriculum in rural district and committee schools with increased emphasis on agricultural production complemented the objectives of colonial policies. As Fijians [*iTaukei*] were largely confined to the villages [<sup>36</sup>] and agriculture, formal education was not oriented toward instruction in skills that would prepare students for employment in urban areas. The exception was the formal education provided for Fijians [*iTaukei*] of chiefly descent who, it was envisaged, would take on civil service positions or assume leadership roles in the Fijian Administration. Fijians [*iTaukei*] of rank received postprimary education at select government schools for Fijians [*iTaukei*] and, in some cases, university education commensurate with their status as mediators between the Fijian [*iTaukei*] commoner masses and the colonial administration within a system of indirect rule.

Further, as Ravuvu (1988) explains, Government assistance in the form of grant-in-aid was also intended to be seen as a goodwill gesture to encourage “law-abiding citizens who would support and disseminate government policies... [and therefore] contribute to the modernisation and development” of Fiji (p.67).

Due to the traditional respect-based ethos of *vakaturaga*, the *iTaukei* “commoner” accepted without question colonial policy aimed at “formal education... for... [those of] chiefly descent”. Tavola (1991) comments that unlike the *Fijians*, *iTaukei* made no demands of the Government for changes to or increased levels of education, instead taking pride in the academic opportunities and successes of their

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<sup>36</sup> “Official policy was to discourage Fijians [*iTaukei*] from leaving their villages, and education beyond the very elementary level was deemed unnecessary for those whose destiny was subsistence agriculture” (Tavola, 1991:19).

chiefly oversights and relying on them to “represent their interests” (p.21). Comment that did come from the chiefly sector was overall limited to a call for “education with a local bias” (Scarr, 1983:340). This was led by *Ratu Sir Lalabalavu Sukuna* (1888-1958), an Oxford University-educated chief, soldier and statesman (Scarr, 1980:198-9). Together with many of his peers, he was concerned that education from a purely Western perspective would weaken *vakaturaga* and the culture. This in turn took pressure off educational improvements for *iTaukei* and led to further governmental neglect, a situation that continued until the early 1960s (Tavola, 1991:21-5).

### **Conspiring Factors in Ethnic Educational Inequality**

As Fiji headed toward independence from colonial rule in 1970, levels of disparity in educational attainment between the two major ethnicities, *iTaukei* and *Fijian*, increased. Tavola (1991:26-7) explains that in 1960 vastly more *Fijian* students (3,211) were enrolled in secondary schools when compared with *iTaukei* (1,162). Similar figures were recorded in 1969 with 8,330 *Fijians* and 3,964 *iTaukei* in secondary education (p.28). “Clearly Indians [*Fijians*] were staying at school longer and gaining qualifications for high status employment or tertiary education. The socio-political implications of this are obvious”, says Tavola (p.29). Viewed purely from the perspective of academic achievement, it could be said that *Fijian* restrictions to land usage under the NLTO had been positive. Deprivation in one area had, in the words of White (2001:311), “inspired the pursuit of... economic opportunities and formal education... [aiding] upward mobility”.

In contrast a number of factors “gave rise to little motivation [on the part of *iTaukei*] to join the monetized economy” (Tavola, 1991:21-2). These, as discussed above, included colonial policy, education restricted mostly to those from chiefly

lineages, “education with a local bias”<sup>37</sup> together with *iTaukei* communal values that encouraged community-based self-sufficiency and simultaneously frowned on “individual competitiveness” (Tavola, 1991:21-2). This in turn is reflected in secondary school attendance records and the increased disparity between *iTaukei* and *Fijian* educational attainment. Additionally, ethnic disparities in academic achievement mirrored ethnic contributions to modernisation. *Fijians* had not only aided the colonial modernisation mandate of increased economic opportunities through the production and export of sugar cane in the late 19<sup>th</sup> and early 20<sup>th</sup> century, but many had then gone on to embrace education as a means of upskilling as well as pursuing individualism and economic self-sufficiency through business ventures. All of this involved “urbanisation, increase[d] levels of literacy, education, wealth, and social mobilization” – all attributes of modernisation described by Huntington (2002:22).

Conversely, the majority of *iTaukei* remained within their villages and engaged in community-based subsistence agriculture. Admittedly a few *iTaukei* elite were able to take advantage of an education system aimed at producing white-collared workers capable of assisting the building of a modern economy, mostly in positions in the Fijian Administration (Tavola, 1991:15-6; White, 2001:311), however on the whole, *iTaukei* contributed very little to the country’s economic development. This “lagging behind... in economic matters” (Spate, 1959:1) prompted the Legislative Council to commission the 1959 *Spate Report*. With strong modernisation undertones (Overton, 1988:3; Tukai, 1988:14), the report recommended *iTaukei* move away from communalism and pursue individualistic “self-reliant” agriculture on communal land (p.1). As Spate

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<sup>37</sup> In Scarr’s (1983) collection of writings by *Ratu Sir Lalabalavu Sukuna* described “education with a local bias” in 1944 as the requirement of

a scheme of education that will fit the Fijian child to become a good citizen of his own country which needs above all... farmers, mechanics, boat-builders, men skilled in indigenous handicrafts; girls with a practical knowledge of house-craft—cooking, washing, sewing, nursing—as well as men with academic qualifications... In the world of today, of highly developed industrial rivalries and colour bars, the Fijian [*iTaukei*] must make the best of these islands. It is thus of vital importance that he should acquire love of country and an understanding of its needs and handicaps, of its history and culture, of its social organisation and its potentialities. To this end education of the child should be given a local bias from the beginning so as to pattern its mind and character on its environment which is native and, for climatic reasons, will remain so.

Tavola (1991:21), commenting on this, stated, “Ratu Sukuna and the other chiefs feared the emergence of a discontented schooled class who would lose its culture and traditional respect.”

(1959) put it, “a community of independent farmers living or working on holdings heritable” (p.9). This position contrasts the move toward individualised land holdings across many areas the Pacific, an action which Crocombe (1987:9) states was a “notable exception” in Fiji (also see Footnote 35). In regards to education, Spate unfortunately stated, “this... [area] is the most important and the most difficult”, although one “which I greatly regret I was not able to explore, owing to the limits of time and preoccupation” (p.97). This is a shame, as he could have greatly contributed to the educational debate as he did to other key Fijian development themes. His remaining comment was limited to the suggestion that there was a need for *iTaukei* “technical education”.

Tavola (1991:32) reports that when Fiji gained its independence in 1970, academic disparity between the two main ethnicities had created political, social and economic instability. “Education had indeed proved to be the passport for Indians [*Fijians*] to enter commerce and the professions... [however *iTaukei*] were increasingly conscious of their inferior position in the education stakes.” Although detailed accounts of the development of the Fijian education system are available for the years between 1970 and the early 2000s (Tavola, 1991:23-74,152-3; MoE, 2000:17-116) (when school enrolments increased significantly, especially for *iTaukei*), the overall theme of academic disparity between the ethnicities mostly reflected the pre-Independence era.

For instance, in 1979 Baba stated that eight years after Independence little had changed regarding *iTaukei* academic achievement. “In fact it seems to be looming larger” (p.16). He cited poor exam results and “a very high drop-out rate” for *iTaukei* when compared with *Fijian* students. Kishor, in 1983, compared the academic performance of *iTaukei* and *Fijian* students based on socio-cultural factors and motivation test results (p.299-301). He reported that *Fijian* students placed a higher value on education and were vastly more academically motivated than their *iTaukei* peers (p.306). Although Veramu’s 1992 (p.75-7) and Puamau’s 1999 (p.102-3) studies cite a lack of resources as a general factor effecting academia for both ethnicities,

Veramu also point to a disinterest in education by rural *iTaukei* parents which subsequently created an educational apathy among their children.

In contrast, Nabuka's 1984 (p.36-7) study argued that the home environment of *Fijian* students had a number of advantages that aided their academic achievement. These included parental assistance and encouragement with homework and other educational resources in the home, such as story books and higher levels of education attainment by guardians, which in turn stimulated the vocational aspirations of their charges. Nabuka stated that "Education becomes a joint family venture... [which is] important in influences on academic ability, achievement and motivation" – factors lacking in most *iTaukei* family environments (p.37). Connew (2007), who spent time with *Fijian* families in the early 2000s, explains the motivation behind this family support and encouragement–

Even during the school break... [parents] insist that... [children] spend time with homework and improve their English. Education and competence with the English language are recognised ways out of Fiji for Indian-Fijian [*Fijian*] children. It will be these children who will reach back after immigration to extract their parents from the country of their birth (p.69).

Drawing on some of these same studies, White (2001:323) suggests that *iTaukei*–

are less motivated academically since they may return to their villages to eke out a living as farmers in lieu of urban skilled employment should they fail in school. Fiji Indians [*Fijians*], by contrast, are... more reliant on formal education for material survival and, therefore, more inclined to invest significant resources in formal education as a safety valve in the face of land insecurity.

Further, because *iTaukei* place such great importance on communalism and the *vakaturaga* value of humility, they are reluctant to be seen to excel academically. Where this occurs it is deemed *qaciqacia* ('showing off') (p.329). This has in turn created a form of 'cultural ambivalence'. Lynch & Szorenyi (2005:8) state that "Because it [*iTaukei*] is a communal society if they do well they have to learn to become a little more individualistic and it is a problem in Fiji. It is one of the reasons the Fijian [*iTaukei*] students are not doing as well as the Indian [*Fijian*] students".

Although the primary focus of this section is to overview *iTaukei* and *Fijian* educational standing to the early 2000s, it is worth considering a comment by St. Clair Skett in 2007. She stated that *iTaukei* cultural conformity and a focus on agriculture “rather than... financial economics” are not issues of the past but are a “legacy [that] continues to the present”, disrupting educational systems and causing ongoing academic “uneven development” between the two main Fijian ethnicities (p.21).

The reason why a time marker for this present discussion has been set at the early 2000s is because the first year of the new millennium saw the release of the Ministry of Education’s (MoE) *Learning together: Directions for Education in the Fiji Islands* document. This “comprehensive review of Fiji’s education system” (Pene, Tavola, & Croghan, 2000:i) acted as one of two key influences to carrying out this research, and provides a resource I will now discuss.

## The ‘Far-Reaching Effect’ of Under-Achievement on Fijian Development

On the opening page of the MoE’s first “examination of the system as a whole”, it is clear that education in Fiji is deemed a key driver to “the achievement of [their] national development goals” by aiding productivity and economic growth (Subramani, 2000:1). In 2009, the Fijian Minister of Education Filipe Bole reassured this position stating, “Education... was a catalyst for increased levels of labour production” (TPAF, 2009:1). Tuinamuana (2005:199) stated that although the Fijian Government has designed their education approach toward the achievement of their national development goals, in actuality these are influenced by “international trends” of neo-liberalism. Nabobo (2001) adds to this argument when she discussed the influence of the World Bank and IMF “in determining education policies and directions” for Fiji together with “globalisation and its neo-liberal policies, [which] are increasingly impacting on education in general” (p.57). She then presents a list of “challenges” facing Fijian education delivery (p.57-63), noting that “neo-liberal policies will have many implications for education” specifically funding shortages with the community

having to provide the financial shortfall (p.57). Concluding her paper, she states, “with the onslaught of globalisation, the challenges of Fijian education have to be addressed with more urgency” (p.71). More recently Tuinamuana (2005) explained that neo-liberalism tends to be confined to “educational policy document production” (p.201) with “very little meaningful... application to Fiji’s education system” (p.212). This suggests that a disconnect exists between the ideology of neo-liberal education at the national level and its practicality at the coal-face. A final comment is worth making concerning the direction of Fijian education considering increased pressure from the World Bank and IMF, neo-liberal “challenges” to education and the influence of education with a local bias. In 2009 I met with the Minister of Education to ask which theoretical model he felt most influenced contemporary Fijian education. He began by acknowledging the need for education to consider the socio-cultural factors that underpin Fijian society and added that “we have evolved our own system, no one has told us” (Bole, pers. comm., Nov. 20). He continued, “the main [outside] influence had been in curriculum, and this has come from Australia, but this is because we sought it”. This certainly shows the continued influence of education with a local bias and hints at post-development utility at the national level through hybridity as discussed in Chapter 2 (p.40). Although Fiji is seeking to evolve their “own system” of education aimed at increased levels of labour production”, there appears to be a disconnect between educational approach, external influences and developmental desire. Moreover, if the education system in Fiji is struggling as has been indicated in the discussion above, it stands to reason that this is having an impact on the development of the country as a whole. This is an area the MoE have sought to address.

The contents of the *Learning Together* report acknowledge a struggle exists, stating that although the “education of all Fijians is a fundamental challenge for the whole nation”, *iTaukei* are the chief concern (Williams, 2000:179). While the report contains a section entitled “Issues affecting Indo-Fijians [*Fijians*] in education”, it is difficult to identify what these “issues” are outside of their preference for taking accounting, economics and science-based subjects over those in the humanities and

arts, and a need to promote *Fiji Bāt* (Fiji Hindi) as a valid language (Tavola, 2000:226). Overall, the report painted a bright future for *Fijians* stating—

[they] are very positively orientated toward education... education is seen as an investment and as a form of long-term security. Achievement in education has been a way out of the insecurity of sugar-cane farming for many people. Indo-Fijian [*Fijian*] children typically achieve well in school, as previous chapters have indicated.

The positive comments continue for almost another half page, making suggestions that *Fijians* are willing to make great sacrifices for education, *Fijian* communities have embraced and actively support the State/Community partnership, *Fijian* parents are highly supportive and actively encourage their children in education, and that potential career paths inform subject choices. This is reinforced by secondary school leaving exam results comparing *Fijian* and *iTaukei* students for the period 1989 to 1997, which shows vastly better pass rates for *Fijians* (Williams, 2000:179).

Alternatively, the report expresses concern at *iTaukei* under-achievement and the impact this is having on the meeting of national development goals. For instance—

the general academic status, performance and achievement of Fijian [*iTaukei*] students at all levels remains a problem. The ‘education gap’ between... [*iTaukei* and *Fijian*] persists. Many students leave school with few or no formal qualifications and this has had far-reaching effects on the participation of Fijians [*iTaukei*] in the total socio-economic and political development of the country. The cumulative effect of these long-standing problems is that Fijians [*iTaukei*] suffer from many disadvantages, which have led to Fijian [*iTaukei*] under-achievement in education (Williams, 2000:179,184)... Whether the school is rural or urban, this is the stereotyped view of Fijian [*iTaukei*] education (p.184).

The report reviews literature such as Puamau’s (1999:101) study on factors believed to contribute to *iTaukei* under-achievement (Williams, 2000:186-8). In the paper she clusters these factors under “categories [such] as: socio-cultural, institutional, psychological, historical, structural and spatial disadvantage”. She presents these in a flow chart (p.105), although in most cases the elements within each category are broad-ranging and lack specifics. For instance, Puamau identifies “cultural” inhibitors to educational achievement as an “emphasis on the vanua, the church and the community; undervaluing of education; emphasis on the adult rather than the child; [and the] group emphasis [which] tends to discourage individual success” (p.105). No

further explanation is given. What is interesting though is her specific identification of the “emphasis on drinking yaqona” (p.105), a practice invariably integral to *iTaukei* life-ways. The report also outlined what it termed “barriers to learning” (Education Review Office, 1995) – impediments to student academic achievement which include–

poor attitude to learning, truancy, failure, lack of parental support, conflict between parental expectations and school programmes, family problems, financial problems, environmental restrictions, poor health and nutrition, bad teaching, inadequate student support, insufficient learning resources, and lack of study and learning skills (Williams, 2000:215).

Taking an alternative stance, the report cited Bole’s 1972 study, which suggests *iTaukei* culture is an important feature to academic achievement (p.4). Such conflict between the negative and positive attributes of culture to education prompted the MoE to call for an investigation into the relevance of *iTaukei* culture and values to education (2000:188).

### **Reflection**

Although education was initially prescribed by missionaries in a homogenous manner to all ethnicities in Fiji, its application had two very different outcomes. For the *Fijians*, indentured from India starting in the late 1800s, circumstances conspired which encouraged them to embrace education for their own advantage and advancement which in turn has aided Fiji’s developmental agenda. However in the case of the indigenous population, colonial policy together with cultural values has led to high levels of *iTaukei* under-achievement inhibiting the meeting of national development goals.

The MoE’s 2000 *Learning Together* report reviewed literature in an attempt to identify key factors influencing *iTaukei* academic failure. Key to this was Puamau’s (1999:105) paper which reviewed 17 earlier studies, allowing her the creation of a “framework to view Fijian [*iTaukei*] underachievement”. Within this she collected elements under key headings such as “institutional, socio-cultural [with a sub-heading ‘cultural’], psychological, historical, structural and spatial disadvantag[ing]” factors. Puamau summarised that collectively the elements within the framework “recognise

the interplay between the dynamics”, with the picture which has emerged as being one “of complexity” (p.109). These complexities, together with informant comment to the review, led the MoE to request that “more research... be undertaken on the relevance of Fijian [*iTaukei*] values and... culture to the current education system”. And additionally, that “the relationship between the traditional life style and the demands of the school curriculum needs to be examined further” (Williams, 2000:188).

This is a key aim of my study. Instead of a broad sweeping investigation into the factors believed to impact on academic achievement, two specific elements have been selected from Puamau’s framework and the MoE *Learning Together* review. The first is “quality of teaching”, which Puamau (1999:105) designated an “institutional” factor. As mentioned, the MoE (Williams, 2000) review links this to “bad teaching” (p.215), an element defined under a list of “barriers to learning” (p.187). Further, as discussed in Chapter 1, for the purpose of this study I have reconceptualised the MoE’s *Institutional* classification of “quality of teaching” and will instead discuss it from the perspective of *quality education delivery*. I regard quality education delivery to be a more contemporary descriptor due to education’s fundamental link to national development. The second element is “drinking *yaqona*” (Williams, 2000:187), identified by Puamau (1999:105) as an inhibitor to educational achievement under “cultural” factors. For the purpose of this study I deem the “drinking” of this “cultural keystone species” to also include its related use-systems which fall under the rubric of traditional cultural practices, a theme I will discuss at length in Chapter 5. Essentially it has been the design and pursuit of contemporary development in Fiji that has brought these two contrasting systems to a traditional/contemporary tension.

## Quality Education Delivery

In Chapter 2 I discussed productivity explaining that the superiority of any human input to the productive process is an important factor in quality of output (p.19). Voigt-Graf (2003:163) stated that while "Education has increasingly come to be seen as a potent

development tool”, the success of that process is dependent upon the “quality of [that] education”. Quality education delivery is therefore deemed a productive input necessary specifically to superior education, but more broadly to achieving development. When applied to the Fijian situation, it can then be inferred that the national development goal is being threatened by substandard education delivery or “bad teaching” (Williams, 2000:215; also see Tavola, 1991:90-1). The MoE has taken steps to mitigate deficiencies in this area. For instance in October 2007, a group of senior staff and Curriculum Development Officers travelled to Perth to meet Australian peers and discuss and evaluate improved education delivery methods. A research participant who attended stated that this included discussion on best practice in teaching to aid quality education delivery (IQ004).

McGee & Fraser (2008) discuss quality education delivery and the attributes of *The Professional Practice of Teaching*. They begin by suggesting that the key to successful quality education delivery is the creation of a “culture [of] learning” based upon “roles” (Fraser, 2008a:1). The contributors assert that if these “roles” are applied and embraced with a “burden of responsibility” (Hall, 2008:225), in conjunction with student input, this will result not only in a “professional teacher” (Hall, 2008:221) but also “a community of learners” (Sewell & St. George, 2008:204).

These “roles” or teacher core competencies, contribute to the delivery of quality education and include “critical reflection” (McGee & Fraser, 2008:xvii), “hard work” (Fraser, 2008:2), flexibility while motivating, and offering students opportunities and accommodating different rates of learning (Fraser, 2008a:13, Barker, 2008:21) to “ensure that rules, routines and consequences are simple, purposeful and understandable” (Yates & Ussher; 2008:103). Additional roles, according to Fraser (2008b), include “stay[ing] relevant to the children they teach” (p.47), displaying a “depth of knowledge, an ongoing passion for learning, and desire to connect with students” (p.48), intuition (a skill that “cannot be reduced to technique [but has to be seen] from the students’ perspectives”) (p.50), and the intentional and frequent use of “quality feedback and feed-forward to students” (p.58).

McGee states that being an expert “facilitator” (p.81) – asking “rhetorical questions” in order to elevate discussion and learning (p.92) – is also vital (p.87). McGee adds this is a competency that is relatively easy to master as it “requires little more than memory recall or lower-order thinking” (p.87). Planning, time management, monitoring (Hill, 2008:136-7; Yates & Ussher; 2008:108), evaluating and assessing “to allow teachers to take advantage of changing circumstances” (McGee & Taylor, 2008:116), carried out ethically and with a “duty of care” (Hall, 2008:230), are also critical to the role of a teacher (Hall, 2008: 225). Finally, Lang (2008) discusses a number of roles she argues is necessary, although their importance often goes unrecognised by teachers, especially in the early stages of their careers. She states, “the development of good time management skills” (p.252) outside of the classroom is important to creating “balance... between work, domestic responsibilities, and leisure activities” (p.243), and this must include adequate sleep which she suggested was “vitally important” (p. 252).

These core competencies are the antithesis of “bad teaching” and their use in the Fijian academic environment would greatly aid the quality of teaching, which in turn would have a degree of positivity on national development. This theme is important to later aspects of the findings and discussions chapters. Prior to moving onto the second key focus of this study, *yaqona*, it is worth considering whether culture can also have a positive influence on education and its delivery. Such considerations not only add to the MoE’s request for more research into *iTaukei* values and culture, but also contribute to the core competency of teachers being “relevant to the children they teach” (Fraser, 2008b:47).

### **Culture and Education**

According to Dodd (1998:40), culture affords a “sense of social identity (who we are), [from which] one receives a sense of personal identity (who I am)”. This is most prevalent in collective, as opposed to individualistic societies (Dodd, 1998:40). In 1992, UNESCO reported that “the loss of culture” or cultural identity is at “the heart of our educational and social problems” (Teasdale & Teasdale, 1992a:1). They added that

this is not limited to indigenous cultures, but also the “dominant societies of the west [who] have moved so far along the road of capitalism, with its emphasis on competition, the consumption of goods and services, and the exploitation of the world’s non-renewable resources that they too are losing their deepest roots”— in other words, development epitomized by the predominant development agenda. In turn this has also seriously impacted on socio-cultural stability. The report concluded that “culturally appropriate teaching and learning is integral” to socio-cultural stability, a process and goal that is reliant upon depth of cultural identity (Teasdale & Teasdale, 1992b:70). Thaman (1992a:30; 1992b:10-12; 1995:725) concurs, arguing that a lack of understanding of one’s personal culture is not only a factor in under-achievement but can also perpetuate a breakdown in values. I would suggest that in the *iTaukei* setting this loss of values manifests itself as a loss to *vakaturaga*, the ethos central to cultural stability and harmony (see p.166).

Literature supports the view that a strong relationship exists between cultural identity, self-worth and academic achievement. Shaffer & Kipp (2010:407-8), in a review of six publications, summarised that "Once ethnic identity is achieved, minority youth tend to display high self-esteem, better academic adjustment, better relations with parents, and more favourable assessments of peers of other ethnicities than their counterparts who still merely label themselves as a minority and are still ethnically diffused or foreclosed." Oetting & Beauvais (1990-91:673-4), investigating cultural identity and academic performance among Amerindian adolescents, suggest strong cultural identity led to heightened levels of self-esteem which increased adjustment to the school environment and conversely, academic performance (also see Oetting, 1993:36). In their literature review on identity development and biculturalism LaFromboise, Coleman & Gerton (1993:403-4) concur, agreeing that cultural identity is critical to environmental adjustment which includes the education arena, with adjustment necessary to academic achievement. Phinney (1992) investigated cultural identity and its importance to self-worth among minority ethnicities (p. 156), or “Black” compared with “White” high school students (p.157). He argues that a heightened sense of cultural identity equates to a more “secure sense of self” and

higher levels of self-esteem (p.160), which in turn enables “Blacks” to attain greater levels of equality with “Whites” in educational settings (p.168-9,171).

From a *Pasifika* perspective, Suaalii (2010:n/a) studied the barriers to learning chemistry in Samoan secondary school classrooms and commented that a “lack of acknowledgement of our own culture and practice” – or aspects that comprise cultural identity – contribute to academic failure in the sciences. He adds that “with the inclusion of these important aspects, learning becomes meaningful and student achievement will be improved”, furthering the argument that cultural identity is important to academic achievement (also see Suaalii, 2011:209).

Concerning Fiji, Nabobo (2000:3) states that the inclusion of local knowledge as part of school curricula was necessary for student empowerment. For *iTaukei* students, she adds that the incorporation of culture is considered democratic, giving pupils an understanding that their own systems of learning have equal standing with those of their Western counterparts. The importance of cultural identity to academic achievement in the Fijian setting has not been relegated to the arena of theory. Nabobo & Teasdale (1995:699), reported that in 1992 the School of Education–

developed a course [to help] contextualize the teaching/learning processes, and that all courses must respect and affirm the cultures of the trainees... Ultimately trainees needed to be personally affirmed and strengthened in their own cultural identity so that they in turn could become effective agents of cultural renewal in the classroom.

Once in their teaching positions, the former trainees drew on the course material together with “maintain[ing] and strengthening their cultural identity by participating in community activities and ceremonies”. Further, they combined these experiences with “cultural education in the classroom... [and] used these opportunities to talk with students about the importance of culture and cultural opportunity” (p.703). Nabobo & Teasdale (1995:704-5) state that the most noticeable impact of the programme was empowerment of the trainees and students, aspects discussed above as important to higher levels of academic achievement. This initiative also offers a culturally informed input to aiding quality education delivery in addition to the “roles” or core teacher

competencies, an approach that hints at post-development hybridity.

Considering cultural identity is a factor in academic achievement, teachers must be aware of local systems and values to incorporate these into the curriculum. An aspect critical to *iTaukei* (and increasingly *Fijian*) cultural identity is *yaqona*.

## Culture and the School Campus

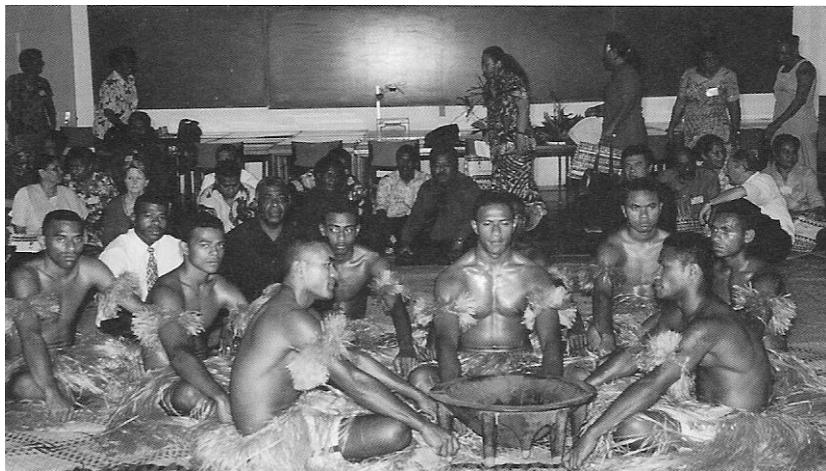
My earlier research explained how aspects of *iTaukei* culture comprise part of the curriculum at some schools (Aporosa, 2008:60-2). This can also be considered a continuation of “education with a local bias” as recommended in the mid 1900s (Scarr, 1980:198-9). For instance, *vakaturaga* values were taught in life-skill lessons, the making of traditional artefacts, including *yaqona* consumption receptacles, comprise art classes (see p.278-9) and *qito vakaViti* (traditional games) and *meke* (dances) are learned and used during inter-school competitions and then presented at fundraisers and other significant events (Brison, 2011:242). Female students weave *ibe* (mats) and make traditional hand-crafts to decorate venues for such events and join with the male students in preparing and cooking food in the *lovo* (traditional ground oven). Although adolescents are generally prohibited from consuming *yaqona* until aged 16 (Bureau of Fijian Affairs, 1999)<sup>38</sup>, male students are taught to mix aqueous *yaqona* and present this together with the raw plant during *isevusevu* as part of opening ceremonies. *iSevusevu* and *yaqona* are an important cultural expression. Ceremonies are important to both *iTaukei* and *Fijian* cultures (Walker, 2005:845) and student participation in the preparation and execution of these demonstrates and reinforces cultural importance and identity.

In my earlier research (Aporosa, 2008:61-2), I also included photographs of students presenting traditional gifts and *yaqona* to dignitaries at a school fundraising event. Additionally, I discussed the use of a similar photograph by *Talatala* Dr. Ilaitia

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<sup>38</sup> “Sa vakatabui na nodra gunuva na yaqona ni Viti na i taba gone ka lailai sobu na nodra yabaki ni bula main a yabaki 16 (Bureau of Fijian Affairs, 1999). [Youth under age 16 are forbidden to drink *yaqona*.]” An exception to this is the medicinal administration of *yaqona* to children and youth by parents.

Tuwere (2002:172) (a prominent *iTaukei* academic) within his book. He explained the reason for its use, commenting that it not only had “profound significance” but also gave him a “sense of pride” to see young *iTaukei* demonstrate their culture. I would suggest that such images continue to engender similar feelings among Fijian commentators. As recently as 2009, Sanga & Thaman presented a comparable photograph in their edited text, a collection of papers from a *Pasifika* education conference held in Fiji. Figure 4.1 shows that photograph, which depicts secondary school students from Nasinu, Suva, presenting *isevusevu* at the opening of the conference (p.28).



**Figure 4.1**

Secondary school students Nasinu, Suva, presenting *isevusevu* at the opening of the *Re-thinking Pacific curriculum* symposium at USP.

(Source: Sanga & Thaman, 2009:28).

This photo demonstrates not only *iTaukei*-ness but ‘Fijian-ness’, cultural identity and pride. *Isevusevu* is a highly important, respected and authoritative action. It is one that creates, possesses and transfers *mana* while opening host/guest obligations and expectation. Therefore the participation of students rather than adults cannot be overlooked – as I concluded in my earlier research, “the teaching and understanding of culture, its practical application, together with its related components within the schooling system, which includes *yaqona*, is vital to the academic and holistic development of Fijian youth” (Aporosa, 2008:62).

Although the MoE and other sources recognise the importance of cultural

identity and expression – which includes *yaqona* – to academic achievement, the *Learning Together* report is equally critical of its use by some teachers (Tavola, 2000:169)–

*Yaqona* drinking is important in ceremonial Fijian [*iTaukei*] culture and social gatherings, but excessive consumption of *yaqona* is becoming a problem. It absorbs income as well as removing fathers from the family. Many teachers in rural areas also become involved in excessive *yaqona* consumption, with the result that they are less effective in their professional work. Instances have been cited where teachers leave classes unattended while they drink *yaqona*. Jenkins and Singh [1996:35] noted that *yaqona* has an:

... ability to sap energy and support listlessness and there can be little doubt that it substantially inhibits performance of duties in non-traditional professional environments, including the civil service and teaching.

This highlights a divergence between the regulation and reality; there is a civil service regulation that prohibits the consumption of *yaqona* during working hours, apart from ceremonial occasions.

The “civil service regulation” mentioned here is a memorandum circulated by the Public Service Commission (PSC) in 1993 (Appendix C; PSC, 2003:n/a). It essentially discusses the “traditional significance” of *yaqona*, but raised concerns over consumption during working hours, suggesting departmental heads “monitor *yaqona* drinking... and if necessary, issue guidelines to ensure it does not become counter-productive” (Kikau, 2006:4). Schools were not specifically mentioned and enquiries with the MoE in 2006 revealed that the PSC memo was to be considered a “guide” with individual schools left to set their own standards. The value and limited applicability of that 1993 memo was discussed in my earlier research from the perspective of teachers. One informant suggested it was toothless, so “Why waste paper printing it?” (Aporosa, 2008:91) As if in response to the subjectivity of that earlier memorandum, the PSC replaced this with a 2007 circular entitled “Prohibition of drinking *yaqona* in Government workplaces” (Appendix D; also see Fiji Times, 2007d:11; PSC, 2007:n/a).

The following year the MoE added to the PCS memo, pointing out the potential effects from “excessive... drinking” outside of the workplace (Fiji Times, 2008a:10)–

Education Minister Filipe Bole... reminded teachers that excessive yaqona drinking is not good for them. 'As teachers, it is absolutely vital that minds are alert and in tune to the daily classroom proceedings,' he said. 'To provide a teaching and learning experience that is surmountable with the expectations of students and stakeholders, teachers should not in any way be affected by over-consumption of yaqona... It is unprofessional and adversely affects service delivery - and is inconsistent with Public Service Values and Code of Conduct'.

This was followed in 2010 by the release of the MoE's *Policy in drugs and substance abuse in schools* (MoE, 2010). "The purpose" stated the policy, "is to provide a framework for the prevention of use of drugs and substances in Fiji schools" (p.2). The key elements are as follows (p.2):

## 2.0 POLICY

- 2.1 The MoE does not permit the possession, consumption promotion, distribution, or sale of all harmful drugs. These will not be tolerated in school environment premises or at any school function within or outside the school. These drugs are:
  - 2.1.1 Marijuana and other illicit drugs such as Cocaine, Heroin and other hard drugs
  - 2.1.2 Tobacco
  - 2.1.3 Alcohol
  - 2.1.4 Inhalants
- 2.2 The MoE makes allowance for kava only to be used at ceremonial purposes in moderate amounts.
- 2.3 The MoE makes allowance that at any official function where liquor, kava and cigarettes are used then it should be held in private and away from school premises.
- 2.4 The MoE has declared all schools as smoke free zones.
- 2.5 Government employees are strictly prohibited from drinking yaqona during office hours including on government premises.

The only other reference to *yqaona* in the policy was (p.5):

### 4.18 Yaqona/Kava

It is a general term to describe the drink prepared from the different parts of the pepper plant *piper methysticum*.

This policy though makes no reference to the consumption of *yqaona* outside of work hours.

What is interesting here is that in 2007, the PSC categorically stated that *yaqona* drinking was prohibited in “Government workplaces”, of which schools are included. The MoE followed in 2008, endorsing this stance by stating that whether arising from consumption during work or after work, a teacher being affected by *yaqona* “is inconsistent with Public Service Values”. However, two years later the MoE policy “makes allowance for kava... at ceremonial purposes in moderate amounts.” This appears to be a difficult issue for the MoE, one that acts as a rationale to the study proper.

## Conclusion

This chapter commenced by discussing education as an input to development under the umbrella of modernisation and more recently, neo-liberalism. An alternative to these approaches was suggested in the form of post-development. Post-development is driven by local systems, traditional knowledge, spirituality, “dialogical education” (Freire, 1997:78), empowerment and cultural identity to achieve development. By drawing on a number of post-development commentators, basic principles were presented that suggested the design of a post-development education approach, a model that has not previously been suggested (p.101 and 104).

The history of education in Fiji was then discussed. This explained that the colonial government’s modernisation pursuit in Fiji resulted in two very different academic pathways for *iTaukei* and *Fijians*, which in turn had marked impacts on the national development agenda. With the abolition of indenture, land restrictions left minimal prospects for *Fijians* who were forced to seek alternatives and, through their own initiative, embraced education and self-employment. This aided Fiji’s modernisation pursuit and the *Fijians*’ own “upward mobility” (White, 2001:311). In contrast, *iTaukei* educational aspirations were stifled by colonial policy which encouraged them to remain in their village homes and engage in subsistence agriculture on native land (Tavola, 1991:19; White, 2001:310-11). Education offered by the colonials was initially religious based and later heavily influenced agriculture

and “education with a cultural bias” (Scarr, 1983:340) that promoted the continuance of the traditional *vakaturaga* values system and culture (Tavola, 1991:21; White, 2001:310-11). The values of the traditional culture maintained the use of *yaqona*, an outcome that contrasted with that of most of the other colonised countries in the Pacific. As discussed in Chapter 3, colonisation, missionary aims, the monetary economy and/or industrialisation frequently deemed indigenous substances a hindrance and a threat to modernity, productive processes and economic growth.

From a post-development perspective, the continued use of *yaqona* together with education with a cultural bias, has great merit as it is locally inspired and contributes to traditional knowledge continuance, empowerment and self-determination. However, this concept of education with a cultural bias was exploited by the colonials who used it to aid their own development aspirations, as it took away a great deal of financial responsibility and limited their commitment to education delivery (Tavola, 1991:21-5). Additionally, the continued use of *yaqona* and its related practices was in reality an unintentional by-product of colonially enforced isolation. Had colonial process matched those of the other countries (as discussed in Chapter 3), it is highly likely *yaqona* use would not feature as Fiji’s “cultural keystone species” today. Further, colonially imposed isolation also created a naivety among most *iTaukei* concerning the potential opportunities available to those who may have desired wider involvement in their nation’s development. The few *iTaukei* who did achieve academically were predominantly from the chiefly lineage, an opportunity accorded by the colonials as it aided their developmental pursuit (White, 2001:310-11). Villagers were left to vicariously live their own academic desires and success *through* their chiefly oversight.

Overall, *iTaukei* villagers were both empowered and disempowered by colonial policy. Isolation enabled them to retain much of their cultural expression. However, it equally prevented them from making decisions concerning the wider aspects of education and national development due to colonially created naivety brought about through enforced isolation. With only half of the country, namely the *Fijian* populace,

committed to the colonial concept of education and economic advancement, this had a major impact on Fiji's modernisation-influenced development pursuit, with *iTaukei* accused of causing the country to "lag seriously behind" in its developmental pursuit (Spate, 1959:1).

Following Independence in 1970, *iTaukei* were again criticised for lacking academic proficiency and inhibiting the "total socio-economic and political development of the country" due to their culture (Williams, 2000:179,184-8). The publication of the MoE's 2000 *Learning Together* document focused largely on the reasons behind, and potential ways forward, in which *iTaukei* academic under-achievement could be mitigated and thereby aid "the achievement of national development goals" (Subramani, 2000:1). However, the report contains opposing opinions regarding the causes of under-achievement. For instance, a number of studies suggested *iTaukei* "socio-cultural factors", which included the consumption and use of the traditional substance *yagona*, were at fault. "Bole, [the current Minister of Education] on the other hand, highlights the importance of values, Fijian [*iTaukei*] culture, self-esteem... concepts of knowledge as the influencing factors in achievement" (Williams, 2000:186-8). Recognising this difference of opinion, the MoE has sought "more research... on the relevance of Fijian [*iTaukei*] values and... culture to the current education system" (Williams, 2000:188). As stated, this study responds to that request by focusing on two specific elements.

This chapter closes with what appears to be a difficult issue being wrestled by the MoE, who have generated inconsistent policy and approaches. On one hand they have embraced education as an input to achieving national development, an aspect that is reliant upon quality education delivery. On the other, the country has as part of the national culture an indigenous substance the MoE recognise is "important in ceremonial Fijian [*iTaukei*] culture and social gatherings" although which simultaneously inhibits education by "adversely affect[ing education] service delivery" (Fiji Times, 2008a:10).

These two opposing elements; one traditional (*yagona*) and the other contemporary (quality education delivery), have been brought together under Fiji's national development pursuit in what I have termed a traditional/contemporary tension. In the Introduction chapter to this thesis I stated that there were two influencing factors that encouraged this research. The first was my own experience as a *yagona* consuming teacher in Fiji (reflected in the opening narrative). The second was the realisation of this traditional/contemporary tension which included a request by the MoE for further research on the relevance of culture to the education system. The following chapter will discuss the significance of *yagona* together with earlier findings concerning this indigenous substance and Fijian education.

# The Chapter 5

## ***Yaqona and Education in Fiji***

### **Introduction**

The previous chapter concluded with what was described as a traditional/contemporary tension resulting from the union of two very different elements. One is quality education delivery, a contemporary development input regarded as necessary to Fiji's economic growth and development strategy. The other is the use of the indigenous substance *yagona*, which comprises a cultural element and ethos based in several thousand years of tradition and which the Fijian Ministry of Education (MoE) have suggested is one of several factors impacting the quality of education delivery in Fiji. As an added complexity, the use of *yagona* within the school compound by students (who are taught to mix and present the aqueous beverage at ceremonial occasions), together with teachers (who consume it as part of culturally based reciprocal acknowledgement at these and other events), appears to be a key factor in reinforcing cultural identity. Further, the previous chapter highlighted the importance of identity to academic achievement. The aim of this chapter is to explain the wider characteristics of *yagona* to the educational environment in Fiji. Up to this point the discussion on *yagona* has been limited to the broader *Pasifika* perspective (Chapter 3) or to briefly give context to the MoE concerns. Commentary in this chapter will also enlarge on the importance of this indigenous substance to Fijian identity and cultural identification. Therefore, when this is applied to the concerns of the MoE, who have cited a conflict between the use of *yagona* and quality education delivery, this suggests then that simply removing the indigenous substance from the school environment has the potential to be counter-productive.

Nevertheless, this course of action has been taken with other indigenous substances when their use was deemed a threat to externally introduced development ideals, a theme that informed Chapter 3. This resulted in the loss of large amounts of traditional knowledge within some cultures. A post-development perspective would

suggest this form of externally imposed action is hegemonic and culturally disempowering, one that also inhibits successful development within developing nations (Gibson-Graham, 2005:4). Considering education is a key input to development, *yaqona* is critical to Fijian cultural identity (as this chapter will show), and identity is argued to be an important factor in academic achievement, this highlights the complexities involved in the traditional/contemporary tension which is unfolding.

I would like to reiterate again at this point that with the exception of the MoEs brief comment in the previous chapter, which drew on Jenkins & Singh's (1996:35) brief observation that *yaqona* is believed to be impacting education, this topic had not been investigated until my 2008 research. This has necessitated that I draw on my 2008 study along with related literature to assist the chapter's aim. Themes discussed in this chapter include the significance of the "cultural keystone species" to Fiji together with its 'currency' in presentation, *yaqona* as cultural identity to both *iTaukei* and *Fijians*, consumption rates, duration and reason, intoxication, post-consumption impact and productivity, and finally, perceived implications to *yaqona*-consuming teachers. These themes will inform the results and discussion chapters and will commence with an overview of the "cultural keystone species" within the Fijian environment.

### *Yaqona: An Overview*

In Chapter 3 I discussed the features of the indigenous substance *kava*, or *yaqona* as it is known in Fiji, within the wider *Pasifika* context. This included the medicinal and physiological effects together with a comparison of its intoxicant feelings when compared with alcohol (Aporosa, 2011a:158-160). Also discussed was *yaqona*'s anxiolytic properties and cross-dependency with Benzodiazepine drugs together with the pharmacologically recommended maximum daily dose of 200mgs (Mediherb, 1994b:2). *Lomaloma ca* (or *yaqona* hangover) was also introduced, followed by changes brought to the traditional use systems of the traditional preparation that resulted from colonial contact, a situation I will discuss shortly concerning *yaqona* in

Fiji. Although Garibaldi & Turner (2004:1-5) do not specifically mention *yaqona* in their discussion on “cultural keystone species” (as presented in Chapter 3, p.46), this indigenous substance undoubtedly holds this position in Fiji. For example, Turner (1986:209) states that “the drinking of *yaqona* in Fiji amounts to a sacred work” irrespective of the reason or mood of those gathered. Once mixed into its aqueous form it is referred to as *wainivanua* (Tomlinson, 2009:109). *Waini*, literally means ‘water of’, while *vanua*—

literally means land, but also refers to the social and cultural aspects of the physical environment identified with a social group. On the social plane it includes the people and how they are socially structured and related to one another. On the cultural plane it embodies the values, beliefs and the common ways of doing things (Ravuvu, 1983:76).

Pigliasco (2011:325) adds, “The *vanua* considers land, water, customary practices, and human environment as one and indivisible” and Tomlinson (2012:218) explains that “*vanua* is inextricably tied to an idealized tradition”. Further, Nabobo-Baba *et al.* (2012:23) state, “*Vanua*... is not only about their [*iTaukei*] land, it defines their sense of identity, their spiritual roots, their relationships, their knowledge and language”. Therefore, *wainivanua* infers an ingestable representation of the land, people, culture and practices which is deeply rooted in their sense of identity and customary practices of the past. Additionally, *yaqona* when mixed into its beverage form becomes a sacred and living entity, one that both embodies *mana* and has the ability to enhance a person’s *mana* (Turner, 1986:209; Tomlinson, 2004:669). In most villages across Fiji, the working day concludes with men, and occasionally women, sitting crosslegged at the *tanoa* (*yaqona* bowl) discussing the day and plans for the next, together with the latest news or gossip (Aporosa, 2008:80-82). According to Ratuva (2007:92-6,98-9) and Vakabua (2007:103), the drinking of *yaqona* demonstrates, externalizes and personifies ‘Fijian-ness’ and the Fijian way. I have deliberately retained the term ‘Fijian-ness’ here and not substituted it with *iTaukei*-ness. This is due to the importance of *yaqona* to both *iTaukei* and *Fijians*. Therefore collectively, the aspects of *wainivanua* and *mana* solidify *yaqona*’s status as Fiji’s “cultural keystone species”.

Historically, post-colonisation *yaqona* use in Fiji reflected that of Tonga and

Sāmoa, as opposed to many of the other Pacific countries where the traditional preparation underwent great use change and in some circumstances eradication (see p.80). Minimal change in Fiji was due to the primary religious influence of the day, “Methodism... [which] grafted to Fijian [*iTaukei*] culture, rather than displacing it” (Tavola, 1991:9). This suggests notions of post-developmental hybridity as discussed in Chapter 2 (p.40) where I drew on the work of Curry (2003). Where change did occur it was minimal. One of the most obvious changes though was the pre-colonial use of *yaqona* by the *bete* (traditional priests) as part of communication with the *Vu* (traditional gods) (Crowley, 1994:90). *Bete* did this in isolation away from the community, a contrast to introduced Christian-styled congregational meetings, which are all-inclusive (Tuwere, 2002:52-4). This led to criticism of solo *yaqona* consumption, or *gunu taudua*, believed to comprise *vakatevoro* (witchcraft, demonic activity and cursing<sup>39</sup>) due to the pre-colonial *bete*-use style (Turner, 1986:209; Katz, 1993:138; Toren, 1999:34; Kava, 2001:293; Tomlinson, 2006:16-7; Toren, 2007:315-16). As such, contemporary *yaqona* consumption is a communal activity.

The early colonial government also reinforced the Methodists’ positive attitude toward cultural retention. For instance, “Sir Arthur Hamilton Gordon, the first Governor of Fiji, made it law that toasts should be drunk in this beverage [*yaqona*] on all public occasions... Consequently we find that our own English princes, when in Fiji, were disposed to conform to native etiquette, and observe this ceremony” (Vernon, 1890:127). This “toast”, more commonly known as *isevusevu*, is a key feature of *yaqona* use.

### ***iSevusevu***

In her book exploring *iTaukei* culture and identity, Brison (2007:15-16) opens a chapter focused on ceremony by stating, “There is perhaps nothing that captures the essence of Fijian [*iTaukei*] culture better than the sevusevu, the ceremonial presentation of kava (Fijian: *yaqona*). The sevusevu is a central component of all life cycle rituals, social gatherings, healing ceremonies, and community meetings.” Brison draws on a

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<sup>39</sup> Also see Chapter 7, Footnote 57 on other aspects of *yaqona* and *vakatevoro*.

quote by a travel writer which “illustrates the way that the *sevusevu* has become emblematic of [*iTaukei*] culture”—

the ceremonial preparation (of kava) is the most honored feature of the formal life of Fijians [*iTaukei*]... It is performed with the utmost gravity according to a sacramental ritual to mark births, marriages, deaths, official visits, the installation of a new chief, etc... The guests present a bundle of *waka* (dried *yaqona* root) to the hosts, along with a short speech explaining their visit, a custom known as *sevusevu*. The *sevusevu* is received by the hosts and acknowledged with a short speech of acceptance.... [After the ceremonial mixing of the *kava*, the] *mata ni vanua* (chief's spokesman) then says '*talo*' ('serve'). The cupbearer squats in front of the *tanoa* (bowl) with a *mbilo* (half coconut shell), which the mixer fills. The cupbearer then presents the first cup to the guest of honor, who claps once and drains it, and everyone claps three times. The second cup goes to the guests' *mata ni vanua*, who claps once and drinks. The man sitting next to the mixer says '*aa*', and everyone answers '*matha*' ('empty'). The third cup is for the local chief, who claps once before drinking, and everyone claps three times after. Then the *mata ni vanua* of the first local chief claps once and drinks, and everyone says '*matha*'. The same occurs of the second local chief and his *mata ni vanua*. After these six men have finished their cups, the mixer announces, '*Sa matha saka tuna yaggona vaka turanga*' ('the bowl is empty my chief'), and the *mata ni vanua* says '*thombo*' ('clap'). The mixer then runs both hands around the rim of the *tanoa* and claps three times. This terminates the full ceremony, but then a second bowl is prepared and everyone drinks. During the drinking of the first bowl complete silence must be maintained [Stanley, 1996:528-529].

Nuikula (2003:208-9) expands on this by explaining the transformative and sacred meaning behind the *isevusevu*—

The Fijian [*iTaukei*] presentation ceremony is an act of transformation. It transforms ordinary objects, such as... *yaqona* (kava, or ceremonial drink)... from an inferior state to a superior state. When these objects... are being offered in a ceremonial way, their quality is transformed to a higher, more sacred level. They are transformed into sacredness. Furthermore, what was once personal has become public. What was once small and unimportant is transformed into something of greater value.

One final comment is worth noting – *isevusevu* from the host's perspective. Ford (1967:170) summarises—

[*isevusevu*] is the only chiefly way to welcome [a] visitor. Sharing a bowl of *kava* tends to foster socialising and friendship and to the Fijian [*iTaukei*] it is unthinkable that *kava* should not be a part of commemorating any event. The practice is solidly embedded in a social and political context.

Although the explanation above describes a village setting with “local chiefs... [and] *mata ni vanua*”, the principles equally apply to the school campus, where the principal is deemed to hold the ‘chiefly’ position and their *matanivanua* is usually appointed from within the staff. Additionally, *isevusevu* is a common practice at many

schools across Fiji, a theme I discussed in my earlier research where I explained its importance to the opening of celebrations, fundraising events, acknowledging hierarchy and reciprocity (Aporosa, 2008:34-8,100-1,109). Also explained in that previous study was the obligation felt by many teachers to attend *isevusevu*, especially when guests of chiefly rank or high position were present (Aporosa, 2008:36-7,83,85). This is known to take teachers away from the classroom leaving their students unattended, a situation cited in the MoE's *Learning Together* report as a factor suggested as contributing to *iTaukei* under-achievement (see p.124 this study). Alternative forms of *isevusevu* presentation, believed to limit the impacts of teachers leaving students unattended in the classroom, were also discussed in my Masters' research (Aporosa, 2008:37,100-1). These included limiting teacher attendance to the specific 'spoken' aspect of the *isevusevu*, where upon they would immediately return to their classroom or alternatively the presentation of a 'dry' *isevusevu*. This involved the presentation of *yaqona* only, without mixing it into the aqueous beverage, and with this postponed until the completion of the school day. The aim of this was to offer the MoE alternatives to the outright banning of *isevusevu*. Some positive feedback was received from several Senior Education Officer's (SEO) and school principals concerning these alternatives. Irrespective, *isevusevu* continues to play a key role at major school events, and board and parent-teacher meetings, reflecting the protocols observed in general Fijian society.

In the previous chapter I discussed the importance of ceremony to the cultural identities of both *iTaukei* and *Fijians* (p.122). *iSevusevu* by students at school events was also presented, a practice acknowledged by *Talatala* Dr. Ilaitia Tuwere as demonstrating 'Fijian-ness', cultural identity and pride (p.123). Additionally, in the previous chapter I stated that due to the literature arguing cultural identity as important to academic achievement, teachers need to be aware of local systems and values and incorporate these into the curriculum (p.122). Cultural identity and *kava* in the Pacific context was discussed in Chapter 3 (p.76). This will now be narrowed to focus on *yaqona* and cultural identity in Fiji.

## *Yaqona* and Cultural Identity

Linnekin (1990:158-60) states that symbols and icons are an important part of defining *Pasifikan* collectivist identity. In Fiji, *yaqona* and its related utensils and practices are icons and symbols that make salient the union of this “cultural keystone species” with identity. These emblems are also drawn on as symbols of nationalism. For instance, the *tanoa* is depicted on the Fijian one cent piece (Figure 5.1) and also comprises the logo and trophy of the annual *Ratu Sukuna Bowl* inter-services (Police versus Army) rugby competition (Figure 5.2), one of the country’s leading sports fixtures after the rugby sevens tournament (Dean & Ritova, 1988:118). The union of the *tanoa* with *Ratu* Sir Lalabalavu Sukuna (1888-1958), Fijian chief, soldier, statesman scholar and a man considered to have personified the ideal *iTaukei*, further demonstrates Fijian-ness (Scarr, 1980:198-9; Lal, 1985:433). Vastly more overt references can be seen within *Tourism Fiji* advertising, on postcards (Figures 5.3 and 5.4) and prepaid telecards (Figures 5.5).

According to Ratuva (2007:92-6,98-9) and Vakabua (2007:103) the drinking of *yaqona* demonstrates, externalises and personifies ‘Fijian-ness’ and the Fijian way. *Yaqona* and identity are central themes in Professor Ian Gaskell’s (2001b) book which reviewed and critiqued eight Fijian theatrical dramas. He states that these presentations “express a collective image of Fiji” (2001a:8). One drama in particular he comments was a—

depiction of life in a Fijian [*iTaukei*] village. The play is infused with the objects, forms and rhetoric of Fijian [*iTaukei*] ritual. No less than six of the nine scenes, for example, are staged around the kava bowl. As a cultural symbol, kava consumption serves to create a sense of authenticity, an assertion of a particularly Fijian [*iTaukei*] context for the action (2001b:10).

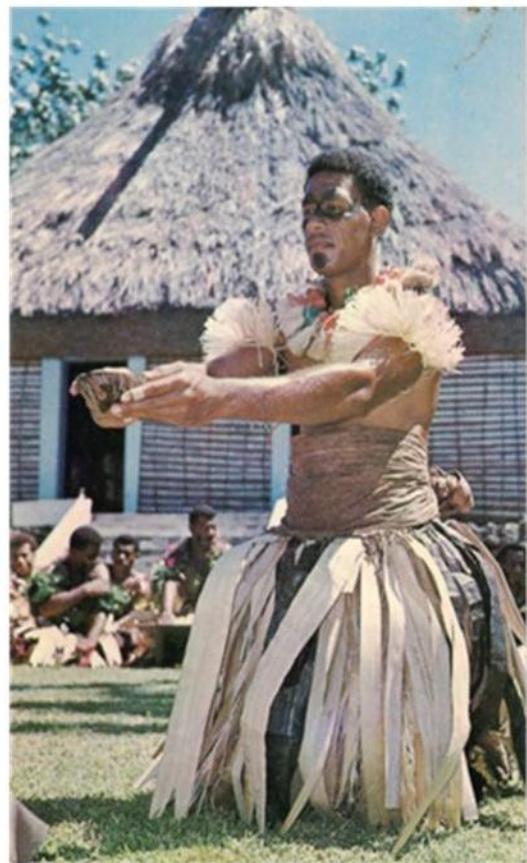
As if to reinforce this point, the cover of his book depicts *iTaukei* mixing *yaqona*. He adds, “The final scene is clearly an affirmation of cultural identity, represented by the... formal use of kava” (2001b:10). Referring to another drama, Gaskell describes a scene in which a character is urged to consume *yaqona*, suggesting that this is a “powerful identification with Fijian [*iTaukei*] culture”.



**Figure 5.5**  
Telecard: *iTaukei* mixing *yagona*.  
(Source: Fiji Posts & Telecommunications Limited, 1994).



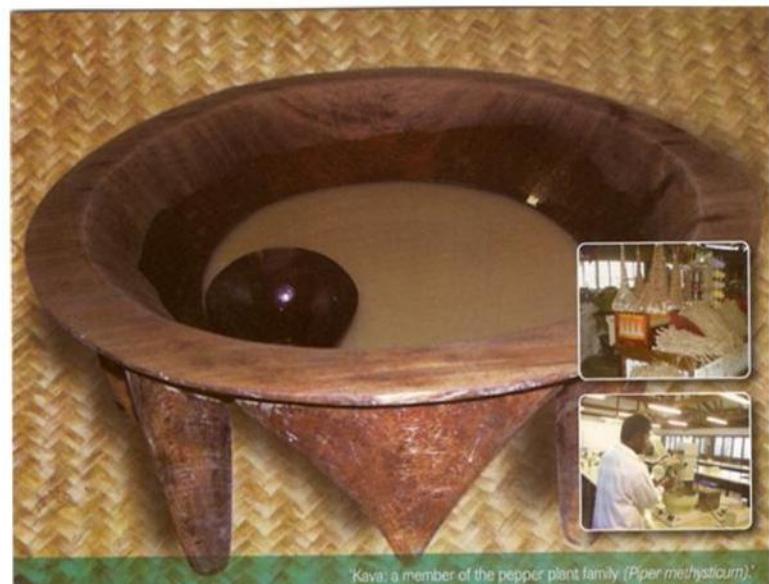
**Figure 5.2**  
Polo-shirt logo: *Ratu Sukuna Bowl*.  
(Source: Republic of Fiji Military Forces, 2009).



**Figure 5.3**  
Postcard: *iTaukei* serving *yagona*.  
(Source: Siers, J., c1979, author of *Fiji in Colour*).



**Figure 5.1**  
Fijian one cent piece  
(2006).  
(Source: Government of Fiji).



**Figure 5.4**  
Postcard: *tanoa* (*yagona* bowl) and images of sale, export and research.  
(Source: University of the South Pacific, undated).

The Fijian Government also illustrated the importance of *yaqona* to identity in a recent publication of *New Dawn* (Ministry of Information, 2010:1-3). The article discusses the work of the *Institute of iTaukei Language and Culture* and their aim to “preserve *iTaukei* identity”. Although no written reference is made to *yaqona*, the story features a large photograph of two *iTaukei* dressed in traditional costume mixing the beverage; clearly linking the practice with the stated objective of preserving cultural identity. Moreover, while this article and those discussed above (Gaskell, Ratuva and Vakabua) collectively demonstrate the union between *yaqona* and *iTaukei* identity, it is Degei (2008:n/a) who potentially offers the most conclusive comment on this theme. A lecturer at the Department of Fijian Studies at the University of the South Pacific, Degei developed this statement by drawing on six sources of literature, some by prominent academics such as Marshall Sahlins (2004:161-3), Ron Brunton (1988:16-17) and Christina Toren (1990:90,99). He asserts, “To the Fijians [*iTaukei*], *yaqona* is a link to the past, a tradition so inextricably woven into the fabric of culture, that life and social processes would be unimaginable without it. Although the use of *kava* is common among other people groups in the South Pacific, for the Fijian [*iTaukei*], *yaqona* is clearly linked to concepts of identity” (also see Cowling, 1988:43; Langi, 1992:41; Kay, 2006:1).

*Yaqona* is also used by *kailoma* (those of mixed European-*iTaukei* ancestry) to demonstrate their Fijian identity. Peter Thomson (1999:5), a “fifth generation Fiji Islander of Scottish decent”, who was born and educated there and went on to become the Permanent Secretary to the Governor General during the *coup d'état* of 1987, exemplifies this. Thomson, a *kailoma* with strong European features and light-coloured skin, presents his memoirs in a book he entitled *Kava in the Blood*. He describes *yaqona* “in our islands [as] the *wai ni vanua*, the beverage that comes from the very land under our feet” (1999:66, emphasis mine). He then asserts–

I present myself in kava's tribute as one who has known it in most of its guises. I was once a kava farmer, planting it on the upper slopes of Taveuni and selling it in the markets of Viti Levu. I drank an average of some ten bowls of kava per working day in my sixteen years in the Fiji civil service. I drank it in hill villages, *sosoko* [concentrated strength] from deep coconut *bilo*; I drank it watered down from enameled *pyala* [small enamel bowl, see Figure 7.3] in the rear of

Gugerati<sup>40</sup> shops; I accepted and presented it as ceremonial *sevusevu* countless times; I dispensed it to curious Japanese at Fiji trade missions in Tokyo; I drank it dried and I drank it green [*yaqona* mixed using fresh undried *waka*], I did everything with it but inject it into my veins. Kava is in my blood. (p.66)

Here Thomson is asserting his identity through his *yaqona* use. Stanley (1996:529) illustrated the connectedness between *yaqona*, the physical being and identity when he states, "Some say the Fijians have *yanggona* [sic] rather than blood in their veins." I would add that this overt use of the indigenous substance as part of authenticating identity is common across many mixed race *Pasifikan*'s. I have a number of New Zealand-born Tongan, Sāmoan and Rarotongan friends of mixed (European) ancestry who are vocal and obvious about their *kava* consumption, essentially using this as a visible means of affirming and demonstrating their *Pasifika*-ness. I also fall into this category. As an insider/outsider (a concept I will explain in the following chapter), *yaqona*'s is also an expression of my own identity and *iTaukei*-ness.

Demonstration of identity through *yaqona* is also obvious among expatriate *Fijians* living in New Zealand. For instance, members of the *Hamilton Fiji-Indian Community* frequently consume *yaqona* at gatherings. At a recent wedding, a group from within this community who originated from Labasa in the *tikina* (district) of Macuata, Vanua Levu, proudly pointed out to visitors a *tanoa poi* (*kava* bowl made from a fishing float, see footnote 56) engraved with their *vanua* name (Figure 5.6). In a discussion with a Tongan attendee, these *Fijians* assured that their *yaqona* (imported from Fiji) was better quality and stronger than that cultivated in Tonga, a mannerism also used to assert identity.

*Yaqona* grown in one's own *vanua* is frequently used to affirm identity. While I have consumed *kava* from many areas across the Pacific, from Pohnpei to Hawaii, I have found the best *yaqona* for taste, strength, purity, sharpness of 'intoxication' and 'cleanness' of *lomaloma ca* is *waka kari* (*yaqona* root with skin removed prior to

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<sup>40</sup> *Gujarati* were free migrants who entered Fiji after the indenture period to pursue business opportunities (Brison, 2011:232).

pounding to powder and mixing with water) from Nabukilevu *tikina* in Kadavu, southern Fiji. This is an admission I should not make, considering I *yavusa* (belong genealogically) to Macuata in the very north of Fiji. In contrast, I have consumed *faikava* with Tongans, who have assured me that the weak, adulterated foul tasting beverage I was drinking at the time was the purest, strongest and best-tasting *kava* in the world.



**Figure 5.6**

*Tanoa poi* belonging to the *Hamilton Fiji-Indian Community*. (Place name embellished for ease of identification)

(Source: courtesy of Kauasi Bourne, 2012.)

Further, I have consumed *yaqona* in a village in the central highlands of Viti Levu, Fiji, where locals attempted to convince me that the beverage we were consuming, derived from five year-old *waka*, was vastly stronger than three year old Kadavu *yaqona* (although to me it was not). As I mentioned, what is at stake here is pride, loyalty, strength and identity based in local *vanua* and asserted through the quality and strength of local *yaqona*. Troost (2006:64-5) encapsulates this ideology when he recounts a conversation with two *ni-Vanuatu* in which he contrasted the *yaqona* intoxication experience and consumption volumes with that of *namaloku* and *nekava* in Vanuatu. One of the *ni-Vanuatu* responded—

'But this isn't Fiji kava. This is Vanuatu kava, from Pentecost Island. It is the best in the world.'

'Very strong.'

I asked him what his home island was.

'I am from Pentecost Island,' he said.

Of course I thought. Kava grows on every island with a hill in the South Pacific, and in conversation with other islanders, I had yet to meet anyone who didn't champion the supremacy of their own island's kava.

The themes of *vanua*, *yaqona* and identity will be extrapolated in Chapter 7 (p.226) where consumption quantity will be shown to demonstrate cultural identity<sup>41</sup>. It is valuable then to consider who is consuming *yaqona* and how much.

## *Yaqona Consumption by Ethnicity and Gender*

Levels of *yaqona* consumption in Fiji are difficult to quantify. For instance, I have been with people I had only recently consumed *yaqona* with who, when asked if they drank the traditional preparation, responded, to my surprise, "no". I later learned that this was because the inquirer was a family member who frowned on *yaqona* consumption. Similarly I was with a friend consuming *yaqona* who requested I not tell anyone because he attends one of the new Pentecostal denominations that is highly critical of its use, linking it with *vakatevoro* (literally meaning 'witchcraft'; Aporosa, 2011b:7-9). Further, a teacher during my Masters study chose not to submit a questionnaire as this would have shown he had consumed *yaqona* over the previous seven nights, potentially revealing he was "a bad teacher who drank too much *grog*" (Aporosa, 2008:73-4). Alternatively, I have heard countless reports of and from those who imagine they are *heavyweight grog swipers* (colloquialism for a person who can consume high volumes of *yaqona* over a lengthy period) only to observe the opposite. Therefore, accurate consumption figures are far from an exact science.

The 2004 *Fiji National Nutrition Survey (FNNS)* (Schultz, Vatucawaqa & Tuivaga, 2007) appears to be the most comprehensive study available to aid understanding of

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<sup>41</sup> The link between *yaqona* and identity is disputed by a minority in Fiji. These people, who include a handful of academics, are mostly parishioners from one of the new Christian denominations. In 2010, while speaking at a conference, I was challenged by two *iTaukei* doctoral students who argued that *yaqona* did not comprise their identity and therefore the identity of all *iTaukei*. This challenge prompted me to discuss this theme in a paper by drawing on literature and ethnographic accounts (some from within this study) together with psychology's Ecological Levels (also known as Systems theory) (Dalton, Elias & Wandersman, 2001:10-13; Newman & Newman, 2011:50). I concluded by arguing that the desires of a minority do not alter the indigenous substance's fundamental link with identity for the majority of *iTaukei*, a union which academics argue is also Pasifika wide (Aporosa, 2011b).

*yagona* consumption level. This was a nation-wide study that surveyed 7,372 participants of all ages, ethnicities and vocations in a “cross-sectional community sample” (p.1,13). From this group 2,508 males and 2,882 female were identified as *yagona* users. Unfortunately the survey did not present a detailed break-down of participants by age. This would have enabled those 16 years (the age at which *yagona* use most often commences, see Footnote 38) and over to be identified. By applying this to the data it would have then been possible to estimate the overall proportion of users and non-users Fiji wide. Those in the survey who indicated they had used *yagona*, whether infrequently for medicinal purposes or more often at consumption sessions, were interviewed. The findings are presented in several tables in the report and have been condensed and reproduced in Table 5.1.

Essentially, Table 5.1 shows that of those sampled, more males (63.9%) consume *yagona* than females (31.2%) (also see FNNS findings p.217). By ethnicity, overall more *iTaukei* males (67.8%, n = 955) consume *yagona* when compared with *Fijian* males (58.6%, n = 609). *iTaukei* females (47.6%, n = 767) are recorded as drinking vastly more of the indigenous substance than their *Fijian* (8.7%, n = 29) counterparts. This is not surprising as it is rare to see *Fijian* woman consuming *yagona* with the exception of occasional medicinal use.

**Table 5.1**  
*Yagona* consumption by ethnicity and gender.

Ethnicity	Male	Female	Number of days <i>yagona</i> consumed per week		
			< 2 days	2-6 days	daily
<i>iTaukei</i>	67.8%	47.6%	73.3%	18%	8.7%
<i>Fijian</i>	58.6%	8.7%	57.3%	24.6%	18.1%
Combined ethnicities	63.9%	31.2%	69.1%	19.7%	11.2%

(Source: Reproduce and modified from Schultz, Vatucawaqa & Tuivaga, 2007:179,180).

Table 5.1 also details *yagona* use frequency. This shows that most (69.1%) drink the traditional preparation less than two days per week, whereas 19.7% drink between two to six days per week and only 11.2% imbibe every day. It must be pointed out though that the ‘less than two days per week’ category is a problematic classification, as this includes those who drink very occasionally, such as one day per

year, through to those who may drink vast quantities on one day per week. Finally, more *Fijians* (18.1%) consumed on a daily bases when compared with *iTaukei* (8.7%). This is interesting considering the discussion above which presented the strong link between *iTaukei* identity and *yaqona*.

The second study to aid in understanding *yaqona* consumption levels is a 2007 University of the South Pacific (USP) investigation. This surveyed 480 participants of mixed age, ethnicity and gender from two large *tikina* (districts) as part of a study into the socio-economic impacts of *yaqona* consumption (Newland, 2008:n/a; Appendix E, slide 12)<sup>42</sup>. Fifteen male and female *yaqona* consumers from each *tikina* were selected for further interview regarding their drinking habits. The preliminary results suggest that 23.3% of the participants consumed *yaqona* less than two days per week, while the majority, 63.3%, drank between two and six days, with the remaining 13.3% drinking every day. When compared with the 2004 *FNNS*, these figures tend to suggest a significant increase in the number of participants drinking from two to six days per week whereas those who consume *yaqona* on a daily basis was only slightly higher.

Unfortunately the *FNNS* did not detail the number of hours consumers spent drinking at *yaqona* sessions. This was however a consideration within the 2007 USP study.

### ***Yaqona Consumption Duration***

The preliminary results of the 2007 USP study implied that the average length of time females spent drinking at *yaqona* sessions was between two and three hours (Appendix E, slide 13). Having attended well over a thousand *yaqona* sessions, I would

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<sup>42</sup> This investigation was a joint effort between the *Faculty of Business and Economics* and *Faculty of Arts and Law*. Participants were drawn from the Rakiraki *tikina* (district) on the main island of Viti Levu and Nasawana *tikina* on Vanua Levu. The results are still being compiled (Newland, S. 2012, pers. comm. 30 March) with the data used here extracted from two powerpoint slides (see Appendix E).

agree with this<sup>43</sup>. The data included two females who stated they had consumed *yaqona* for an average of eight hours at sessions they attended. Again from personal experience, I do know a few *iTaukei* women who are extremely heavy *yaqona* consumers and drink for these periods. Some of these women appear to take pride in demonstrating their consumption abilities and will sit to the side and quietly goad their male counterparts with *bole* (challenge).

This USP study also suggested that the majority of the men surveyed consumed *yaqona* for an average of five hours at each session (Appendix E, slide 13). One man indicated he usually drank for seven hours while two other males stated they consumed the indigenous substance for an average of nine hours at sessions. This is not uncommon. I have frequently attended *yaqona* sessions in Fiji in excess of 10 hours. In New Zealand, mid-week consumption lengths of seven to eight hours are common, as are Friday and Saturday night sessions of 12 hours or more. Tomlinson (2004:657) stated, "In the late 1990s and early 2000s *kava* was drunk in large quantities by most adult men every night in Tavuki [Kadavu, Fiji] village". This comment was the result of a week-long survey conducted in order to document the number of hours he personally spent consuming *yaqona* with local Tavuki-ites. Tomlinson added that, from his experience travelling throughout Fiji, it was not uncommon for *iTaukei* men to spend in excess of 40 hours a week consuming *yaqona*, a practice he referred to as equivalent to "a full-time job spread over seven days" (Aporosa, 2008:68).

What then encourages these lengthy *yaqona* consumption sessions? The effects, experienced as social casual contentment as summarised in Chapter 3 (p.78)

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<sup>43</sup> In my experience, women typically organise themselves to be at meetings during key discussion periods. Such commentary tends to last from two to three hours. *Yaqona* is often consumed during meetings. Females who do drink will also partake and then depart once the key discussions have concluded. Additionally, during periods of festivity or when special guests are present in the village, women will either break away from catering duties for a couple of hours and join the men drinking *yaqona* as part of relaxation and to catch up with news, or will join later in the evening once hosting duties have been completed and the children are settled. These women often sit together behind the men, relaxing, *talanoa* (telling stories) and consuming *yaqona* within their gendered group for a couple of hours before departing.

certainly play some part, however it is much more than this.

### **Reasoning Behind *Yaqona* Consumption Durations**

*Yaqona*'s link with identity has already been discussed, a union that encourages the consumption of Fiji's "cultural keystone species" (also see p.136-41). Key to this is also the influence of Fiji's customary value system of *vakaturaga*. This ethos is explained at length in the following chapter (p.166) and is strongly influenced by *qaravi tavi* (fulfilling obligations) and *veiwasei kei na veikauwaitaki* (sharing and caring). Fundamentally these create a great sense of obligation on hosts (Ravuvu, 1983:81,87,103; Aporosa, 2008:28,37,47,66-67,81,107; Ryle, 2010:116-8). Every *yaqona* session has a host, whether the owner of the house in which the consumers are seated, the person who initiated the consumption event, or the person who called the meeting if in a public setting. This sense of obligation also extends to those who are from the same *vanua* as the host. They take on the host's obligation in caring for guests from other *vanua*. Essentially this sense of obligation both encourages people to attend *yaqona* sessions to support their kin and neighbors (especially in the rural areas) and also prevents one from simply getting up and leaving a *yaqona* session until guests, or those of a high rank, have departed (Aporosa, 2008:80-1). Williksen-Bakker (2002:75) appropriately summarises this position–

Kava gatherings are time-consuming. One cannot just get up and leave when this 'unifying drink' is being consumed. In fact, it is considered rude to leave at all, unless the bowl, *tanoa*, is empty.

Further, when at *yaqona* sessions consumers feel obligated to accept and consume whatever amount is given to them. A participant from my Master's study stated (Aporosa, 2008:81), "There is *yaqona*, *tabua* [whales tooth]; things that are traditional. *Grog* is seen as sacred, so you feel an obligation to accept". A second commented that *iTaukei* "culture says when we sit together, we must receive what [we] get. If you decline, that shows we do not respect the offer".

Another factor that encourages high volumes of consumption is *bole* (literally

“challenge”) or *grog fighting*; “a non-aggressive form of *yaqona* consumption warfare”, and a theme I wrote extensively on in my Master’s study (p.72; also see p.82-3,108-111). When certain kinship-based and *vanua-based* relationships (such as *tavale*, *tauvū* and *veitabani*) meet at *yaqona* sessions, whether it be under a tree in the village, in a private home, or a hall in urban New Zealand, the *vanua*, despite the fact that it may be thousands of kilometres away, becomes an ethereal battleground to defend, provoking *bole* that encourages *yaqona* consumption levels (Arno, 1993:13; Toren, 2005:281; Qereqeretabua, 2006:11; Tomlinson, 2006:13-14). As Tomlinson (2007:1066-7) stated, although—

kava is a potent symbol of peace and tranquillity... it is also a means of competition in which men vigorously try to outdrink each other in sessions that last many hours. Such ‘warfare’ is playful, on one level, but deeply serious on another level, as ‘grog fighting’ may be particularly intense between traditional warring chiefdoms.

Figure 5.7, a photograph taken by Tomlinson at Nagonedau, Kadavu, illustrates *bole* in progress. The practice is a combination of contradictions that both breach and are guided by the ethos of *vakaturaga*. For instance, *vakaturaga* prohibits one from unapologetically standing over another, imposing on personal space (especially in male-female situations) and making demands on another, which in the case of *bole* occurs when compelling a *grog fighting* opponent to *na gunuvi ni yaqona me itotogi* (drink *yaqona* as punishment). *Vakaturaga* also prohibits mocking or goading, particularly when done by a younger person to an elder, or a subordinate to a title holder. *Bole* playfully breaks such *tabus* (culturally informed prohibitions), done through *veiwali* or ‘spoiling’ (a colloquialism for joking or teasing) that results in comical verbal-sparring and eventually *gunuvi ni yaqona me itotogi* (the consumption of their ‘punishment’) to the defeated, a situation displayed in Figure 5.7. These incidents are surrounded by great hilarity, not simply because of the playful ‘crime and punishment’ aspect, but because *bole* also technically breaches *vakaturaga*, which in turn can initiate further incidents of *grog fighting*. More importantly though, *bole* simultaneously remains strictly influenced by *vakaturaga* with opponents taking great care in choosing the appropriate setting, language and time to *veiwali* and *spoil* others while navigating a delicate path to ensure they do not incite malice, cause hurt or

over-step boundaries, which would in turn cause a genuine breach to the principles of the cultural ethos.



**Figure 5.7**

*Bole* in progress, Nagonedau Village, Kadavu.  
(Source: courtesy of Tomlinson, 2006)

Put simply, identity, culture, *vanua* and *vakaturaga* not only compel people to attend *yaqona* sessions, but also oblige them to stay late and to consume large quantities while there. The ability to consume vast quantities of the indigenous substance equally manifests identity; *I drink a lot, therefore I am*.

Another contributing factor to high volumes of consumption is a lack of extra-curricula activity, especially for those living in the rural areas (Aporosa, 2008:77-8,106-7). As one participant commented in my Master's study, "It's our traditional drink and it brings people together" (p.85). Another added, "This [indicating the hall we were seated and the local site of *yaqona* consumption] is the only place to relax. In town you can go to the movies, but here there is only *grog*" (Aporosa, 2008:85). This is an important theme. In a later chapter I will discuss how this is essentially a misinformed notion of identity.

With all of this vigorous and lengthy consumption occurring, what then are the effects of drinking and how is *yaqona* 'intoxication' (or *grog-doped* as it is colloquially known in Fiji) experienced?

### **Grog-Doped and How it is Experienced**

In Chapter 3 the physiological effects experienced from *kava* use were briefly discussed and compared with alcohol intoxication. *Kava* intoxication was essentially described as “a warm, pleasant and cheerful, but lazy feeling, making people sociable” without hilarity or interference with reasoning (Chanwai, 2000:957). I also presented commentary by Lebot, Merlin & Lindstrom (1997:3) explaining that the effects of *yaqona* are often described using “terms [such as] *intoxication*, *drunkenness*, *inebriation*”, however such terms are misleading as they tend to suggest effects as experienced following alcohol use or “other familiar drugs found in the Western world” (also see footnote 25). In my Masters study, *grog-doped* was presented using both ethnographic comment and published material and included perceived impacts to driving and cognition in the workplace (Aporosa, 2008:38-43). Although users described a “haze of inebriation” that caused impassivity, which in turn can interrupt “assigned work”, exact impacts to cognition are both unclear and confusing (Aporosa, 2008:99; 2011:233-4)<sup>44</sup>. This is because the majority of research to date (with the exception of Waqainabete, p.199) has utilised cognitive assessment measures following the ingestion of small pharmacologically recommended doses set to comply with safety constraints (Mills & Bone, 2005:484,488; Aporosa, 2008:43). As a reminder, these dose levels are between 200 and 300mgs of kavalactones (the active constituent in *yaqona*) per day (Mediherb, 1994b:2), an amount that is minuscule when compared with average ingestion quantities consumed in the traditional setting.

Average *yaqona* consumption rates in the traditional setting have been calculated at six “standard” 100 millilitre *bilo*’s per hour (Qereqeretabua, 2006:6,7,11; Aporosa, 2008:43-44). With each *bilo* containing approximately 247.0mgs of kavalactones (Duve & Prasad, 1984:11), this equates to an estimated ingestion rate of 1,482mgs of kavalactones per hour (Aporosa, 2008:43-4), or 1,182mgs more than the

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<sup>44</sup> For a comprehensive explanation as to the feelings of *yaqona* intoxication, it is worth consulting Troost’s (2006:62-7) informative yet humorous biography entitled *Getting Stoned with Savages: A Trip Through the Islands of Fiji and Vanuatu*. Although this explanation followed four *shells* (*bilo*, cups) of Vanuatu ‘strength’ *kava*, which is mixed vastly stronger than *yaqona*, his experience mimics those felt following five or so hours of *yaqona* consumption.

pharmacologically recommended daily dose. These consumption rates and kavalactone levels are important as they will inform discussion in Chapter 7 (p.212). By drawing on the work of Kilham (quoted in Pina, 2000:7) and Qereqeretabua (2006:6,7,11) who discuss *yaqona* quantities and signs of intoxication, together with the assistance of a statistician who applied gut-to-blood movement calculations specific to kavalactone transfer (Ng, 1997:1; Singh, 2004d:127), I hypothesised in my Master's research that those who drink up to six "standard" *bilos* of average-strength *yaqona* within a period of one hour experience the first 'real' sensations of intoxication (later termed 'the initial point of intoxication') which has the potential to impair cognition (Aporosa, 2008:43-5,130-2; 2011:234-5). Although these findings remain untested by an independent source, personal experience, together with confirmation by fellow consumers, support this hypothesis.

An additional theme investigated in the earlier study was *lomaloma ca*, or *yaqona* hangover, a theme I will briefly overview, and one which has wide application in the later discussion chapters.

### ***Lomaloma Ca and the Day after the Night Before***

*Lomaloma ca* is a subjective issue, with some arguing it does not occur<sup>45</sup>. For instance, Perez & Holmes (2005:51) state there is "limited data" on *yaqona* hangover and how it manifests. Doctor Vincent Lebot, a co-author of *Kava: The Pacific Elixir*, reports consuming the substance most days and denies this possibility<sup>46</sup>. He added during conversation that *lomaloma ca* could only occur if users ingested *kava* prepared from plant material with a disrupted *chemotype*, or chemical composition, a corruption that would come as a result of human interference during the propagating process (pers.comm., cited in Aporosa, 2008:49-50). Many *iTaukei* also argue *yaqona* does not

<sup>45</sup> As discussed earlier (see Footnote 25), *yaqona* intoxication is often confused with alcohol intoxication. A similarity exists with *lomaloma ca* and alcohol hang-over – they are experienced quite differently. *Yaqona* hangover is essentially the process of *yaqona* intoxication slowly declining, a process that can sometimes take several days. *Yaqona* hangover is not experienced as a 'crash' in the manner of alcohol hangover, therefore it is rare to experience headache and nausea as you do following the consumption of large quantities of alcohol.

<sup>46</sup> A 2008 ABC News (Australia) report described Dr. Vincent Lebot as "The world's leading kava expert. A French scientist... [who] has spent 30 years studying and drinking kava" (2 min. 25 sec.).

cause *lomaloma ca*. The late Ratu Josateki Nawalowalo, former Chairman of the *Fiji Kava Council*, was one such high profile critic. He and many others have frequently stated that the morning following heavy *yaqona* consumption they “feel fresh”. However, this appears to be based on cultural ideals as opposed to ethnobotany. The cultural ethos of *vakaturaga* discourages complaining and views the endurance of hardship without lament as a sign of strength (Erkine, 1967:424,429; Aporosa, 2008:50). Further, due to *yaqona*’s medicinal, spiritual and reciprocal aspects, all of which add to its sacredness (Tomlinson, 2007:1068-9), attributing negative characteristics, whether that be bodily or productivity related, is deemed by many *iTaukei* to be both a sign of weakness and a criticism of an emblem considered to be beyond critique (Aporosa, 2008:50-1,81,86-7; 2010:30-1). This will be looked at again in Chapter 9 as part of changing attitudes toward this indigenous substance (p.284).

Interestingly though, when informants were in one-on-one discussion with me, assuring their anonymity, they typically presented a vastly different account (Aporosa, 2008:114). Although not “as severe as... a bad alcohol hangover” (Young, 1995:89), *lomaloma ca* was explained as “feelings of sleepiness, a lack of energy, lethargy – both physical and mental... [which] encouraged a retreat from work” (Aporosa, 2010:27; also see 2008:86-8; 2011:238-9)<sup>47</sup>. More importantly though were the ethnographic reports from teachers concerning *lomaloma ca* and perceived impacts to teaching and quality education delivery.

In addition to my hypothesis concerning *yaqona* consumption quantities and

<sup>47</sup> In a similar manner to his explanation of *yaqona* intoxication (in Chapter 3), Troost (2006:67) also offers an insightful evaluation of *lomaloma ca*. “It was two days before I returned to Earth... I felt like I had been mugged, taken unawares, slugged from behind... It had been a slow descent, nothing like a [alcohol] hangover, just a lingering sense that I was in a place far, far away, in a world of my own.” For the uninitiated this could sound like the period of *lomaloma ca* is the gradual regaining of understanding and comprehension. This is not the case. Comprehension and faculty are never lost. You ‘descend slowly’ from a blissful, pleasant, contented, carefree and relaxed ‘mugging’ with the “far away” place being an aware form of apathy and acute lethargy as opposed to euphoric non-*compos mentis* state. I use the word ‘aware’ to mean that if you force yourself, you have the ability to articulate, make reasonable judgements, mentally process and move with agility. Put simply, during *lomaloma ca*, you often *don’t give-a-stuff about much*, a feeling that gradually subsides over the two days following heavy *yaqona* consumption. Troost’s insights, I would suggest, are fairly typical among those experiencing *lomaloma ca*.

the initial point of intoxication, a second exploratory investigation into *steady-state concentration* and *lomaloma ca* was presented in the Master's thesis. This is believed to be the first time *steady-state concentration* has been studied in connection with *yaqona*, and those findings will now be condensed and discussed.

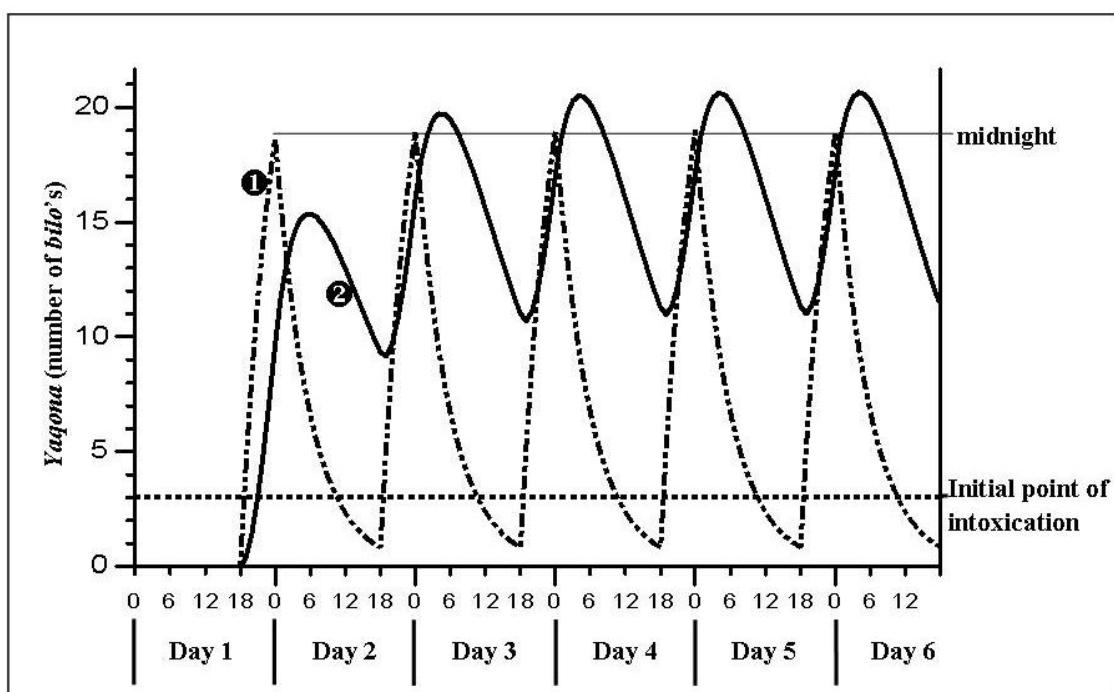
### ***Lomaloma Ca and Steady-State Concentration***

The second hypothesis detailed in the earlier research (Aporosa, 2008:44-49; 2010:235-7) was informed by the work of Julien (2001:19-20). He describes the manner in which drugs accumulate in the body when new amounts are added before earlier doses are completely eliminated. Julian explains that once a drug peaks in the blood of a user, lesser amounts are required to maintain that peak. This condition is known as *steady-state concentration* and can be measured by applying specific calculations to the elimination *half-life* of a drug. Singh (2004d:127) states that a 200mg dose of kavalactones has "A distribution *half-life* of 3-5 hours", meaning this dose takes between three and five hours to be distributed into the body's muscles, tissues and neural pathways. Additionally, kavalactones have "an elimination *half-life* of 9 hours", implying that it takes this length of time for the potency of the lactones in the bloodstream to drop by half. With this drop to half, it is often assumed that following a further nine hours, full elimination is reached. This is incorrect. Elimination involves "*half-life[s]*", therefore full elimination is not achieved until 90 hours post-consumption (Aporosa, 2008:45-6). By adding Singh's "elimination *half-life*" to Julian's *steady-state concentration* calculations, I was able to hypothesise *steady-state concentration* following *yaqona* ingestion at traditional levels (Aporosa, 2008:45-9,131-2). This is believed to be the first time such an investigation has been conducted and is illustrated in Figure 5.8.

Figure 5.8 shows the consumption of *yaqona* for six hours (1800–0000 hours / 6pm to midnight) on consecutive days. The dotted line (❶) tracks the action of *yaqona* in the gut. Although a consumer ingests 36 *bilos* during each six hour period, the dotted line only peaks at 19 *bilos* due to the processes of bodily elimination (kidneys, urine, etc.). The solid line (❷) traces the rise and fall of kavalactones in the blood

proportional to consumption. Figure 5.8 illustrates that for a person who habitually consumes *yaqona* for six hours over consecutive days, they remain significantly and continuously above the line identified as the initial point of intoxication. Further, this significant level of intoxication will remain until the consumer ceases drinking for at least 24 hours (Aporosa, 2008:45-9). Figure 5.8 suggests that even following a single six-hour period of consumption the consumer remains well above the initial point of intoxication throughout most of the following day. Troost (2006:67, see footnote 43) unknowingly describes *steady-state concentration* when he states, "It was two days before I returned to Earth" following *kava* consumption in Vanuatu. These findings have potential implications for productivity.

In a similar manner to the initial point of *yaqona* intoxication and *steady-state concentration*, very little focused research has been done on the impacts of *yaqona* on productivity with the exception of the 2007 USP investigation, which is still being collated. This has not prevented comment in the media though, a topic I will briefly discuss.



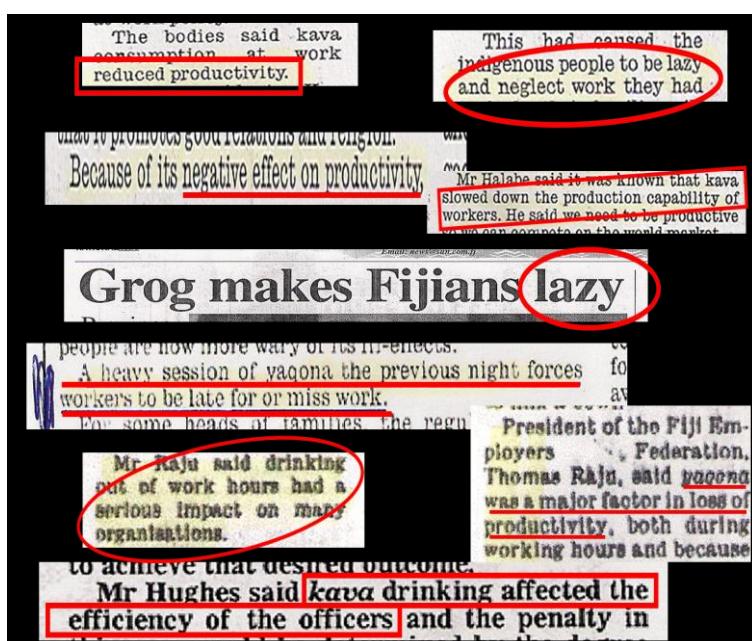
**Figure 5.8**

*Steady-state concentration from yaqona consumption over a six-day period.*

(Source: Author and Dr. M. Upsdell, 2008:45-9,131-2).

### **Lomaloma Ca and Productivity**

Cost to development from lost productivity as a result of hangover affect was discussed at length in Chapter 2 (p.21). Criticism concerning *lomaloma ca* has increased over the past decade. The Fijian media has often acted as the primary arena for comment – for instance, headlines such as “*Grog makes Fijians lazy*” (Nagalu, 2007:9) and “*Yaqona: It is getting the nation doped?*” (Baba, 1996:1-4). The latter included the bold statement that “yaqona was a major factor in loss of productivity, both during working hours and because of its 'hangover' effects” (Figure 5.9). In reality, these are unfounded assertions. This is because no focused research has been completed on the specific link between productivity and this “cultural keystone species”.



**Figure 5.9**

Selection of clippings from Fijian newspapers  
(Source: Fiji Times, Fiji Sun, Fiji Daily Post: various.)

In November 2009 I met with Professor Mahendra Reddy, the Dean of the *College of Business, Hospitality and Tourism Studies* at Fiji National University. He is described by the *Fiji Commerce Commission* (2010:n/a) as an “expert commentator... on development and economic issues”. When asked his opinion on media claims that *yaqona* impacts productivity, he stated–

Yes, it is an issue. First, people are consuming *yaqona* late into the night. Secondly, absenteeism rates due to *yaqona* is high even though there is no documentation as such. They [indicating *yaqona* consumers] never give the reason, they say 'I've got a stomach bug', something, but because they were drinking last night, they didn't have enough sleep. So all the data on absenteeism, nowhere on the form will you find it written that I didn't come to work because of that [*yaqona*].

*Yaqona*, absenteeism and sickness is investigated as part of the second research question within Chapter 8 (p.261). When asked why this theme had not previously been researched, Professor Reddy commented, "When you look at the production function you look at direct inputs, and *yaqona* is not a direct input. So that is the main reasons economists have not looked at this." Asked if he felt there was a general reluctance to tackle this issue head-on he stated, "It's because it's a personal thing, it's a social behaviour, so you can't do anything. There can't be any regulation as such. I would like to do it [research this theme] but there are other pressing issues." Finally, Professor Reddy was asked how much impact he believed *yaqona* was having on productivity. "It indirectly impacts on productivity coz they drink until 2 or 3am. So I think it's having a significant effect".

Although Reddy asserted that there is no reluctance to research this theme, his opinion is not universal. In the introductory chapter to this study I cited another Fiji-based senior academic (Professor) who commented that previous attempts to research this theme had been met with opposition (p.7). He stated–

I personally think that you are very brave to take on such a study. Anything that might show *grog* in a negative light is contentious. In a sense, some will look at you almost like you are being a traitor, you are letting the country down, and that there is almost something evil in looking for harm.... I spoke to... [a leading *yaqona* advocate, since deceased], and he is the archetypical example of someone who just didn't want to know. He just wouldn't listen, and you could say whatever you like, and show that there is good evidence that it is causing harm, but he would go off on tangents and show you someone else's opinion that it wasn't. He was almost like an evangelist, a closed mind to the thought that *grog* could be harmful, and continually wanting to look for evidence that there wasn't any harm, and any scrap of evidence that there wasn't harm he would blow up, and evidence that there was, he would ignore (pers. comm., 2009, November, 11).

It must be acknowledged that I did not at any time get the impression Professor Reddy was being evasive. However, I did on occasions encounter the types of denials described above. When this occurred, and more-so when the informant was *iTaukei*, I

most often got the impression this was due to *yagona*'s sacredness and the underlying belief that the emblem was considered to be beyond criticism (as discussed above), as opposed to a malicious attempt to be obstructive. This again demonstrates the sensitive nature of this theme. Nevertheless, a large number of participants in the Master's research spoke honestly to me about their experiences, with commonality in comments such as "If I drink *grog* up to 10, 11, 1, myself, in the morning, it is a problem. It is hard to get up from bed and I feel lazy, and feel sleepy during the day" (Aporosa, 2008:86-8).

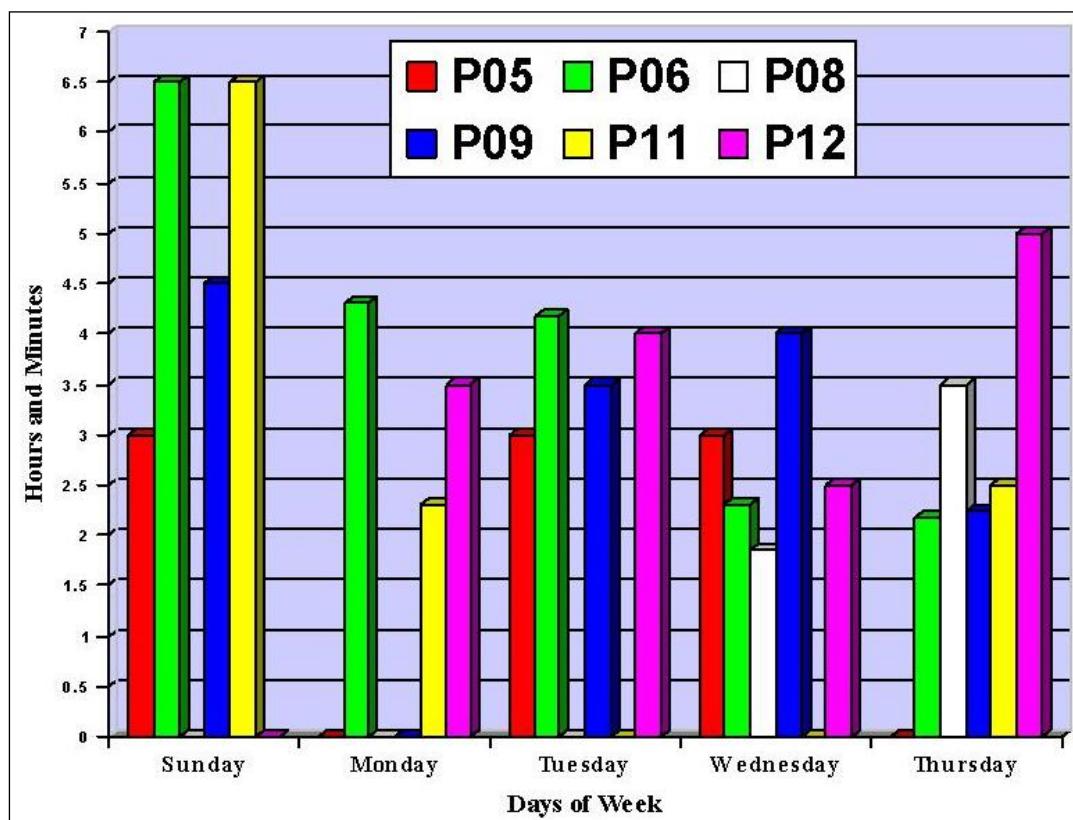
Although the Fijian media and an economist report *lomaloma ca* as impacting on productivity, no specific investigation (with the exception of the 2007 USP survey which is still being collated) has been undertaken to examine these assertions. What has been done though is an explorative study on the consumption habits of teachers at a rural school, which included investigation into impacts to education delivery, a study that comprised my 2008 Master's research. This provides foundational information which will assist the current study as it attempts to provide a country-wide perspective.

## Teacher *Yaqona* Consumption

In March 2006, all 21 teachers at a rurally isolated school in Kadavu were surveyed and interviewed regarding their *yagona* consumption habits as part of my Master's study (Aporosa, 2008:72). The survey gathered data on teacher consumption habits over a seven day period (Aporosa, 2008:122). From the original 21 surveys distributed, 12 indicated they had consumed *yagona* during the designated period (p.75). This group was further analysed to identify those who had ingested the indigenous substance on nights prior to teaching, whittling the participants down to six males. This meant that the six participants eliminated from the final analysis had only consumed *yagona* on the Friday and/or Saturday night during the seven day period.

Figure 5.10 shows the number of hours the six teachers (coded P05,P06,P08-

P12) had spent consuming *yagona* on nights prior to teaching during the survey period. Consumption durations and frequency varied between participants. For instance participant P06 drank on all nights for a total of 19.4 hours compared with P08 who consumed for only two nights totalling 5.25 hours. Most important though is the average consumption time of three hours on nights prior to teaching (Aporosa, 2010:24). Although this may sound somewhat less when compared with findings of the 2007 USP survey (which found the average drinking time to be five hours) or Tomlinson's reference to "a full-time job", outliers such as participants P06 and P11, who drank for six-and-a-half hours on the Sunday night need to be considered. The average consumption duration of three hours suggests consumers ingested 18 *bilos* over this time equating to 4,446mg of kavalactones – 14 times the pharmacological recommendation.



**Figure 5.10**  
*Yaqona* consumption on nights prior to teaching.  
 (Source: Aporosa, 2008:77)

When these teachers were questioned about how they felt in the morning as they entered the classroom, several commented that the struggle began from the

moment they woke, finding it extremely difficult to get out of bed. This was followed by ongoing tiredness, restlessness and difficulty with concentration, whereas without *yaqona* the previous night, “I get up easy” (Aporosa, 2008:86). Another stated that when *lomaloma ca*, “to teach is hard. It's even harder for me to speak. I'm lazy to speak. Sometimes I forget what I have taught the day before, or I forget what to teach”. In another case, a teacher cited an incident where a peer “was preparing students for an exam question, and they taught them the wrong answer, and then all of them got it wrong [in the exam], and X [edited for confidentiality] had to re-teach and give false marks” (Aporosa, 2008:86).

When asked which factors they believed influenced their *yaqona* consumption, the teacher participants cited similar purposes to those mentioned earlier, namely *vakaturaga*, *veikauwaitaki*, obligation, host responsibility, limited extra-curricula activity and *bole* (Aporosa, 2008:80-4,106-7,110). Further, some teachers admitted to utilising covert strategies as part of moderating consumption to aid longevity at sessions (Aporosa, 2006:7; 2008:84-5). This usually comprises taking on a service role such as mixing and serving the beverage or *tuki na kosa* (the re-crushing or the pounding of the mixed plant material allowing for re-mixing). These duties are performed ‘from’ the *tanoa* allowing consumers to pour quantities back or conspire with others they are working with so as to miss a ‘round’. The *tuki* role is often done away at a distance (due to the thumping noise) also making it easier to pass a round or insinuate another has already served you. Further, some consumers will deliberately schedule toilet breaks just as a round of *yaqona* is being served, providing an excuse to miss consumption. However, if caught, the strategist can expect to be punished for their offence, most often in the form of a double serving of *yaqona*. One participant stated, “We have to have the strategies so we can meet obligation. Everyone does it. Even the next day sometimes people tell the strategies [they employed]” (Aporosa, 2008:84-5).

Participants added that they had heard visiting Senior Education Officer’s (SEO) express their concerns regarding excessive *yaqona* consumption by teachers.

However, some felt this involved a ‘double standard’ as *lomaloma ca* and impacts on education delivery were often addressed through what was described as a “joke” – veiled language as a means to “address... the situation” (p.88), although no definitives, examples, guidance or boundaries were offered. One participant stated the reason was “because the regulation makers [indicating the SEOs] are also *swipers* [heavy *yaqona* consumers] and don't want to get caught out” (p.88).

Further, several Heads of Departments (HoD) stated that the affects of *lomaloma ca* on teachers and their efficiency was evident within the Performance Management System (PMS), an appraisal measurement indicator administered annually to staff (MoE, 2004). HoDs reported heavy *yaqona* users tended to achieve lower scores in “PMS 5 (Punctuality and Attendance)” when compared with light or non-drinkers. A HoD commented, “Yes, indeed. You can see it in competencies that show, like, due dates. You can see the procrastination. They drink *grog* and never get it done” (Aporosa, 2008:88). However, HoDs appeared to be reluctant to address this perceived deficiency with their staff, citing culture, *vakaturaga* and the sacredness of *yaqona* as key reasons. Another HoD added, “because even myself I do” (Aporosa, 2008:89). An additional area of concern was the possibility that complaints regarding impacts on education delivery could lead to the banning of the indigenous substance within the school environment (Aporosa, 2008:89). As a way of mitigating impacts, the principal at one rural school had limited consumption within the school compound to Friday and Saturday nights unless visitors were present (Aporosa, 2008:94-6). Further, Saturday night drinking was to conclude at midnight and consumption was confined to the school hall and prohibited within staff accommodation. The principal stated that following the institution of the policy he had noted a marked improvement in the quality of education delivery by teachers, together with an increase in examination pass results (Aporosa, 2008:94).

However, discussion with both the principal and staff 12 months following the completion of the Master’s research revealed a difficulty in maintaining this protocol for two reasons. First, volunteer labourers, usually the parents of the students or

alumni who were constructing new facilities as part of the State/Community partnership scheme (see p.107), frequently stayed at the school. To show appreciation, the school board and teachers would ‘host’ the volunteers nightly, most often with *yaqona*. This in turn led to hosting obligations and increased volumes of consumption for teachers, even though they were required to teach the following day. This is a theme discussed at length in the section on *Facilitating Parental Participation in the School* (Chapter 9, p.274). Second, teachers, especially those in rural areas, tended to form close bonds with neighbouring villages regardless of whether they had relational or *vanua* connections (Aporosa, 2008:67; Nabobo-Baba *et al.*, 2012:xix). This obligated teachers to attend functions and accept invitations to these villages. Therefore, when *yaqona* consumption days were reduced at the research site under the new policy, teachers were often invited to the local villages. As one participant suggested, “it’s hard to say no [suggesting this was rude]. See, no escape” (IQ005).

My Master’s thesis concluded with an acknowledgement by many of the research participants that *yaqona* over-consumption had the potential to negatively impact on education delivery. However such commentary was often limited to veiled expressions, unless discussed with me in private. This, as explained, results from *yaqona*’s link with the *vanua*, identity and *vakaturaga*, or the indigenous substance’s position as an emblem considered to be beyond critique (Aporosa, 2008:113-15, 2010:36-8). These factors not only reinforce the sensitivity surrounding this culturally embedded “keystone species” but also highlight the complexities involved when uniting *yaqona* with a contemporary system of development. To a lesser degree, but nevertheless a concern, was the possibility that such impacts could result in the banning of the indigenous substance from the school environment. As has been discussed, it is believed this would cause major cultural loss and upheaval. These findings acted as a springboard from that previous study into the present. I will now draw together several threads from the earlier study together with discussion from the preceding literature review chapters.

## Conclusion

A thread that wound throughout Chapters 2, 3 and 4 explained that over the past 200 years Eurocentric-inspired development set itself up as the authority on what supposedly embodied ‘developed’. This prescribed and imposed a ‘one-size-fits-all’ standard for which all countries and people groups were expected to work toward and aspire to (Peet & Hartwick, 2009:121,140; Nederveen Pieterse, 2010:16). In the process an ‘us and them’ divide was created. At one end of the spectrum were deemed to be the ‘productive’ contributing members who embrace specialisation and mechanisation together with the “right” Eurocentric values of modernity, individualism, capitalism and “economic initiative” (Rostow, 1956:27; also see Smith 1852:viii,327; Lie,1971:14-5; Escobar, 1995:43; Nederveen Pieterse, 2010:16). At the other are the unproductive “lower societies” – the traditional, communal, insular and “primitive” (Durkheim & Pickering, 1975:107) believed to be guided by “crude myths” (Rostow, 1956:27), superstitious gullibility and archaic practices which include the use of indigenous substances (Lange, 1999:242,247,249-250,281-2). Although there has been some shift in attitude over the past 30 years, including a greater emphasis on participatory development (in the case of Alternative Development), an acceptance of culture and tradition in the form of “multiculturalism” and the protection of indigenous rights (under a neo-liberal approach) (Arneil & MacDonald, 2010:115), an underlying hesitation regarding aspects of culture as an impediment to development remains (Nederveen Pieterse, 2010:16). Traditional communal land ownership, aspects of indigenous substance use and cultural mindsets that struggle to adopt neo-liberal “pragmatic, technocratic, and conservative vision” are such examples (Domenech & Mora-Ninci, 2009:164; also see Coomber & South, 2004:18; Arneil & MacDonald, 2010:114-15).

This suggests then that the ‘us and them’ divide remains. In his recently re-published 1995 text, *Encountering Development*, Escobar (2012:xxvii) defines this ongoing “separation... [as] the colonial divide between the West/modern and the Rest/nonmodern”. He added this also applies to the neo-liberal–

globalization discourses... [which] is seen as naturally and fully occupied by forms of socionatural life that are in fact an extension of Western-styled modernity... these discourses always amount to a deepening and a universalization of capitalist modernity... [with] this view of globalization as universal, fully economized, delocalized, multicultural (yet with modern cultures as the preeminent model)... [are] increasingly made possible by the immense power of [globalization itself] (p.xxxii).

In the Introduction chapter I stated I did not intend to be reductionist, oversimplifying or minimising the facets of culture and development in the ‘contemporary’ development era (including neo-liberalism) by recreating ‘us and them’ binaries of “modern” and “primitive” (p.5; Durkheim & Pickering, 1975:107-8), which evolved during the earlier period of modernity/modernisation (p.15). However, this appears to have “naturally... [occurred as] an extension of Western-styled modernity” under the globalisation agenda – “a deepening... of capitalist modernity”, suggesting an ongoing marginalisation of cultural practices, including indigenous substance use.

Changes to indigenous substance use due to colonially inspired desires for modernity/modernisation was a key theme in Chapter 3. There I explained that alcohol, at the advent of the industrial revolution, saw the greatest use change (p.53). Within a short time-frame, alcohol - the ‘original indigenous substance’ (Patrick, 1952:12-3) - was situationally banned from the worksite in order to limit impacts to productivity (p.54), a key driver to modernisation and economic growth (p.18). As part of increasing productive output, analysts have examined indigenous substances as both aids and impediments, with the latter theme highlighting workplace injury, sickness, absenteeism and presenteeism (p.20-22). This has prompted situational bans and prohibitions on a wide variety of indigenous substances, an action that also led to cultural and traditional knowledge loss (see p.16). This exemplifies the wider aspects of the traditional/contemporary tension, the term used in this study to illustrate the conflicting yet interconnected relationship that has resulted when traditional practices such as indigenous substance use has met with modernisation-inspired development inputs. Therefore with neo-liberal policy and globalisation becoming “an extension of Western-styled modernity” (Escobar, 2012:xxxii), and one that “reinforces a re-colonisation in the Pacific... replac[ing] indigenous structures with its own...

institutional, state, corporate and intellectual pressure” (Bargh, 2001:252; also see p.30; Brohman, 1995:127;) as I argued above, threats to traditional practices such as the use of indigenous substances from Western-styled development appears to have altered little. Coomber & South (2004:18) add that overall Western attitudes continue to view indigenous substance use as “backwardness’ or ‘underdeveloped’ with their use not fitting “into a wider notion of human progress and/or the western notion of drug use” which they argue is “both myopic and unreasonably ethnocentric” (p.94, this study).

The previous chapter narrowed the traditional/contemporary tension to the use of the indigenous substance *yagona* and the development input of education in Fiji. This Pacific Island state has embraced Western-styled education as a key driver to achieving national development and economic growth (p.113). Conversely they have as their “cultural keystone species” *yagona* – an indigenous substance emblematic of cultural identity and expression and deemed to be an ingestible representation of the *vanua*, an icon imbued with *mana* and capable of transferring *mana*. *Yagona*’s role and importance also applies to the school campus, with commentators adding that culture is vital to academic achievement (p.116,120).

However, the MoE and a number of *yagona* consumers have expressed their concern that the heavy ingestion of this indigenous substance has the ability to inhibit quality education delivery. This has led to a conflict for the MoE, who recognise the importance of the “cultural keystone species”, but have also embraced education as part of their development agenda. This has prompted the MoE to request more research on the association between culture and education (Williams, 2000:188). I would suggest this complexity, one that both attempts to recognise and legitimise *yagona*’s traditional use and sacredness, while balancing it against education that requires alert, productive teachers to impart quality learning systems to aid the national development agenda, will remain until this traditional/contemporary tension is investigated from a paradigm other than the contemporary “economized, delocalized, multicultural” neo-liberal development approach (Escobar, 2012:xxxiii).

Post-development, as explained in Chapter 2, offers such an alternative paradigm (p.38).

Post-development is essentially a grassroots-informed development approach that encourages developing nations to untangle themselves from the prescriptive expectations of development hegemony through a legitimate and academically supported ideology. Post-development inspires these nations to reconsider their position from a vista free of Eurocentric expectations that are primarily concerned with economic growth which cares little for the local and their cultural icons, life-ways and the embedded practices that give meaning and manifest cultural identity. Concerning education, Rahnema (1997:158), as discussed in Chapter 2, reminds us of the motives behind these Eurocentric expectations. He argues that the promotion of education within developing nations by the hegemonic West is a guise specifically intended to discredit local systems and traditional knowledge in order to promote capitalist processes for the benefit of the First World at the exclusion of the developing local economy.

Post-development makes salient the motives of the hegemonic development agenda and encourages a process where the local takes control via indigenous systems of communication and understanding while embracing external processes at their discretion and under their terms. Additionally, post-development offers the possibility of ‘real’ and realistic development by starting with “what they know... [which] is their own culture and values” (Anacleti, 2002:172) by “tap[ing]... indigenous traditions... as a resource... to solve contemporary problem caused by modernization and development” (Schech & Haggis, 2000:124).

The following chapter details the methodology utilised to answer the three research questions (presented in Chapter 1). Additionally, this also utilises a modified quantitative measure which I suggest will push post-development in a new direction. This will provide the MoE, and ultimately the Government of Fiji, with detailed information to assist with an informed decision on a way forward, a direction that, if

pursued solely from the predominant development dictum, could cost them and the *vanua* dearly through disempowerment, traditional knowledge loss, cultural disruption and identity forfeiture, aspects argued to be necessities to sustainable development (Verhelst & Tyndale, 2002:11; Radcliffe: 2006:18).

# Chapter 6

## Methodology

### Introduction

The previous chapter concluded by discussing a traditional/contemporary tension that appears to have resulted from the use of the “cultural keystone species” (Garibaldi & Turner, 2004:5) *yaqona* within the domain of education, a key driver embraced by the Fijian Government to aid contemporary national development and economic growth. Development and culture were key themes that aided in the identification of this proposed tension (see Chapter 2). Underpinning this was a discussion of post-development, an evolving ideology founded upon culture, traditional knowledge and self-determination aimed at eliminating external hegemony (p.32). As McKinnon (2008:281) notes though, much of the post-development literature tends to focus “on a critique of development without offering any suggestions for how to move forward”. In Chapter 2 (p.38) I explain how McKinnon sought to counter this criticism by adopting “a genealogical approach to her fieldwork” (p.283) – a post-development influenced methodology she claims contributes to overcoming “the lack of post-development alternatives” (p.281). She did not however define exactly what constitutes a post-development methodology. Nevertheless, when McKinnon is considered alongside others such as Gibson-Graham (2005:12; also see p.39), it appears that any such methodological process must consider the key post-development challenges of eliminating external hegemony by embracing local culture, traditional knowledge and self-determination.

With these attributes as a guide, it appears that other researchers also utilise methodologies that align with post-development. For instance, Laverack & Brown (2003:335,341) in their article on cross-cultural research in Fiji, argue that local “process” such as flexibility and the embracing of cultural practices are critical to the success of research in that country. They add that “activities that have little or no relevance to the researcher, such as the seating arrangements or ceremonial kava

drinking, might have profound implications for the subjects of the research” (p.337). Therefore if research is to be locally driven, such practices must become important to the investigator. Additionally, by acknowledging the critical position of local participants and their cultural practices, Laverack & Brown (2003) affirm notions of self-determination while simultaneously deferring to local “process” and the embracing of traditional knowledge systems. In other words they embrace principles that align with post-development.

In this chapter I discuss at length the work of Associate Professor Unaisi Nabobo-Baba and her *Vanua* Research framework, an indigenous approach that also conforms with the ideals of post-development. *Vanua* Research acted as the key influence during my field research phase carried out in May-June and November-December 2009 aimed at gathering data to answer the three research questions mentioned above. An explanation of *Vanua* Research will be followed by details of the research ethics, procedures and measures utilised.

### *Vanua* Research and the Ethos of *Vakaturaga*

In his book *The Fijian Ethos*, the late Professor Asesela Ravuvu (1931-2008) makes a comment that those who are unfamiliar with Fiji could easily overlook or potentially dismiss. He (1987:18) states, “*Vakaturaga* is the most important concept depicting ideal behaviour among indigenous Fijians”. *Vakaturaga* remains the key influence to *iTaukei* behaviour today and comprises a set of ‘Chiefly’ values and expectations irrespective of one’s status, such as *veidokai* (respect), *vakarokoroko* (humility), *kila na iyatu* (knowing ones place in the community), *qaravi tavi* (fulfilling obligations), *veiwasei kei na veikauwaitaki* (sharing and caring), *veivosoti* (forgiveness), *veivukei* (helpfulness) and *yalo malua* (a quiet demeanor) (Ravuvu, 1983:103-4; 1987:18-19,319-320; Tuwere, 2002:110). Nabobo-Baba (2006:25-36) draws on this “ideal” (or in her case as a woman, “*vakamarama*: to behave like a lady at all times”, or womanly chiefly attitude) in explaining her *Vanua* Research concept, a methodological guide for researching *iTaukei*. *Vanua* Research, she explains, is “an ethical approach” that takes

into “account indigenous Fijian [*iTaukei*] values, protocols of relationship, knowledge and ways of knowing” (p.24). Therefore, one cannot participate in, or observe *iTaukei* “values [and] protocols” without actively embracing *vakaturaga/vakamarama*.

Nabobo-Baba (2007) explains that *Vanua* Research aids in de-colonising research by encouraging the use of local systems, self-determination and development – a reaction to the colonially driven process that dominated in the Pacific until the 1970s (p.1). She adds that *Vanua* Research is “counter hegemonic... [it] gives power and recognition to things Fijian as research and knowledge accumulation in its broadest sense is deeply connected to power” (p.1). Both *Vanua* Research and *vakaturaga* encourage the advancement of local strategies through the application and manifestation of practices and models of culture and nature specific to the *iTaukei* context, processes that have developed over centuries from within.

*iSevusevu* – the ritualised form of *yaqona* presentation discussed in the previous chapter – is also critical to *Vanua* Research (Nabobo-Baba, 2007:3). *Vanua* chiefs, village principals, elders and officials are informed of the reason for *isevusevu* during its presentation together with the seeking of permission. Permission is never assumed, and if it is granted, it will often be sought again on each subsequent visit (Nabobo-Baba, 2007:3). Therefore, decision and power originates and remains within the control of local authorities as opposed to being assumed or demanded from the ‘outside’, further countering hegemonic process. *iSevusevu*’s reciprocal practice hints at post-development “gift exchange”, a concept described by Curry (2003:419) as “a culturally place-specific form of economy”. Curry argues that post-development acknowledges and legitimises “nonmarket economic” (p.420) systems which can be accomplished through “gift or indigenous exchange” (p.418). These, he asserted, are just as valuable as capitalist exchange and lead to local community level development (p.418). Further, he stated, “The capacity of people to engage in gift exchange is crucial to social relationships and identity and is an important determinant of the quality of life”. Cultural gift exchange within *isevusevu* together with the elimination of hegemony and the legitimisation of self-determination within the wider *Vanua*

Research framework – a methodology that acted as the principal guide to my field research – aligns well with a post-development approach.

### ***Vanua Research and the Fijian community***

Although Nabobo-Baba developed the *Vanua* Research framework for the investigation of *iTaukei* issues, I would argue this nevertheless has high transference to the *Fijian* community who also informed this study. Ravuvu (1987) and Nabobo-Baba *et al.* (2012) give context to my reasoning. Firstly, Nabobo-Baba *et al.* states that a “person who is *vakaturaga* is a person steeped in respect and behaves towards others as if others were of more importance than themselves” (p.44). Ravuvu adds, “People who are *vakaturaga* in behavior know their place in the community and act appropriately” (p.18). *Vakaturaga*, as an ethos and ideology, is principally about appropriate behaviour based on respect and does not specify what constitutes “community”. Therefore I would argue that those who pursue *vakaturaga* do so in all communities, whether a *Fijian* settlement, a Hindi school, a *kaivalagi*’s (visitor to Fiji) hotel room in Suva, or a garage in Hamilton, New Zealand – all places in which I have conducted research and embraced *Vanua* Research and *vakaturaga*. *Vanua* Research therefore has multi-ethnic application in a similar manner to the indigenous Tongan methodological framework, *Kakala*, which could equally be utilised within the *iTaukei* setting. As Taufa (2010:112) explains, the “*Kakala* model... [is] based on... values and principles such as reciprocity, respect, collectivism and context-specific skills and knowledge”. *Kakala*, similar to *Vanua* Research, also aligns with a post-development approach.

### ***Vanua Research: The Practicalities***

In her book, Nabobo-Baba (2006) explains the practicalities of her *Vanua* Research framework (also see Nabobo-Baba, *et al.*, 2012:108-10). Essential to this approach is that information gained during interviews and surveys must be checked for accuracy and the identity of sources protected where requested or in situations where relational disruption could result (p.25). Additionally, reporting back is essential and further deemed to be a reciprocal response (p.26). These criteria also manifest the

*vakaturaga* ideals of community, compliance to obligation, and the respect of others and authority (Ravuvu, 1987:18). An example of compliance with this reciprocal obligation occurred following my Master's research which also utilised the *Vanua* Research framework. Following the completion of my study, the research findings were condensed and translated (with the assistance of a friend) into a *vosa vakabau*/English parallel. This was subsequently published in a Fiji-based academic journal (Aporosa, 2010), together with extracts in *Nai Lalakai*, the local *iTaukei* newspaper (Matau, 2008:1-2). Most importantly though, the findings were presented in *vosa vakabau* to participants at each of the research sites, complying with *their* processes and modes of communication and holding these up as paramount as opposed to those of the outsider.

*Vanua* Research also involves the embracing of time flexibility, the wearing of appropriate clothing such as *sulu vakataga* for men (wrap-around formal skirt with pockets), and the presentation of *isevusevu* (Nabobo-Baba, 2006:26-7,31-2). These elements are also essential to outworking the ethos of *vakaturaga* (Ravuvu, 1987:18-19). Nabobo-Baba (2006:26) explains that *Vanua* Research compliance requires more than the 'giving' of *yaqona* as part of *isevusevu*, it must also carry with it the appropriate acknowledgements and information. *Talatala* (Reverend) Dr. I. Tuwere (pers.comm., 12 June, 09), a well-respected commentator on *itovo* (*iTaukei* culture and practices), asserted that the language and words used during *isevusevu* can either add 'weight' to, or equally dilute the 'value' of its presentation. He added that correct and appropriate language not only creates reciprocity and outworks *vakaturaga*, they are essential to manifesting *mana* (see Footnote 21).

*Vanua* Research and *vakaturaga* also require that appropriate forms of communicative exchange are observed. These include discussion and language fitting to the environment, the use or avoidance of gestures, appropriate deportment, and the use of *talanoa* (Nabobo-Baba, 2006:26-29). *Talanoa* is the meeting together of two or more people where information is shared (Havea, 2010), a theme I will discuss at length in Chapter 9 (p.306-7). As Mishra (2007:45) explains, *talanoa* frequently

occurs around the *tanoa*, a practice common to both *iTaukei* and *Fijians*. While academic ethical guidelines occasionally spell out the terms for participant interviews (for example one-on-one meetings to be conducted in appropriate settings to ensure anonymity if information is of a sensitive nature), *talanoa* allows for some information of this nature to be shared within community or family settings. This can be somewhat confusing to a Western researcher who often originates from an individualistic culture where sensitive information is held close. In both the *iTaukei* and some *Fijian* environments, sensitive information tends to be family or community ‘owned’, and therefore is often discussed in the *talanoa* setting. An understanding of *vakaturaga*, *itovo*, relational connections and interaction systems is necessary to making informed decisions regarding the best environment to conduct interviews, especially those of a sensitive nature.

Invitation was an important aspect of this study; one that had a level of uniqueness due to my position as both an ‘insider’ and ‘outsider’. Although I will discuss a number of other factors surrounding my ‘insider/outsider’ role later in this chapter, research ‘invitation’ together with a number of ethical aspects will now be discussed.

## Research Invitation and Ethics

In late 2007 I met with Mr. Filipe Jitoko, then the Permanent Secretary for Education in Fiji, who had been an advisor to my Masters research. Following *isevusevu*, I presented to him the findings of my rurally focused study. Jitoko questioned a number of the outcomes, stating that a fuller understanding would require a nationwide investigation. Although this was something I had considered, ideals within the ethos of *vakaturaga* prevented me from simply asking the obvious, “Can I undertake that research?” Instead, the ethos requires a respectful conversational ‘dance’ on the part of subordinates (Nabobo-Baba, 2006:28; Nabobo-Baba, *et al.*, 2012:107). Ravuvu (1987:18-9) explains this: “A person who is *vakaturaga* does not openly question... his senior... He should not impose any idea or question”. Our conversation resulted in

Jitoko inviting me to submit a research proposal to undertake a national level investigation.

Several months later Jitiko and the Education Research Officer, Mr. Joji Qaranivalu, considered the proposal, approved it, and granted “Research Authority” (see Appendix F) which included ethical conditions. Foremost I was asked to “tread with caution” due to the importance of *yaqona* as a cultural icon. This was a subject that Jitoko and I had discussed at length during our earlier meeting. He had stated that there was a reluctance by some within the Fijian educational arena to discuss this topic due to its sensitive nature (p.171). However, my position as both an ‘insider’ and ‘outsider’, he suggested, offered a unique advantage. Additionally, approval was granted on the condition that I “liase [sic] directly with target schools and personnel”. This meant that although the MoE had given authority to conduct the research, permission was still to be sought from schools and individuals. This topic, as part of informed consent, will be discussed later in this chapter.

### **Ethics Approval: Academic versus *Vanua***

Just as the methodological philosophy which informed this study required invitation to conduct the investigation, it also necessitated that ethical consideration be locally driven. Nabobo-Baba, *et al.* (2012) explain this in the Fijian context–

Consent forms are good as they meet university and institutional standards but researchers also need to find out what consent means locally among Pacific groups. Working among her people in 2003, Nabobo-Baba found that there was a general refusal to fill or sign forms. As the official ceremonial *yaqona* was accepted by the village and district or tribal chiefs, work would have it that it was a piece of work the community ‘was bound’ to be engaged in, in whatever way they could. Consent constitutes more than just form to fill (p.88)... As a scholar she knew she had to follow rigorously University ethics and guidelines of research but soon found out that it was the *Vanua* (tribe) and its protocols and ethics of knowledge that dictated research processes on the ground (p.89).

In effect this relegated the academic ethical protocols to a secondary position. Ethics approval was granted under the “Low Risk” categorisation by Massey University’s Human Ethics Committee (MUHEC) (Appendix G), however in actuality this comprised an academic formality. I would argue though that MUHEC accepts that they may be

required to take a secondary position in certain circumstances. Instead of requiring their researchers to abide by “ethical rules”, MUHEC (2010:4) seeks that they guide their inquiries and data collection by eight “ethical principals” which they preface with the following summary statement. Researchers must “be aware of... cultural sensitivities, and gender and socio-economic differences. In particular... [investigators] must recognise the power relationships involved in their work... and take steps necessary to respect the social and cultural sensitivity of all participants” (p.4). Therefore I interpreted MUHEC’s guidance as endorsing my chosen direction. Further, when a comparison is made between MUHEC’s “major ethical principles” and *Vanua* Research’s “ethical approach” together with the fundamentals of *vakaturaga*, the latter is vastly more ‘strict’ and holds researchers to a higher ethical standard than the former.

Pacific academics and educationalists Anae, Coxon, Mara, *et al.* (2001) endorse a shift in ethical approach toward more control by those in the country or community where research is to be conducted. Although stipulating that “ethics approval from formal ethics committees” is necessary, they add that “in order to ensure that ethics committees or codes of ethics are culturally sensitive, such committees or codes need to have specific Pacific or other cultural input both by the appointment of a Pacific committee member and/or the appropriate cultural framing of ethical guidelines” (p.40). In my case I utilised *Vanua* Research as “the appropriate cultural framing”, whereas “specific Pacific... cultural input” came from a variety of sources such as Associate Professor Unaisi Nabobo-Baba (also my third academic supervisor and the author of the *Vanua* Research framework) and friend, academic and cultural expert Sekove Degei (Fijian Studies, University of the South Pacific). Others included family members, friends and advisors, many who are listed in the acknowledgement section at the beginning of this thesis together with numerous anonymous sources.

### **Informed Consent**

During field research all informants were shown a Participant Information Sheet (Appendix H) and Participant Consent Form (Appendix I). Both of these were

translated into *vosa vakabau* and *Fiji Bāt*, and individual consent was sought. Although all of the research participants possessed a high degree of fluency in English, it was felt that the full disclosure of the research's intentions, together with the rights of the participant, would best be achieved by using the participant's first language. This also complied with the requirements of *Vanua* Research as decision making and power remained within the control of the local and thus countered external hegemony.

### **Confidentiality: An Outgrowth of Trust**

The final ethical theme is confidentiality. Nabobo-Baba (2006:25) prescribes that "the *vanua* researcher ensures that no harm is done to the *vanua*". Moreover, Anae *et al.* (2001:40) stated that "confidentiality occurs more by the establishment of confidence and trust between the interviewer and interviewee, than by the mere signing of written ethics consent forms." The sensitive nature of this research has been mentioned several times so far (p.154,171) and will become even more palpable in the following chapters where teacher participants make comments that could be deemed in some arenas to be unprofessional and potentially lead to disciplinary action. What is important here is that while issues of confidentiality were discussed and guaranteed on numerous occasions including *isevusevu* and during the informed consent process, sensitive research is not possible without high levels of trust.

To reassert Anae *et al.* (2001:40-1), it is the "trust between the interviewer and interviewee" that enables confidentiality and not guarantees of confidentiality that enables trust. In my case, this trust resulted from relational connections and many years of demonstrated service and taking the 'low' position of "respect and deference" (Ravuvu, 1987:18) in Fiji and the *iTaukei* community in NZ. In other words, I had simply been an honest, authentic contributing participant in the life of the community in which I was living and/or working at the time. Having spent almost 12 years working at and visiting schools in Fiji, I have built up a healthy group of friends and colleagues who are spread across a variety of teaching environments in that country. These contacts were extremely important in preparing the way for me when I visited their schools. They opened 'trust doors' that enabled me to simply step into the lives of

people I didn't know. Bourgois (1995:13), in his text that presents poverty and the crack-cocaine economy in East Harlem, discusses the importance of relational connectedness to research accuracy: "Only by establishing long-term relationships based on trust can one begin to ask provocative personal questions, and expect thoughtful, serious answers." Therefore, in the case of culturally based research of a sensitive nature, honesty and openness that results in accurate high-quality research data is not a product of formal ethics procedures, information sheets or consent forms, but rather relationships of trust based on culturally appropriate behaviors. In addition to this, an important consideration is how that sensitive data is subsequently handled.

### **The Protection of Identities and Information**

To protect the identity of my research participants and informants, I utilised the same processes as I did in my Masters study. Firstly, written documents, data and recorded audio files that resulted from the field research were allocated a numerical identification with a corresponding participant 'key' kept within an encoded partition on my laptop. This meant that, should the documents have been misplaced, informant anonymity would have been maintained. Where paraphrased remarks and quotes appear within this thesis, they have been referenced using an alternative sequential coding system (IQ001-IQ227) that requires a two step process, namely the use of the 'key', to identify a participant. This is believed to be vastly superior to a situation where each participant is allocated their own code which is then assigned to all of their comments. Such a system could potentially open up the possibility of an investigator collating all of a particular participant's comments and quotes and then analysing these in order to identify that person.

Although many interviews and research themes were engaged during *talanoa*, highly sensitive issues were discussed in one-on-one settings. Great care was taken when seeking the clarification of statements made by other informants. This was done by re-formulating questions and making no reference to third parties, a technique I became proficient in while interviewing offenders of serious crimes as a police

constable. Therefore, participants were strictly asked questions during interviews and opinions were not offered. A breakdown of the research participants will now be presented.

## Those Who 'Know' and Chose to Participate

A total of 145 research participants were consulted during this study. Additionally, 18 schools were visited during the field research phases. However, not all of those informants were from school environments. Table 6.1 shows a breakdown of all participants by gender, ethnicity and vocation. Age is not included in the table, as only those who completed the survey questionnaires were asked this information. Table 6.1 also details the locality in which each of the participants was located when interviewed and/or tested. Most of the informants were spoken to face-to-face with only three of the Australia-, and New Zealand-based participants communicated with either by email or telephone, and the USA- and Europe-based informants were interviewed via email.

Table 6.1 shows that 107 of the participants were males and 38 were females, with the later group comprising 26.2% of the total informants. Two reasons exist for the greater percentage of male participants over female. Firstly, only a small number of females (6 out of a total of 36 participants) were required for cognitive test assessment (see later this chapter). Secondly, males tended to comprise the majority of those interviewed at the MoE, Fijian Government departments and school Principal positions, which generally reflect what I have observed as being the gender makeup of government heads in that country. Alternatively, females tended to comprise the majority of the non-administrative hands-on positions in the academic settings. In the interests of anonymity, participant details have been kept vague and will not be extrapolated further.

**Table 6.1**  
Participant characteristics.

Variable	Totals	Participant location (at time of interview/test)					
		Fiji	Vanuatu	N.Z.	Australia	USA	Europe
<i>n</i>	145	105	7	15	10	6	3
Male	107	79	6	9	7	4	2
Female	38	25	1	6	3	2	1
<i>Ethnicity</i>	145	105	7	15	10	6	3
<i>iTaukei</i>	69	67	0	1	0	0	1
<i>Fijian</i>	42	42	0	0	0	0	0
<i>ni-Vanuatu</i>	4	0	3	1	0	0	0
Māori/Pakeha/ New Zealander	12	0	0	12	0	0	0
Australian	9	1	0	1	7	0	0
American	6	0	0	1	1	4	0
Europeans	3	0	2	1	0	0	0
<i>Environment</i>	145	105	7	15	10	6	3
Urban	97	64	0	15	10	6	2
Semi-urban	16	14	1	0	0	0	1
Rural	32	32	0	0	0	0	0
<i>Vocation</i>	145	105	7	15	10	6	3
Teacher: Principal/HoD	17	17	0	0	0	0	0
Teacher	51	51	0	0	0	0	0
MoE Official	8	5	2	1	0	0	0
Govt. Official	9	6	3	0	0	0	0
Church Official	2	2	0	0	0	0	0
<i>Academics</i>	36	11	0	10	10	4	1
<i>Other</i>	22	17	1	4	0	0	1

Ethnically, when *iTaukei* and *Fijians* are compared in Table 6.1, the former account for the majority (69, or 62%) of those tested and interviewed while the latter comprised 42 participants (or 38%). Participant ethnicities also included *ni-Vanuatu*, Māori and *Paheka* (European) New Zealanders (NZ), Australians, Americans and Europeans, equating to 34 informants, or 23% of total participant numbers. Vocationally, teachers, which included school principals and heads of departments (HoDs), accounted for 68 (or 47%) of all participants. MoE and government officials included the Fijian Minister of Education and Fijian school inspectors, together with Fijian provincial officers and government statisticians. Education policy advisors and Public Service Commission (PSC) staff from both Fiji and Vanuatu were also spoken to. These participants comprised 17 (or 11%) of the total participants. The remaining 60 (or 41%) participants were made up of two (1%) Fijian church officials, 36 (or 25%) academics such as Fijian-based development, economics and education experts, a

number of international and New Zealand-based specialists in indigenous substances and advisors on psychometric testing and cognitive assessment of ethnic minorities. The final category of participant – ‘others’ – equated 22 (or 15%) and comprised spouses of teachers, training and productivity personnel, village chiefs and *matanivanua* (spokespersons), and targeted informants. Again, the identity of these participants has deliberately been kept vague to ensure anonymity.

In Table 6.1 I have intentionally not identified the specific school of a teacher participant, nor do I detail the subject vocation of each teacher in Tables 6.1 and 7.1. This would offer the possibility, through a process of elimination if tables were combined, to identify participants, particularly if they were to teach in strictly defined or limited subject areas such as physics or computer studies. Nevertheless, to ensure wide representation, participants were selected across a variety of teaching subject areas which included, although were not limited to, woodwork, technical drawing, computer studies, home-economics and physics through to core subjects such as English, math and science, as well as with multi-curricular subjects in the case of primary school teachers. Therefore participant subject vocations were not ‘stacked’ in favour of one particular teaching stream offering a wide participant knowledge base to aid research validity. Although my participants cannot be classified as truly representative of all teachers across all ethnicities, teaching streams, intellectual levels and ages, I would nevertheless argue that strong efforts were made to provide a quality sample.

## School Research Sites

Table 6.2 details the schools visited during the field research periods, whereas Figure 6.1 aids in identifying their geographic locations. The 18 schools visited were located as close as a few hundred metres from a central business district to several hundred kilometers from the capital Suva. Matuatabu Primary School, a small rural campus on the island of Ogea in Southern Lau, was the furthest school from Suva and took over 23 hours (non-stop) to reach in the *Dausoko*, the small Fijian government research vessel.

This area is extremely remote, and is only visited once per month by a government supply boat. I was privileged to travel to this and other schools in Southern Lau as part of a Government research team.

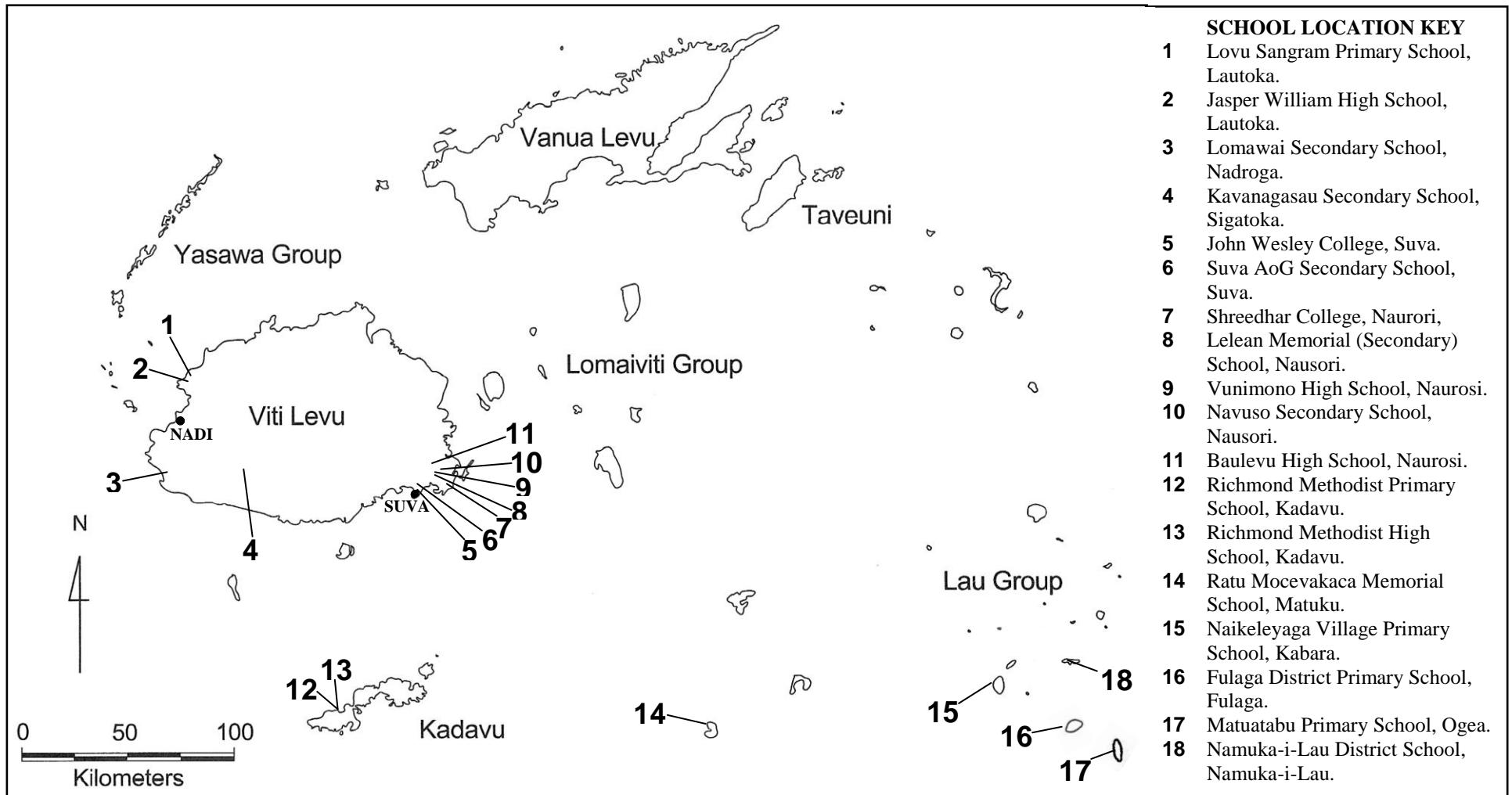
Schools provided a variety of assistance toward the research. This ranged from one to a combination of the following: staying for several hours or a number of days at a school with teachers in their staff quarters, consuming *yaqona* with hosts, access to teaching staff, board members and/or the parents of students for between one hour and several consecutive nights, observing school culture and education delivery, attending end of year graduation ceremonies, surveying participants, interviewing informants and/or cognitively testing selected teachers. There was no pattern to what was accomplished at each school. For example, I arrived at one particular school at lunch time, *sevusevu* to the Principal and a HoD, observed several teaching sessions, consumed *yaqona* with staff that evening where we *veitalanoa* (discussed) my research, stayed with a teacher friend overnight, and departed the following morning. A quick visit that could appear to have achieved little although actually resulted in the gathering of some exceptionally valuable information. Details regarding the specific methodology at individual schools has deliberately been kept vague to aid anonymity.

**Table 6.2**

Schools visited during the field research periods: May-June and November-December 2009.

SCHOOL	CATEGORY	AFFILIATION	STAFF No.	STUDENT No.	BOARD -ING	STUDENT BREAKDOWN
Fulaga District Primary School, Fulaga Island, Southern Lau.	Rural	Community school	4	47	Y	100% <i>iTaukei</i>
Kavanagasau Secondary School, Sigatoka, south central Viti Levu	Rural	Sanatan (Hindi) / Community	12	166	N	49% <i>iTaukei</i> 51% <i>Fijian</i>
Matuatabu Primary School, Ogea Island, Southern Lau.	Rural	Community school	3	19	N	100% <i>iTaukei</i>
Ratu Mocevakaca Memorial School, Matuku Island, Southern Lau.	Rural	Community school	4	41	N	100% <i>iTaukei</i>
Naikelyaga Village Primary School, Kabara Island, Southern Lau.	Rural	Community school	3	27	N	100% <i>iTaukei</i>
Namuka-i-Lau District School, Namuka-i-Lau Island, Southern Lau.	Rural	Community school	4	68	N	100% <i>iTaukei</i>
Richmond Methodist High School, Kadavu Island, southern Fiji.	Rural	Methodist Church school	19	168	Y	100% <i>iTaukei</i>
Richmond Methodist Primary School, Kadavu Island, southern Fiji.	Rural	Methodist Church school	3	103	N	100% <i>iTaukei</i>

Baulevu High School, Naurosi, eastern Viti Levu.	Semi-urban	Sanatan (Hindi) / Community	21	239	N	33% <i>iTaukei</i> 66% <i>Fijian</i>
Lomawai Secondary School, Nadroga, south central Viti Levu.	Semi-urban	Community school	33	540	Y	70% <i>iTaukei</i> 30% <i>Fijian</i>
Navuso Secondary School, Nausori, eastern Viti Levu.	Semi-urban	Methodist Church school	10	190	Y	99% <i>Fijian</i>
Shreedhar College, Naurori, eastern Viti Levu.	Semi-urban	Pundit Shreedhar (Hindi) school	24	246	N	99% <i>iTaukei</i>
Jasper William High School, Lautoka, western Viti Levu.	Urban	Methodist Church school	37	730	Y	50% <i>iTaukei</i> 50% <i>Fijian</i>
John Wesley College, Suva, eastern Viti Levu.	Urban	Methodist Church school	9	609	N	95% <i>iTaukei</i> 5% <i>Fijian</i>
Lelean Memorial (Secondary) School, Nausori, eastern Viti Levu.	Urban	Methodist Church school	59	1400	Y	95% <i>iTaukei</i> 5% <i>Fijian</i>
Lovu Sangram Primary School, Lautoka, western Viti Levu.	Urban	Sangram (Hindi) school	18	560	N	33% <i>iTaukei</i> 66% <i>Fijian</i>
Suva Assembly of God Secondary School, Suva, eastern Viti Levu.	Urban	Assemblies of God Church school	43	749	N	30% <i>iTaukei</i> 70% <i>Fijian</i>
Vunimono High School, Naurosi, eastern Viti Levu.	Urban	Sanatan (Hindi) school	54	1152	N	50% <i>iTaukei</i> 50% <i>Fijian</i>



**Figure 6.1**

Schools by geographic location visited during field research: May-June and November-December 2009.

Eight (or 44%) of the 18 schools visited were located in the rural areas. Four (or 22%) were in the semi-urban areas, while six (33%) were urban based<sup>48</sup>. Of the total schools visited, six (or 33%) were designated community schools – meaning they lacked a religious affiliation or were one of the few Government Schools in Fiji, seven (or 38%) were Christian Church (Methodist and Assemblies of God) administrated, and five (or 27%) were Hindi (Sanatan and Pundit Shreedhar). All operate under the State/Community partnership scheme which was explained in Chapter 4 (p.107). Finally, no formal system of school selection was utilized. Research sites were chosen in order to provide a diverse spread of schools as influenced by geographical location, rural, semi-urban and urban categorisation, student numbers, community and religious affiliation, accessibility and local contacts in order to ensure wide representation.

During visits, schools were asked for a rough percentage break-down of the two main ethnicities, *iTaukei* and *Fijian*. The majority of rural schools visited were attended by *iTaukei* students with the exception of Kavanagasau Secondary School, which is situated above the fertile plains of the upper Sigatoka River. This area is well known for agricultural farming undertaken predominantly by *Fijians*, with their children attending the local secondary school. When the ethnic makeup of the four semi-urban schools is considered, collectively these represent an almost 50/50 split. The most interesting though is Shreedhar College in Wainibokasi near Nausori town. This is a Hindi-affiliated school although almost all of the students are ‘Christian’ *iTaukei*. This anomaly was discussed with an informant at another school who had

<sup>48</sup> Nabobo-Baba *et al.* (2012:xviii-xix) explain that typically ‘rural’ and ‘urban’ are based on population density however in the case of Fiji, due to extremes between populated areas and “remoteness”, such classification is difficult. In their 2000 education review the MoE attribute the following characteristics to rural and urban (Tavola, 2000:162):

Rural category:  
1: 10-20 km from a town boundary  
2: equal to or greater than 20 km  
from town boundary  
3: very remote school

Urban category:  
1: city metropolitan  
2: city suburban  
3: peri-urban  
4: town area

This study has added an additional category of *semi-urban*. This is because the MoE ‘rural’ categorisation is extremely broad, ranging from 10 kilometres from a “town boundary” to extremely remote. Matuatabu Primary School on Ogea Island in Southern Lau is an example of such a school. This is only accessible once per month on a supply vessel. Essentially I have defined semi-urban schools as those beyond a “town boundary” that were accessible by a public transport bus (albeit infrequent in some cases). In contrast I have defined rural schools as those that required more effort to access such as the organisation of a flight, sea travel, a private four-wheel-drive vehicle or on foot.

previously taught at Shreedhar College. They stated that *iTaukei* parents sent their children to this Hindi-affiliated school to capitalise on *Fijian* academic success (*iTaukei* and *Fijian* academic disparity was discussed in Chapter 4, see p.109). Additionally, these parents were prepared to overlook the compulsory Hindu religious instruction in order to achieve this aim (IQ006). Finally, student ethnicity at the urban schools visited during the field research varied, with the figures presented above failing to offer any definitives on the ethnic make-up of urban schools. For example, John Wesley College and Lelean Memorial are recognised as *iTaukei* educational facilities, and naturally reflect a strong presence of that ethnicity, whereas Lovu Sangram Primary School is situated close to the Lautoka sugarcane area and has a high *Fijian* populace.

The largest school visited was Vunimono High School in Nausori, with a school role of 1,152 students and 54 staff. The smallest school, with three staff and 19 students, as mentioned above, was Matuatabu Primary School in Southern Lau. Schools in the rural and semi-rural areas tended to have vastly fewer staff and student numbers when compared with those in the urban areas. The only exception to this was Lomawai Secondary School with 540 students, categorised as semi-urban and situated approximately one hour from Fiji's second-largest city, Nadi. This school services a highly populated agricultural area with the nearest urban secondary school approximately half an hour away in Sigatoka. Six (or 33%) of the schools I visited had a boarding component. Overall, boarding schools tend to be more common in the rural areas as students often do not have the luxury of public transport. The main difference between boarding schools located in the rural areas from those at semi-urban and urban schools was staff accommodation. Rural boarding schools, due to their isolation, were more likely to provide accommodation within the compound for all staff members whereas semi-urban and urban schools were more likely to have only a few staff members living onsite who were responsible for the welfare of the live-in students. Further, staff that lived in the compound usually socialised together – this frequently included *yagona* consumption. More detail regarding notions of community and the formation of surrogate village communities by staff living together

in school compounds was discussed in earlier research (Aporosa, 2008:67). What will now be discussed are the field research methodological procedures.

## Procedures (Field Research)

As was explained above, the MoE requested in their research and ethics approval that I “liase [sic] directly with target schools and personnel”. Upon my arrival at schools, my first action was to meet with Principals or the designated HoD if the Principal was absent. In situations where I was unknown to these people, former teaching colleagues, if present, would often accompany me. In most cases I presented *isevusevu* on entry, including a brief explanation of the research. This was followed up with the Participant Information Sheet (PIS), Participant Consent Form (PCF) and MoE Research Authority. Although the PIS and PCF stated that the research had been approved by the MoE, the ‘Ministries’ Research Authority played a crucial role. In effect, the document acted as a research request – as if the Ministry was asking ‘Can I please have your approval to conduct this research?’; a question my methodology and culture prevented me from asking directly as discussed above. At every venue, without exception, I was greeted with enthusiasm. Without question my *isevusevu* played a key role in this. As I explained in Chapter 5, *isevusevu* is in essence a manifestation of *vakaturaga*; the primary means of chiefly acknowledgement, introduction, request and reciprocity that if presented correctly, can transform a complete stranger into a long-lost friend (p.133-4). Undeserved positionality of this nature, with its entry rights and hospitality entitlements, I would suggest, is extremely difficult to comprehend unless experienced.

When *isevusevu* was presented in the school setting this was often reciprocated with the mixing and offering of *yaqona*. In cases where I arrived at schools in the late afternoon, my *isevusevu* frequently initiated *yaqona* sessions that would include staff. These sessions often went on into the early hours of the following morning. Although such events seriously limited my sleeping hours and were accompanied by large *yaqona* consumption volumes, they equally proved extremely valuable as sites of information sharing and diffusion which in turn led to many

participants approaching me and making themselves available for interview and cognitive testing. In cases where *isevusevu* were presented and reciprocated during school hours, it was not uncommon for teachers to also be present. They often informed other members of staff of my reason for being in their school, further aiding in stimulating interest in the research and offers of assistance. The use of the *isevusevu* in order to outline the focus of the research, together with the seeking of permission, complied with *Vanua* Research. Further to this, three other methods were utilised during the field research.

### **Survey Forms**

Post-*isevusevu*, teacher *yaqona* sessions, staff rooms and occasionally one-on-one meetings acted as sites for the administration and completion of a Teacher Survey Form (Appendix J). In total, 63 teachers were surveyed at 15 schools. This enabled the collection of both qualitative and quantitative data to give specificity to accepted practices. For example, it is accepted that some teachers drink *yaqona* until late in the evening several nights per week (Aporosa, 2008:75-6). This survey sought to update those reports. Further, it sought data on absenteeism due to sickness. This information will be drawn upon in the following three chapters to aid in answering specific aspects associated with the research questions.

Although Chambers (1983:50-1) stated that “Questionnaire surveys... embody the concepts and categories of outsiders rather than those of rural people, and thus impose meanings on the social reality.” Similarly Kumar (2002:316) is critical of surveys and questionnaires, arguing they are time consuming and fail to “allow peoples realities to come out”. In my case, questionnaire surveys were administered with respect for appropriate local protocol systems to assist in uncovering understandings which are supported or critiqued by ‘insiders’, and not to impose meaning from ‘without’, an approach supported by the MoE (2000:169). Further, they saved a great deal of time, enabling me to quickly identify participants for cognitive testing, whereas *talanoa* and one-on-one semi-structured interviews “allow[ed] people’s realities to come out” and further aid my “generative experimental” *Vanua*

Research approach (Gibson-Graham, 2005:6).

### **Semi-Structured Interviews**

113 of the 145 participants were interviewed using designated sets of semi-structured questions (Appendix J). For instance, one set of questions was developed specifically for school principals, others for non-drinking and *yaqona*-consuming teachers with additional questions designed to allow for the perspectives of female teachers, the spouses of teachers and those of different ethnicities. Responses were also sought to understand different perspectives on *bole* (competitive *yaqona* consumption) and '*grog abusers*', plus specific questions designed for a number of individuals that included, although were not limited to, the Minister of Education, Senior Education Officer's (SEO), key academic informants, a number of civil servants in defined roles and training and productivity officers. Research questions aimed at this latter group (with the exception of the Minister of Education) have deliberately been excluded from Appendix (K) as they offer the potential to identify an informant.

Although semi-structured interview questions appear rigid on paper, they were used as more of a guide. Flexibility allowed some questions to be eliminated from an interview where applicable, or built upon where necessary. During interviews, deductive reasoning and the process of continuously asking for clarification with the use of 'why' aided in seeking out subconscious explanations. This proved valuable in foraging cultural concepts that locals actively engage as part of everyday indigenous life-ways without consciously reflecting on these. Johnson (2006), referring to the work of Bourdieu (1977:164-71), describes this concept as "doxa", or the taking "for granted and unquestionable in a given society" (Moore, 2009:334-6). Turner (1992:293), also drawing on Bourdieu's work, argues that *iTaukei* life-ways tend to be subconscious practical expressions resulting from repetitive cultural application; knowledge that is often difficult for them to explain and verbalise. The deductive approach utilised during the semi-structured interviews proved extremely valuable as part of identifying and clarifying reasoning behind cultural practices. Finally, to aid and ensure accuracy of interview response, almost all interviews were recorded on a digital

dictation device and transcribed on my return to New Zealand.

Following transcription, the semi-structured interview responses were analysed using “focused coding” (Emerson, Fretz & Shaw, 1995:157-162). This consists of identifying and coding themes from participant responses together with observations and field notes. Focused coding aids the researcher to “generate theory that grows out of, or is directly relevant to activities occurring in the setting under study” (*ibid*, 1995:167). This further assists in identifying themes that did not specifically or significantly add to the direction of the thesis. However the questions that generated these responses have been retained in the questionnaire as presented in the Appendix. Finally, emphasis has been placed on the use of interviewee quotes in writing up the findings. This has enabled the participants to more accurately voice their opinions, or where possible, has allowed one informant to represent several similar responses. Finally, as previously noted, quotes are basically presented as stated, therefore grammatical irregularities are intentional.

### **Participant-Observation versus Participating-Interpreter**

Bernard (2006:342-386), in a chapter on participant-observation within the fourth edition of his key anthropological text, questions the ethics of this method. He rightfully describes it as shallow and deceptive, based on the ‘dark art’ of “Gaining rapport (p.369)... getting close to people and making them feel comfortable so that you can observe and record information about their lives (p.342)”. He adds that participant-observation “involves immersing yourself in a culture... [and then] learning to remove yourself everyday from that immersion so you can intellectualize what you’ve seen and heard... and write about it convincingly” (p.344). Although observation comprised part of my overall methodology, I feel the term ‘participating-interpreter’ is a more accurate description.

As I have previously explained, my first priority when visiting locations in Fiji or the homes of *iTaukei* in New Zealand is to contribute as an honest, authentic member in the life of that community or home. This I term ‘participating’. Much of what

happens in these communities is extremely familiar to me and comprises a major aspect of my own life-ways. Therefore I would argue that my secondary role as researcher required me to interpret and record certain happenings as they related to my research theme. This included but was not limited to aspects such as *yaqona* consumption volumes and times, ethnic makeup of consumers, impressions of alertness and comprehension of teachers the morning following *yaqona* consumption, and school environmental factors. My role as a participating-interpreter positioned me as both an ‘insider’ and an ‘outsider’. Although ethnic links to a research site is often believed to be the precursor to ‘insider’ status (Narayan, 1993:677), it is ‘depth of membership’ that academics argue is the true component, one that enables meaningful participant-observation or participating-interpretation.

Arweck & Stringer (2002) argue that the ‘insider/outsider’ position is contrasted and defined by “membership”, with depth of membership reflecting accuracy of observation (p.2-3). Angrosino (2008:167) furthers this, stating that an ethnographers “membership” and identity within their community of study is critical to “observation-based social research” reliability. Finally, Williams (2010:107) asserts, “depth of membership” aids in the ability to understand and comprehend information that is “often encoded in culturally specific ways”; in other words, the greater the ‘depth of membership’, the greater the comprehension and understanding and therefore the higher the ‘insider’ value.

‘Depth of membership’ together with previous experiences in Fiji, which I will discuss in greater depth shortly, had four key advantages for me as a participating-interpreter. First, as discussed above, it granted me a great deal of freedom and choice regarding access to research venues including extremely high levels of trust and openness from participants. Second, relational connectedness and this trust and openness were critical to research accuracy, a theme acknowledged by Bourgois (1995:13) above. Third, ‘depth of membership’ greatly assisted in understanding expectations, cultural processes, body language and linguistic nuances. Finally, my return to remote environments, often with sparse conditions, enabled a simple

transition without having to initially interpret through a layer of culture-shock; uncomfortability frequently experienced by some urban teachers when first transferred to isolated rural areas. These advantages however were countered by several negative attributes, which I will discuss following explanation of my ‘insider/outsider depth of membership’ status as an academic investigator.

## ‘Insider/Outsider’ and “Depth of Membership”

Prior to discussing my ‘outsider’ role as a researcher, I will first explain how, from a genealogical perspective, I was both an ‘insider’ and an ‘outsider’ within the communities I investigated during the field research. My ‘outsider’ status derives from my birth place, New Zealand and not Fiji. My father is New Zealand *Pakeha* and I have lived most of my life in New Zealand. However, what simultaneously contributes in part to my ‘insider’ status is my mother’s father, who was Fijian-born. His great grandmother is ‘full-blooded’ *iTaukei*, granddaughter of *Tui Macuata*, one of the three high chiefs of Vanua Levu. With the aid of Gardère & Routledge (1991:38,41), I can trace my *iTaukei* ancestry back to the mid-1500s. Although my lineage to Fiji is ‘separated’ geographically by a generation (creating ‘outsider’ dynamics), it is my ‘membership’ to this community that contributes to my *real* ‘insider’ status.

I ‘identify’ as *iTaukei*, speak basic *vosa vakabau* and the majority of my socialising and support systems comprise *kai Viti* (people of Fiji). Potentially, my mobile phone contact list puts my relational/social connectedness into perspective. This contains 378 contacts: 36 are businesses, 44 are New Zealand *Pakeha*, 43 are Tongan, Sāmoan, Rarotongan or Māori, and the remaining 255 are *kai Viti*. I am a member of the Hamilton (NZ) Fijian Community and an advisor to and member of the Hamilton Fijian Methodist Church. I meet or socialise at least three times per week with my *iTaukei* and *Pasifika* friends and relatives, where most often *yaqona* and its related culture, together with *vosa vakabau* and *itovo vakaViti* (‘the Fijian Way’), are the centerpieces. Over the past 12 years I have travelled 27 times to Fiji having lived and worked there in excess of 600 days. Much of this time was spent in rural Kadavu, where I both taught and assisted in development projects in and around Richmond

Methodist High School. When in Fiji I stay with friends or family members in their homes, living as a member of the community and taking on the responsibilities and roles required of a male *iTaukei* of my age. I also have two *yaca* (name-sake children) in Fiji. As Sahlins (1962:183) and Becker (1995:176) explain, *yaca* relational unions are not undertaken lightly, with parents seeking to name their children after others they perceive as having cultural standing and understanding – appropriate role models who then become family members if not already related. One is Aporosa *lailai* ('small Aporosa'), my *yaca* from Natokalu Village, Kadavu, nephew of *Tui Rauni (na i Turaga ni Yasana* – the sub-district chief). This relationship accorded me land and farming rights, which enabled me to cultivate and harvest *yaqona* over a four-year period and which greatly aided praxis in terms of this research theme.

In summary, when applied to my situation, the literature and discussion so far argues that although genealogic connection to Fiji has some influence, it is my 'membership' within the communities I have lived in and associated with that determine 'insider' status levels. This concomitantly shapes acceptance, trust levels, honesty and research accuracy. It does not however make a researcher immune to 'outsider' impressions by those in the community being investigated.

### **Power Relationships**

The 'outsider/researcher' juxtaposition has been widely discussed, especially in terms of power relationships. Henn, Weinstein & Foard (2006:98), drawing on other academic sources, acknowledged that while it may be the full intention of a researcher to be in relationships of equity, research is infused with power, especially in societies and communities lacking research experience. Momsen (2006:45) adds to this debate by first citing post-development literature and its critical stance regarding the legitimisation of Western development discourse and the marginalisation of the local voice. She then asserts that even when there is 'insider' and gender compatibility between local and researcher, "educational differences... can create barriers" (p.49). In Fiji, University graduates are often esteemed and accorded higher levels of status similar to that of village elders. This contributes to power relationships in which

research participants can feel obliged to meet researcher requests and answer questions.

I discussed the theme of research obligation with some of my family members at a *yaqona* session during my Master's field research. They explained that for *iTaukei*, *vakaturaga* was the key cultural driver behind feelings of obligation. When this is combined with a request from a researcher who is deemed to have status as discussed above, unequal participant/researcher power relationships can develop. Although participants can feel obligated to meet such requests, this does not necessarily lead to information accuracy. My family went on to describe an experience they had with a Western-born academic who had stayed with them in the village for several days conducting research. While every effort had been made to accommodate this person, the visitor constantly appeared dissatisfied. This eventually caused a conflict of emotion in the hosts. On one hand they believed their visitor was *dokadoka* (had an arrogant condescending attitude), while on the other they felt *madua rarawa*, *vakamavoataka* (shame and hurt), believing they had failed to adequately care for their guest<sup>49</sup>. The family members added that although they wanted to say something to the visitor, *vakaturaga* prevented this, just as the ethos encouraged hosting standards through obligation. Instead, reaction to the researcher's behavior was demonstrated subtly. The villagers stated that although they appeared to willingly oblige with research requests, much of the information offered was either false or comprised veiled responses. This in turn compromised information accuracy. Such action demonstrates that research power relationships can, in some circumstances,

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<sup>49</sup> The day after I was told of this situation, I went to the village communal meeting area and presented a *matanigasau* (formal apology accompanied by *yaqona*). I explained that although I was family and also felt *madua kei na vakamavoataka*, on this occasion I was presenting the *matanigasau* from my 'outsider'/researcher position and apologised for the actions of a peer who represented me and fellow academics. I was surprised at the level of hurt that remained. One respondent reciprocated the *matanigasau* with an emotional and tearful acknowledgement stating that they felt they had not lived up to appropriate hosting standards. The cultural importance placed on the care of guests is a theme discussed by Thomas (1997:173-4), who argued that host responsibility together with the standard of that obligation is both a manifestation and reflection of *iTaukei* identity. Therefore an unhappy guest, no matter the reason, is deemed by the host to be simply an indication of the host's lack of attention, concern, resources and *vakaturaga* ideals. To my sadness I also heard a number of other negative reports about this same researcher's behaviour while travelling around Fiji. I had the opportunity to discuss this with this researcher, although this was denied and rationalised as a village shortcoming.

exist bi-directionally, a theme also discussed by Scheyvens & Leslie (2000:125-6).

Notwithstanding this situation, geographical ‘outsiders’ are still capable of becoming high-leveled ‘insider members’. American-born Australian National University lecturer Dr. Matt Tomlinson is an example of this. Tomlinson spent considerable time in the chiefly village of Tavuki on Kadavu Island as a researcher in the late 1990s and early 2000s. While visiting the village I frequently heard Tomlinson referred to as *na gone susugi mai Tavuki* (‘adopted son of Tavuki’), a title that demonstrates his ‘depth of membership’.

In my case, as a post-graduate researcher, my ‘outsider’ position was most noticeable when I first entered *yaqona* sessions. Frequently I was encouraged to ‘*dabe i cake*’ (sit ‘up’ at the chiefly position), a move I managed in most cases to argue my way out of. Unlike arguing in the traditional sense of staking a knowledgeable claim, this is more of a humble apologetic spar guided by the ethos of *vakaturaga* and common to *iTaukei* behavioral patterns. My ‘argument’ was framed to elevate the status of my host while simultaneously diminishing my own importance in order to bring about a mutual agreement that I did not warrant the position my host was attempting to elevate me to; this therefore prevented me from having to move up to the chiefly sitting position.

Sahlins (1962) discussed a similar situation while researching in Lau. He explains that although he made an effort to ‘be local’ he came to realised that it “was unrealistic to believe that any European can be fully ‘accepted’... [because] a European is [viewed as] some sort of power” (p.2). Sahlins adds though that he did manage to make some progress in diminishing this perceived power imbalance. “I even succeeded in lowering my rank, moving from first-served (hence highest) in kava drinking... to sixth or seventh after a few months” (p.3), although he admitted that as a European he was never “entirely trusted” (p.2). Unlike Sahlins, Tomlinson appears to have overcome acceptance issues, although time and exposure to *kaivalagi* (overseas visitors) could also be a factor here as Sahlins carried out his research some 40 years

prior to Tomlinson. In my case, refusing to *toso i cake* (move up) at *yaqona* sessions acted as a type of counter-balance, further reducing the ‘quantity’ of my ‘outsider’ status and ‘crediting’ my ‘insider’ position. I could be accused of playing ‘insider/outsider’ games here to advantage myself, but I would strongly refute this: my ‘usual’ sitting position at almost every *yaqona* session I attend is routinely *i ra* (down/below), behind the *matanitanoa* (the ‘front/face’ of the *tanoa*; see Footnote 56) – a position of servitude.

Regardless of my *yaqona* seating position, ‘depth of membership’ or ancestral connections, my academic researcher status nevertheless manifested an unintentional power imbalance that simultaneously made me an ‘outsider’. Meo-Sawabu (2010:1-2), an *iTaukei* who researched female health issues among her own relatives, stated that during her field research she constantly had to negotiate “a fine balance” between her ‘outsider’ research status and her culturally indigenous ‘insider’ position. This is something I also experienced, a tension that manifested as I attempted to live and be an ‘insider’ and community member while simultaneously knowing I was ‘different’ and an ‘outsider’ because of my research responsibilities. I have pondered this juxtaposition at length since completing my field research and believe that overall my ‘insider’ value far outweighed my ‘outsider’ position. However, this was not challenge free.

### **Challenges as an ‘Insider’**

The first challenge of an ‘insider’ is, according to several ‘outsiders’, a lack of objectivity. Bernard (2006:372-3) argues that for a researcher studying their own culture, objectivity is their “biggest test... [as] it’s harder to recognize cultural patterns that you live with every day and you’re likely to take a lot of things for granted that an outsider would pick up right away”. I acknowledge that I have a tendency to idealise aspects of the culture I identify with. Although I continually remind myself of this romanticised view, I nevertheless often do not question areas that others do, especially where I believe there is cultural reasoning for an action. This tends to be the case when it involves the ‘culture of *yaqona*’. Some argue that consumption practices

that comprise the ‘culture of *yaqona*’ are irresponsible and compromise productivity and/or socio-cultural responsibilities. As a teacher and worker in Fiji there were numerous occasions when I left my students unattended or my work situation out of feelings of obligation to be present at *isevusevu*.

There were also times when I consumed *yaqona* during free teaching periods or during breaks at work. Additionally, there have been occasions in New Zealand when I have had people call at my home, resulting in *yaqona* being mixed. I have subsequently attended my place of work or have stayed up until the early hours, even though I had employment responsibilities the following morning. I have been challenged regarding my actions on a couple of occasions and have also been accused of unprofessionalism while I feel I can justify my actions by pointing to culture, host responsibility and respect, I have been told this legitimisation lacks objectivism.

*Yaqona* consumption was an ever-present accompaniment and challenge during the field research. There were days when I attended *yaqona* sessions as early as 7am and many occasions when these and other sessions went into the early hours forced me to survive on only a few hours sleep per night. It could be argued that I could have simply refrained or departed early from these sessions, but this would have countered the ethos of *vakaturaga* and failed to respectfully acknowledge and reciprocate the hospitality I was shown. On one occasion I arrived at a research venue to find an elderly villager had died. What followed was a 40-hour sleepless marathon involving a large amount of physical activity interspersed with numerous formal presentations and vast quantities of *yaqona* without a recovery period, prior to moving on to my next research site. Thorough pre-field research preparation and the use of a dictaphone to record interview responses were invaluable during these times. Additionally, there were occasions when, due to such unexpected situations or acute *lomaloma ca*, I postponed or did not administer some of the research methods.

The challenge of *yaqona* consumption and *lomaloma ca* was not confined to the field research. In my case, *lomaloma ca* is experienced as a lethargic ‘haze’ (similar

to that encountered immediately upon waking in the night after deep sleep) that persists for many hours. This in turn promotes procrastination. *Lomaloma ca* also causes some memory disruption for me, small impairments such as difficulty in recalling the name of a friend I have known for years or failing to attend to a chore I had agreed to do, although with effort I can overcome this to some degree. Following several consecutive daily *yaqona* consumption sessions I often find it can take several more days before I feel I am ‘back to normal’ and able to mentally ‘wrestle’ with complicated concepts or produce a flow of written material I feel is of a reasonable standard. This suggests the impacts of *steady-state concentration* as described earlier (p.151-2).

Additionally, when writing this thesis following heavy *yaqona* consumption, I would frequently note grammatical irregularities after several days of abstinence, inconsistencies that had appeared correct over the previous days. To assess this, I had a clinical psychologist administer cognitive tests that make up the Wechsler Intelligence Scale (WAIS-III) to me the morning following a heavy night of *yaqona* consumption. This noted a ‘significant’ (‘significance’ and its value representation will be discussed later in the chapter) disruption in my mental sequencing, especially numerical arrangement. Although it is common for students to struggle with procrastination during assignment and thesis writing, in my case I believe this was exacerbated by *lomaloma ca*, which frequently challenged motivation, writing flow, grammar and sentence construction. A fellow student offered what they thought was a simple solution to these impacts on my writing: “Just stop drinking *kava* until you finish”. While this has merit, cultural factors concerning *yaqona* and the ethos of *vakaturaga* (as previously discussed) prevented such a simplistic approach. For me to abandon these cultural practices would amount to forsaking cultural obligation and therefore aspects of my personal identity.

Roberts (2001:9) argues that self-experimentation and the “*n*-of-one” (sample of one) has a valid place in research, supporting the idea that I could have used my own cognitive test results (as discussed above) to address this tension. This will not be

done – although I do not question the validity of Robert’s findings, I believe such an approach would fail to adequately represent local voice and would therefore compromise my *Vanua* Research influenced methodology. Instead, teachers working in the classroom in Fiji were cognitively tested to gather grassroots data. This will be discussed in the next section. At this stage, one further comment is necessary, and this concerns the approach I have adopted in writing up the remaining chapters. Although Roberts intimates that my own cognitive test results have standing, and I can support this with personal experiences as a result of having lived, farmed, taught and consumed *yaqona* in Fiji, I have chosen from this point on to refrain from offering personal opinions or imposing suggestions regarding *lomaloma ca* and impacts on quality education delivery. Instead this will come from local voice and experiences in the remaining chapters to answer the three research questions to comply with the *Vanua* Research methodological approach.

## Quantitative Measure - Cognitive Assessments

The key influence on my decision to utilise psychometric tests to measure post-*yaqona* consumption cognition came following the completion of my Master’s study when a small number of people, mainly in Fiji, staunchly denied that a causal relationship existed between *yaqona* consumption and a hangover effect. Although literature exists that examines *yaqona* use and cognition<sup>50</sup>, some of which was discussed in the previous chapter (p.148), this has limited applicability in clarifying this issue. Cairney *et al.* (2003a:389), for example argue that cognitive impacts resulting from both chronic and acute *yaqona* use were “unclear” and conflicting. In a recent review of 10 studies which LaPorte *et al.* (2011:102) selected from a possible group of 219, they concluded that *kava* has no significant impact on cognitive processing. At first glance LaPorte *et al.*’s comment would appear indisputable, however in actuality this adds very little to the focus of my investigation. This is because most of the studies reviewed were clinically based and used small doses of *kava* between 200mgs and 600mgs, which as I

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<sup>50</sup> In contrast to the absence of studies on *kava* and cognition applicable to productivity, a substantial amount of research is available on alcohol hangover and workplace achievement. Much of this utilises quantitative assessment tools such as the WAIS-III subtests (Kelly, Foltin, & Fischman, 1990:130) to measure impacts.

pointed out are minuscule amounts compared to the average ingestion quantities. LaPorte *et al.* (2011:110) to their credit acknowledge this, suggesting the need for “research... on how kava affects cognition in both acute and chronic usage... [at] larger recreation doses”. Only one study could be found that administered large doses of aqueous *yaqona* to Fijian participants prior to cognitive assessment, and that was by Waqainabete (2003). Unfortunately this study also has limited applicability in supporting my ethnographic findings as it did not assess participants at a time that replicated the commencement of work.

The limitations of these prompted me to undertake exploratory and experimental in-vivo research using two psychometric measures. These will be explained following justification of their use under the indigenous *Vanua* Research framework utilised in this study.

### **Justifying Cognitive Assessment use Within a *Vanua* Research Framework**

As discussed earlier, I suggest the *Vanua* Research framework aligns well with a post-development approach. For instance, Nabobo-Baba (2007) states the values of *Vanua* Research as locally informed and driven, and “counter hegemonic” (p.1). To date post-development researchers have not utilised Western science based approaches or quantitative measures that clearly originate ‘outside’ of the local context. In a similar manner to Curry (2003), McGregor (2007), Gibson-Graham (2005) and McKinnon (2008), this study ventures into new territory and utilises and adapts an ‘outside’ approach – namely cognitive tests – as part of its *Vanua* Research influenced methodology in order to contribute to overcoming “the lack of post-development alternatives” (McKinnon, 2008:281). Essentially the cognitive tests were utilised to bring clarity to post-*yaqona* consumption affect within Fiji, an issue of subjectivity as explained above, and one the MoE has sought further understanding on. Additionally, to counter hegemonic leanings, the tests were modified to allow greater cultural alignment by comparing participants with one another as opposed to standardized (external) norms. This will be expanded on shortly. Essentially this research, together with the use of specific methods to investigate a local complexity, is aimed at

supporting current cultural systems and processes informed by ‘insiders’ and not the subjugation of this through external systems of power or hegemonic influence. The use of psychometric assessment shows how quantitative measures can complement *Vanua* Research and the use of post-development theory.

### **WAIS-III Digit-Span and Digit Symbol-Coding Subtests**

Groth-Marnat (2003) suggests that to test concentration, short-term memory and attention aspects of cognitive function – which McGee & Fraser (2008) argue is necessary to the delivery of quality education (see p.120) – clinicians use “Processing Speed Index” tests, namely symbol search and coding assessment measures (p.150). Two psychometric assessment tools specifically developed for this purpose are the Digit-Span and Digit Symbol-Coding subtests. These comprise two of the 14 subtests that make up the WAIS-III test battery, a instrument used to measure a wide range of cognitive functioning ability (Kaufman & Lichtenberger, 1999:5), and recognised as the “most frequently used” and authoritative worldwide (Daniel, 1997:1038). The Digit Symbol-Coding subtest requires participants to match symbols and numbers within a 120-second time period (see Appendix L). This measures–

perceptual organization, convergent production and evaluation of symbolic stimuli, sequential processing, encoding information for further cognitive processing, facility with numbers, learning ability, reproduction of models, short-term memory (visual), visual sequencing [in order to access] processing speed, broad speediness, paper-and-pencil skill, visual-motor coordination, clerical speed and accuracy, psychomotor speed (Kaufman & Lichtenberger, 1999:100-1).

The Digit Symbol-Coding subtest “examinee score is determined by the number of symbols correctly drawn within the 120-second time limit” and takes into account errors in ascertaining the processing score value (Wechsler, 2007a:93). The aim and function of this test is critical to later findings.

The second measure, the Digit-Span subtest, requires participants to repeat a series of numbers in both forward and reverse order (see Appendix M). This measures–

working memory, short-term acquisition and retrieval, memory of symbolic stimuli, sequential processing, encoding information for further cognitive processing, faculty with numbers, short-term memory (auditory), immediate rote recall [in order to access] auditory perception and simple stimuli (Kaufman & Lichtenberger, 1999:91-2).

Although Kaufman & Lichtenberger are detailed in their description of the specific cognitive areas measured by the Digit-Span and Digit Symbol-Coding subtests, they can also be confusing, as there appears to be large areas of crossover. For instance, both subtests are said to measure “sequential processing, encoding information for further cognitive processing, [and] faculty with numbers”. This is because the brain does not work in isolation; rather it draws on numerous cognitive aspects in achieving a given function. Weiss, Saklofske, & Prifitera (2003) are helpful in further clarifying the specific focus of these psychometric tests. In a concisely presented table they explain that the Digit-Span subtest, which, while having crossover attributes, is primarily designed to assess the “Working Memory Index (WMI)” (p.152). Working memory is the cognitive function that gives “the ability to retain and associate information over brief time intervals” (Tesche & Karhu, 2000:919). Alternatively, the Digit Symbol-Coding subtest, which also has cognitive function crossover, specifically measures the “Processing Speed Index (PSI)” through accuracy of “visual scanning, clerical speed, and the ability to process information rapidly” (Weiss, Saklofske, & Prifitera, 2003:152). Processing speed, as a cognitive function, enables “an individual... [to] process simple or routine information without errors” (Zhu, Weiss, Prifitera, *et al.*, 2004:61).

All tests that comprise the WAIS-III have been standardised to a wide international demographic (Kaufman & Lichtenberger, 1999:10-11). Although the Fijian population was not included in that standardisation, Heaton, Taylor & Manly (2003:198-99) argue that these tests nevertheless have applicability to ethnic minorities. Groth-Marnat (2003:60) state that the WAIS-III scores are effected not so much by ethnicity, but by “socioeconomic status, intelligence, and education”. He added that cross-cultural disruption can be mitigated by a familiarity, on the part of the test administrator, “with the values and beliefs of the client’s culture..., [and the use of] language most familiar to the client” (Groth-Marnat, 2003:190-1). Additionally,

the WAIS-III subtests are strongly influenced by earlier versions of the WAIS together with similar psychometric measurement tools such as the *Stanford-Binet Tasks*, the *Army Performance Scale Examination* and the *Army Beta* which were developed “to assess immigrants [recruited to the US Army] who spoke little English” (Kaufman & Lichtenberger, 1999:2).

### **The Digit-Span and Digit Symbol-Coding Subtests and Ethnic Minorities**

Although ethnic minorities and those with limited English are a consideration in the design of the WAIS-III, and researchers such as Heaton, Taylor & Manly and Groth-Marnat argue that ethnicity does not impact test scores, Ogden (2001), in her paper on psychometric assessments among Māori and Pacific Islanders, takes an alternative view. She suggested that because test scoring is derived from norms and standardisation, these tests “tend to favour people from the culture of the test developers” (p.2). Ogden adds that such “culturally-biased tests... result in discrimination against, and oppression of, an indigenous people by their colonisers who form the white majority” (p.2) and do not allow for alternative cultural knowledge, “lower educational qualifications, poverty and institutional racism” (p.3). However, at the same time she admits that because culturally specific psychometric assessment tools do not currently exist, assessors must engage flexibility and processes compliant with the participants culture in order to mitigate imbalance (p.4-9). Ogden’s comments have great applicability to this research considering its *Vanua* Research approach that seeks to eliminate hegemony. This is a theme I will occasionally return to during upcoming explanations on the subtest field research administration processes.

### **Sample<sup>51</sup> Selection and Participant Demographics**

In late 2008 I met with a Massey University statistics advisor seeking guidance on a suggested sample size to aid psychometric test results accuracy. It was felt that

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<sup>51</sup> In their text entitled *Research for Development*, Laws, Harper & Marcus (2003:459) state, the term sample is “often used loosely to refer to respondents within a study, even if no formal process has occurred (i.e. people were self-selected).” Sample in this study complies with this definition.

although test standardisation comprised part of the WAIS-III, greater rigour would occur if the subtests were also administered to a ‘control’ group. This would allow for comparative data between the participants and have greater alignment with the *Vanua* Research methodology as it compared participants within the same environment as opposed to contrasting them with internationally situated ‘outsiders’. McCready (1996:102) suggests that in experimental projects that involve psychometric testing, literature containing a similar research focus should be used to guide sample sizes. Nine studies utilising the Digit Symbol-Coding and Digit Span subtests were consulted to determine appropriate participant numbers<sup>52</sup>. Heinze *et al.* (1994) was chosen as the primary influence from these studies. They had administered the Digit Symbol-Coding and Digit Span subtests to 12 participants following clinically controlled doses of *kava* extract (p.225)<sup>53</sup>. This study set the minimum participant number.

The 2004 *Fiji National Nutrition Survey* (FNNS) (Schultz, Vatucawaqa & Tuivaga, 2007:197), which discussed *yagona* consumption by ethnicity and gender, acted as the second influence. This report stated that slightly more *iTaukei* males consume *yagona* when compared with their *Fijian* counterparts. Because the percentage figures were quite close, it was decided that equal numbers of *iTaukei* and *Fijian* males would be selected for testing. Further, FNNS consumption by gender suggests that roughly two thirds of *yagona* drinkers are male and one third female. Of the female consumers though, the majority are *iTaukei*, as it is rare for female *Fijians* to imbibe (see p.232). It was therefore decided that one third of the participants would be female *iTaukei*. The three educational environments (rurally isolated, semi-urban, and urban), influenced final composition of the participants, establishing an environmental/gender/ethnic grouping of 18 ‘active’ and ‘control’ participants. This breakdown is presented in Table 6.3.

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<sup>52</sup> These nine studies were Mathews, Riley, Fejo, Munoz, Milns, Gardner, *et al.* (1988), Russell, Bakker & Singh (1987), Saletu, Grünberger, Linzmayer & Anderer (1989), Münte, Heinze, Matzke & Steitz, (1993), Prescott, Jamieson, Emdur & Duffield (1993), Heinze, Munthe, Steitz & Matzke (1994), Schelosky, Raffauf, Jendroska & Poewe (1995), Foo & Lemon (1997) and Spillane, Fisher & Currie (1997).

<sup>53</sup> The Heinze *et al.* (1994) study was included in the LePorte *et al.* (2011:104,107) systematic literature review as it was deemed to have authority and met 6 strict predefined criteria.

**Table 6.3:**

'Active' and 'control' cognitive test participants by school categorisation, ethnicity and gender.

School category	YAQONA CONSUMERS 'active'				NON-CONSUMERS 'control'			
	<i>iTaukei</i>		<i>Fijian</i>		<i>iTaukei</i>		<i>Fijian</i>	
	Male	Female	Male	Female	Male	Female	Male	Female
Rural/isolated	2	1	3	0	2	1	3	0
Semi urban	2	1	3	0	2	1	3	0
Urban	2	1	3	0	2	1	3	0
sub-totals ( <i>n</i> )	6	3	9	0	6	3	9	0
Totals ( <i>n</i> )	18				18			

Teacher participants between the ages of 25 and 29 years were targeted. This age group was chosen for two reasons. Firstly, it aligned with one of the 13 age scales within the WAIS-III allowing for ease of score calculation and interpretation (Wechsler, 1997b:7,9). Secondly, this age range increased the availability of 'active' participants for testing. Over the past 12 years while staying with teachers and visiting schools across Fiji, I have noticed that it is this age group who appear to be the most frequent attendees at *yagona* sessions. I would suggest this is because they include a large number of new teacher graduates and junior staff members who are often unmarried. Although married teachers frequent *yagona* sessions, single teachers tend to have increased social freedom as they are not restricted by spousal or parental responsibilities. Arno (1993:100) adds to this, mentioning that "*cauravou*, unmarried male[s]" tend to consume *yagona* more frequently.

My participant selection process, based on age, gender and ethnicity, complies with "probability sampling" in that "members of... [my] sample have known probabilities of membership" (McCready, 1996:103). 'Gold-standard' methodological procedures such as placebo-driven randomised testing were not considered, nor could they have been. To do this would have taken considerable time and comprised a complete study of its own, attributes far beyond the exploratory parameters intended to add to this wider investigation (see Limitation later in this chapter). I would nevertheless argue that my methodology has strength, especially when considered alongside the research of Wyatt (1996). As part of his investigation into work performance and industrial accidents in PNG, Wyatt administered the Digit-Span

subtest to “28 male operators of earth movers... after chewing *various* quantities of betelnut ” (p.451,454-5, italics added for emphasis). Participants were administered one or one-and-a-half betelnuts prior to testing (p.456). This demonstrates dose accuracy could not be guaranteed or standardized, a limitation that did not prevent the publication of this study in *Psychological Reports*, a journal considered to have authority within the psychology environment. Although testing procedures were followed as closely as possible, *iTaukei* and *Fijian* cultural practices together with their *yagona* consumption environments did influence a number of small changes to the standard process. These will now be discussed as part of the testing procedures.

### **Cognitive Test Procedures**

The two WAIS-III subtests were administered to the 36 teacher participants during the May and November 2009 field research periods. The teachers were selected from the survey form respondents. Prior to the administration of the subtests participants were shown the MoE research approval letter together with the Participant Information Sheet and Consent Form. Additionally, the purpose of the subtests was explained to them. The participant’s name, school, age and hours of drinking the previous night (if applicable) were recorded.

The hours participants had spent consuming *yagona* the previous night were averaged. This will aid discussion of the test results and findings in the following chapters. The important point here is that participants were not given accurately measured doses of *yagona* at defined times, nor was *yagona* mix strength standardised across test subjects, hours of sleep monitored or prescribed, or placebo administered, standard procedures in many clinical tests. Such constraints would have been impossible to regulate within the traditional consumption environment frequented by the teacher participants who mix their *yagona* to a desired strength based upon a visual measure and then set their own consumption pace. It was known though that alcohol use among the participants was extremely rare. From the perspective of *vakaturaga*, to prescribe a consumption strength and pace would have been culturally inappropriate. Instead, the participant’s *yagona* consumption

durations and quantities were averaged and calculated using the work of Duve & Prasad (1984) and Qereqeretabua (2006) as a guide (see previous chapter, p.148-9).

Participants were tested within a 30 minute period, either side of 8.30am, in order for the data to reflect the average time a teacher enters the classroom in the morning to begin teaching. Wechsler (1997b:28) stresses the importance of uniform procedures when using the WAIS-III to ensure test results can be interpreted accurately against score interpretation measures. Kaufman & Lichtenberger (1999:15) are a little more relaxed. They concur with Wechsler, but argue that small adjustments and flexibility must also be allowed for to ensure both administrator and participant comfort, which in turn increases test compliance and reliability. Ogden (2001:4-9) argues that flexibility with environmental factors, identity, support persons, cultural observances and local styles of vocabulary should be actively engaged to assist in eliminating imbalance. Therefore Ogden's suggestions, together with those of Kaufman & Lichtenberger, were taken into consideration and also aided my decision to make slight modifications to the subtests. Within the Digit Symbol-Coding subtest, two of the original test symbols were substituted for simple alternate characters found in *iTaukei* art, figures also familiar to the *Fijian* demographic. These two substituted symbols are marked with the designator  on the demonstration form in Appendix L. In the Digit-Span subtest (Appendix M), numbers were offered in both *vosa vakabau* and *Fiji Bāt* allowing participants a more friendly use medium.

To further aid test reliability, Wechsler (1997b:32) recommended specific instructions be followed. Participants were read these from a cue card prior to test commencement, although again, the wording was slightly modified from that used within the standard WAIS-III protocol allowing for a more friendly and relaxed approach (see Appendix N). All tests were conducted at a desk within a quiet classroom, staff office, or school library to ensure standardisation across test environments (Wechsler, 1997b:29). Additionally, the order in which tests were administered was strictly observed with the Digit Symbol-Coding test being completed first (Wechsler, 1997b:36-7). Further, a strict time observance of "exactly 120

seconds” was maintained during the administration of all Digit Symbol-Coding tests (Kaufman & Lichtenberger, 1999:31).

Wechsler (1997b:31-2) and Kaufman & Lichtenberger’s (1999:16-8) guidelines regarding the establishment and maintenance of rapport was noted. Again, slight alterations were made to allow for cultural and environmental factors to aid test administration. This included *vakaturaga* observances and the use of appropriate language and behaviours regarding *vanua* connections. *Vanua* connections, as discussed in the previous chapter (p.146), influence attitudes of respect or alternatively encourage good humoured banter. Understandings of this nature are vital – Ogden (2001:4) argues that a lack of familiarisation with the culture of the participant, together with cultural insensitivity, can create a “power imbalance [that] will impact on the client’s test performance or willingness to be open” with the administrator.

### **Cognitive Test Data Analysis**

To gain meaning from the cognitive test data, raw scores were first converted to scaled scores using the WAIS-III equivalents calculators (Wechsler, 1997b:184). The scaled scores were subsequently converted to WAIS-III national percentile rankings (Kaufman & Lichtenberger, 1999:145) which “show how well an individual has performed on... [a] test compared to others of the same age” (Loreman, Deppler, & Harvey, 2005:54-5). Finally, these were aligned with qualitative descriptors that range from “extremely low... [through to] very superior” and describe a participants performance (Wechsler, 1997b:25). As mentioned earlier, Ogden (2001:2) warns that psychometric tests developed by “the white majority... [can lead] to labels of intellectual inferiority” adding that flexibility within the bounds of the assessment process need’s to be engaged until culturally specific psychometric assessments are developed. In the case of this study, the participants’ raw scores, subsequently converted to scaled scores and then national percentile rankings, enable an initial point from which the remaining analysis could be conducted. More importantly, it allowed assessment to be carried out between the ‘active’ and ‘control’ participant groups instead of the standardised

norms. This inter-group comparison as opposed to a contrast with ‘outsiders’, I would argue, has a better fit with the *Vanua* Research methodology.

*The Statistical Package for the Social Sciences* version 17 (SPSS) was utilised to analyse and compare the inter-group comparative data using a simple box plot, a group statistics *t*-test analysis and an independent-samples *t*-test (2-tailed inter-group comparison). The box plot shows the spread of the individual scores (Griffith, 2007:184; Pallant, 2009:75-7) whereas the group statistics *t*-test measures how big the difference is between the means of two groups – in this case the *yaqona* consumers and the non-drinkers. The independent-samples inter-group comparison *t*-test provides the critical figure for the purposes of this study, that being the ‘*p*-value’, also known as ‘probability’ or ‘significance’. Coolican (1999:327) states, “we cannot simply say [a situation exists,] we need a significance test to demonstrate to the research world... the probability of our... [situation] occurring”. The ‘*p*-value’ provides this and demonstrates occurrence probability (Pallant, 2007:103,232).

Finally, two-tailed analysis was used over single-tailed. This was chosen because two-tailed analysis measures the statistical significance between variables. For instance, the difference between the cognitive test scores of the ‘active’ and ‘control’ participants. Alternatively, single-tailed analysis only measures changes in the actual statistical significance – whether there is any change in the amount of difference that is found when the test results of the participants are compared (Pillemer, 1991:13,16; Kremelberg, 2011:123). Output data accuracy for SPSS is 99%. The results of the psychometric tests are presented and discussed in Chapter 8.

Although this study was carefully planned and designed, several limitations must be considered. These will now be discussed.

## Limitations

First, my role as a *participating interpreter* potentially created a number of limitations. For instance, my presence at several research sites directly initiated *yaqona* drinking

sessions. This may have resulted in an increase of drinking duration and volume, or encouraged some who may not have intended imbibing on that occasion to do so. Therefore my presence may have produced inaccuracies in the consumption surveys which collated data regarding average ingestion frequency or the purpose of selecting participants for cognitive tests. Such factors are extremely difficult to mitigate due to the aspects of hosting and obligation within the cultural ethos of *vakaturaga*. However, they do contribute to research limitations. Additionally the cultural ethos of *vakaturaga* prevented any replication of consumption times, volumes, or *yaqona* mix strengths across naturalistic environments in order to bring about standardisation. Singh (2004:159) also recognised these issues associated with standardisation in naturalistic settings, but my research was unable to address this and as such the results of cognitive testing should be interpreted with these considerations. *Steady-state concentration* also added a complicated element to the findings. That is, consumption (or lack of) over the days proceeding testing could not be mitigated or factored. Again, this could not be moderated because of cultural constraints, therefore limiting the generalisability of these results.

As a *participating interpreter* I regularly consumed *yaqona* in similar volumes and timeframes as my participants. This suggests that I too experienced impairments in processing speed whilst administering the cognitive tests and conducting interviews. Although precautions were taken to mitigate any effects such as – administering a prepared survey, digitally recording interviews using a structured interview format, post-poning or cancelling interviews and/or psychometric tests when I felt my condition may have compromised administration standards, and analysing data once in the home environment – the potential for impacts to accuracy need to be acknowledged. Again, culture made it extremely difficult to surmount this issue as I could not decline or refuse *yaqona* consumption.

Consideration must also be given to the data obtained from the cognitive tests. Specifically, compliance with the *Vanua* Research framework necessitated some departure from standard administration procedures stipulated by the test creators.

This included minor changes to the psychometric measures and their delivery to increase cultural compatibility. Further, the data was compared between the control and active groups rather than the standardised norms. This has the potential to limit the generalisability of the final results to the normative data and greater veracity will not be possible until the tests that measure the “Processing Speed Index” have been normed to the Fijian population (Groth-Marnat, 2003:150).

A third limitation arises out of the presentation of the research data. All interview responses, survey answers and the cognitive test data required interpretation. This potentially led to biased representation. Each of the 63 teachers surveyed provided their understanding of *yagona* use in 15 schools. I added to this with personal observations relating to an additional three schools. Although the 18 schools visited were across a wide area of Fiji and were a mixture of urban, semi-urban and rural, collectively they may not be representative of all schools in Fiji and therefore the results are limited to these contexts and are not applicable to all schools in Fiji. In addition, the female participant numbers involved in the surveys and cognitive testing were vastly less than those of the males. The three females who participated in the cognitive tests were representative of those in the heavy *yagona* consumption category (Aporosa, 2008:75). This limits specific statements being made concerning female *yagona* consumption habits and also potentially skews the cognitive assessment results due to the heavy consumption habits of the female participants.

Finally, seasonality may have influenced *yagona* consumption volumes during one of the research and testing periods (p.215). This prevents any definitive statements regarding use amounts as seasonality is believed to have elevated the consumption volumes of two-thirds of my participants.

## Conclusion

This chapter has detailed the methods utilised to investigate the three research questions and the traditional/contemporary tension that has resulted from the use of *yagona* in the education environment. Although these methods are in common use

across a variety of research approaches, they were applied in a way which conforms with Nabobo-Baba's (2006) notion of a *Vanua* Research methodology, and McKinnon's (2008) "vision of a new kind of post development practice" (p.291).

The use of cognitive assessments as part of *Vanua* Research methodology and a post-development approach is believed to be a first. This embraces Gibson-Graham's (2005:6) challenge of "venturing into a creative field in which the possibilities of reconfiguration and experimentation are linked to... a [new] mode of thinking and practice that is generative [and] experimental".

A valuable aid to the methodology and research as a whole, I have argued, is my 'depth of membership' as a participating-interpreter. Being both an 'insider' and 'outsider' has offered a unique perspective; one of 'knowing' while being able to acquire distance to mitigate 'doxic' influence, another of cultural obligation and responsibilities, aspects that brought added challenge to the field-work and study write-up due to my own experiences of *lomaloma ca.* Although my struggles and realities offered the potential for self-experimentation and "*n-of-one*" research (Roberts, 2001:9), this will not be done. Instead, the study mostly utilises findings and the voices of those teachers and administrators at the coal-face of Fijian education to answer the three research questions and consider a way forward.

The following chapter is the first of the three results and discussion sections in which I investigate the first research question, 'What are the *yaqona* consumption habits of Fijian teachers, and what role does culture play in this?'

# Chapter 7

## Who is Drinking What, How Much, and Why?

### Introduction

The preceding chapter set out the methodological procedures used to gather the field research data. This included details on the research participants. This data will be used to aid the aim of this present chapter which is to answer the first research question: ‘What are the *yaqona* consumption habits of Fijian teachers, and what role does culture play in this?’ A detailed analysis of the drinking habits of the active (*yaqona*-consuming) participants will assist this. This examination reveals new data that both adds to and clarifies earlier research presented in my Master’s study, which was summarised in Chapter 5. Moreover, it uncovers several misconceptions on the part of *iTaukei* regarding how they perceive the consumption habits of their *Fijian* peers. This prompts discussion on the potential causes of these misconceptions together with the role that cultural expectations play in influencing such discourse. This is then followed by comment on an unexpected finding revealed within the data on female *yaqona* consumption. The chapter concludes by discussing mixed-ethnicity drinking and how the teaching profession, unlike the nation generally, tends to blur the lines of ethnic segregation when it comes to *yaqona* drinking.

This chapter commences by presenting a breakdown of the participants who aided the answering of the first research question.

### Who’s Drinking What and How Much?

A breakdown of all 145 research participants together with the 18 schools visited during the field research phases was presented in the previous chapter (see p.178-4). The *yaqona* consumption habits of a selected number of these participants was recorded and, where possible, observed. Most of these participants were also those who had met criteria for cognitive testing as discussed in the previous chapter (see p.200). The remaining 109 (or 75%) of participants contributed to the research by

supplying basic information (such as local demography, suggested informants, etc.), being observed, and/or specific data gathered through semi-structured interviews. The information gleaned from these 109 informants will be woven into upcoming discussions where appropriate.

Table 7.1 presents a breakdown of the 18 ‘active’ (*yaqona*-consuming) participants selected for cognitive assessment by gender, age, ethnicity and school environment (rural, semi-urban, urban). This information was obtained from the survey questionnaire. Two *iTaukei* males, plus one *iTaukei* female and three *Fijian* male test subjects, all aged between 25 and 29 years old, were chosen from each of the three different education environments (rural, semi-urban, urban). In Chapter 5 I discussed how it is extremely rare for *Fijian* females to consume *yaqona*, therefore they were not included in the participant group. Although Table 7.1 could be criticised for lacking a number of specific details regarding the participants, this is deliberate as part of maintaining anonymity.

**Table 7.1**

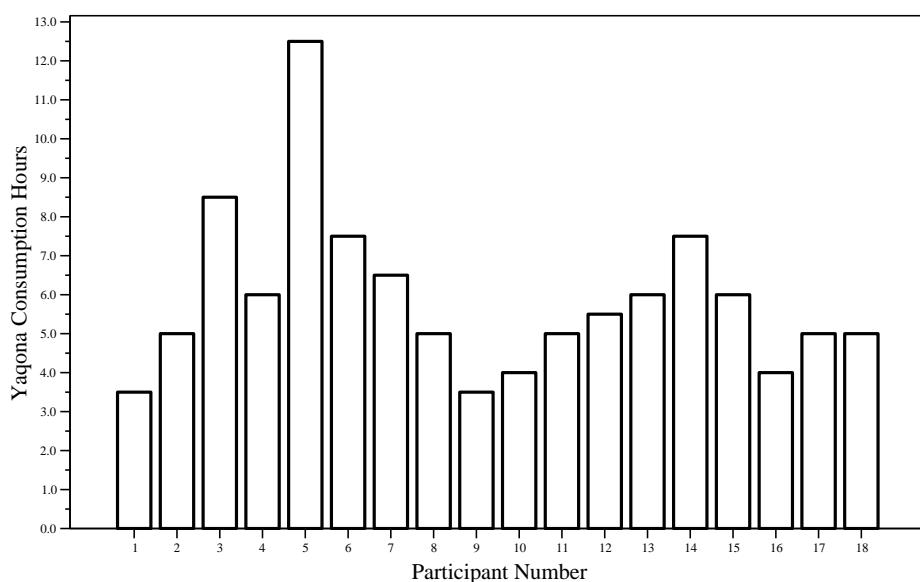
Breakdown of the *yaqona* consuming (‘active’) participants and their consumption habits on the night prior to cognitive testing.

Parti- cipant	Sex	Age	Ethnicity	School design- nation	<i>Yaqona</i> consumption previous night		
					Consumption hours	Estimated <i>bilo</i> 's consumed	Estimated kavalactone ingestion
1	M	29	<i>iTaukei</i>	Rural	3.5	21	5,586mgs
2	M	28	<i>iTaukei</i>	Rural	5	30	7,980mgs
3	F	28	<i>iTaukei</i>	Rural	8.5	51	13,566mgs
4	M	26	<i>Fijian</i>	Rural	6	36	1,596mgs
5	M	26	<i>Fijian</i>	Rural	12.5	75	19,950mgs
6	M	25	<i>Fijian</i>	Rural	7.5	45	11,970mgs
7	M	25	<i>iTaukei</i>	Semi-urban	6.5	39	10,374mgs
8	M	25	<i>iTaukei</i>	Semi-urban	5	30	7,980mgs
9	F	29	<i>iTaukei</i>	Semi-urban	3.5	21	5,586mgs
10	M	29	<i>Fijian</i>	Semi-urban	4	24	6,384mgs
11	M	25	<i>Fijian</i>	Semi-urban	5	30	7,980mgs
12	M	29	<i>Fijian</i>	Semi-urban	5.5	33	8,778mgs
13	M	25	<i>iTaukei</i>	Urban	6	36	15,96mgs
14	M	29	<i>iTaukei</i>	Urban	7.5	45	11,970mgs
15	F	27	<i>iTaukei</i>	Urban	6	36	1,596mgs
16	M	28	<i>Fijian</i>	Urban	4	24	6,384mgs
17	M	26	<i>Fijian</i>	Urban	5	30	7,980mgs
18	M	29	<i>Fijian</i>	Urban	5	30	7,980mgs

The average age of participants for the *iTaukei* teachers from the rural education environments was 28.3 years old, whereas the average *Fijian* was almost three years younger at 25.6. In the semi-urban teaching environment, the average *iTaukei* was aged 26.3 and the *Fijians* just over a year older at 27.6 years old. 27 years of age was the average for *iTaukei* in the urban areas and 27.5 the average for *Fijians*. When the overall average age for both ethnicities was calculated, these groups are almost identical with *iTaukei* averaging 27.2 years old and *Fijians* 27 years.

### **Yaqona Consumption and Kavalactone Levels**

Table 7.1 also details the *yqona* consumption hours for these participants, the estimated number of *bilos* they consumed, and the approximate milligrams (mgs) of kavalactones (the active ingredient within *yqona*) believed to have been ingested by each of the active participants on the night prior to cognitive testing. The estimates regarding *bilos* consumed, together with kavalactone levels in the body, was calculated using data presented in Chapter 5 (p.148-9). Figure 7.1 provides a graphed representation of the consumption hours for these informants.



**Figure 7.1**

*Yaqona* consumption hours for the active participants on the night prior to cognitive testing.

Two key findings stand out from Table 7.1 and Figure 7.1 and concern participants 1, 5 and 9. First, participants 1 and 9 (an *iTaukei* 29-year-old male

teaching at a rural school and an *iTaukei* female, also aged 29, teaching at a semi-urban school) both consumed *yagona* for the least numbers of hours (3.5) on the night prior to cognitive testing. This is estimated to be 21 *bilos*, equating to 5,586mgs of kavalactones. In contrast, participant 5 (a 26-year-old *Fijian* male teaching at a rural school) reportedly consumed for 12.5 hours on the night prior to cognitive testing<sup>54</sup>. Assuming the full 12.5 hours were spent drinking, his consumption level equated to approximately 75 *bilos* and over 19,950mgs of kavalactones. As discussed in Chapter 5, pharmacologists recommend a maximum daily intake of 200mgs of kavalactones (Mediherb, 2004b:2; Mills & Bone, 2005:484,488). Therefore these figures suggest that the lowest consumers had exceeded this recommendation by 5,386mgs whereas the heaviest drinker surpassed this by 19,750mgs. Although the kavalactone ingestion levels of even the smallest drinkers may seem excessive to the uninformed, this level of consumption is quite common (p.156).

For greater understanding of the collective consumption habits of the participants on the night prior to cognitive testing, Table 7.2 and Figure 7.2 group the raw data from Table 7.1 and presents the mean averages by ethnicity and school categorisation. The *Fijian* participants teaching in the urban areas were the smallest consumers, averaging 4.6 hours and equating to an estimated 28 *bilos* and 7,448mgs of kavalactones. In contrast, the *Fijian* participants teaching in the rural locations were the heaviest drinkers, averaging 8.6 hours, 52 *bilos* and 13,832mgs of kavalactones on nights prior to testing.

When the combined averages for both ethnicities within each of the teaching environments are considered, rural participants are the heaviest consumers at 7.1 hours, followed by the urban informants at 5.6 hours and then those in the semi-urban areas at 4.9 hours. When the total consumption hours for all consumers is calculated,

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<sup>54</sup> The consumption hours of participant 5 were discussed with a statistics consultant from Massey University in order to determine whether their inclusion in averaging would impact or skew the overall results. The advisor suggested the removal of this participant would have little impact on the overall results. He added that if "participant five was treated as an outlier this would only reduce the average consumption hours by .22, or approximately 10 minutes, reducing the average consumption hours to 5.6. [from 5.88]" (pers. comm. March 22, 2010).

this reveals that on average the participants surveyed in this research consumed *yaqona* for 5.889 hours (5 hours, 53 minutes and 30 seconds) on the night prior to cognitive testing, a figure that will be rounded to six hours. This equates to an estimated 36 bilos and 9,576mgs of kavalactones, 9,376mgs or almost 32 times more than the pharmacologically recommended daily dose. In Chapter 5 (p.156) I explained that during my Masters research the average consumption duration per drinking session was three hours. That field research was conducted in several phases in 2006. The consumption time period differences between 2006 and 2009 – the field research period for this current study – presents a number of interesting themes.

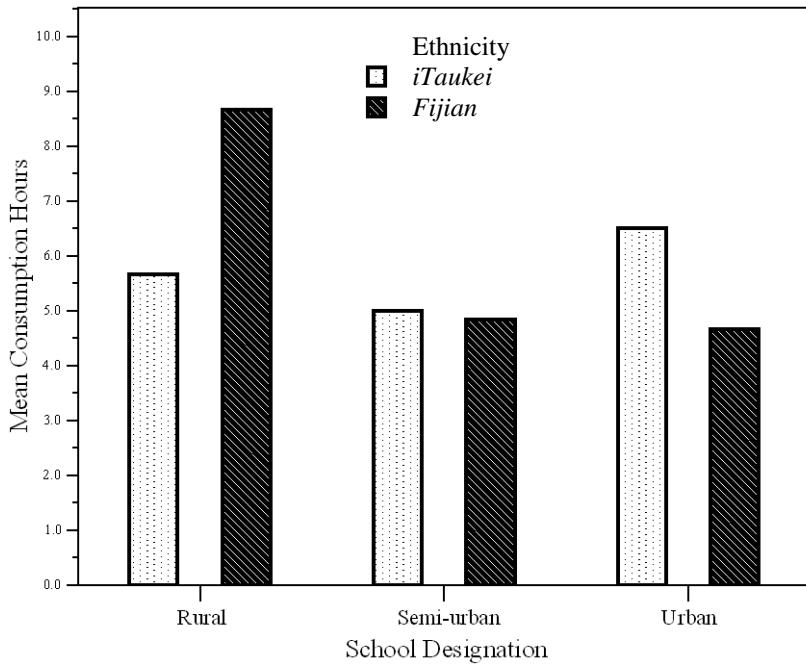
**Table 7.2**

Mean *yaqona* consumption of ‘active’ participants by ethnicity and school categorisation on the night prior to cognitive testing.

Ethnicity	School designation	<i>Yaqona</i> consumption previous night		
		Consumption hours	Estimated bilo's consumed	Estimated kavalactone ingestion
<i>iTaukei</i>	Rural	5.6	34	9,044mgs
<i>Fijian</i>	Rural	8.6	52	13,832mgs
Combined ethnicities	Rural	7.1	43	11,438mgs
<i>iTaukei</i>	Semi-urban	5	30	7,980mgs
<i>Fijian</i>	Semi-urban	4.8	29	7,714mgs
Combined ethnicities	Semi-urban	4.9	29.5	7,847mgs
<i>iTaukei</i>	Urban	6.6	39	10,374mgs
<i>Fijian</i>	Urban	4.6	28	7,448mgs
Combined ethnicities	Urban	5.6	33.6	8,911mgs

### ***Yaqona* Consumption Inconsistencies Between 2006 and 2009**

The first point of interest is the average consumption hours for all participants – six hours. Two possible reasons exist for the differential between the 2006 and 2009 research findings. First, the present study targeted participants in the 25–29 age range, whereas the previous study calculated consumption hours for participants aged 20–55 years old. As discussed in the Methodology chapter, consumers in the 25–29 age group tended to account for the majority of attendees at the sessions I attended. A reason for their high representation is believed to be due to their *cauravou* (single/bachelor) status, a demographic who often have a greater level of social freedom due to the absence of spousal and/or parental responsibilities.



**Figure 7.2**

Mean *yagona* consumption hours by ethnicity and school categorisation of participant teachers on the night prior to cognitive testing.

The second potential factor to explain this rise in consumption hours is seasonality. Approximately two-thirds of my participants were tested during November. This is a time when the school year winds down and most students sit exams. A number of teachers I spoke to felt this factor encouraged consumption, as teaching pressure had reduced considerably and allowed for more social time which included *yagona* consumption (IQ008-11). Additionally, at several schools I visited teachers consumed *yagona* while their pupils were sitting exams with the reason that this constituted an act of support (IQ012). Some of my participants had commenced consumption in the early afternoon and continued into the night. It also needs to be pointed out though that some of the Master's field data had been collected during the mid-year examination period. Therefore some similarity potentially exists concerning 2006 and 2009 seasonality. Regardless, these same teachers were still required to be at work at 8am the following morning, a time when they were responsible for preparing their remaining students for exams and/or attending to end of year duties such as book collection, report writing, departmental stocktaking, resource accounting and clean-up duties. Admittedly though, these duties did not require the same degree of alertness.

## Why are they drinking?

### The Myth of Higher *iTaukei Yaqona* Consumption

The second interesting theme to arise out of Table 7.2 and Figure 7.2 was *yqona* consumption habits by ethnicity. This highlighted two misconceptions, common to many of my research participants, that lead to anecdotal reports presented as fact and accepted as such. During hundreds of *yqona* sessions I attended in Fiji over a 12-year period, I was frequently told, 1). that rural *iTaukei* consume more *yqona* than urbanites of all ethnicities and 2). rural *iTaukei* teachers made similar assurances adding they also drank more than their rural *Fijian* counterparts. For example, a rurally situated male asserted, “We [*iTaukei*] drink more than Indians, all the time” (IQ013). Another stated, “see, *yqona* is our traditional drink, so us [*iTaukei*] will always go to it more than the Indian” (IQ014). When comparing rural and urban consumption, an urban *iTaukei* informant commented, “I was at [a rurally isolated school] for 12 years... we had *grog* every day. Not like the city teachers, they only drink little.” (IQ015). An American Peace Corp volunteer, teaching at a rurally isolated school for approximately 14 months at the time of interview, held similar impressions—

Us teachers drink every night here. But what else can we do, we can't go to the movies or have a few beers? There is no other option. I was at a school in Namosi [prior to coming here] and as soon as the bell rings [to indicate the end of the school day], the teachers are out of there, on the bus, going to do what they want. Urban teachers drink *grog*, but they have other options. So we drink more [in the rural areas], and what we drink here is [mixed] more potent than the city teachers. (IQ016)

In another example, an urban *iTaukei* female stated categorically, “*Grog* is part of our culture so we drink for fun, social and culture, but Indians [*Fijians*] only do it for leisure. We always drink more.” (IQ017) In the minds of my *iTaukei* participants, such reports and beliefs ‘proved’ they consumed more of the indigenous substances than their *Fijian* peers. The lack of research targeting teacher *yqona* consumption by ethnicity even led me to present these anecdotal reports as fact in my Master’s study (Aporosa, 2008:77,85,106-7). Those earlier research findings were bolstered by an additional belief. Participants stated that rural *iTaukei* teachers consumed more than their urban counterparts because they (the ruralites) lacked extra-curricular activities and the opportunities widely available in the urban areas. This is a theme I will return

to shortly. However, the fact that a lack of extra-curricular activities also had the potential to encourage heavy consumption among rural *Fijian* teachers was neither considered nor dismissed by *iTaukei* participants in that earlier study.

Table 7.2 and Figure 7.2 shed new light on these *iTaukei* beliefs and reveal the first of several misconceptions on the part of participants. In this latest study, the rural *Fijian* teacher participants were shown to consume just over a third more *yaqona* than their rural *iTaukei* peers. In the urban setting, *iTaukei* teachers may consume just over a quarter more than their urban *Fijian* counterparts, however they were shown to consume slightly more than their rural *iTaukei* peers. Finally, when the total consumption hours are calculated by ethnicity, this suggests that on average it is the *Fijian* teachers who consume more *yaqona* overall, approximately 30 minutes longer when compared with their *iTaukei* colleagues. These findings then call into question the beliefs of many *iTaukei* consumers, that they drink more *yaqona* than their *Fijian* counterparts.

Although the small number of participants in my study prohibits generalised statements regarding the consumption habits of *Fijian* and *iTaukei* teachers, these findings do reflect a national trend. The *Fiji National Nutrition Survey (FNNS)* (Schultz, Vatuwawaqa & Tuivaga, 2007:1,180) reported that in a sample of 7,372 participants from all vocations, more *Fijians* consume *yaqona* on a daily basis than *iTaukei* (also see p.142). What then is believed to influence this *iTaukei* misconception? Tomlinson's work assists as an introduction to this. In his theory of "perpetual lament", Tomlinson (2004; also see 2009:121-3) discusses how feelings of indigenous loss and disempowerment are perpetually lamented at *yaqona* sessions. He explains how *iTaukei* "lament" the 'old days', a time when the ancestors consumed less than we do today, whilst simultaneously engaging in vigorous *grog swiping* of the indigenous substance. This in turn perpetuates their lamentations, which are asserted as fact. A similarity also exists between "perpetual lament" and *iTaukei* belief that they consume more than *Fijians*. Borrowing from Tomlinson, I have termed the creation of these beliefs 'perpetual statements of inaccuracy'. Identity is believed to play a major part in

creating these perpetual statements of inaccuracy.

Drawing on *yaqona*'s importance to identity formation (as discussed in Chapter 5) and combining this with perpetual statements of inaccuracy, this demonstrates that many *iTaukei* like to be seen and like to be known as people who regularly consume *yaqona*, as this creates a palpable demonstration that they 'are' *iTaukei*. This is clearly illustrated in the comment where the informant stated, "Grog is part of our culture so we drink [more than other ethnicities]" (IQ017). This statement sends a clear message that the consumption of the traditional substance also sets *iTaukei* apart: Fijian counterparts may drink the beverage, however because they are not '*true*' *iTaukei*, they cannot possibly consume as much or as frequently as *we* do.

A second factor that encourages perpetual statements of inaccuracy is the practice of *bole* (*grog fighting*), an activity also linked to identity as discussed in Chapter 5 (p.146). This activity also has elements of masculinity woven into it. Becker (1995:50-1) discusses indigenous attitudes to physique, arguing that "Fijians [*iTaukei*] specifically associate ideal shape with physical characteristics suggesting strength or the ability to work hard, [which] necessitates eating large quantities of food". She then contrasted this with the female physique and role. In summary, Becker's discussion suggests a stereotype that 'men are supposed to be big, work hard, eat and drink a lot, and actively pursue manly activities' such as playing rugby, as opposed to engaging feminine activities like preparing meals. Additionally Tomlinson (2004:656) discusses how *iTaukei* pride is associated with human strength, especially the size, physique and strength of the indigenous ancestor warriors. By combining this ideology (*bole*, physique, physical strength, notions of masculinity and eating and drinking) with the discussion above that *Fijians* are not deemed to be '*iTaukei – true Fijians* capable of consuming as much or as frequently as *we* [aborigines] do', this further explains reasoning behind the perpetual statements of inaccuracy. Put simply, *iTaukei* imagine they are stronger and more masculine than *Fijians*. Because *yaqona* drinking has its competitive aspect (*bole*), *iTaukei* would expect to 'win' in any comparison with *Fijians* because they traditionally believe themselves to be bigger, stronger and more manly.

This leads to the second myth to arise out of the findings.

### **The Myth of Higher *iTaukei Yaqona* Consumption in Rural Areas**

As previously mentioned, Table 7.2 and Figure 7.2 revealed a second misconception. This derives from the notion that a lack of extra-curricula activities in rural areas is a cause of high *yqona* consumption. During my Master's research, rural participants frequently commented that limited options regarding after-hours recreation, in comparision to urban areas, was a major contributor to high consumption among teachers (Aporosa, 2008:106-7). Limitations were cited as isolation, no roads, a lack of television reception and/or power, with the exception of a few hours per night in most areas. This issue was again stated as fact during the recent field research when an informant stated, "city teachers, they only drink little [compared with rural teachers] coz they can go to town, watch movies [etc.]" (IQ018). However, contrary to this and my earlier Master's report, these latest findings (Table 7.2 and Figure 7.2) reveal that urban *iTaukei* are spending more time consuming *yqona* by approximately one hour per night when compared with their rural *iTaukei* counterparts.

This disparity between the earlier research and present study again raises the question of why misconceptions concerning *yqona* consumption are perpetuated by *iTaukei* teachers. I would suggest that in a similar manner to the discussion earlier, in which I linked such imaginings to invented traditions and the reinforcement of identity through perpetual statements of inaccuracy, a similarity also exists regarding this present theme. Brison (2007) aids this assertion when she contrasts Fiji's perceived idyllic traditional/rural setting with that of the urban environment with its Westernisation, individualism and materialism. She states, "the ways Pacific people imagine 'modernity' is just as critical as the ways they invent tradition [and] sense of self" (p.95). By imagining urban Fiji as modern and developed, with roads, public transport, bars, restaurants and power at the flick of a switch, ruralites reinforce "romantic, 'antimodern' imaginings of tradition" within their rural environment which in turn "bolster[s] local pride and power" (Brison, 2007:xii). Further, Becker (1995) comments that perceived threats from Westernisation and the *Fijian* community has

prompted “a popular movement, supported by the chiefly leaders, [encouraging a] return to indigenous custom” (p.15). She added that “in some ways, the mobilization of ethnic Fijian identity is a post-traditional movement that has emerged from the reflective awareness of the threatened integrity of Fijian [*iTaukei*] lifeways” (p.16). I will return again shortly to Brison and the theme of post-traditionalism, however given *yaqona*’s intrinsic link with tradition and indigenous practice, it stands to reason that *iTaukei* perceive and expect that they would have increased consumption levels within their traditional rural environment when compared with urbanites as this helps to reinforce notions of tradition and “sense of self” – in other words, identity.

I discussed this misconception of elevated rural consumption due to limited extra-curricular activity together with the link I had made to Brison’s work with academic, friend and fellow *yaqona* drinker Matt Tomlinson (2008), who reviewed Brison’s book. He suggested that part of her argument included the idea that *iTaukei* draw on selected themes and notions associated with ‘tradition’ and ‘modernity’ to suit personal biases and needs–

I would say the same happens with *yaqona*-drinking. Those who want to emphasize their reverence for tradition might emphasize their commitment to being at *grog* sessions; those who want to emphasize their appreciation of modernity might criticize everyone else for drinking and not getting work done. But what happens, practically, is that the two strands of discourse get mixed together, and people – the same people – will say *both* that *kava* drinking is a crucial traditional custom that must be valued and maintained and also that too many people drink too much. (email, 2010, April 16)

Again, Tomlinson highlights ideologies of “perpetual lament” and substantiates my argument that indigenous misconceptions are constructed to reinforce notions of tradition and identity.

Brison (2007) makes an interesting comment in the closing section of her introductory chapter that reinforces this current debate on misconceptions by *iTaukei* teachers. She suggests that as *iTaukei* attempt to maneuver an often confusing and contradictory path between traditional and modern systems they “author novel solutions that blur the distinctions between modernity and tradition... [and] in the process they make space for a variety of ways of being truly Fijian [*iTaukei*]” (p.14).

This ‘making space’ then includes ‘authoring’ misconceptions that overinflate ideas regarding the consumption of their “cultural keystone species” in order to reinforce and solidify identity. Informant statements such as “grog is part of *our* culture... [therefore] we drink more” (IQ019) clearly illustrate this.

Admittedly this finding – that *iTaukei* in rural areas do not consume more than urbanites – is based on a small sample of 18 participants. However, it is not really surprising. I have spent long periods in Fiji’s capital Suva and the smaller cities of Sigatoka, Nadi, Lautoka and Labasa. At any time during the working day I would be able to find a *yaqona* session to join without difficulty, and have had multiple choices on venues to attend on any given night. In hindsight I believe I had simply brought into the notion that people consumed more in the rural areas as that was where I worked and consumed *yaqona* nightly, simply blaming limited extra-curricula activity although I admit that if I had been in the urban area I would usually have consumed the indigenous substance in a similar manner. A final point is worth considering on this theme. Metropolitan areas in New Zealand offer vastly more after-hours opportunities when compared with the Fijian cities. However I can attest that long, vigorous *iTaukei* consumption sessions can be found in both Auckland and Hamilton on any night of the week. Reflecting on Becker’s comments above, this would suggest that such hearty New Zealand based *yaqona* consumption is in part a post-traditional reaction motivated by “reflective awareness” – an attempt to retain and maintain cultural identity in the face of change and environmental dislocation.

### **Cultural Influence and *Fijian Yaqona* Consumption**

I have discussed the distinct link between *iTaukei* culture and the consumption of their “keystone species”. How then is culture an influence in *Fijian* consumption? This question was put to a number of *Fijian* informants. All were unanimous that *yaqona* had no cultural significance to them as an ethnicity, although a number of practices that comprise *iTaukei* consumption have been adopted into *Fijian* drinking patterns (IQ020-23). A *Fijian* informant made a comment that encapsulated the beliefs of others. He stated–

Fijian [indicating *iTaukei*] grog drinking is about culture. But for us Indians, no, it's mainly about fun and relaxation. There is no culture in our drinking. Yes, some, like myself, will observe some Fijian [*Fijians*] culture, like I never tip grog out or drink by myself<sup>55</sup>, but most [*Fijians*] no, they don't care (IQ024).

Academic Brij Lal (2007) comments that although his ethnic peers consume “copious amounts” of *yaqona* (p.22; also see Lal, 2011:98), they equally lack cultural etiquette and respect for the cultural keystone species, a practice he argues contrasts with *iTaukei* consumption.

As was discussed in the *Methodology* chapter, *iTaukei* consumption styles and protocol are extremely familiar to me (p.189). In order to gain an understanding of *Fijian* practices, I attended a number of drinking sessions with both teachers and community members of that ethnicity where I discussed this issue. Table 7.3 presents general practice differences in consumption between the two ethnicities. This will aid and give understanding to comparative discussions. It must be stressed though that these are typical differences which I observed and/or were advised of by *Fijian* informants. For example, I list next to ‘mixing receptacle’ (5<sup>th</sup> item, Table 7.3) the use of the *tanoa* for *iTaukei* consumers and the plastic basin for *Fijians*. This is ‘typical’ practice, although I have frequently attended *iTaukei* consumption where a *tanoa* was unavailable and a *poi* (or *tanoa poi*)<sup>56</sup> was used, while on another occasion a plastic bucket was employed. However this tends to be the exception rather than the rule. On the other hand, I have never attended an *iTaukei* *yaqona* session where basic elements of protocol such as ‘starting’ the consumption with the appropriate

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<sup>55</sup> For a further explanation on the reasons people do not drink by themselves or tip out *yaqona*, see Footnote 60.

<sup>56</sup> *Poi* (or *tanoa poi*) are plastic *tanoa* made from a fishing float (see Figure 7.4; Thomas, 1997:176,180). This practice reportedly started in Macuata, Vanua Levu, due to an abundance of floats which had washed ashore from offshore fishing boats. With the rise in cost of *tanoa* due to decreasing stocks of *vesi* (Fijian hardwood), *poi* are increasing in popularity. Some are beginning to appear with *magimagi* or *sau* (plaited coconut fibre rope) and *buli* (cowry shells) attached to the *matanitanoa* ('the face of the *tanoa*') – small triangular piece carved into the front of the *tanoa* giving the receptacle ‘direction’ to bring added cultural value to a contemporary representation of a traditional icon (see Figure 5.6). *Yaqona* mixing receptacles can be ranked under an importance hierarchy with *tanoa* clearly heading the classification closely followed by *dari* (*tanoa* made from *lapita* pottery), *poi* ranked third, a large plastic basin fourth, and a bucket in last position. It would be extremely rare for an *iTaukei* ceremony to use anything other than a *tanoa* and occasionally a *dari*.

declaration<sup>57</sup>, *cobo* (clapping as a mark of respect<sup>58</sup>) and serving order have been negated (Thomas, 1997:174-5; Aporosa, 2008:102). Additionally, at several Fijian schools elements of *iTaukei* practice were evident.

**Table 7.3**

Typical differences between *iTaukei* and Fijian *yaqona* consumption practice.

Practice/observance	<i>iTaukei</i>	Fijian
Imbuement	Sacred, reciprocal, medicinal	Relaxation/commodity
Planting/cultivation	Spiritual aspect/commodity	Commodity
Harvesting	First plant harvested presented as <i>isevusevu</i> to village chief or land owner	Harvest
Preferred portion of plant for consumption	<i>Waka</i> (lateral roots)	<i>Lewena</i> (basal stump)
Mixing receptacle	<i>Tanoa</i>	Plastic basin
Consumption commencement declaration <sup>54</sup>	Yes	No
Consumption purpose	Acknowledge hierarchy, welcome visitors, seeking assistance, healing, life events (birth, birthdays, milestones, death), initiating and completing projects, conflict resolution, facilitating meetings, socialising	Socialising
Formality	Culturally influenced processes dependent upon reason/purpose of consumption/presentation	None
Serving receptacle	<i>Bilo</i>	<i>Piala/pyala</i> (small steel bowl)
Serving interval	Dictated by the <i>matanivanua</i> (herald/spokesperson for chief/senior person present)	At discretion of individual consumers

<sup>57</sup> Following the mixing of the *yaqona*, the session is typically ‘started’ with a semi-chanted declaration such as “*Darama Saka ni yaqona*”. This advises the *Saka* (‘Sir’/‘sir’) who, depending on the person making the proclamation could be either the *Vu* (or ancestral gods) or *Karisito* (the Christian God) or the senior person present, that the session is ‘officially’ started. Similarly, the session is usually concluded with a semi-chanted declaration such as “*maca Saka ni yaqona*”: “Sir, the *yaqona* is finished”.

<sup>58</sup> Arno (2005) wrote at length on *cobo* (pronounced ‘thombor’). He stated, “In Fijian society, *cobo*, a stylized form of clapping performed with cupped hands held crosswise to one another, is a pervasive element of public ritual performances, and it also takes place frequently in everyday private interaction... It has generally... an expression of respect in ordinary social contexts, and it can be looked at as part of the etiquette of polite interaction” (p.48) also used as an expression of apology (p.49). Arno suggested *cobo* is in essence “cultural currency... vital to the social construction of identity” (p.47).

Serving rate	Dictated by the <i>matanivanua</i>	At discretion of individual consumers
Serving quantity	Dictated by server	At discretion of individual consumers
Seating	On <i>ibe</i> on floor (woven mat made of <i>voivoi</i> leaves), hierarchical seating arrangement, cross-legged on floor.	On plastic mat on floor or chair, no designated seating arrangement, not specified sitting position
Serving concomitants	<i>Cobo</i> <sup>55</sup> (clapping on receipt of <i>bilo</i> and finish of each <i>bilo</i> ), <i>bole</i> (competitive consumption)	Occasional competitive consumption associated with masculinity, drinking with right hand only
Behaviour during consumption	<i>Vakaturaga</i>	Influenced by host
Consumption completion declaration <sup>54</sup>	Yes	No
<i>Yaqona</i> custodianship	Must not be left unattended <sup>59</sup>	Can be left unattended
Pour out unwanted <i>yaqona</i>	No, all must be consumed <sup>60</sup>	Yes
Consumption by gender	Men and women	Men only

(Source: Author).

<sup>59</sup> *Yaqona* in its mixed aqueous state is deemed to be a living entity (Turner, 1986:209; Tomlinson, 2004:669) and an ingestible manifestation of the *vanua*; a drinkable representation of the people, the land, culture and cultural practice (Tomlinson, 2009:11,112). For *iTaukei* to abandon their *vanua* is equivalent to deserting their identity. A similar distinction is made between the need to ‘accompany’ rather than ‘abandon’ or leave mixed *yaqona* unattended. Additionally, some assert that unaccompanied or ‘unguarded’ *yaqona* can be adulterated by malevolent spirits.

<sup>60</sup> Turner (1986:209) reasons why pouring out *yaqona* is considered inappropriate for *iTaukei*. “In Fiji, the *mana* of kava can be used to contact the spirit world for evil and good. Another term for sorcery (*drau ni kau*) is *sova yaqona*; that is, ‘to pour *yaqona*’... one prepares the beverage and the other utters the curse while pouring [it] out”. The ‘pouring’ is a libation to give efficacy to the malevolent spirit/s. *iTaukei* believe these spirits are incapable of mixing their own *yaqona* however they require the indigenous substance for efficacy. Therefore, whether *yaqona* is poured for malicious intent or simply because excess has been mixed, *iTaukei* believe malevolent spirit/s are continually waiting for the pouring of the substance. Conversely Nabobo-Baba, *et al.* (2012:27) comment that “Our healthy communion with the spirit of the universe has been misinterpreted by outsiders for too long as worshiping the devil or *vakatevoro* (lit: worshipping the devil) or sorcery... [through] ceremonies like the *kava/yaqona*, *tabua* (whalestooth), and other items related to such rituals.” This “fear” they continue, has led to the dismissal of indigenous knowledge, a theme I discussed in Chapter 2 (p.42).

Overall, most *Fijian* school principals stated that *yaqona* and the presentation of *isevusevu* did not have a role in the official ‘culture’ of their schools. However, I did observe glimpses of this. For instance, I visited a semi-urban *Fijian* school at 7.45am in order to interview the *Fijian* principal. Upon arrival he produced a plastic basin, mixed the indigenous substance and then to my surprise *isevusevu* (presented) to me in *vosa vakabau*<sup>61</sup>. It was clear from the presentation and language style, his observance of indigenous protocol and the time of the day that this was important to him. He stated that *isevusevu* were always presented to visitors, preceded official functions and board and parent/teacher meetings held at the school (IQ025). The principal asserted that *isevusevu* comprised part of school protocol. This cultural form of presentation and reciprocation was also described as important to two other *Fijian* schools. A *Fijian* principal at one of these stated that this observance was “important to all Fijians” (IQ026)<sup>62</sup>. These examples, I suggest, hint at a link between *Fijian* identity and *yaqona* culture.

During a visit to a semi-urban school, I observed interior decorating which implies a union between *Fijian* identity and *yaqona*. On arrival at the school I accompanied the *iTaukei* principal to the student dining room which was being refurbished. On entering I was welcomed by a group of parents, mostly of *Fijian* ethnicity, sitting around a *tanoa* consuming *yaqona*. They were discussing their day’s work and the agenda for the following while watching a parent and several *Fijian* students paint large colorful traditional icons on the dining room walls. These images included *kiakavo* (traditional fighting clubs), coconut palms, native birds and a *tanoa*. The animated demeanour of the artists, which included continual stepping back to considering progress, gave the impression they were excited and involved in their

<sup>61</sup> Mugler (2004:243), in a footnote, states that “Although kava drinking among Indo-Fijians [indicating *Fijians*] is social and does not involve a formal ceremony... a sevusevu can of course be mentioned by Indo-Fijians in the context of a Fijian [*iTaukei*] ceremony, in which they can on occasion be participants. Indeed Indo-Fijians have been known to present a sevusevu in fluent Fijian [*vosa vakabau*]”.

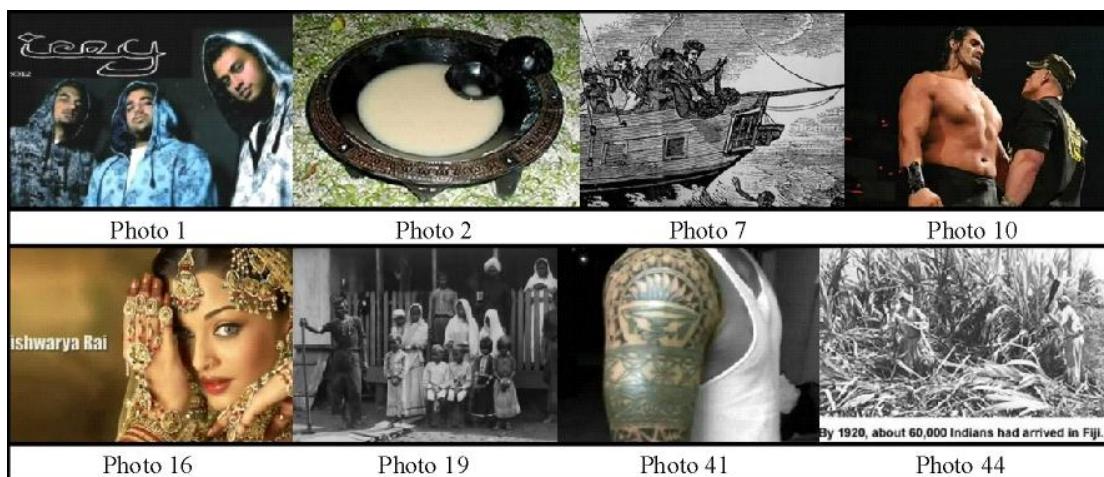
<sup>62</sup> Brison (2001:322) describes a similar incident during a *iTaukei* funeral in which a *Fijian* presented a *isevusevu* in *vosa vakabau*. An “audience for Fijian (*iTaukei*) assertions of identity are Indo-Fijians. Occasionally sevusevu are used to define indigenous Fijian identity vis-a-vis Indo-Fijians. At a Fijian (*iTaukei*) funeral, for example, an Indo-Fijian (*Fijian*) man presented *yaqona* to the community of the deceased, following Fijian practice”.

work. I questioned the principal about the use of such icons in the student dining room. "See, these are all important to our culture, they show we are Fijian" (IQ027). I added that most of the parents in attendance, together with the students I had observed, appeared to be of *Fijian* ethnicity and that there were no icons of the traditional *Fijian* form. "Yes," he responded, "99 percent of our students are Indian. See, they are still 'Fijian' and these [indicating the painted icons] are also part of their culture". The comments of this *iTaukei* principal further add to my argument that a link exists between *Fijian* identity and *yaqona*.

It has been discussed that most *Fijians* believe their *yaqona* consumption style lacked culture and was "mainly about fun and relaxation" (IQ024). This would suggest then that *yaqona* has established itself within *Fijian* socio-cultural systems. Rajendra Prasad (2004:210-1) and Mugler (2004) concur with this, with the latter reporting that "kava drinking... has been adopted enthusiastically by Indo-Fijians as a social custom, to the extent that 'grog' drinking has become a central part of Indo-Fijian culture" (p.243). Mohit Prasad (2009:171), in a discussion principally focused on the *Fijian* 'work ethic', adds to this. He describes the *Fijian* concept of *din maaro* (meaning relaxing with others or 'killing time'), socialisation which frequently includes the consumption of *yaqona*. Further, a large photograph that appeared in a 2008 edition of the Fiji Times added an interesting dimension to this theme (Ralogaivau, 2008:14). It shows a group of *Fijian* taxi drivers seated cross-legged on an *ibe* (woven mat) before a *tanoa*. While the article itself makes no mention of *yaqona*, describing a strike by cabbies frustrated over Land Transport Authority action, the photograph makes a statement of its own. Although some may suggest the use of *yaqona* is little more than *din maaro*, it depicts *Fijian* solidarity centered around an *iTaukei* symbol of power and unity. In other words, by embracing this 'borrowed symbol of identity' and outworking what Hall (1990:235) terms "diaspora identity", these *Fijians* are concurrently demonstrating *yaqona* as comprising an aspect of their own identity.

In October 2011 an insightful video was uploaded to YouTube. *Fiji Indian Punjabi Gujarati Muslim Hindu Kava Song* furthers this present discussion (Clique,

2011:n/a). The video comprises 50 still images such as the indenture period (Figure 7.3, photo 7,19,44), the British colonisation of India, Bollywood movie stars (photo 10,16), Indian sporting and political heros, both the flags of India and Fiji, the *Taj Mahal* immediately followed by an iconic colonial building in Suva, all overlaid with a hip-hop song. The lyrics are a mix of *Fiji Bāt* and English. What makes this notable is both the name of the video: the *Fiji Indian... kava song* and the inclusion of *yaqona* themes (photos 2 and 41).



**Figure 7.3**

Selection of photos from the *Fiji Indian Punjabi Gujarati Muslim Hindu Kava Song*  
**(Source:** Clique, 2011:YouTube video)

The clip begins with a conversation (in *Fiji Bāt*) between two *Fijians* overlaid with photos 1 and 2 (0 seconds – 20 seconds):

Fijian 1	<i>Kitna julum din yaar, eh shamal, baalu pe lay ke chataai bichaaye deo.</i>	What a beautiful day today, just get a mat [suggesting an <i>ibe</i> – woven mat used for <i>yaqona</i> drinking] and spread it on the beach.
Fijian 2	<i>Accha hum abhi jaata.</i>	Yes, am going.
Fijian 1	<i>Aree nagona ghoroo.</i>	Hey, mix the grog [ <i>yaqona</i> ] man!
Fijian 2	<i>Aree nagona ban gaye, hum challaye dei.</i>	It's already mixed, I'll <i>taki</i> [serve] it now.
Fijian 1	<i>Haa yaar.</i>	Ok.
Fijian 2	<i>Accha hum sabke thora chalaaye dei, kahenahi tum thora bataao, hum log ke ancestors ke uupar konchi beeta?</i>	Ya, I'll give everyone just a little [ <i>yaqona</i> ], so tell me what all happened to our ancestors in the olden days?
Fijian 1	<i>Ee baat hay...</i>	This is it...

The rap then commences and includes lyrics such as:

...picture this, a people been British'ed ripped,  
kicked out of India and shipped to Fiji,  
we be the hardest working refugees,  
where ever we go the economy goes... (2 min. 58sec. – 3 min.11sec).

Although other photos of *yaqona* are included together with references to the indigenous substance<sup>63</sup>, photo 41 is especially interesting as it depicts a *Fijian* with a *tanoa* tattooed on his shoulder surrounded by *Pasifika* patterns. It could be said that the video, lyrics and conversation appear incongruous with an image of India followed by seemingly unrelated pictures of Fiji. However, in totality these suggest a cry from a group of young *Fijians* for connectedness and identity. This is sought first through images of oppression, strength, beauty, pride and displacement followed by re-establishment symbolised with *yaqona* as a representation of their 'new' *vanua* – an icon and culture embraced to reflect aspects of their new cultural identity.

### Reflection

This section started with comment that *yaqona* had no cultural significance to the *Fijian* ethnicity. However, when the various themes that followed are considered together, this appears not to be entirely the case. *Fijian* consumption has essentially been incorporated into social processes, although traditional forms of presentation and appreciation, together with iconology, have also been adopted. Collectively, these elements have contributed to *Fijian* identity, although admittedly not to the depth and influence applicable to *iTaukei*. Prasad (2009) makes an interesting comment concerning *din maaro* that reinforces my argument here. He argued that this form of relaxation, which can include *yaqona* consumption, is in itself a form of identity founded within the "Oceanic or Pacific Island [notion of]... free-spirited individuality" (p.172). Although many of the *yaqona* socio-cultural and *din maaro* themes above apply more to adult males, the use of *isevusevu* and iconology in schools demonstrates the union between the "cultural keystone substance" and *Fijian* identity. When combined with the literature presented in Chapter 4 on the importance of cultural

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<sup>63</sup> Another reference to *yaqona* within the video was, "accha nagona, hum challaye [o grog, ya I'm doin it]... humlog ke baad Imran hay, to u know uu bhi maage pee ke aapan gatai thora bhijaaye le [after us, is Imran, so let him have some to wet his throat...]" (2 min. – 2 min. 15 sec.).

identity to academic achievement, this would suggest *yaqona* culture has a level of influence (albeit small) upon *Fijian* academic achievement.

### **What Drives *Fijian Yaqona* Consumption?**

Table 7.2 and Figure 7.2 shows that *Fijians* actively engage *yaqona* drinking for longer periods than their *iTaukei* counterparts. What then is believed to drive this consumption? As noted earlier, Prasad (2004:209-211), highly critical of *Fijian yaqona* use, discusses the consumption of the indigenous substance as a relatively new practice, comprising one of a number of major social and cultural changes that have enveloped his ethnicity starting in the 1970s. Voigt-Graf (2004:177) supports Prasad's argument. In personal communication (April 25, 2010) she advised that during her research, which considered historical factors as influences on contemporary *Fijian* cultural and religious practice, she did not find a single reference to *yaqona* use by *Fijians* during or for many years following the indenture period (1879-1920).

My own field interviews revealed very little to aid the answering of what has motivated, or is driving *Fijian yaqona* consumption outside of culture adaptation in the use of *isevusevu* within the school environment and as a mechanism of "relaxing, a way for us to get together" (IQ028). The literature also fails to provide a specific answer to this question, although Prasad's (2004) comment that *yaqona* is a relaxant that induces socialisation potentially offers insight to this theme. The 1970s, he added, was a time of "cultural meltdown" for *Fijians* (p.208). Changes to the roles of women, marriage and religion (which formally restrained the use of intoxicants), together with the influences of Westernisation and the media, and the focus on education and vocational achievement, all conspired to alter traditional forms of socialization (p.208-9). Further, Prasad suggested that this had a marked impact on collegial forms of discourse in which discussion no longer "nourished their minds nor enriched their souls" (p.208). Instead "gossip... and mundane matters [became the norm]. The fuel to drive these animated discussions came from *kava...* consumed in copious quantities" (p.210). Considering *yaqona*'s soothing anxiolytic properties, known to ease "emotional [and] psychological... impairment" (Prasad, 2004:98; also see p.79),

new challenges during the 1970s offer reasoning for the adoption of *yagona* use, an indigenous substance that offered both a soothing chemical aid (Beyer, 2007:4) and an environmental setting which helped *Fijians* relax and escape some of the upheavals of cultural disruption.

Challenges since this period have potentially continued to motivate the use of *yagona* and solidify its presence within *Fijian* social systems. Examples of these challenges include the uncertainties and anxiety that have resulted from living and farming on *iTaukei* land together with insecure and fluctuating leases arrangements (Voigt-Graf, 2004:180). Further, there was racial division propagated by the *iTaukei Movement* that motivated Rabuka's military coup of 1987 and led to a new 1990 Constitution which "instituted a system of apartheid which deliberately marginalised Indians" (Robertson & Sutherland, 2001:81; also see Ratuva, 2002:151-4; Prasad, 2004:208,212-14).

To give a little more traction to this theory, it is worth considering the potential use of *yagona* by other ethnicities as part of coping. I have occasionally heard *iTaukei*, who have recently shifted from rural isolation to urban areas within Fiji or emigrated to New Zealand, joke that *yagona* and familiar systems of socialisation have aided in their adjustment. That 'joking' is in reality a camouflage under-laid with seriousness. Additionally, I have *Pasifika* friends with stressors such as struggling business ventures, university or domestic pressures, and remittance expectations and obligation, who freely acknowledge that *yagona* comprises a key coping mechanism for them<sup>64</sup>. Therefore, this therapeutic social union as an aid to coping could explain one of several mechanisms that have influenced *Fijian* consumption. Further, *Fijian* use levels surpassing *iTaukei* could be explained as a combination of use as part of socio-cultural custom (Mugler, 2004:243) and other encouragers.

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<sup>64</sup> McNaughton (2008:19) discusses the use of anxiolytics and self-medication as part of stress coping within an edited text on "Anxiety... Substance Use... [and] Comorbidity". He argues that anxiety-inducing "life events can impact on the settings of biological systems... can alter, adversely... life events... creating extended feedback loops supporting substance ...use" as part of coping.

There are four additional factors believed to promote *Fijian yaqona* consumption. The first is the price of alcohol – a 40oz (1.2 litre) bottle of locally produced *Bounty Rum* costs the equivalent of a half week's wages, whereas *yaqona* is a fraction of this price. Therefore the substance is naturally more attractive as an aid to socialisation. Second, Prasad (2004:94,210) explains that traditionally *Fijian* socialisation has involved a great deal of discourse where people sat together with occasional singing and dancing for the entertainment of others. This is a social environment (inclusive of sitting, talking and discussing) that lends itself nicely to *yaqona* consumption, a system that mirrors aspects of *iTaukei* practice. Third, although the *Fijian yaqona* consumption rate, pace and quantity is often regulated by the individual (as opposed to a *matanivanua* in the *iTaukei* case, see Table 7.3), there are nevertheless occasions when competitive consumption is engaged. This however tends to be different to *bole*, the *iTaukei* competitive drinking highly influenced by cultural factors (see p.145-6): "We Indians have some small competitive drinking, but not like the Fijians [indicating *iTaukei*]", commented an informant (IQ029). Another elaborated on this stating–

If somebody tells a good story, and you really like the story, we say, 'okay, one big one [*bilo*] for him'. Like a reward. And if somebody comes late, we will say, 'one big one for him' because he was missing some time. But not like the Fijians [*iTaukei*] style, they try to kill each other (IQ030).

Such comment suggests a form of *bole* within this ethnicity, which then adds to *Fijian yaqona* consumption levels. The final driver promoting and encouraging *Fijian* drinking is their practice of consuming *yaqona* throughout the working day as opposed to defined settings. This was something I observed at a semi-urban school where *Fijian* labourers consumed the substance throughout their working day (see Figure 7.4). This is reportedly a common practice among sugar-cane cutters, who use the substance as a "refreshing drink" (IQ031). Informants also reported that it is relatively common for *Fijians* working in the agricultural and labouring sectors to consume throughout the day (IQ032-34). Another informant made a comment that explains this practice–

Indians do not drink like Fijian's [referring to *iTaukei*]. They start earlier, some start early in the day and drink all day when they at work, but they finished early, like 9 o'clock [pm]. We do not go late like the Fijians. Fijians usually drink in big amounts and usually only in the afternoons

and evenings. But us Indians, we usually drink more often, but in smaller amounts during the day (IQ035).



**Figure 7.4**

*Fijian* school labourers consuming *yagona* from a *poi* (see footnote 53 for more detail) and using *piala's* (steel *bilo*) while working.

(Source: Author)

These insights offer potential reasons for elevated *Fijian yaqona* consumption patterns when compared with their ethnic counterparts. Additionally, while these motivators cannot be attributed purely to traditional cultural expressions – with their use origins based upon thousands of years of indigenous practice – in the manner of *iTaukei*, they nevertheless equate to socio-cultural pronouncement. Additionally, this then creates a union between *yagona* and *Fijian* identity and therefore a link between *Fijian* academic achievement and the *yagona* culture. Admittedly though, this *yagona* socio-cultural identity argument loses some traction when adult *Fijian* women are factored.

### ***Yagona Consumption and Gender***

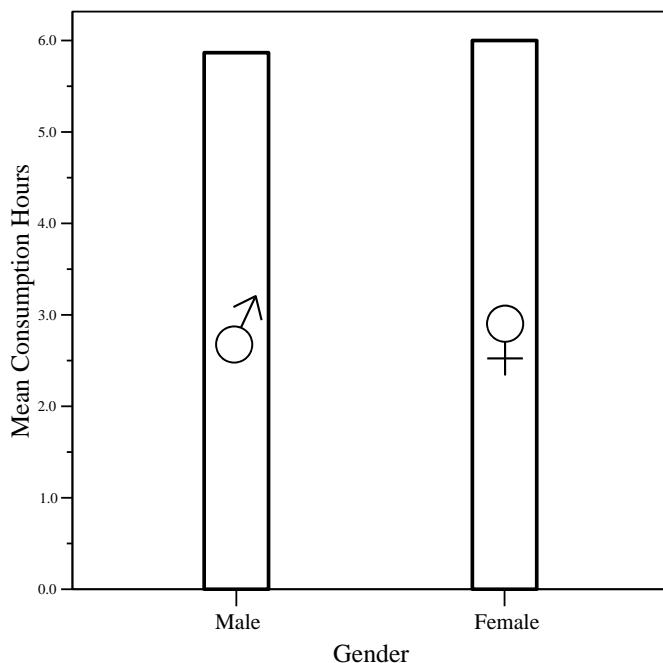
Most *Fijian* females, with the exception of a few of the elderly who use the substance for medicinal purposes (IQ036,037), rarely consume the indigenous substance. A teacher participant was questioned regarding this and stated, “our religion [Hindi] does not allow it”, although this same informant did say that it was common for younger *Fijian* women to consume alcohol (IQ038). Further, *Fijian* women do not sit

with men while they are consuming the substance, therefore divorcing themselves from *yaqona* socio-cultural practices. While it is not standard practice for *iTaukei* women to consume *yaqona* directly (as in sitting immediately) with male peers, it is also not uncommon. This type of mixed-gender consumption comprised approximately 10% of all sessions I have attended in school settings. Additionally, *iTaukei* females are also known to engage in women-only sessions although again, this is not standard practice. The field research did however highlight an unexpected finding regarding *iTaukei* female consumption, again in the form of a misconception. This resulted from analysis of consumption patterns by gender on the night prior to cognitive testing.

Figure 7.5 illustrates that the mean average consumption hours of all male participants on the night prior to testing was 5.8 hours whereas for the female participants it was 6. As a reminder, these females were all *iTaukei* due to the non-consumption of *yaqona* by *Fijian* women who were therefore excluded from the sample and cognitive testing (p.201). In Chapter 5 (see p.142) it was discussed that the consumption of *yaqona* is predominantly a male-orientated activity, although findings from the FNNS (Schultz, Vatucawaqa & Tuivaga, 2007:1,180) survey report an increase in *iTaukei* female consumption of 21.5% when compared with 1993 figures.

Due to the small numbers of females in my survey it is impossible to make any definitive statements regarding the disparity and slightly elevated consumption level when compared with the male consumers of both ethnicities. However, a possible explanation could be drawn from my Master's study. In this study the *yaqona* consumption habits of 21 participants – seven females and ten males – were recorded over a seven-day period. The results enabled these participants to be categorised as non, light and heavy drinkers (Aporosa, 2008:25,72-3). When these categorisations are compared with the female consumption hours in this present study, it would suggest that these latest female participants fall within the heavy consumption grouping. Therefore, it is possible that the female participants I chose as part of my latest group may simply be a reflection of the heavy female *yaqona* consuming demographic rather

than representative of female consumers nationally. Further, this may have skewed my results and given an incorrect impression that females generally are consuming more than males (see Limitations).



**Figure 7.5**  
Mean *yagona* consumption hours by gender of participant teachers on the night prior to cognitive testing.

In the final section on the *yagona* consumption habits of teachers and the role of culture, inter-ethnic drinking will be addressed.

### ***Yagona: Social Lubricant with Ethnic Boundaries***

It is rare for *iTaukei* and *Fijians* to actively pursue combined drinking sessions of a purely social nature. The long-standing tensions between the two ethnicities as discussed by academics (Robertson & Sutherland, 2001:78-81; Ratuva, 2002:151-4; Srebrnik, 2008:91), influence consumption segregation. This is not limited to the Fiji Islands context, but is also applicable to Hamilton, New Zealand. For a number of years attempts were made for both communities to combine in order to celebrate their annual Fiji Day, which marks independence from colonial rule. This almost materialised in 2009, although a last-minute disagreement over a minor incident caused separate events and some lingering frustrations as one of the parties was

forced to find a new venue at short notice. In October 2010 the two ethnicities did come together to celebrate the occasion, and although these groups shared the same venue and performance stage, in most cases (from my perspective), they did not share each other's inter-relational space<sup>65</sup>.

However, an exception to this can be found in the teaching arena. In the past 12 years I have noted a blurring of ethnic boundaries at *yaqona* sessions. This is especially the case when teachers of both ethnicities live together in school compounds (at boarding schools, for instance) or have limited socialisation opportunities with their own ethnicity due to factors such as rural isolation. In these cases, the minority ethnicity tends to adopt the consumption practices of the majority culture. In an illustration of this, a *Fijian* informant stated, "some of those Indians in the rural areas,... they live with the Fijians [indicating *iTaukei*]... so they follow the Fijian way" (IQ039). I was therefore quite surprised when returning to a school in Lautoka township one afternoon during my field research to see a *iTaukei* and a *Fijian* sitting together on the road-side in front of their sugarcane transport trucks consuming *yaqona* (see Figure 7.6). I approached them and sat and discussed their unusual allegiance. They acknowledged that this was uncommon, although justified it due to being "workmates" – a key ingredient that blurs the lines between rurally isolated *yaqona* consuming teachers as discussed above, and a theme I will return to in Chapter 9 (p.281-2).

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<sup>65</sup> Tavola (1991:52) explains that the racial tensions following the 1987 coup d'état saw incidences of *iTaukei* and *Fijian* teacher "using different staff rooms and in extreme cases of teachers of one race refusing to teach children of another race".



**Figure 7.6**

An *iTaukei* and *Fijian* consuming *yaqona* together at the end of the working day.  
**(Source:** Author).

## Conclusion

The aim of this chapter was to answer the first of the three research questions, ‘What are the *yaqona* consumption habits of Fijian teachers, and what role does culture play in this?’ In answering this, the field data yielded a number of unexpected results which in turn highlighted several misconceptions. Firstly, the participants were shown to drink on average for six hours on nights prior to teaching in the classroom the following morning. This is double the consumption time of the participants surveyed in my earlier Master’s study. A drinking period of six hours equates to an estimated 36 bilos and 9,576mgs of kavalactones, almost 32 times greater than the pharmacologically recommended daily dose. Additionally, while the rural *iTaukei* informants in the earlier study were adamant they consumed more of their “cultural keystone species” than both their rural *Fijian* counterparts and *iTaukei* urban dwellers, this does not appear to be the case. My most recent data suggests that rural *Fijian* teachers are drinking significantly more than *iTaukei* in all teaching environments, whereas it is the urban *iTaukei* who consume more than their rural peers of the same

ethnicity.

The question was asked why *iTaukei*, and especially those living in the rural area, emphatically believe they lead in *yagona* consumption. Essentially this is believed to be based within concepts of identity and what was termed perpetual statements of inaccuracy. By combining discussion in Chapter 5, which explained *yagona* as an ingestible manifestation and emblem of *iTaukei* identity together with Tomlinson's (2004:565,662-4; 2009:121-3) theory of "perpetual lament" (above), this suggested that although *iTaukei* may drink less than their *Fijian* peers, they nevertheless sincerely believe the opposite. This is because *yagona* is deemed to be *their* "cultural keystone species" and an element that demonstrates, reinforces and solidifies their indigeneity as the traditional inhabitants of the land. Additionally, physique, manliness and competitiveness are all aspects that inform *iTaukei* identity, therefore they presume unquestioningly that they would win, and expect to consume more of their indigenous substance, when compared with *Fijians*. Finally, for *iTaukei*, the rural area is considered traditional in contrast to the urban environment. Through post-traditional imaginings the rural environment has become both a physical and conscious escape for *iTaukei* from perceived threats of modernity and Westernisation. Rural *iTaukei* therefore imagine increased *yagona* consumption in the rural area when compared with the urban environment as this solidifies notions of traditionalism and adds to the "sense of self" and identity (p.219-20). These findings reinforce the discussion linking the "cultural keystone species" with *iTaukei* identity formation.

The *yagona*/identity union is not isolated to *iTaukei*. By drawing on literature and ethnographic comment, *yagona* appears to also comprise an aspect of *Fijian* identity, one that is both increasing and solidifying. Although clear differences are obvious between the consumption styles of both ethnicities (see Table 7.3), *yagona* nevertheless comprises both *Fijian* socio-culture and borrowed traditional expression as the indigenous substance is utilised in some *Fijian* schools as *isevusevu*.

An additional parallel was drawn between increased *Fijian* and *iTaukei* *yagona*

use due to perceived uncertainty. In the case of *Fijians*, cultural change and instability, contrasting political opinion with *iTaukei* and land loss, were cited as reasons for increased *yaqona* consumption. Similarities were evident among *iTaukei* who perceived modernity and increased *Fijian* power as threats to their life-ways and identity which in turn has led to greater levels of *yaqona* drinking. Although segregation and feelings of disempowerment were identified as increasing consumption levels for both ethnicities, *yaqona* was also seen as a uniting factor for these two groups within the teaching environment. Situations were cited in which *yaqona* broke down segregation, encouraging teachers to freely socialise and consume together, with the majority ethnicity influencing the cultural tone at consumption sessions.

A final unexpected outcome from the data was related to consumption volumes by gender. Female *iTaukei* were shown to ingest more on average than their male counterparts. Though the sample size was small (therefore preventing generalised statements), this does reflect findings within the *FNNS* which shows a rise in female *yaqona* consumption rates.

In summary, the findings presented in this chapter greatly aid in answering the first research question. First it was asked, what is the *yaqona* consumption habits of teachers in Fiji? *Fijian* teachers, especially those working in the rural area, are shown to consume significantly more than *iTaukei* in all teaching environments. Further, as discussed above, teachers of both ethnicities are believed to consume on average for six hours prior on nights before teaching. Second, the remaining portion of the research question asked, what role does culture play in this *yaqona* consumption? Culture undoubtedly plays a critical role for both ethnicities in promoting hours spent and volumes consumed at drinking sessions. Although identity expression and solidification was the primary factor in *iTaukei* use, aspects related to identity reformation through *yaqona* was also evident for *Fijians*. Finally, political uncertainty and disempowerment were argued to increase consumption volumes for both ethnicities.

The following chapter will investigate the second research question. This asks, 'Does *yaqona* impact teacher cognition, sickness and absenteeism and if so, what effect does this have on education delivery?'

## Chapter 8

# ***Yaqona, Cognition and Absenteeism***

### Introduction

The aim of this chapter is to answer the second research question which asks, 'Does *yaqona* impact teacher cognition, sickness and absenteeism and if so, what effect does this have on education delivery?' This is an important question in light of my Master's research, summarised in Chapter 5. It was explained that the teachers in that study reported consuming *yaqona* for an average of three hours on nights prior to teaching. This amounted to an estimated 18 *bilos* and 4,446mg of kavalactones, or 14 times the pharmacologically recommended daily dose. Further, many of these participants reported these volumes as causing *lomaloma ca*, or a *yaqona* hangover that disrupted their ability to teach the following morning, effects that could take up to two days to subside (p.155-7). Additionally, over the past 10 years anecdotal comment has frequently appeared in the Fijian media espousing concerns that post-*yaqona* effects are negatively impacting on productivity (p.153).

A recent comment in the *Fiji Times* not only illustrates this concern but for the first time recommended a consumption amount other than that prescribed by pharmacologists. Dr. Moese Salusalu, a public health lecturer from the *Fiji School of Medicine* – who at the time was speaking at a two-day healthcare workshop – stated that from personal "experience... more than five... 100 mililitre bowls, is too much for a day" (Panapasa, 2010a:2; also see 2010b:3). A number of *yaqona* consumers suggested to me that Salusalu's comment that five *bilos* was "too much" was ridiculous on the basis that this amount was minuscule. Similarly, denials concerning the possibility of *lomaloma ca* and negative effects from the use of the indigenous substance are commonplace. Such opposition can be staunch, voiced by *yaqona* consumers from all spheres of Fijian society, with comments such as "you feel fresh the next morning" being cliché (p.149). In the previous chapter, data collected from recent field research reported an increase in the average teacher *yaqona* consumption

from three hours to six hours on nights prior to teaching. This is believed to equate to approximately 36 *bilos* and 9,576mgs of kavalactones – almost 32 times the pharmacological recommendation and almost eight times greater than Salusalu's suggested daily intake volume.

Overall, these assertions and counterclaims have led to a great deal of subjectivity and commentary based on preference regarding acceptable consumption volumes and actual impacts on functionality post-*yaqona* drinking. In an attempt to further verify the ethnographic data, this chapter also presents the findings from cognitive tests administered to *yaqona* consuming and non-drinking teacher participants as they enter the classroom the morning. This is believed to be the first time this type of investigation has been undertaken on consumption levels at non-pharmacologically recommended doses. Previously post-development researchers have not used quantitative methods (p.209). As I have argued in Chapter 6, my utilisation of these psychometrics is culturally compliant and internally focused, while making a genuine contribution to post-development practice (p.197). The cognitive test findings will be combined with new ethnographic comment on the themes of *lolomloma ca*, absenteeism and presenteeism allowing both an updated understanding on the effects of post-*yaqona* consumption and adding to discussion on what effect this has on education delivery.

Before presenting the results of these tests, it is first necessary to briefly describe the two groups who made up the sample and participated in the cognitive assessments.

## Participant Data

As a reminder, a total of 18 schools were visited during the field research phases. 82 of the 145 research participants came from these schools. From this group, 36 were selected following an interview and questionnaire process and were split into two groups of 18, one comprising 'active' (*yaqona* consumers) and the second consisting of 'control' (non-*yaqona* drinking) participants. Table 7.1 presented a breakdown by

gender, ethnicity and school designation (rural, semi-urban, urban) of the 18 ‘active’ participants together with their consumption habits on the night prior to cognitive testing; Table 8.1 presents a breakdown of the ‘control’ participants, a group that mirrors the gender, ethnicity and school designation of their *yaqona* consuming peers.

**Table 8.1**  
Breakdown of the ‘control’ participants (non-*yaqona* consumers)

Participant	Sex	Age	Ethnicity	School designation
1	M	25	<i>iTaukei</i>	Rural
2	M	26	<i>iTaukei</i>	Rural
3	F	26	<i>iTaukei</i>	Rural
4	M	28	<i>Fijian</i>	Rural
5	M	27	<i>Fijian</i>	Rural
6	M	26	<i>Fijian</i>	Rural
7	M	29	<i>iTaukei</i>	Semi-urban
8	M	28	<i>iTaukei</i>	Semi-urban
9	F	29	<i>iTaukei</i>	Semi-urban
10	M	25	<i>Fijian</i>	Semi-urban
11	M	25	<i>Fijian</i>	Semi-urban
12	M	26	<i>Fijian</i>	Semi-urban
13	M	27	<i>iTaukei</i>	Urban
14	M	26	<i>iTaukei</i>	Urban
15	F	25	<i>iTaukei</i>	Urban
16	M	29	<i>Fijian</i>	Urban
17	M	29	<i>Fijian</i>	Urban
18	M	25	<i>Fijian</i>	Urban

The overall average age for both ethnicities within the ‘control’ group was calculated. The participants are almost identical with *iTaukei* averaging 26.7 years old and *Fijians* 26.6 years. When the average ages for all ‘control’ and ‘active’ participants are compared – 26.7 and 27.1 respectively – the ‘active’ participants are approximately six months older than their ‘control’ counterparts. This differential is negligible and will not impact the findings. Both the ‘control’ and ‘active’ participants were cognitively assessed just prior to entering the classroom in the morning to teach. The results will be discussed following a brief reminder of the make-up of the tests. This will aid in answering the first part of the second research question, does *yaqona* impact on teacher cognition?

## Cognitive Tests

In the *Methodology* chapter the mechanics of the psychometric assessments, the Digit-

Span and Digit Symbol-Coding subtests were explained together with the reasons for their choice. As a reminder, the Digit-Span subtest (Appendix M) measures working memory, specifically short-term information retention and association (Teschke & Karhu, 2000:919), whereas the Digit Symbol-Coding subtest (Appendix L) measures the processing speed of basic everyday information (Zhu, Weiss, Prifitera, *et al.*, 2004:61). Both subtests were administered to the participants at a time that reflected entering the classroom in the morning to begin teaching. The tests produced a raw score which was analysed using the WAIS-III equivalents calculator. This in turn provided a scaled score that was matched with a national percentile ranking and aligned with a qualitative description (see p.205). Appendix O and P provide a complete breakdown of the Digit-Span and Digit Symbol-Coding subtest results for each of the ‘control’ and ‘active’ participants respectively with the averages from those tables synthesised within Table 8.2 and 8.3.

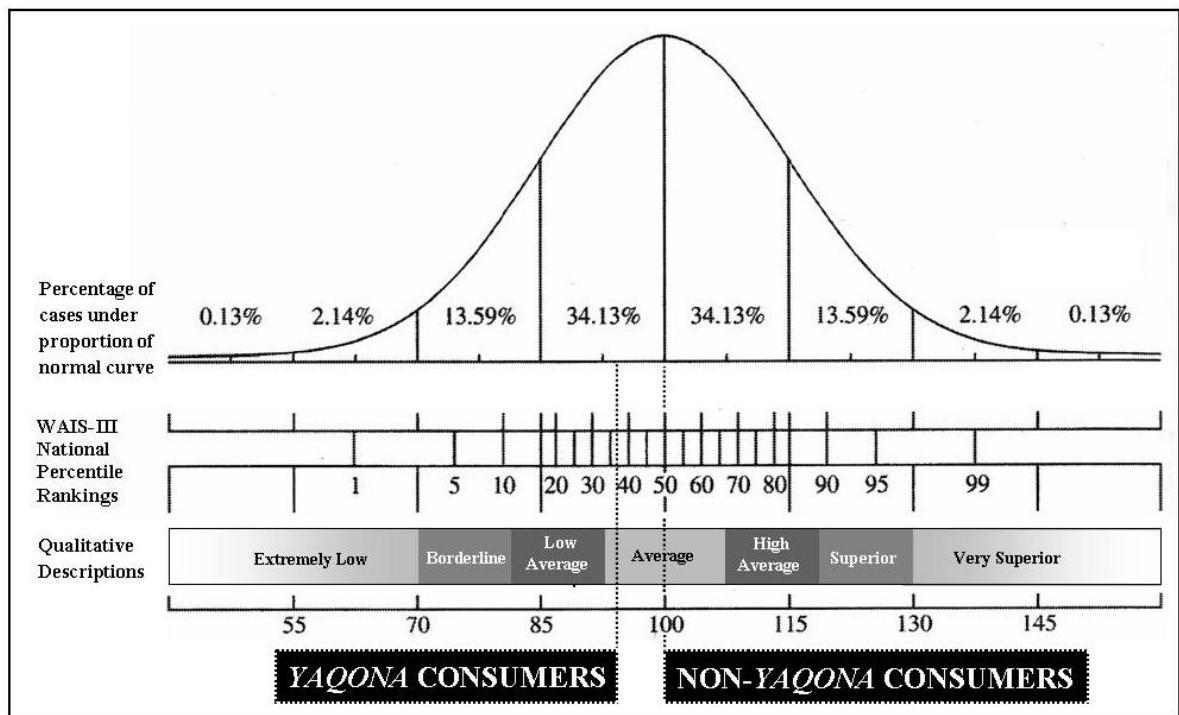
**Table 8.2**

Average Digit-Span subtest scores for the ‘control’ (non-*yaqona* consuming) and ‘active’ (*yaqona* drinking) participants.

Participant group	Digit-Span subtest			
	Raw score	Scaled score	National percentile ranking	Qualitative description
‘Control’	16.6	10	50	Average
‘Active’	16.2	9	37	Average

### Digit-Span Subtest

Table 8.2 shows that the 18 ‘control’ participants, when assessed using the Digit-Span subtest, collectively achieved an average raw score of 16.6. This raw score converted to a scaled score of 10. The scaled score for this group was aligned with a WAIS-III multi-ethnic national percentile ranking of 50 and a qualitative descriptor of ‘average’. This 50-ranked national percentile suggests that on average, the ‘control’ participants assessed by the Digit-Span subtest did as well as, or better than, 50% of their aged peers in the standardised sample (Loreman, Deppeler, & Harvey, 2005:54-5). This position is clearer when viewed under a normal bell curve (see Figure 8.1).



**Figure 8.1**

Digit-Span subtest score alignment for the ‘control’ (non-*yaqona* consuming) and ‘active’ (*yaqona* drinking) participants when compared with the standardised norms under a normal bell curve.

(Source: Condensed and modified from Wechsler, 1997b:25,58; Kaufman & Lichtenberger, 1999:145; Groth-Marnat, 2003:142.)

Table 8.2 also shows a raw score of 16.2 for the 18 ‘active’ participants assessed with the same psychometric measure. When the raw score was converted using the WAIS-III conversion tables, which provided a scaled score of 9, a national percentile ranking of 37, and a qualitative descriptor of ‘average’. Figure 8.1 shows the positioning of these scores under the normal bell curve illustrating that collectively the ‘active’ participants achieved a score similar to 34.13% of the standardised norm. When compared with this assimilated norm, the score of the *yaqona* consuming participants is within the ‘average’ qualitative descriptor range, albeit in the lower sphere. However, what is important in the case of this research is not the comparison with the standardised norm, but rather the contrast between the ‘active’ and ‘control’ groups, a factor that will be discussed at length following the presentation of the Digit Symbol-Coding subtest data.

### Digit Symbol-Coding Subtest

Table 8.3 shows that the average raw score for all 18 ‘control’ participants when

assessed using the second psychometric measure, the Digit Symbol-Coding subtest. This was 66.6, whereas the score for the ‘active’ participants was 55.3. When converted using the WAIS-III tables, this equated to a scale score of 8 (‘control’) and 6 (‘active’) and a national percentile ranking of 25 and 9 respectively. Figure 8.2 illustrates the positions of the ‘active’ and ‘control’ participants under a normal bell curve.

**Table 8.3**

Average Digit Symbol-Coding subtest scores for the ‘control’ (non-*yaqona* consuming) and ‘active’ (*yaqona* drinking) participants.

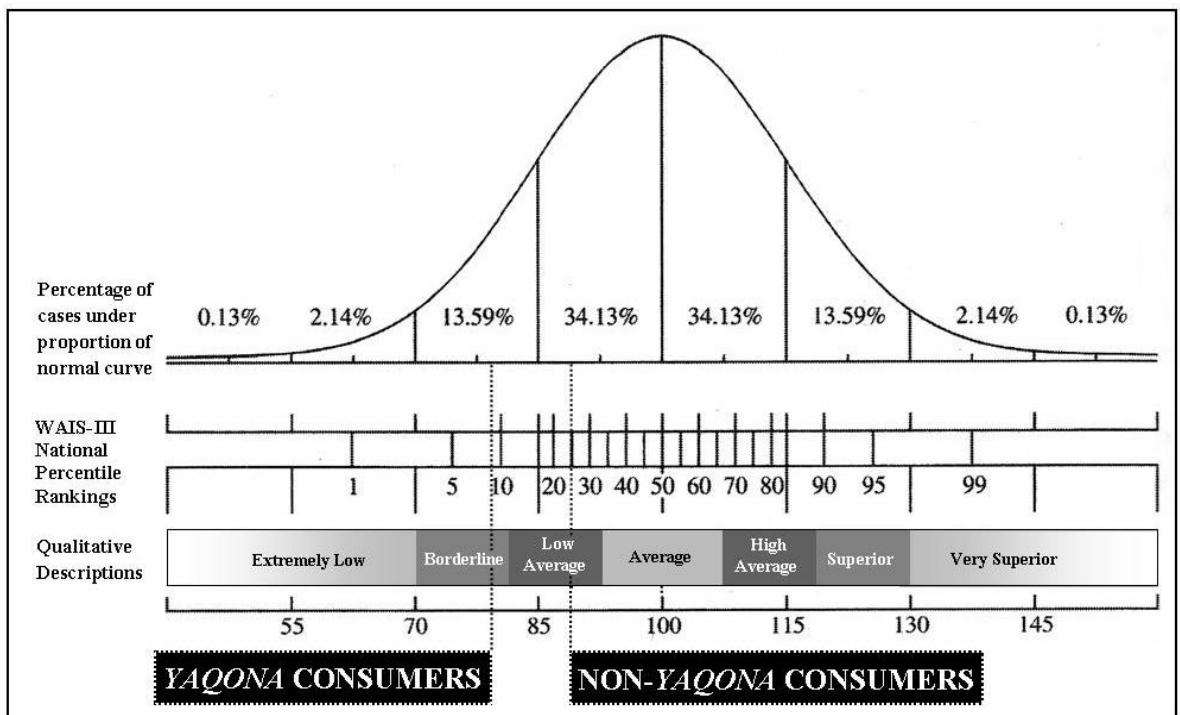
Participant group	Digit Symbol-Coding subtest			
	Raw score	Scaled score	National percentile ranking	Qualitative description
‘Control’	66.6	8	25	Low Average
‘Active’	55.3	6	9	Borderline

Figure 8.2 shows that the collective average scores for the ‘control’ participants, when compared with the standardised norms, allocates them a ‘low average’ qualitative descriptor, although it still ranks them alongside 34.13% of their standardised peers when they were assessed using the Digit Symbol-Coding subtest. In the case of the ‘active’ participants, they were allocated a ‘borderline’ descriptor and ranked within one standard deviation of the mean together with 13.59% of their aged peers. The scores of the ‘active’ participants when assessed with the Digit-Span and Digit Symbol-Coding subtests will be discussed shortly. However, the question that requires an answer at this stage is, what could be influencing the disparity between the scores of the ‘control’ participants? This group compared favourably with their standardised peers when assessed with the Digit-Span subtest, whereas they compared rather differently when assessed with the Digit Symbol-Coding subtest. Ogden (2001) potentially offers an explanation for this difference.

### The Influence of “Cultural Knowledge” on ‘Control’ Scores

In the Methodology Chapter I discussed at length both critical and supportive literature regarding the use of standardised norms to assess ethnic minorities. Ogden (2001), a critic, makes a valuable comment concerning test score disparity, standardised norms and test participants—

When one population consistently scores below another population, it is likely that the tests are to some degree measuring ‘cultural’ knowledge specific to the higher-scoring population (usually the mainstream majority). Often the variables of race and education overlap. The minority group usually has lower educational qualifications, arguably for many reasons including poor school attendance due to culturally-inappropriate teaching styles, poverty, and institutional racism. Much cultural knowledge is imparted through the education system; both ‘facts’ and processes (e.g. comfort with written test-taking) (p.3).



**Figure 8.2**

Digit Symbol-Coding subtest score alignment for the ‘control’ (non-*yqaona* consuming) and ‘active’ (*yqaona* drinking) participants when compared with the standardised norms under a normal bell curve.  
**(Source:** Condensed and modified from Wechsler, 1997b:25,58; Kaufman & Lichtenberger, 1999:145; Groth-Marnat, 2003:142.)

Ogden’s comment has direct applicability to Fiji and my research participants, considering Fiji’s socio-cultural and economic environment. Fiji is a considered a developing nation struggling with issues of poverty, unemployment, low GDP growth, limited productive resources and an education system built on a First World model in which students and teachers often struggle to cope due to a variety of cultural, institutional, resource and language deficiencies (Subramani, 2000:9; Global Investment & Business Center, 2011:56-7). It is likely then that these socio-cultural and economic environmental factors negatively impacted upon the processing speed of the ‘control’ participants (as measured by the Digit Symbol-Coding subtest), whereas cognitive aspects associated with working memory are not affected to the

same degree. An investigation of this anomaly is a study in itself and one that will not be pursued here. Rather, Ogden (2001) follows her quote above by acknowledging that culturally specific psychometric assessments do not currently exist that allow for the mitigation of such extraneous factors in test results and suggested that test administrators seek flexible processes in order to minimise hegemonic “discrimination (p.2),... cultural insensitivity... [and] power imbalance” (p.4) so as to allow greater test score applicability.

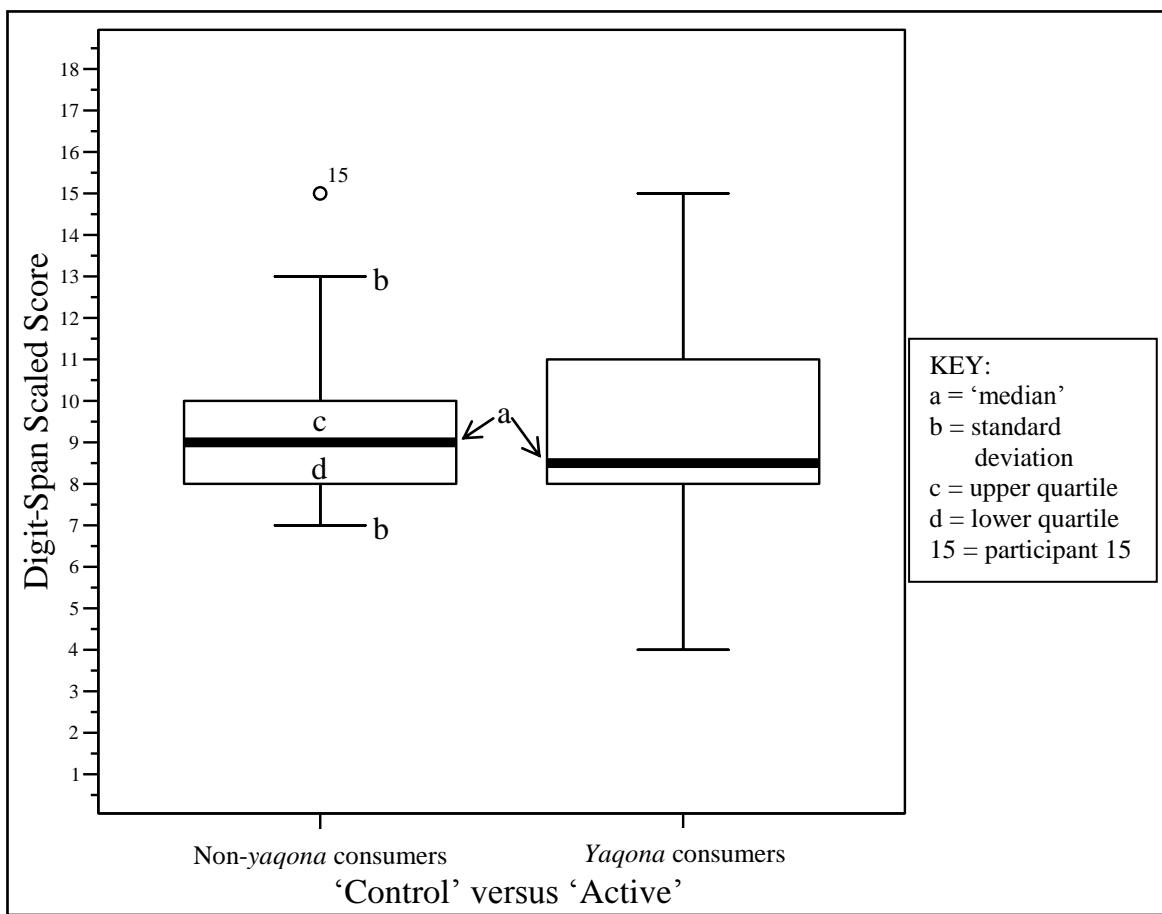
The use of the WAIS-III conversion tables together with the aspects that make up Figures 8.1 and 8.2 (which are based upon a standardised norms), have enabled the basic interpretation of raw scores and the presentation of this data. Although the Tables and Figures used will continue to be referred to, from this point the participant scores will no longer be compared with this norm. Rather, the averages of the ‘control’ and ‘active’ groups will be analysed against each other, employing Ogden’s suggested flexibility in order to minimise hegemonic processes and align this research with the post-development methodological approach as discussed in Chapter 6 (see p.204). Additional flexibility will also comprise the use of rich qualitative data collected during the field research phase, and will be engaged following a comparative analysis between the *yaqona* drinkers and non-consumers.

### **Digit-Span Subtest Results: Group Comparisons**

Table 8.2 and Figure 8.1 show ‘control’ participants as scoring higher than the ‘active’ participants when assessed using the Digit-Span subtest with a 0.4 raw score and 1.0 point scaled score difference. In order to investigate the significance of this difference, the scaled scores for all participants were analysed using a simple box plot and two *t*-tests in *The Statistical Package for the Social Sciences* (SPSS).

Figure 8.3 illustrates the Digit-Span scaled score data of the ‘active’ and ‘control’ participants using a simple box plot. The numerical value 15 represents ‘control’ participant 15, whose score was outside the group’s normal range and identifies this informant as an outlier (Griffith, 2007:187; Pallant, 2007:76). Two things

stand out from this. Firstly the ‘active’ users exhibit a much greater range of scores, both in terms of quartiles and standard deviation. Secondly, there is also an interesting grouping within the quartile below the median. Although an exact reason for this greater range would require investigation beyond the scope of this current study, individual *yagona* consumption levels (see Table 7.1 and Figure 7.1), *steady-state concentration* and the varying effects between individuals following consumption are likely to be the cause. Meador (1998:149-50), in his review of the cognitive side effects from medications such as anxiolytics and anticholinergic due to their similarity in action to *yagona*, adds to this hypothesis when he concludes that amounts and variability can cause differing effects across patients.



**Figure 8.3**

Simple box plot representing the Digit-Span scaled score data for the ‘active’ and ‘control’ participants.

Table 8.4 presents the result of a group statistics *t*-test analysis of the Digit-Span subtest raw and scaled scores of the ‘active’ and ‘control’ participants. This shows that the ‘control’ group answered on average 16.67 correct questions compared

to the ‘active’ participants who averaged 16.22, or 0.45 fewer. The mean difference within the scaled score range is 9.44 for the ‘control’ and 0.27 points less for the ‘active’ group at 9.19. This again demonstrates a lower mean score and a greater variation within the scores of the ‘active’ user group.

**Table 8.4**

Group statistics *t*-test analysis using the raw and scaled score data for the ‘active’ and ‘control’ participants assessed with the Digit-Span subtest.

Score analysis	Participants	n	Mean	Standard Deviation	Standard Error Mean
Digit-Span Raw Score	‘Control’	18	16.67	2.931	0.691
	‘Active’	18	16.22	3.703	0.873
Digit-Span Scaled Score	‘Control’	18	9.44	2.093	0.493
	‘Active’	18	9.17	2.550	0.601

Finally, Table 8.5 draws on the data from Figure 8.3 and Table 8.4 and shows the results of an independent-samples *t*-test (2-tailed inter-group comparison) between the scaled score mean of the ‘control’ and ‘active’ groups assessed with the Digit-Span subtest. The descriptor ‘degree of freedom’ within the table equals the “sample size minus [any] constraints” (Petrie & Sabin, 2000:28), “usually one less than the number of values used in the calculation” (Griffith, 2007:324).

**Table 8.5**

Independent samples *t*-test showing the amount of difference between the ‘control’ and ‘active’ Digit-Span subtest scaled score mean values<sup>66</sup>.

	<i>t</i> -test for Equality of Means			
	Degree of freedom	p-value Significance (2-tailed)	Mean Difference	Standard Error Difference
Digit-Span Scaled Score	34	0.723	0.278	0.777

The critical figure for the purposes of this study is the ‘*p*-value’, also known as the ‘probability’ or ‘Significance (2-tailed)’ value, that being 0.723. Where such a value is 0.05 or more, this indicates “no significant difference between the two groups” (Pallant 2007:235). The independent-samples *t*-test infers that there was no significant difference between the two groups in terms of the cognitive processes of working memory as assessed with the Digit-Span subtest when administered at a time

<sup>66</sup> This table is a condensed version of the original SPSS output file. The full table is presented in Appendix O.

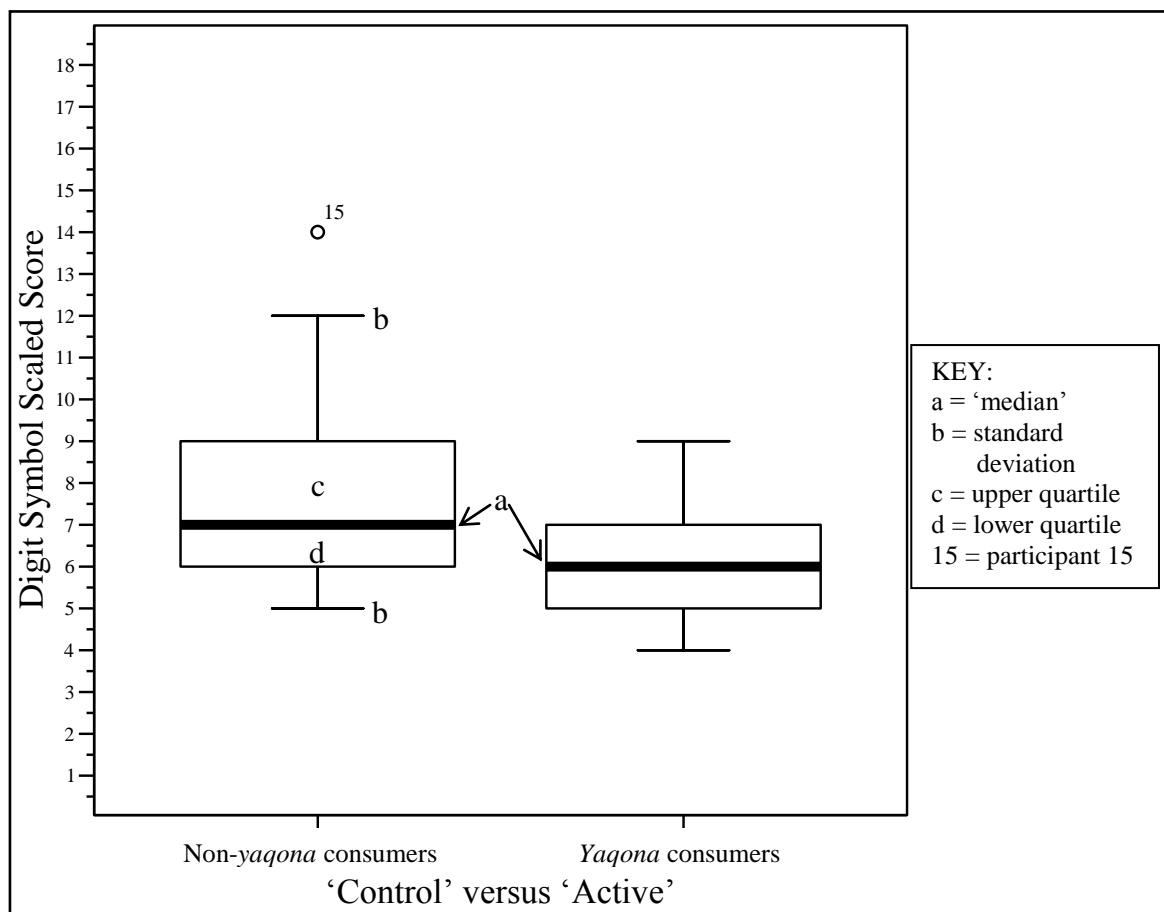
when the teacher participant was entering the classroom to teach. However, a somewhat different result was observed following the analysis of the Digit Span-Coding subtest data.

### **Digit Symbol-Coding Subtest Results: Group Comparisons**

Table 8.3 and Figure 8.2 shows the non-*yaqona* drinking ('control') participants as scoring higher on average when compared to the consuming ('active') group when measured using the Digit Symbol-Coding subtest. This is represented as a 11.3 raw score and 2.0 point scale score difference. In a similar manner to the Digit-Span results above, these scaled scores were analysed using a simple box plot and the two *t*-tests in SPSS.

Figure 8.4 illustrates the Digit Symbol-Coding scaled score data of the 'active' and 'control' participants following simple box plot analysis. The key points to draw from this figure are that the 'active' group has a lower median score and a tighter grouping, with less variation than the 'control'. This is in contrast to the Digit-Span subtest results (Figure 8.3) which showed the non-consumers with less variation between individual scores. The possible reasons for this will be discussed following the test results.

Table 8.6 shows the result of a group statistics *t*-test analysis using the Digit-Symbol-Coding subtest raw and scaled score data of the 'active' and 'control' participants. This indicates that collectively the non-*yaqona* drinking group averaged 63.67 correct questions compared with the 'active' participants who answered 8.45 fewer at 55.22. When using the converted scaled score, the mean is 8.00 for the 'control' and 1.78 points less for the 'active' group at 6.22. This test underscores the much greater variability of the 'control' group scores with a larger Standard Deviation and Standard Error Mean for both the raw and scaled scores. A discussion concerning these values will be engaged following the results of the independent-samples *t*-test.



**Figure 8.4**

Simple box plot representing the scaled score data for the 'active' and 'control' participants assessed using the Digit Symbol-Coding subtest.

**Table 8.6**

Group statistics *t*-test analysis using the Digit Symbol-Coding raw and scaled score data for the 'active' and 'control' participants.

Score analysis	Participants	n	Mean	Standard Deviation	Standard Error Mean
Digit Symbol-Coding Raw Score	'Control'	18	63.67	20.167	4.753
	'Active'	18	55.22	10.814	2.549
Digit Symbol-Coding Scaled Score	'Control'	18	8.00	2.521	0.594
	'Active'	18	6.22	1.517	0.358

The Digit-Symbol-Coding subtest scaled scores were also analysed using the independent-samples (2-tailed inter-group comparison) *t*-test and are presented in Table 8.7. Similar to the results of the Digit-Span results above (Table 8.5), the critical figure for the purpose of this study is the '*p*-value' of 0.015 with a magnitude of the difference in the means of 1.778. As the '*p*-value' is less than 0.05, this indicates that "there is a significant difference in the mean scores between the two groups" (Pallant, 2007:235). These findings suggest that the 'active' group exhibited a statistically

significant difference in the cognitive aspect of processing speed as assessed by the Digit-Symbol-Coding subtest when administered at a time when the teacher participant entered the classroom to teach. Statements such as “a significant difference” tend to imply a weighty measurable valuable. Therefore one is tempted to ask, ‘how big is this significance’? I will return and discuss this significance difference following comment on potential reasons why a variation in significance exists between the Digit-Span and Digit Symbol-Coding *t*-test results.

**Table 8.7**

Independent-samples *t*-test showing the amount of difference between the ‘control’ and ‘active’ Digit Symbol-Coding subtest scaled score mean values<sup>67</sup>.

<b><i>t</i>-test for Equality of Means</b>				
	Degree of freedom	p-value Significance (2-tailed)	Mean Difference	Standard Error Difference
Digit Symbol-Coding Scaled Score	34	0.015	1.778	0.693

### **Digit-Span and Digit Symbol-Coding Subtest: Why the Disparity in the *t*-test Results?**

Prior to summarising these findings for further discussion, it is worth asking why a significant difference occurred in the mean scores of the ‘active’ and ‘control’ groups when assessed with the Digit Symbol-Coding subtest (Table 8.6), while there is no significant difference between the groups when measured with the Digit Span subtest (Table 8.4). As researchers have explained, there is a great deal that is unknown about the psychotropic and pharmacological effects of *yagona* (see Footnote 68). Therefore, to accurately explain the reasons why *yagona* does not seem to impair aspect of the working memory (as suggested following the Digit-Span subtest), but does impact on processing speed (as implied from the Digit Symbol-Coding subtest) would require research far beyond the scope of this study. However clinical investigations hint at similar findings with participants who had used both benzodiazepine and

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<sup>67</sup> This table is a condensed version of the original SPSS output file. The full table is presented in Appendix P.

anticholinergic drugs which have an analogous action to *yagona*<sup>68</sup>.

Lawlor *et al.*, as early as 1991 (p.100-101), noted that anticholinergics had no effect on working memory when assessed by the Digit-Span subtest, whereas “the storage of new memories [was] disrupted”. They noted similar effects concerning benzodiazepine (p.103). Ancelin, Artero, Portet, *et al.* (2006:458), in a more recent study, concur with these anticholinergic findings. During their longitudinal study with elderly people they found that those taking this antihistamine-based medication “had significantly poorer performance on psychomotor speed, primary and secondary visuospatial memory, narrative recall, and visuospatial construction than non-users” – these being similar cognitive impairments to those identified in my participants following the administration of the Digit Symbol-Coding subtest. They added however that they had “found no significant difference for implicit memory or logical reasoning ability” – in other words working memory – in those same participants. They were unable to offer an explanation as to why this occurs with the exception that it may be linked with cholesterol (p.456). However their findings nevertheless reveal that the anomaly found with my participants is not unique.

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<sup>68</sup> Although Singh (2004:150) is clear that there is a great deal that is unknown about the psychotropic and pharmacological effects of *yagona*, researchers acknowledge a similarity in action between *yagona* (kava) and benzodiazepine medication (Dean, 2000:1-2; MediHerb, 1994:1; Mindell, 1998:36-7; Bone, 2002:306). Ashton (2002:n/a), in her online manual, describes in simplistic terms how benzodiazepines work – their “speed of elimination..., [drug] half-life..., duration of effects..., therapeutic actions... [and] five major effects... anxiolytic, hypnotic, muscle relaxant, anticonvulsant and amnesic (impairment of memory)”, therefore assisting with an understanding of how *yagona* works in the body. She adds that the “Acquisition of new information is deficient, partly because of lack of concentration and attention. In addition, the drugs cause a specific deficit in ‘episodic’ memory, the remembering of recent events, the circumstances in which they occurred, and their sequence in time. By contrast, other memory functions (memory for words, ability to remember a telephone number for a few seconds, and recall of long-term memories) are not impaired. Impairment of episodic memory may occasionally lead to memory lapses or ‘blackouts’. It is claimed that in some instances such memory lapses may be responsible for uncharacteristic behaviours such as shop-lifting.” Lawlor stats (1991:103) that benzodiazepines can impact “new memory formation without effecting access to previously learned information... [and] it is difficult to say whether the effects of benzodiazepines on memory are specific, or whether they are secondary to the sedative effect. [Although] memory impairment without sedation, however, has been demonstrated in a number of studies, suggesting that the effect of the benzodiazepines on memory is specific” (p.102). Additionally, Sadock, Kaplin & Sadock, (2007:345) states that the heavy use of anxiolytic medications induces “impairment in attention”. Kalat (2005:280) adds to this by stating, “impaired attention causes problems for almost any aspect of memory”. Yanagihara & Petersen (1991:401) make a similar observation, arguing that benzodiazepine and anticonvulsant medications can cause “hazy memory... affect[ing] concentration and decision-making as well as delayed recall”.

A second point of interest arises from the spread of the test scores as illustrated in the quartiles and standard deviation in Figure 8.4. Why do the ‘control’ participants, when assessed by the Digit Symbol-Coding subtest, exhibit a greater standard deviation and score range, especially in the upper quartiles, when compared with their ‘active’ *yagona* consuming peers who are vastly more evenly and closely clustered? Again, this is a complex issue that would require a great deal of investigation outside of the scope of this study. However a possible explanation may lie in the relationship between anxiolytics and motivation. In his discussion on the therapeutic use of anxiolytics, Roth (1992:209) notes the union between this medication, increased “passivity” and impacts to intrinsic motivation, the undertaking of an activity for pleasure rather than reward. In another study, Deci & Ryan (1992:12) discuss the link between “intrinsic motivation,... choice... [and] challenge” as critical factors in achievement. In applying these two studies to the question of score distribution, it is possible that the greater spread in the upper quartiles of the ‘control’ participants is a reflection of intrinsic motivation in some who embraced the assessment as a challenge. Alternatively, the ‘active’ participants, potentially lacking intrinsic motivation due to anxiolytic properties of the substance, were less inclined to view the assessment as a challenge to be conquered, therefore limiting upper quartile ‘motivation influenced’ score spread.

### Reflection

In summary, the results of the simple box plot analysis and the *t*-tests using the cognitive test data suggest three findings. Firstly, the consumption of *yagona* appears to impact processing speed the following morning, as assessed by the Digit Symbol-Coding subtest results. In contrast, Digit-Span assessments on *yagona* consumers revealed that the substance had a marginal negative impact on working memory. Similarities in findings have been noted among users of pharmacologically based anxiolytics such as benzodiazepine and anticholinergic. Because of this, there will no longer be discussion related to the Digit-Span subtest results and instead emphasis will focus on the Digit Symbol-Coding data and results. Secondly, a group statistics *t*-test also suggested *yagona* consumers had a reduction in their processing speed when

compared with their non-drinking peers. Finally, the independent-samples *t*-test showed that the group statistics *t*-test findings were statistically robust. Although this infers that it is highly likely that *yaqona* consumption reduced processing speed among my users, it must be remembered that this use of psychometric tests to examine cognition is exploratory (as discussed in the Limitations section), conducted to stimulate new understandings and bring a quantitative element to the subjectivity of *lomaloma ca*.

In the Methodology Chapter it was explained that the purpose of the independent-samples *t*-test is primarily an indication of whether an occurrence probability is negligible or significant. The question that arises regarding the *t*-test results is what is this degree of difference in the processing speed of the *yaqona* drinkers when compared with their non-consuming ('control') peers? Two methods will be employed to give meaning to this and further assist in answering the first part of the second research question, does *yaqona* impact teacher cognition? The first will be a basic comparison of the Digit Symbol-Coding subtest raw scores and the second through the voices of the teachers themselves.

### **Explaining the "Significant Difference"**

In the *Methodology* chapter it was explained that a key function of the Digit Symbol-Coding subtest is to measure processing speed that takes into account score errors (p.298). When the Digit Symbol-Coding subtest raw scores of the two groups are rounded, the non-*yaqona* drinking participants averaged 64 correct answers in two minutes compared with the *yaqona* consuming participants who recorded 55, a difference of nine correct answers. When calculated, this would suggest that the 'active' participants were taking (on average) approximately 0.31 seconds longer to answer each question when compared with their 'control' peers; a difference of 16.5%. Remembering that these findings resulted from the administration of the Digit Symbol-Coding, a subtest which assesses processing speed, it can be guardedly speculated that this represents a 16.5%, or 0.31 second delay in cognitive function in these *yaqona*

consumers. Further, this 16.5% impairment also suggests a “significant difference” value between the *yaqona* consumers and their non-drinking peers.

However, it is the *yaqona* users themselves, the teachers who have to deliver education to their students ‘the morning after the night before’, who can best describe the “significance” of this quantitative finding.

### *Lomaloma ca:* The Ethnographic Findings

In Chapter 5 I discussed the “limited data” on *yaqona* hangover (Perez & Holmes, 2005:51) and the conflicting beliefs regarding the ability of this indigenous substance to manifest negative post-consumption effects. Further, I explained there that *vakaturaga* and the importance of *yaqona* to culture were the reasons why many drinkers refuted the possibility of *lomaloma ca*, or unpleasant post-consumption impacts. However, a somewhat different story is revealed when this theme was discussed in private, which produced ethnographic reports that give the quantitative findings a ‘personality’.

24 participants, both male and female, *iTaukei* and *Fijian*, offered insights into *lomaloma ca* during the field interviews which corroborated the reports as presented in my Master’s research (Aporosa, 2008:86-8). Although four of the informants initially stated they were alert and felt “fine the next day” (IQ040-043), all changed this view when questioned further, effectively contradicting themselves. Collectively, these participants reported similar hangover manifestations with common threads indicating “dizziness” (IQ044), feeling “groggy and sleepy” (IQ045-050), “unprepared... and... [got] angry easily” (IQ051-052), a lack of “motivation” (IQ053-057), frequently being “late to work” and interrupted memory (IQ058-61), manifestations which negatively “effect productivity” (IQ062-064). Strategies for dealing with this while teaching was most commonly reported as assigning student-directed work such as “copy[ing] from the [text] book” so teachers could rest at their desks (IQ065-072). Further, when questioned whether they felt their *lomaloma ca* impeded their ability to deliver quality education to their students, all participants responded in the affirmative (IQ073-81).

An *iTaukei* male school principal with almost 20 years teaching experience in both rural and urban schools stated—

The effects of *grog* on me is like a big chain that ties me down and you forget to, or can't be bothered, to attend to your commitments... I believe that excess grogging not only affects education, but health, village life and even the farm. But when we are talking about education then that means the teachers are impacting upon the students. (IQ082)

A senior *Fijian* male teacher with over 20 years experience supervising both *iTaukei* and *Fijian* staff, and working in an urban setting at the time of interview, commented—

I have been drinking *grog* all my life, every day... Definitely yes *grog* effects [negatively]. First of all, the sleeping time is cut short and the mind needs some rest, but we use the sleeping time to drink *grog*. The mind is not active in the morning and we still feel a bit drunk and lazy. *Grog* will never make us active; it will always make us lazy. Lazy men can never do the job. See, the non-drinker prepares for the next day, but the drinker, he just wants to prepare for the *tanoa* [*kava* bowl]. So the drinker, he just comes the next day and he is not prepared, but the other one, he has already prepared. I try to be prepared, but some days, no. (IQ083)

Although the consumption of *yaqona* was not as prevalent among the *iTaukei* female teachers, several reported their post-consumption experiences. One senior female teacher, with 21 years experience in both urban and rural settings, commented—

I drink [*yaqona*] nearly every night. Sometimes, when I drink plenty, I will *lua* [make myself vomit] before I sleep to get some out... For me, if I drink *grog* the night before I teach, as soon as I get to the classroom and sit down, I will go to sleep. So I have to stand up and walk around the classroom. So maybe when I drink *grog*, I do more in the classroom, because I know if I sit down I will go like this (indicates sleeping and laughs)? (IQ084)

Another female teacher with only two years experience, and teaching in an urban setting at the time of interview stated—

I used to drink *grog* but I stopped [five months ago]. It was my own decision. I thought it was the best thing for myself and the students. I used to drink up to 10 or 11 [pm] every night and it made me feel very lazy. It was having a big effect on the students. I was not concentrating and I just gave students work and I would relax. [Since ceasing *yaqona* consumption] I can see the change now. Before I was slow at teaching and marking, but now I spend more time with the students and feel more fresh in the morning. (IQ085)

### ***Lomaloma Ca* and Inter-Relational Impacts**

Several female teachers of both ethnicities were asked if they felt the consumption of

*yaqona* by their male peers had any impact on them. Responses were mixed. For instance, two teachers stated that they did not wish to comment although their demeanour and tone of response suggested that they had experienced negative effects, however culturally it was inappropriate to discuss this. Alternatively, an *iTaukei* female with nine years teaching experience and working at an urban school at the time of interview stated, "Yes, they [male teachers] don't feel like teaching after heavy *grog* so they ask us to supervise their classes so they can rest. They depend on other teachers to do the share [of the load]." (IQ086). A *Fijian* female with 12 years experience teaching at a semi-urban school got quite emotional when asked this question. Although speaking of her frustrations in a past tense, it was clear her experiences still impacted her. She confided—

When I was the VP [Vice Principal], the principal was always drinking *grog*. Yes, it affected me. I had to run the entire school on my own. It was hard to find him because he was never in his office, he was always out drinking *grog*. I had to do all the running, but I had no authority. I was not happy in those times, but I did not want to report him. I did not want to cause those problems. It is not fair that us people who do not drink have to cover for the people that drink *grog*. Sometimes I would get upset, and sometimes I would get annoyed. And it should not be like that. Why should we have to carry them? (IQ087)

The impacts of *yaqona* hangover were also noted by the spouses of teachers. Three separate reports were gleaned from *iTaukei* wives. One reported that after drinking *yaqona*, "he doesn't wake up early, he doesn't like to talk and his mood has changed" (IQ088). The second felt that "he is sleepy, and he needs lots of sleep. He gets moody, and he is easily frustrated over small things, and he gets frustrated with the children" (IQ089). The third commented that "after *grog* he feels lazy and he doesn't want to do any work the next day" (IQ090).

*Fijian* spouses expressed similar concerns—

After *grog* he is very lazy... even his tidiness is bad. He is a very different person from *grog* and no *grog*. After *grog* he does nothing. (IQ091)

Another stated—

My husband drinks *grog* at the office [at school] and when he goes home. He drinks *grog* all day

and every day. The *grog* has a big effect on my husband. He is very lazy, sleeps a lot. How can he teach? And whenever he drinks *grog* he smokes a lot, like a chain. (IQ092)

Discussions with *yaqona* consumers regarding mood swings suggested overall drinkers were nonchalant and listless the following morning, although if there were flashes of anger or mood swings, these were believed to result from a lack of sleep and not the substance itself. “That [anger and frustration] is because they never get enough sleep. With plenty of sleep you won’t get angry, plenty *kua ni leqa* [literally meaning ‘no worries’]” (IQ093). Anger and *lomaloma ca* was briefly mentioned in my opening narrative and discussed in the earlier Master’s study (p.87).

The impact of *yaqona* hangover on teacher productivity, reflected in comments such as ‘he/she/I is/are lazy’, was a reoccurring theme throughout these ethnographic reports. A *yaqona* drinking teacher in Southern Lau, an environment where the indigenous plant cannot be grown due to environmental factors, made an informative contrasting comment—

The *grog* comes with the *sedi* [the monthly boat from Suva]... so there is plenty of times there is no *grog*. You can see when there is no *grog* because the teachers are more energetic and the teaching standard, it is much better... When there is no *grog*, the teacher is more alert, always checking the students, talking with the students. The class is happy and the students learn more. Then after the *sedi*, it is different until the *grog* is gone. (IQ094)

An American Peace Corp volunteer who had been teaching for two years in both urban and rural environments, eloquently captured and condensed the comments and feelings of many when he said—

When I first came here [to Fiji] I was very culture shocked, so I drank *grog* because it helped me to settle in – that would probably be the anti-anxiety part of it. And I have been drinking almost every day since. See, I have thought a lot about this, comparing myself to before I came here. For me it feels like it [the *yaqona*] is affecting my goals, everything. It is slowly killing me and sucking my life away. It’s like I have no energy, no spark to get in and do it. I was different before I drank *grog*, always motivated. Maybe the best way to describe it; when you wake up after drinking *grog* you feel like ‘old shoe laces’ – crusty, stiff, worn out. You come to the class and drag your ass, and you don’t care that you are like this... Of course this affects the students. Look at the teachers that don’t drink, they teach better because they have life. You can hear their class, laughing, involved. Yes, there are some who can drink and work, but they are not to capacity. All us *grog* drinking teachers are the same, we are all ‘old shoe laces’ waiting for the end of the day when we can do it all again. (IQ095)

### ***Lolaloma ca: Ethnographic Reports on Concentration and Memory***

A number of teachers of both genders and ethnicities reported concentration and memory difficulties following *yaqona* consumption, although detailed explanations proved difficult to obtain. Because many of the teacher participants were *lomaloma ca* at the time of interview, it is possible that this sparseness of detail was due to post consumption impact. An *iTaukei* male teaching at an urban school stated–

Sometimes I find it hard to remember. I don't think the *grog* affects the brain and memory permanently, but the *grog* makes you lazy and so you don't want to remember. Even sometimes you feel too lazy to talk to people. And sometime you can't remember simple things... like a [person's] name. (IQ096)

A *Fijian* teacher from a semi-urban environment confirmed this when he stated, "Yes, sometimes it is hard to recall small things" (IQ097). Another *iTaukei* male with almost 20 years teaching experience in both rural and urban settings was slightly more specific when he said, "Yes, the *grog* slows you down, it makes your brain lazy, it makes it hard to think. But you can remember if you force through and then you can get started and it's okay" (IQ098). This appears similar to what Lawlor (1991:100-1) termed "new memories" disruption (see p.253 this study) and mimics what clinicians term memory "retrieval failure" following anxiolytic use (Petersen, 1991:13). When asked how long these manifestations persisted, reports differed from, "you are good after lunch" (IQ099) to being fully alert and "recovered after a few days" (IQ100) dependent upon how much was consumed. Comments such as full recovery can take several days potentially illustrates the impacts of *steady-state concentration* (p.151).

Whereas this section aimed to answer the first part of the second research question, does *yaqona* impact teacher cognition?, the next will consider the second part of that question, whether *yaqona* is also a factor in teacher sickness and absenteeism, the focus of the next section.

### **Absenteeism, Presenteeism, and Arriving Late**

In Chapter 2 I discussed absenteeism and its threat to productivity, citing research that found users of indigenous substances were three times more likely to arrive late and

accounted for up to 80% of sick leave, costing the US \$184 million in lost revenue annually (see p.21). There appears to be a relationship between *lomaloma ca* and absenteeism in Fiji. For instance, "Lautoka doctor Davendra Nandan said that the [*yaqona*] hangover effect was a major cause of people seeking sick sheets, with symptoms ranging from burning stomachs, gritty eyes, thirst, and headache to body aches." (Baba, 1996:2) A *Fijian* teacher with over 20 years experience initially laughed when I asked him if he believed *yaqona* consumers took more sick days than non-drinkers, and followed by stating—

Yes, but you can never prove [this]. The problem is that some of the compassionate and bereavement leave is not for compassionate and bereavement purposes. Some of it will be for *grog* but they say it is for bereavement. People can even get medical certificates and tell the doctor that they are sick but the problem is *grog*. Just yesterday we had a teacher who was absent. But someone came and filled in the attendance role for them. I am trying to find out who did this. He is still absent today and someone filled them again today. See, sometimes people play up. I will tell the staff that if this happens again I will put the book on my desk and they have to sign in here. Plenty loopholes in Fiji (smiles). (IQ101)

An *iTaukei* school principal, also with over 20 years teaching experience stated categorically, "Yes, I know that *grog* drinkers have more sick days than people who do not drink" (IQ102), with a *Fijian* principal stating, "Plenty of them [hungover on *yaqona*] still come to school, but sometimes, lunchtime, they run off; they do not finish the day, they just leave and it is not recorded as a sick day" (IQ103). Another *Fijian* principal, at an urban school at the time of interview, stated—

I know of a teacher who was sick for two days after *grog* but said they were sitting an exam at USP [University of the South Pacific] and was granted study leave. Some teachers report to the office and then go straight home and get another teacher to watch their class and no sick days are recorded. (IQ104)

An *iTaukei* male in their second year of teaching at a rurally isolated school commented—

Yes, I had two sick days in the last year. They were not registered as sick days at the office. Both times coz of *grog*. I come to school and then said I was sick and I went home. I didn't tell them that I had been drinking *grog* the night before. If you come to school and then go home sick, they do not register you on sick leave. (IQ105)

Another *iTaukei* male teaching in a rural setting echoed the previous participant when he stated–

I had four sick days [in the past 12 months] because of *grog*. The official records is zero. Like, one time we finished [drinking *yaqona*] late, at 4am, then I had to start at 8[am]. I came to school and then asked permission to go home. I got some pain in my head so I went to the hospital, but I did not admit that it was from the *grog*. I got a [medical] certificate and I went home. Most of the time the principal does not know when we are drinking *grog*. (IQ106)

These reports appear to echo the concerns of Professor Reddy who comments (in Chapter 5, p.153-4) that sick-leave due to excessive *yaqona* use is frequent although tends to be reported as a “stomach bug” or other ailment.

Eight of the 18 schools visited during the field research provided a copy of the previous 12 month’s ‘sick reports’. In the interests of school anonymity, the data has been clustered and identifiers eliminated. The reports provided sick leave records for a total of 188 teachers – 69 *yaqona* consumers and 119 non-drinkers<sup>69</sup>. The total sick days were calculated for both groups and averaged 4.3 sick days for each of the drinkers and 4.5 days for the non-consumers. However, these figures are potentially misleading and inaccurate for several reasons. Firstly, the ethnographic reports above site a number of incidents where sick leave due to *yaqona* post-consumptive effect was taken although never recorded. Secondly, the sick leave reports from a school with more than 15 staff members showed that not a single day’s sick leave had been taken by anyone at the school in the previous 12 months (IQ107), however I was made aware of two teachers who had taken several lots of sick leave during that period. At another school, three teachers reported taking sick leave due to *lomaloma ca*, although the ‘official’ records showed no absent days for these same staff members (IQ108). At yet another school, a teacher assured me–

No, [I have taken] no sick days in 10 years because I drink *grog* every day. See, it's mostly the non-drinkers that get sick and us drinkers are more healthy because we drink *wainimate*

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<sup>69</sup> The categorisation of teachers as either *yaqona* consumers and non-drinkers was aided by the school principal, or in cases where this was unknown, the teacher themselves. Of the non-drinkers, a large proportion of these were *Fijian* females who rarely consume the indigenous substance (as previously discussed).

[*yaqona* as ‘medicine’]. Especially the woman, they are always sick because they don’t drink grog. (IQ109)

However, this teacher had five days of sick leave recorded for the past 12 months (IQ110).

Although it is common for *yaqona* consuming teachers to deny taking sick leave or feeling sick, often citing the medicinal properties associated with the indigenous substance as the reason (IQ111-122), checking with other sources such as school sick leave records and supervisors (IQ123-131) proved this incorrect. Further, although the informant above suggested, “you can never prove [*yaqona* drinkers take more sick days]”, these ethnographic reports show otherwise.

The problem with workplace absenteeism data accuracy is certainly not unique to the Fijian setting. Johnson, Westerfield, Momin, Phillipi, *et al*, (2009:566) report that there is a “lack of consensus... in the methodological debate” as to whether data used to estimate absenteeism “should come from administrative sources..., personal [medical insurance] claims or from employee self-reporting.” Administrative data, they argue, is often difficult to obtain and self-reporting tends to be misleading due to “plausible alternative reasons for employee absenteeism” being given (p.566), an issue evident in the ethnographic reports of my participants.

In a comprehensive study on absenteeism recently conducted in Australia, researchers estimate that the average daily cost in lost productivity is \$370 per employee (Aylward, Bratt, Beaumont, *et al.*, 2010:9). This converts to \$549 Fijian dollars per employee per day<sup>70</sup>. Although this raw monetary value is significant, especially to a developing economy such as Fiji, purely financial views fail to delineate wider issues, as mentioned by the research participants. These include the alertness and preparedness of teachers when they arrive at work in the morning, the delivery of quality education to their students who have come to learn in an environment funded by parents, the community and the government, and the impacts to peers who are

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<sup>70</sup> <http://www.oanda.com/currency/converter/> on 3 June 2012.

expected to ‘take up the slack’. Additionally, these systems are all linked to a national development process reliant upon education as one of its drivers (see Chapter 4). Smith (2007:1) considers and encapsulates the wider issues when he states, the “loss of productivity [due to absenteeism] has a ripple effect... both directly and indirectly... [by reducing] the quality of public and private goods and services. At the workplace, it may place an additional burden on employers and workers especially at critically important times, or in key processes.” Further, while the sick reports I obtained from the eight schools indicated an average of 4.3 annual sick days for non-drinkers and 4.5 for *yaqona* consumers, these figures are highly subjective, as a number of factors discussed here tend to question the reliability of sick reporting generally.

Johnson *et al.* (2009) follow their discussion on the accuracy of workplace absenteeism data by adding that measuring this disruption is vastly easier than attempting to quantify the impacts of presenteeism, which is “simply defined as unproductive hours while present at work” (p.568). A senior Fijian teacher at a semi-rural school linked presenteeism with teacher *lomaloma ca* and impacts to education delivery when she said, “Some [teachers] are here but they might as well be at home” (IQ132). A number of earlier statements, such as if “I sit down, I will go to sleep” (see IQ084 above), corroborate this. Cyr & Hagen (2007:1299) add that “the complex nature of presenteeism” makes it extremely difficult to measure and even more problematic to convert to “monetary estimates [of] lost productivity”.

I would suggest that the complex nature of presenteeism, especially when it is linked with *yaqona*, is even more circuitous to define in the Fijian teaching context due to cultural factors. Dr. Helen Tavola (2000:169), an expert in Fijian education who has travelled extensively throughout the country researching and assessing educational systems, is responsible for one of the few published statements on teacher *yaqona* consumption and impacts to education. She added—

I have... visited a lot of schools... and sometimes head teachers and other teachers would leave their classrooms and come and have a mix [of *yaqona*]. It just amazed and appalled me that they would leave their classrooms unattended. They didn't just come out for half an hour, sometimes the whole day, and without a moment's compunction. It happens all the time...

[and] I think it exacerbates the disadvantages in [*iTaukei*] education. (pers. comm., 2007, Sept. 3)

Chapter 5 discussed the importance of reciprocity and acknowledging guests through the *isevusevu*, explaining how some teachers leave the classroom in order to be a part of this cultural observance (p.135) which can be extremely advantageous in aiding and procuring assistance to a school. Although Tavola (above) stated that teachers left classrooms to “have a mix”, her explanation is indicative of attendance at *isevusevu*, conducted due to her and/or those she arrived with. If this was the case, and not some indiscriminate consumption session, this then raises the question of whether leaving the classroom constitutes presenteeism that “exacerbates the disadvantages in [*iTaukei*] education” or comprises part of cultural obligation and practice. If the latter, at what stage then would presenteeism occur? Is it when the teacher departs the classroom; at a time when the teacher’s *yaqona* consumption induces intoxication (see p.149) and impairs the ability to return and teach; or is it possibly some defined point at which the *isevusevu* concludes and socialisation commences? Answers to such questions are philosophically problematic. However they illustrate the difficulties of measuring presenteeism among teachers in the Fijian education context where culture is strongly influential.

The final theme that comprises part of the presenteeism and absenteeism debate is lateness due to post-consumption effects. A female *iTaukei* with six years teaching experience and working at an urban school at the time of interview stated, “I have not had any sick days in the last year [although ‘official’ records showed three] but I come to school late a lot of times because of grog, maybe 12 to 16 times in the last year” (IQ133). Reports of lateness following *yaqona* consumption were common (IQ134-143). Although the ethnographic reports appeared to demonstrate a greater prevalence for lateness among *iTaukei* teachers (66%) when compared with their *Fijian* counterparts, these figures are cursory as no focused investigation was done to specifically measure this. Nine school principals stated they had observed lateness due to *yaqona* consumption. With the exception of three, all had spoken directly to the ‘offending’ teacher. A male *Fijian* principal teaching at an urban school said—

Yes, I told him straight. He was always late to school, and then when I went to look for him he would hide and then he would go for a rest in the [staff] quarters. And you could tell by the appearance, he had plenty *kani* [*kava* dermopathy<sup>71</sup>], and I told him direct, ‘you drink too much *grog* and that makes you a bad teacher’. (IQ144)

Two *Fijian* and two *iTaukei* Principals stated that instead of speaking to ‘offenders’ directly they addressed issues in staff gatherings. “I have told teachers at staff meetings that if the *grog* is affecting their work they need to quit. I have never spoken to an individual teacher about *grog*” commented the rural *Fijian* principal (IQ145). One of the *iTaukei* principals, leading an urban school stated, “I talk to teachers about the behavioural issues. I do not refer to their consumption of *yaqona*” (IQ146). The second *iTaukei* principal, a female at a rural school stated the reason she spoke to the misdemeanour (arriving late and absenteeism) rather than the consumption of *yaqona* was because “the *grog* is sacred so we don’t want to say that the *grog* can be bad” (IQ147). This comment reflects the earlier discussion in Chapter 5 (p.150) in which I suggested that there is a reluctance to openly discuss *lomaloma ca* and any negative parallels, which in the case of this study includes impacts on

<sup>71</sup> Ruze (1990:1442) explains *kani*, or *kanikani*, as “A scaly rash suggestive of ichthyosis and eye irritation... present in some heavy kava drinkers”. This manifests in different ways with different consumers although tends to be more pronounced in colder months (Ruze, 1990:1443) and “is treatable – with abstinence” (Norton & Ruze, 1994:94) – usually a week. For some drinkers it is most noticeable as a peeling of the skin around the fingers and toes whereas others it may be present on the legs and back and occasionally on the face. Additionally the “red, irritated eyes” which Ruze describes (p.1443) is not universal to all heavy drinkers. I would argue that Ruze’s description of a “rash” tends to suggest itching and/or painful inflammation. *Kava* dermatopathy (as it is clinically referred) is mostly not itchy and if this does occur can be simply remedied with moisturiser. Additionally, on rare occasions following extreme amounts of *yaqona* ingestion over consecutive days the peeling will subside and the pores of the skin will weep a clear (mostly) odourless liquid similar to sweat. This tends to occur mostly on the sensitive areas of the body such as under the arms and down the sides of the torso and has been mistaken by doctors as Shingles (the varicella-zoster virus). This can take several days to subside and is extremely painful, especially to the touch. *Kanikani* is discussed at length in my Master’s study which included a photo (Aporosa, 2008:53,69-70,78-9,110-11). An important aspect of that discussion was *kanikani* as “A ‘Badge of Honour’”. In Chapters 4 and 7 of this thesis I explained that Fiji’s “cultural keystone species” is deemed an ingestible manifestation of the *vanua* with the ability to consume vast quantities of *yaqona* believed to demonstrate Fijian-ness. In many circles *kanikani* is deemed to be a visual demonstration of that Fijian-ness. A participant in the earlier Master’s study encapsulated this idea when they stated, “If you have *kanikani* it shows you drank a lot of *grog*, you are ‘the man’. It’s like an unspoken badge of honour” (p.79). Therefore *kanikani* could be argued to comprise a demonstrable facet of *yaqona* identity based on historical influences in addition to the consumption and use practices as discussed in this study. For instance Smith, a missionary in Tahiti in 1813 stated that “After some continuance of yava [*kava*]-drinking, the skin begins to be covered with a white scurf, like the leprosy, which many regard as a badge of nobility. (p.93). Beaglehole’s (1967:612) edited volume on *The Journals of Captain James Cook* adds to this when it reports “the more Scaly their bodies are, the more honourable it is with them”.

productivity and quality education delivery, due to the sacredness of *yagona*. Essentially, to criticise the consumer or link *yagona* to a negative output is to vicariously criticise the emblem that is beyond criticism (p.150). This participant continued, “There is plenty things that is causing under-achievement in Fiji, but yes; *grog* is one of them” (IQ148).

Reports of this nature aid in answering the second part of the current research question, acknowledging that *yagona* is a factor in teacher sickness and absenteeism. In the final section of this chapter, these *lomaloma ca* manifestations will be combined with earlier discourse on teacher cognitive impairment in order to answer the final part of the second research question, what effect does *lomaloma ca* have on education delivery?

### ***Lomaloma Ca and Quality Education Delivery***

In Chapter 4 I discussed the importance of education as a development tool (p.97-8). The Fijian Government have embraced education as part of increasing national development and economic growth (Ministry of Finance and National Planning, 2004:7-9). In the latter section of that report they stated that in order to achieve this, emphasis must be shifted from “raising school enrolments [*to*] raising school learning achievements” (p.34). They detail nine policy objectives that have as a central theme running through them – the need to improve the quality of education provision (p.35). Voigt-Graf (2003) concurs, stating that for Fijian education to achieve expansions in economic growth and national development, “the quality of [that] education... depends on the quality of teaching staff” (p.164). Further, Bessell (2009), another commentator concerned with education in Fiji, argues that “unprofessional behaviour

among teachers" (p.66), namely arriving in the classroom hungover<sup>72</sup>, as one of several impediments to quality education delivery. Finally, the MoE (2000:212,215.220) also acknowledges an urgent need for a lift in education delivery standards. To answer the final part of the research question, which asks what effect *lomaloma ca* has on education delivery, this must be considered in terms of quality education delivery.

Chapter 4 discussed the attributes of quality education delivery by drawing on McGee & Fraser's (2008) edited text that set out the "roles" and core competencies of a teacher. These included "critical reflection" (McGee & Fraser, 2008:xvii), "hard work" (Fraser, 2008:2), motivational flexibility (Fraser, 2008a:13, Barker, 2008:21), being relevant (Frazer, 2008b:47), "depth of knowledge... [and] passion" (Fraser, 2008b:48), intuition (Fraser, 2008b:50), "quality feedback and feed-forward" (Fraser, 2008b:58), facilitation skills (McGee, 2008:86,87,92), planning, time management, monitoring, evaluating and assessing (Hill, 2008:136-7,140,143; Lang, 2008:243,252; McGee & Taylor, 2008:116, Yates & Ussher; 2008:105,108), a "duty of care" (Hall, 2008:230) and a "balance... between work, domestic responsibilities, and leisure activities" which includes adequate sleep (Lang, 2008:243). How then does the Fijian teacher, who has spent the previous night consuming *yaqona*, measure up regarding these "roles"?

The previous sections of this chapter contain qualitative findings together with 98 separate ethnographic reports that present negative impacts associated with quality education delivery post-*yaqona* consumption. All of these, to some degree,

<sup>72</sup> Bessell (2009:66) discusses that the "unprofessional behaviour" of teachers in Fiji can be corrected by "coming to school sober or not affected by alcohol or other stimulants as something that would improve the educational experience for students." In her article she does not mention *yaqona*, an indigenous substance that is not a stimulant. In the past 12 years visiting, living and working at schools in Fiji, I have only once heard of a teacher being spoken to after coming to a campus affected with alcohol, although arriving *lomaloma ca* with *yaqona* was a daily occurrence. I emailed Bessell and explained my experiences as discussed. I added that unlike many countries where *grog* is a colloquialism for alcohol, in Fiji *grog* is *yaqona*. Therefore, was it possible in hindsight that there was a misinterpretation, and the substance responsible for impairing the sobriety of teachers, as discussed in her paper, was in fact '*grog*' as in *yaqona*, and not alcohol, as she implied? Unfortunately she did not respond to my emails (July 2, 2010 and Aug. 9, 2010). Nevertheless, I would strongly argue this is the case, that the teachers Bessel refers to as required to "come to school sober" in order to "improve the educational experience for students" are in fact "affected" with *yaqona* and not alcohol, and therefore I have, without hesitation, used her work in this context.

crossover and appear to contravene the roles or teacher core competencies as summarised in Chapter 4. For example, 32 participants noted motivational impairments such as lethargy, grogginess, laziness and sleepiness, attributes that are necessary to the roles and competencies of critical reflection, facilitation, feedback, hardwork, a passion for learning, a striving to improve, planning and time management. Motivational impacts, with the five reports of mood swings and anger, are inhibitors to flexibility and student understanding as part of staying relevant with pupils. Further, the six reports of unpreparedness, together with the qualitative findings regarding impairment to processing speed, interfere with ensuring rules, routines and consequences are kept simple, purposeful and understandable.

Moreover, memory recall is a necessary input to all of these competencies. However, this is a cognitive faculty recognised as being impaired in the cognitive assessments and in feedback from five of the participants. Therefore, as much as McGee (2008:86,87,92) can assert facilitation and the asking of rhetorical questions to be simple methods in elevating discussion and learning (because they are based on “little more than memory recall”), the reports and findings as presented above tend to suggest that such competencies are hindered following *yaqona* consumption. Motivation, awareness and perception are also necessary to intuition (Myers, 2000:23-6), faculties which also appear impaired by post-consumption although necessary to understanding student perspectives and staying relevant with pupils. Further, teacher “duty of care”, a responsibility that requires multiple cognitive faculties including observation, motivation, perception and memory recall also appears threatened. Hall also argued the importance of teachers ‘practicing what they preach’ – a role jeopardised when the teacher is unable to model alertness, motivation and preparedness<sup>73</sup>. Finally, in order to fulfil these roles and competencies, teachers need to be present. However attendance, both physically and mentally, are hindered through lateness, absenteeism and presenteeism due to post-*yaqona* consumptive effects.

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<sup>73</sup> The importance of the teachers as role model was discussed at length in my Master’s study (Aporosa, 2008:67-70).

When McGee & Fraser's "roles" or core competencies of a professional teacher are contrasted with the impairment manifestations reportedly experienced by *yagona* hungover teachers, the results of the cognitive tests, together with participant comment, strongly suggest that these are compromise, which in turn jeopardises quality education delivery. Menter (2009), in his concluding chapter in another edited volume discussing teacher competencies – which includes “professional virtues”, that is... technical and ethical standards” (Gewirtz, Mahony, Hextall & Cribb, 2009:3) – argues that the types of roles discussed there are the benchmarks of a ‘professional teacher’ who is an active participant in nation building and economic growth (p.225). Therefore, Menter infers that teachers who arrive in the classroom in the morning impaired for whatever reason are not only limiting student learning through substandard education delivery but also impeding national development and economic growth. These findings will no doubt be ‘music to the ears’ of anti-*yagona* campaigners and religious organisations (who I discuss in the following chapter), together with development practitioners who tend to focus primarily on indigenous substances as threats to modernity, and economic development. Further, due to interest surrounding *yagona* as a threat to productivity in Fiji (see p.153), I would suggest that this type of finding will be seized upon and quoted by these same people and groups who will fail to acknowledge the qualifier that follows.

## Conclusion

This chapter started by posing the question, does *yagona* impact upon teacher cognition and sickness and absenteeism and if so, what effect does this have on education delivery? By analysing the cognitive test data which compared *yagona* consuming and non-drinking teachers as they enter the classroom in the morning, this suggested a significant difference in the mean scores between these groups groups. Then, by assessing the process used to gain the test data this ‘significance’ was guardedly believed to represent a 16.5% deficit in processing speed of the *yagona* consumers. The qualifier 'guardedly' was used to acknowledge that time constraints and cultural factors prevented ‘gold-standard’ methodological procedures and therefore this method was exploratory and experimental. However, when the

quantitative and ethnographic evidence were combined, this tended to support the assertion that the post-consumptive effects of *yaqona* negatively impact teacher roles, competencies, professionalism and attendance. When these findings are linked with discussion on the importance of education as a development tool, it tends to draw the reader to a reasonably tidy conclusion – that *yaqona* consumption impedes quality education delivery, which in turn hinders the achieving of developmental goals, and therefore jeopardises increases in national development and economic growth. However, such a sterile verdict fails to consider wider issues – that *yaqona*, an indigenous substance central to identity and cultural practice, is important to development.

The theme of culture to development was discussed in Chapter 2. Additionally, the importance of culture to educational achievement was described in Chapter 4. This argued that commentators believe culture, identity and traditional practices were shown to be vital to achieving successful long-term development and educational attainment. What has not been agreed on though is the level of influence culture should have in development practice (p.31-2). Regardless of whether culture is embraced at a moderate level as in post-modernisation ‘impasse’ (see p.26), or exclusively, as in post-development thinking, culture remains vital to development and also assists in eliminating myopic sterile verdicts. The cultural influences associated with *yaqona* and its post-consumption effects on education will be an important theme in the following chapter in which I will address the final research question: Does *yaqona* play other positive roles in the school environment and if so, what action should be taken regarding teacher *yaqona* use, considering it both negatively impacts quality education delivery through teacher impairment although is central to culture and aiding to academic achievement? While this chapter has tended to draw out the negative implications of *yaqona*’s relationship with teaching, the following delineates a broader perspective.

# Chapter 9

## Usage Moderation

### Introduction

This final findings/discussion chapter seeks to answer the last research question: Does *yaqona* play other positive roles in the school environment and if so, what action should be taken regarding teacher *yaqona* use, considering that *yaqona* is central to culture? Prior to addressing this it is worth summarising the discussion thus far to allow several themes to be highlighted.

Chapter 2 explained the conventional development theories of modernisation and neo-liberalism and their emphasis on economic growth and Western style development. This was contrasted with post-development, an anti-hegemonic, internally initiated and theorised development ideology that could also creatively manipulate external systems for their own interests. Although post-development argues for self-determination, the importance of traditional knowledge and discourse systems, communal work practices and ‘economic’ modes of gifting and reciprocity, to date it has not been applied to consideration of indigenous substance use.

Chapter 3 discussed five indigenous substances, explaining that prior to colonisation, the introduction of a monetary economy, and/or industrialisation, these preparations had been deemed non-problematic to socio-cultural and productive systems within their traditional environment. These ‘outside’ influences were so pervasive and efficacious that they frequently caused the demise of, or greatly restricted the use of, most traditional substances within a very short time frame. An exception to this was the use of *kava* in several Pacific nations, where its importance for identify and ceremonial significance was either recognised and “grafted to the culture” (Tavola, 1991:9) or ignored by the colonials (Crowley, 1994:90). This reinforced use systems that have remained to this day.

In Chapter 4 I discussed education as a key input to national development and

economic growth together with the importance of cultural identity to academic achievement. The Fijian Government have embraced education as part of their national development strategy, also recognising the importance of local cultural values and systems. These include *yagona* and *vakaturaga*, elements that also comprise student culture and their expression and identity, elements argued as importance to academic achievement. *Yagona* use appeared unproblematic until questioned by the MoE in their 2000 review. Although they acknowledged at the outset the importance of *yagona* to culture and practice, the MoE followed with concerns that the over-consumption of this indigenous substance by teachers was having a negative impact on education delivery.

Chapter 5 added to the concerns of the MoE by presenting items in the media that suggested the over-consumption of *yagona* negatively impacts productivity. However, in a similar manner to the MoE, no focused research has been conducted to test these reports with the exception of my Master's investigation and preliminary research conducted by USP. My Master's study was summarised, explaining *yagona* intoxication and *steady-state concentration* together with field research data that suggested teachers consumed *yagona* on average for three hours on nights prior to teaching which manifested *lomaloma ca* and impacted their ability to teach. Moreover, that study reported teachers as suggesting *yagona* consumption was difficult to control due to *vanua*-based relationships, *vakaturaga*, cultural obligations and a lack of extra-curricula activity.

Chapter 7 presented new findings that both corroborated and extended areas of my earlier Master's investigation. This included new findings on teacher *yagona* consumption durations of six hours (average) on nights prior to teaching. Further, new perspectives were gained regarding the importance of *yagona* to *iTaukei* cultural identity by investigating several misconceptions revealed between this and the previous Masters research. Additionally, *Fijian* identity was also shown to be linked with *yagona* use. This is mostly through socio-cultural systems and diaspora identity formation, although traditional use patterns were reported at some *Fijian* schools through *isevusevu*.

Chapter 8 discussed the cognitive test results and *lomaloma ca* of post-*yaqona* consumers. Together with the themes of lateness, absenteeism and presenteeism, the findings suggested that the consumption of *yaqona* for an average of six hours on nights prior to entering the classroom potentially caused a 16.5% decrease in processing speed when compared with non-*yaqona* drinkers, which in turn inhibits teacher “professional virtues” (Gewirtz, Mahony, Hextall & Cribb, 2009:3). This in turn is argued to have a negative impact upon national development. With the exception of *yaqona*’s link with cultural identity, argued as a positive input to academic achievement, this substance’s position within the remaining educational environment does not look good. When this is further considered alongside development theory, which has tended to view the use of indigenous substances as an impediment to developmental process (see p.17,94), situationally imposed bans or prohibition on teacher *yaqona* consumption would appear, at first glance, to have considerable merit. As discussed at the end of the previous chapter, those opposed to *yaqona* use together with those who consider it simply as an impediment to production and developmental advancement will no doubt seize this ‘apparent’ explicit finding and use it to push their agenda. However, prior to making such a leap, ethnographic comment gleaned during the field research must first be considered. This asks, does *yaqona* play other positive roles in the school environment?

## ***Yaqona* as Facilitating School Function**

Sixteen school principals were interviewed and asked what role *yaqona* played within their schools. With the exception of one, who stated that due to religious beliefs the indigenous substance was not permitted on the campus (IQ149), the remainder commented in various tones *yaqona*’s role in facilitating school function (IQ150-158). This facilitation manifests in a number of ways.

### **Facilitating Parental Participation in the School**

A common theme associated with *yaqona*’s role in aiding school function was its use in encouraging and facilitating parental participation. As was explained in Chapter 4, most schools in Fiji operate on a State/Community partnership. This relies heavily on

parental and alumnae assistance which contributes to voluntary labour, fundraising activities, and food items for boarding students. Without this community input schools would fail to operate (Nabobo-Baba *et al.*, 2012:386). Therefore, well-developed and maintained relationships are critical to the survival of most schools (p.107). An *iTaukei* principal from a rural school summarised the situation when he said, “*Yaqona* is very important to all Fijian schools [generally] because it is part of the culture but also because it brings the parents to help the school. Like tomorrow we have a building project. No *grog* for the parents, some will not come and then we can't support the school and the students” (IQ159). Another stated, “see, we don't have money to pay [parents who volunteer], so we *caka yaqona ni vakavinavinavina* [show appreciation by hosting them with *yaqona*]” (IQ160).

Such a response could give the impression that voluntary commitment and the success of the State/Community partnership is based upon coercion through *yaqona* addiction, but as I pointed out earlier, citing pharmacological literature, *yaqona* is not believed to cause addiction (p.79). I have looked at this in my Master's research and suggest that if the label 'addiction' is to be applied to *yaqona*, I would hesitantly use 'socially addictive' in the sense that it has been habituated to most aspects of Fijian socialisation (Aporosa, 2008:52). A female principal at a rural school added to this. I asked her whether she believed parents simply came to support her school because of the *yaqona*. She replied–

It's like the *grog* calls the people. It's hard to explain, but you know, it calls the people together. People who don't drink *grog* don't understand this. Like they say, 'see, the *grog* is bad, it is in control of you people, you *grog swipers*'. But it's not like that. We are Fijian's [*iTaukei*] and *yaqona* is important to us. We greet each other with it. We use it for *vakavinavinaka* [showing appreciation]. We use it for talking, for meetings, and for mixing with friends. So it is both. Parents come to work because they want to support the students, to support their old school. Then they sit after, *lose* [mix] *na yaqona, talanoa* [talk, tell stories]. This is *itovo vakaViti* [the 'Fijian way']. When there is no *grog* parents don't come. That is because no *grog* changes everything, like we are not Fijian". (IQ161)

### **Facilitating the Paying of School Fees**

A second valuable role of *yaqona* in facilitating school function is its use in paying school fees, an aspect that tends to be more common in rural areas where *yaqona* was cultivated. *Yaqona* given for this purpose is subsequently sold and the cash credited to

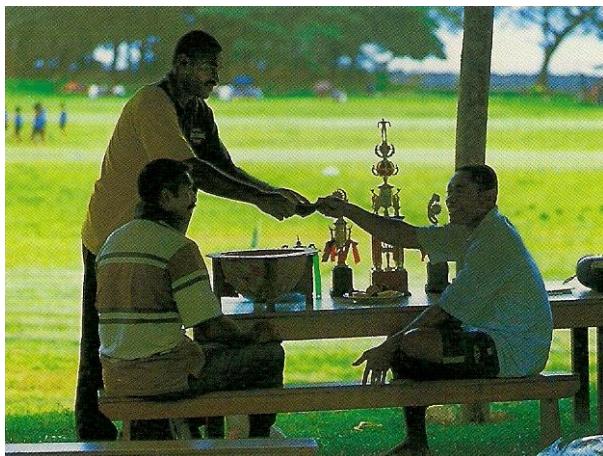
fees (Tirimana, 2005:n/a; Aporosa, 2008:60; Nabobo-Baba *et al.*, 2012:248; IQ162). Instead of being a hindrance, a rural principal stated that he likes this manner of payment, as parents frequently give quantities of *yaqona* valued at more than the fee debt (IQ163).

### **Facilitating Discussion at Board and Parent-Teacher Meetings**

A third role in which *yaqona* facilitates school function is its use at board and parent-teacher meetings. Several principals, both *iTaukei* and *Fijian*, asserted that *yaqona* is essential to these meetings as it offers a culturally appropriate setting that encourages open discussion (IQ164-166). For example, two principals have commented that during board meetings, when sensitive issues need discussion, they would pose the question and immediately call “*taki mada*”, literally meaning ‘serve (the *yaqona*) please’. Because *yaqona* culture prescribes a communication hiatus during consumption (Barker, 1968:91), this encouraged those present “to think deep about the answer. If no *yaqona*, then people talk before thinking” which weakens solutions, argued the informants (IQ167,168). Further, both teachers and parents are reportedly more relaxed, facilitating critical discussion that in other settings could be difficult to engage. This communication process is *talanoa*, a theme I will return to shortly.

### **Facilitating Fundraising**

Fourth, *yaqona*’s use at fundraising events is also deemed vital to financial contribution (IQ169-173). Most schools in Fiji hold annual fundraising *bazaars* which include the sale of food, handi-craft items and the holding of sports events and cultural games with proceeds given toward future running costs and major projects (Perkins, 1967:146-8; Tavola, 1991:92; Nabobo-Baba *et al.*, 2012:298). The inclusion of *yaqona* at these events is so common that Cooper (2003:22) includes a photo of a *Talatala* (Minister) “taking *yaqona* [at a] school sports day” in his précis on “*Viti*” (Fiji) (Figure 9.1). Although Cooper’s photo depicts only three people, at fundraisers attendees frequently gather in *vanua* groups and consume *yaqona* – which the parents and alumni themselves usually supply – in a practice termed *gunu sedi* (literally meaning ‘drinking [for] cash’).



**Figure 9.1**

*Talatala* consuming *yaqona* at a school sports day.

(Source: Cooper, 2003:22)

Technically the *yaqona* is not ‘sold’ during *gunu sedi* in the typical sense, as this is culturally inappropriate (Toren, 1999:37-8). Instead attendees make financial offerings to a ‘crier’ who announces their contribution. This is followed by hearty thanks and a *bilo* of *yaqona* to all. At other times groups compete against each other to encourage and increase giving (Nabobo-Baba *et al.*, 2012:298). For instance, I attended a *bazaar* at a rural school on two occasions<sup>74</sup> where parents and supporters gathered in five designated groups based on *tikina* (district) affiliations. Several of these *tikinas* were *veitabani* to one another (loosely translated as former combatants during the tribal warfare era) (Sahlins, 2004:280). In contemporary culture, violent rivalry has been replaced with *bole* – vigorous joking and fun based competitiveness in the manner of *tauvū* (Toren, 2005:281) as discussed in Chapter 5 (p.145-6). Therefore *veitabani* competitiveness is often encouraged and exploited at *bazaars* to increase fundraising capacity. Toren (1999) presents an insightful description of *gunu sedi* and *bole* that nicely illustrates this discussion. Although she explains *bole* between *tavale* (cross-cousins), her observations are equally applicable to the *veitabani* situation—

*Gunu sedi*, as opposed to ordinary everyday *gunu yaqona* (*yaqona*-drinking), is the name given to those occasions where money is raised by buying and drinking *yaqona* together with other members of the community. This is the only context inside the village in which money is exchanged for a bowl of ready-prepared *yaqona* (p.38)... *Gunu sedi* is often uproarious, full of high good humour and ridiculous jokes all derived from the way one spends one’s money in

<sup>74</sup> Between 2004-9 I attended six fundraising *bazaars*. Four at rural schools, one at a semi-urban school and one at an urban school.

buying drinks for other people but never for oneself... Similarly a competitive exchange can take place where a woman for instance, having pledged a bowl to a male cross-cousin who refuses it by paying to have it sent back to her, then adds a further increment to the money given so that she may herself refuse to drink and have the bowl sent back again to him. The competition goes on, each adding 10c or so to the money they have pledged each time they continue to refuse to drink. One of them is bound to accept the bowl in the end – *yaqona* can never be returned to the *tanoa*. Once the sum has risen to \$1 or \$1.50, or even more if both parties are really flush, one of them signifies surrender by, perhaps, slapping a hand down on the mat in a highly exaggerated version of the clapping of cupped hands that always proceeds one's acceptance of a bowl of *yaqona*. So a single bowl may wind up fetching \$2 to \$3 since each party is bound to pay up to the crier the final sum that he or she has named. There is much joking and plotting and giggling and loud laughter, with spontaneous clapping and expressions of thanks from all the onlookers when someone brings off a particular joke, or at the culmination of competitive payments to force the acceptance of a single bowl (p.39).

At the school *bazaar* I attended, *tikina* members selected one of their *heavyweights* or *black-belts* (colloquialisms used for a *grog swiper* capable of consuming vast amounts of *yaqona*) who then visited their *veitabani* colleges to intentionally initiate *gunu sedi*, bringing back the 'winnings' to boost their own fundraising coffers and overall tally. Several principals explained the importance of *yaqona* to their fundraising *bazaars*. "If no *yaqona*, people don't come" (IQ174). Another stated, "we must have *yaqona* to *sevusevu*" (IQ175, also see p.122), a practice also engaged by staff at a semi-rural Hindi school. "We always do a *sevusevu* for big events at the school like the fundraising *bazaar*" stated the *Fijian* principal (IQ176). As noted earlier, the link between *yaqona* and *iTaukei* identity is obvious. This latest comment adds to my argument that *yaqona* comprises an aspect of *Fijian* identity. The importance of *yaqona* to fundraising is best illustrated by a rural principal who stated that typically their school raised an average of \$8,000 at their annual *bazaar*. This principal lamented that, "last year we did not have *yaqona* and we only got \$182. No one came. We will never do this again" (IQ177). This illustrates the extreme importance of *yaqona* to school fundraising events.

### **Facilitating School Curriculum on Culture**

Although students do not usually consume the indigenous substance outside of medicinal administration by parents and guardians (see Footnote 38), *yaqona*'s cultural aspects were reported as being included in, and important to the curriculum at five schools (see p.122). In this fifth example of how *yaqona* facilitates school function, an *iTaukei* Principal at a rural primary school commented–

The *yaqona* is part of our arts and crafts. See [indicating the *bilo* and wood carvings on the sills in the staffroom (Figure 9.2)], we get them [the students] to make artefacts and things. It's important to do arts that show the culture. *Grog* is important to the school indirectly, like in cultural lessons when the students learn the *sevusevu* and in crafts". (IQ178)



**Figure 9.2**

*Bilo* and miniature *kiakavo* (traditional fighting clubs) made by primary students during arts and crafts classes.

(Source: author)

A similarity can be drawn here between these classroom-based cultural lessons and my description in Chapter 7 (p.225) of students decorating their dining hall walls with traditional iconology that included *tanoa*. While the earlier discussion may not have been strictly curriculum based, they were nevertheless done during class time and were demonstrations of cultural identity linked with *yaqona*.

The learning and presentation of *isevusevu* as part of cultural studies is relatively common, especially in *iTaukei* schools, as discussed in Chapter 4 (p.122). For example, Figure 9.3 shows a friend, Maika Balenaivalu (Jnr), then aged 12 and a student at Veiuto Primary School in Suva, presenting a *tabua* at the opening of his school's fundraising *bazaar* (Kikau, 2001:5). Shortly following the taking of this photograph, Maika presented a *isevusevu*. In 2011, at a *yaqona* session in New Zealand that included his father and several friends, I produced a copy of the photograph which prompted a lively and lengthy discussion by all present. Maika explained that aspects of the presentation were taught to him both at school and in the home environment. "It was important to me that I do it [the *tabua* presentation and *isevusevu*] properly. When I do it properly, I do it for everyone who comes from there [indicating his own *vanua* and school]". His father, Maika Balenaivalu (Snr), described how proud he had felt and emphasised that his son had spoken in his own Naitasiri dialect and not the common *vosa vakabau* tongue. "It shows we have

something to pass down to the generations. This shows who we are, that we are Fijians.” Others at the *yaqona* session reflected on their own school days and the importance to them of presenting or being part of *isevusevu* at school events. This discussion clearly emphasised cultural identity and a sense of pride that remained many years after the event’s conclusion.



**Figure 9.3**

12 year old Maika Balenaivalu (Jnr) presenting a *tabua* at the opening of his fundraising bazaar, Veiuto Primary School, Suva.

(Source: Kikau, 2001:5, photographer: Asaeli Lave.)

### **Facilitating Identity Through Cultural Expression**

In the weeks leading up to a *bazaar* I attended in 2006, I observed male students in cultural studies classes practising the art of *isevusevu* presentation using the traditional mixing style (with *na ibou*, a fibrous strainer made from the branch of the *vau* or Hibiscus tree) (Aporosa, 2008:33-4) and the serving of *yaqona*. At the subsequent fundraiser I watched emotional parents proudly looking on as their sons put into practice what they had learned. One student’s father explained to me following this event, “When my son does that [the presentation of *yaqona* to the invited guests], he is us, he is doing it for all us [making a gesture with his hands that indicated those present at the school and the surrounding *vanua*]. We are proud of him and you can see we are *kai Viti*”. This, with the Maika Balenaivalu (Jnr)’s discussion above, reiterates the link between the *yaqona* culture and the teaching of cultural studies as part of school curriculum. Additionally, it reasserts an important theme within this

study. Although the act of presenting *isevusevu* or even the mixing and presentation of *yaqona* to dignitaries is ‘technically’ an individual pursuit, from a cultural perspective it is considered ‘representative’. This is because it is done on behalf of the entire school, which includes the teachers, the students and their parents, and the *vanua* of the presenter, should they be connected paternally to an area other than the *vanua* in which the school is located. This sixth example of *yaqona*’s use in facilitating school function also reasserts, demonstrates, and confirms the importance of *yaqona* in furthering cultural identity.

### **Facilitating the Promotion of Staff Unity**

*Yaqona* use to create staff unity was frequently mentioned during interviews. In this seventh and final example of the role *yaqona* plays in facilitating school function, an urban *iTaukei* principal explained that his staff met habitually at the end of the school week to consume *yaqona* together–

See, *yaqona* is the cornerstone of our culture. I use it to get the teachers together. It's a way we can openly sit and discuss things. When we drink together, I am not the principal, we are all equal and it's time for us to talk. The staff can relax and talk about the problems of the week. (IQ179)

A rural *iTaukei* principal added–

The teachers mix [*yaqona*] every afternoon. I always go to them. When I go, I become a staff member, not the principal. Staff relax and we can discuss the problems. It makes us strong like a team". (IQ180)

A male *iTaukei* vice principal at a semi-urban school commented that because his Principal was a woman who did not drink *yaqona*, staff frequently gathered at his house (within the school compound) at the end of the day to consume the indigenous substance. He stated, “the *yaqona* washes away the stress... it brings us together. Alcohol can’t do that” (IQ181).

At the end of Chapter 7 I discussed the value of *yaqona* ‘bringing people together’ and breaking down ethnic separation. Under normal circumstances there is a marked boundary between *iTaukei* and *Fijian* socialisation. However this tends to

blur in the teaching environment when *yaqona* is consumed, a situation I have observed in over a dozen schools. What is interesting though is that the dominant culture in the consumption setting tends to influence consumption style (Subramani, 2000:11). For example, at a rural school where *iTaukei* comprised the majority at the *yaqona* circle, traditional protocols were clearly embraced by all present including the *Fijian* teachers. Alternatively, at an urban Hindi school the consumption was vastly more relaxed, with a greater secular feel, lacking structure in seating position and with rarely any *cobo* (clapping, see Fotnote 58). The *iTaukei* teachers present at this *yaqona* consumption also reflected this relaxed style. However, later that same night I went with one of the *Fijian* teachers to an indigenous *yaqona* circle at a nearby village. Upon arrival he immediately adopted a more formal attitude, observing ‘standard’ *iTaukei* cultural norms. In contrast, at a semi-urban Hindi school I visited, which comprised mostly *Fijian* staff, strong indigenous consumption practices were observed which were clearly encouraged by the *Fijian* principal who presided over the event. Irrespective of the consumption style, what was most obvious at all of the school-based *yaqona* sessions I attended was the strong sense of cooperation and amicability between ethnically mixed staff members. This mutuality appeared to transcend the usual racial segregation (Robertson & Sutherland, 2001:78-81; Ratuva, 2002:151-4; Srebrnik, 2008:91) I have witnessed in general society, separation I have also seen in the staff room where teachers tended to congregate ethnically. These observations demonstrate the critical role *yaqona* plays in facilitating the school function of staff unity.

### **Reflection**

In the opening section of this chapter, following an overview of selected themes from previous chapters, it was suggested that, with the exception of *yaqona*’s link to cultural identity and concomitantly academic achievement, the position of this “cultural keystone species” within the remaining educational environment did not look good. By answering the first part of the final research question, participants have offered new perspectives which argue strongly in support of *yaqona* and its use within the educational environment. Essentially, *yaqona* and the culture that accompanies it acts as a beacon, drawing, aiding and encouraging parental and alumni support in furthering

the State/Community partnership mandate. *Yaqona* is then used to reciprocate that support, acting as a recognisable emblem of appreciation. The indigenous substance also acts as a mode of fee payment, a meeting facilitator, and an ‘encourager’ to both the attendance and financial contribution at *bazaars* – fundraising events that are critical to the survival of most schools in Fiji. *Yaqona* is also an icon that expresses and cements cultural identity. This *yaqona* identity juxtaposition is vastly more pronounced with *iTaukei*, although as discussed earlier and in Chapter 7, glimpses of *yaqona*-related identity can also be seen in the *Fijian* ethnicity (p.229). Therefore, as is argued in the case of *iTaukei*, this would suggest that an *yaqona*/identity juxtaposition also contributes to *Fijian* academic achievement (p.225).

Finally, participant reports indicate *yaqona*’s use in encouraging staff interracial unity in a nation that has in the past suffered violent ethnic separation (Prasad, 2009:117). When these positive attributes are considered, instead of asking if *yaqona* plays other positive roles in the school environment, possibly the first part of the final research question should read, how would many schools survive without this indigenous substance? For instance, how would many schools survive if *yaqona* was banned, eliminating the practice of *gunu sedi* and limiting fundraising *bazaar* income?

Admittedly *yaqona*’s positive role in schools does not specifically address or counter impacts to education delivery and “professional virtues” (Menter, 2009:217,219,225) that participants report result from the over-consumption of the substance on nights prior to teaching. It could equally be argued that many of these positive roles in fact contribute to the disruption of “professional virtues” (Gewirtz, Mahony, Hextall & Cribb, 2009:3) – events such as *bazaars* and reciprocal appreciation potentially increase *yaqona* intake and hours spent at the *tanoa*. This further illustrates the traditional/contemporary tension discussed throughout this thesis which illustrates the complexity that has arisen from the use of *yaqona* in the education environment. On one hand Fiji has embraced education as part of its ‘tool kit’ for achieving national development and promoting economic growth. Critical to this goal is a teaching structure that encourages motivation and physical and mental alertness and delivers high quality education paralleled with “professional virtues”. This is

complemented by a State/Community partnership reliant upon volunteers and altruism to support the delivery of that education. On the other hand, Fiji has a traditional substance that, although strongly linked with cultural expression, identity, reciprocity and school function, also appears to cause cognitive impairment that concomitantly disrupts education delivery and the “professional virtues” of those tasked with aiding the attainment of national development and the promotion of economic growth.

This leads to the last part of the final research question. This will seek to gain understanding about action that could be taken regarding teacher *yaqona* use and the tension this has created in the contemporary education environment, a complexity that both negatively impacts quality education delivery while also being culturally centric and aiding school function? To aid answering this question, it is first worth considering the two extreme opinions regarding *yaqona* use:

## Contrasting opinions

Two contrasting opinions concerning *yaqona* use emerged during this research. Overall, most Fijians support the use of this indigenous substance, although there is a small but growing oppositional voice. This section will explain these two extremes. However, it also demonstrates variances in belief within these two key opposing voices.

### Pro-Use

The predominant or popularist view, is held by those who actively embrace the use and practices associated with *yaqona* as part of culture, identity and socio-cultural expression. This is a theme which has been widely explored throughout the study. Many *iTaukei* pro-use advocates tend to be aligned with the Methodist Church. Thomas (1997) obviates this when he explains that daily *yaqona* use is an “expression of pious religious (Methodist) sentiments... reinforce[ing] the explicit identifications between Fijian [*iTaukei*] custom, a respect-structured kinship order, the way of the church, and the kava ceremony” (p.50). Alternatively, in Chapter 7 it was discussed that *Fijian* *yaqona* users were more likely to be Hindu or Muslim (Fiji Islands Bureau of

Statistics, p.7).

During the field research participants were asked their opinions on *yaqona* prohibition. Pro-use respondents tended in the first instance to be reactionary. For example, a male *iTaukei* principal at a rural school began his reply with, “No one can stop us from drinking *yaqona*. People might try to stop us but they can’t because it is part of our culture” (IQ182). An *iTaukei* female teaching at a rural school appeared frustrated when asked this question. She replied, “See, it’s the people looking from the outside that are making a big deal out of it, about us teachers drinking *grog*. Leave us alone. This is our drink, the *kai Viti* drink” (IQ183). In this response she alludes to anti-*yaqona* comments made by New Methodist sect Minister *Talatala* Vulaono suggesting that those who were critical of, or did not partake of *yaqona*, simply did not understand the wider issues surrounding the indigenous substance and therefore were not ‘true’ Fijians. Such beliefs though are not limited to *iTaukei*.

A female *Fijian* who stated she did not consume *yaqona* believed prohibitions and bans were futile. “They,” referring to anti-*yaqona* advocates, “can’t do much. *Grog swipers* will always drink” (IQ184). An urban male *Fijian* teacher concurred, adding, “No one can stop us. They can't tell us what to do at night-time, in my time” (IQ185), an issue also pointed out by an urban *iTaukei* principal (IQ186). On the whole though, *iTaukei* comments tended to lean toward culture as the reason prohibition should not be considered or would fail, whereas *Fijians* were more likely to point to personal time and freedom of choice.

Another female *iTaukei*, this time from an urban school stated, “This is hard. See, it doesn’t matter what those people say, because we are part of the community, so we have to be there, we have to *sevusevu*, and that means you have to drink. To tell us to stop is too easy” (IQ187). In her response this informant could not conceive of a *yaqona* ban. She simply responded that other factors, such as cultural practices and hosting obligations would overshadow and outweigh the possibility of *yaqona* prohibition. The MoE in their *Learning Together* report also acknowledge this situation stating, “Teachers are expected to participate in and conform to the host community.

This places an extra burden on teachers, as they are effectively on duty 24 hours a day, and their actions are constantly under the scrutiny of the community" (Tavola, 2000:169).

A female *iTaukei* principal pointed out a contradiction-

There is lots of things that is causing under-achievement, not just *grog*. Just like plenty of countries, there are different things. They can't just blame the *grog*. It's double standard coz plenty of white teachers drink alcohol every night and go to the classroom, but that is okay. Too many people are talking about us *grog* drinkers. See, the *grog* is sacred. You can't blame the *grog*. (IQ188)

This informant is not alone in highlighting this incongruity. D'Abbs (1995) reports a similar concern among Aboriginal *kava* drinkers following a ban on the substances in the Northern Territories. "Why is it, men at Yirrkala ask rhetorically, that governments are so willing to impose controls on the sale and supply of kava, which we all know is drunk mainly by Aboriginals, when they are apparently incapable of imposing anything like comparable restrictions on alcohol sales?" (p.180). D'Abbs makes a good point. However, when such an inconsistency is highlighted by *iTaukei*, who also conceive of the substance as part of and an expression of their cultural identity and life-ways, the contradiction gains an added level of potency and complexity.

These responses suggest that most informants believe the indigenous substance is so immersed, and is of such great importance to cultural systems, that many found it hard to conceive a life without it. This can be further illustrated by an encounter I had while visiting a school. During a *yaqona* session in a staffroom after school hours, I left the room at one stage and returned a few minutes later to notice a sticker on the staffroom door warning that smoking, *yaqona* and alcohol consumption were "prohibited on these premises" (Figure 9.4). I later learned this had been issued by the MoE around 1996 or 1997, and had been on the door since. As we were consuming *yaqona* at the time, I jokingly drew the teachers' attention to it. One teacher commented, "*Sa dina* [an expression of surprise]! First time for me to see [that] aye; I been here four years now [laughs]" (IQ188). Another stated, "no, no smoke and *hot-stuff* [referring to alcohol] in here, but *grog* is different" (IQ189). This

teacher then explained that the top section of the sticker, which had originally displayed the word “Prohibited”, had been removed. Therefore these activities were now permissible, which led to quite a bit of hilarity. These comments were stated as though any references prohibiting *yagona* consumption in the staffroom was a ‘misprint’ on the sticker, something that could be ignored and/or justified. Such reactions reiterate the importance of the indigenous substance to the culture so much so that many cannot conceive of life (including aspects of socialisation within the school) without it.



**Figure 9.4**

A sticker warning that cigarette smoking, *yagona* and alcohol consumption are “Prohibited on these premises”.

(Source: MoE, est. 1996-7)

This is in contrast to a growing oppositional voice who is gaining momentum. Collectively I have termed this opposition group ‘the anti-*yagona* alliance’. They comprise two positions which I have further designated the ‘sacred’ and the ‘secular’.

### ‘Sacred’

The ‘sacred’ are those who consider *yagona* and its associated practices to be evil and demonic, believing its use comprises communion with the traditional gods and is therefore anti-Christian (Newlands, 2004:2; Tomlinson, 2007:1065). As discussed in Chapters 2 and 5, early missionaries, colonials and modernists held similar concerns although they failed to ban *yagona* due to its crucial role in ceremony and cultural practice (Crowley, 1994:90; Thornley, 2002:185). Many of the contemporaries who

maintain these beliefs tend to be affiliated with Pentecostal congregations such as the *Assemblies of God*, the *Seventh-day Adventists* and splinter churches including *New Methodists* and *All Nations* (Blocker et al, 2003:345; Tomlinson, 2007:1068; Titus, 2009:8; Tomlinson, 2009:128)<sup>75</sup>.

Potentially the most vocal opponent of *yaqona* in recent times has been *Talatala Atunaisa Vulaono*, co-founder of the splinter *New Methodist Church* (Fiji Times, 1999:13; Titus, 2009:8). In 2001 Vulaono (p.1) allegedly received a “prophetic... revelation for Fiji and the World [being ‘told’] that Kava / Yaqona drinking is used by Satan... [to disrupt] the development, education, living standards, knowledge, wisdom and maturity of all people”. The call for *yaqona* prohibition by *New Methodist* has become one of its defining points as a movement, with its founders suggesting, “it is a hold-over from pre-Christian religion and not from God” (Titus, 2009:8). In 2008 Vulaono reasserted his beliefs in two articles published in the Fiji Times (2008b:2; 2008c:2). I was in Fiji at this time and heard a great deal of discussion at village-based *yaqona* sessions concerning Vulaono’s statements, especially from those who attended the mainstream Methodist Church. Reactions ranged from light-hearted jokes and dismissals of his views to heated debate claiming Vulaono had rejected his culture (“he is not a true *kai Viti*”), through to suggestions that it was he who had been deceived by Satan. Criticism of Vulaono by Methodists is not surprising considering many from this mainstream denomination believe a connection exists between *yaqona* and the Christian God.

As I discussed in Chapter 3, many *Pasifikans* believe a union exists between *kava* and Christianity. Ryle (2010), for instance, states, “Pacific theologians have related the *kava* ceremony to the Christian Eucharist,... [paralleling this with] themes of self-sacrifice, leadership and service” (p.19; also see p.20-15). In the case of Fiji, he adds that many *iTaukei* liken images from Christ’s *Last Supper* with servitude within

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<sup>75</sup> In a recent email discussion with University of the South Pacific anthropologist Dr. Lynda Newland (who specialises in new Christian movements in Fiji), we discussed *yaqona* and Pentecostal Churches. She commented that although these groups ban the “cultural keystone species”, “this doesn’t stop them from growing the stuff – just drinking it, and in some places, a cup for *vakaturaga* sake [indicating *isevusevu*]” (pers.comm, 2012, June 6).

the *yaqona* circle. Toran (1988) furthers Ryle's comments, suggesting Leonardo da Vinci's tapestry of *The Last Supper* "evokes the image of a group of clan chiefs [drinking *yaqona*] with the paramount [chief Jesus] at their centre" – the 'centre' meaning *icake* (in front of the *tanoa*, at the top, in the high position) and therefore symbolising an act of worship (p.709). The tapestry image and symbolism, she argues, is "a material manifestation of 'the Fijian way'" (p.696). Such imagery is considered to symbolise 'Fijian-ness', explaining why teacher participants such as the critic above (IQ183) engaged in heated debate concerning Vulaono's comments – beliefs deemed to amount to a rejection of Vulaono's *iTaukei* identity and 'Fijian-ness' (Aporosa, 2011b:7-9).

Vulaono's anti-*yaqona* message created a further stir when his brother Esala Teleni, the Commissioner of Police and a *New Methodist*, announced at a Police religious crusade the institution of a ban on *yaqona* consumption by on-duty officers<sup>76</sup> and those living in Police accommodation (Fiji Times, 2008d:18; 2009b:16, Delaivoni, 2009:3), and the taking of *yaqona* overseas by officers on foreign deployment (Valou, 2009:3). Many I discussed this issue with were concerned regarding the real motive behind the ban. Although Teleni stated this was to aid "professional and best appearance (and maligning) the picture of a disciplined force" (Fiji, 2009a:18), most of his messages were delivered at religious crusades where he "challenged those who gathered... to quit drinking *kava*, the traditional drink, as it is not 'right'" (Delaivoni, 2009:3). Additionally he singled out and warned *Fijian* officers that they "must respect my religion" (Raicola, 2009:1), that attendance at weekly church functions "was mandatory" (Indian Weekender, 2010, n/a), and that those who ignored his

<sup>76</sup> On-duty *yaqona* consumption by members of the Fijian Police is not uncommon. In 2009 I sat with a group in Suva that included four on-duty, in uniform, night-shift constables, consuming *yaqona* until the early hours. One was tasked with monitoring the radio and twice during the night the four hurriedly left the room and attended emergency jobs. On several occasions during the night they joked about hiding their patrol car at the rear of the building we were drinking in so "the boss can't see". There are times however where "officers [are] often offered *yaqona* in the line of duty." (Fiji Times, 2005:2; also see Baba, 1996:2). Abramson (2009:269) explaind such an occasion where "police need to sit with the chief and drink *yaqona* under usual ritual conditions if they are to go about their business in the *koro* [village]. And, even then, business with the suspect will be ritually mediated and necessarily shared with the chief, his herald, and a good percentage of the village men folk". Similarly, at a large school fundraising *bazaar* I attended, *isevusevu* was presented to Police who attended as part of crowd control and security duties. The *isevusevu* was received and acknowledged by one of the party and all consumed several *bilo*'s as a culturally appropriate response.

requirements would be sacked<sup>77</sup>. His comments were interpreted, for right or wrong by those I discussed the issue with, as being motivated primarily by his New Methodist-influenced beliefs, as opposed to issues concerned with best practice and professionalism. In August 2010 Teleni handed in his resignation under a cloud of suspicion. A Government spokesperson “acknowledge[d] there's been speculation surrounding the Police Commissioner's role... [but] it was Commodore Teleni's own decision to resign” (Radio New Zealand International, 2010:n/a). Admittedly we will probably never know the full story, however “mandatory Christian worshipping and praying came to a stop at police stations” following Teleni's resignation (Indian Weekender, 2010, n/a). Additionally, a police source in Fiji told me *yaqona* consumption had resumed in police accommodation and officers on foreign deployment were again taking the substance with them overseas. This suggests that concerns regarding Teleni's anti-*yaqona* mandate appear to have manifested at higher levels than the village *yaqona* circle.

In another situation illustrating ‘sacred’ anti-*yaqona* practice, Newlands (2004:8-9,12) discusses village-based friction and division that resulted when visiting members from a ‘sacred’ anti-*yaqona* Christian group refused to partake in *isevusevu* and consume *yaqona*. This was interpreted by the host villagers as a rejection of culture, the *vanua* and most importantly, local chiefly authority. Thomas (1997) adds to this theme, describing a *Seventh-day Adventist* member seated at the periphery of a *yaqona* circle drinking water during his field research. After briefly mentioning this, he follows by detailing the importance of *yaqona* to “tradition, values,... social relations”, chiefly acknowledgement and “hierarchical order” (p.50). He asked, “How was it possible for people [such as this Adventist] to take foreign religious prohibitions so seriously and eschew these crucial cultural values?” (p.50). In asking this, Thomas queries how an *iTaukei* could renounce fundamentally entrenched cultural values and respect-based submission observations. He follows by arguing that the act of renunciation amounted to the challenging of chiefly authority and the rejection of “the ‘official’ church” (Methodist) itself, an act that leads to village fraction and potentially

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<sup>77</sup> In September 2009 the Fiji Times reported that six officers were “sacked... because they had acted in defiance to [the] directive issued two months ago” (Ralogaivau, 2009:4).

self-imposed ostracism (p.51). A key point from Newland and Thomas's work is that those who reject *yaqona* consumption, and especially the cultural practices surrounding it, are seen by pro-use subscribers to be challenging and disrespecting chiefly position. Although anti-*yaqona* advocates may have a greater chance of avoiding criticism in urban areas, this is most often not the case in the rural setting where traditional values are prized (Brison, 2007:95). The *Methodist Church* is often the centre piece of the village, church attendance is routine (Tomlinson, 2009:6-7) and 'sacred'-type beliefs are considered anti-establishment, non-conformist and a threat to life-ways and authority. However, exceptions to this do exist.

The maligning of 'sacred' members by village Methodists is not always *fait accompli*, with tolerance extended under certain circumstances. For example, Tomlinson (2009:217) discusses a situation in which a 'sacred' member held to his beliefs and did not consume the indigenous substance, although attended *yaqona* sessions and "voiced his approval of the proceedings". I have also attended *yaqona* sessions in which this same person was present. At one gathering, another attendee with a *veitabani* connection to this person attempted to draw him into *bole* to force him to consume *yaqona* (see p.146). Others present dissuaded the initiator and affirmed the 'sacred' member, overtly suggesting acceptance of this person regardless of their beliefs. I discussed this with a colleague seated next to me. He stated that the important issue to most in attendance was that this person was present and would attend during *isevusevu* (although not consume), that they were an active participant in the community and did not attempt to proselytise others. These factors mitigated and excused his refusal to consume *yaqona*. It could be argued that this 'sacred' member simply 'played the game' in order to be accepted, but I did not get that impression. He was a personable individual, although what set him apart while, simultaneously unifying him to the *yaqona* consumers, was his commitment to his beliefs without appearing to judge those consuming the indigenous substance. By "voic[ing] his approval of the proceedings" he acknowledged cultural values and authority so, together with being an active member of the community, the non-consumption of *yaqona* was considered a minor matter. I would go further and suggest that his actions and words of cultural affirmation together with his unwavering

commitment to his own beliefs was actually considered a strength of character, which in turn was rewarded with equal respect by those present.

In a similar manner to *iTaukei*, there are also ‘sacred’ members within the *Fijian* community. As discussed in Chapter 7 (p.229), the consumption of *yaqona* by *Fijians* is a recently acquired practice and still frowned upon by some. Miller (2008:370) states, “kava... [is] usually associated with ritual pollution in Hindu theology”. I would argue though that Hinduism is a little more relaxed regarding *yaqona* consumption than Miller suggests. For example, 78% of the *Fijian* community record themselves as Hindu (Fiji Islands Bureau of Statistics, p.7) although “significantly more... *Fijians* consume kava... compared with [*iTaukei*]” (Schultz *et al.*, 2007:180). Additionally, a majority of my *Fijian* friends and teachers identify as Hindu and most have ‘healthy’ *yaqona* appetites, further implying a vastly more relaxed approach when compared with their *iTaukei* ‘sacred’ peers. A *Fijian* teacher who I know is Hindu and does not consume *yaqona* admitted during an interview, “*Grog* causes problems, *grog* makes teachers lazy, villagers don’t go to the farm, it makes family problems, but you can never stop it. This is Fiji and *grog* is part of Fiji” (IQ190). Although the ‘sacreds’ may be outnumbered by those who enthusiastically embrace *yaqona* use and consumption as part of culture and practice, they are not alone. A second group, also comprising the anti-*yaqona* alliance, are those I have termed the ‘seculars’.

### **‘Secular’**

‘Secular’ adherents are those who hold to varying degrees of *yaqona* renunciation for non-religious reasons. They range from ‘secular fundamentalists’ who reject *yaqona* completely in the manner of the ‘sacred’ through to a more moderate grouping who partake of the indigenous substance only on special occasions such as funerals, weddings, high-level cultural events (chiefly installations) and business transactions requiring cultural affirmation due to the involvement of the *vanua*. What tends to solidify the ‘secular’ group is their concern regarding *yaqona*’s impacts on productivity and socio-cultural disruption. Although this study does not discuss the latter (see Aporosa, 2008:52 for more on this theme), *yaqona* and impacts on productivity have been discussed extensively. In Chapter 5 it was explained that such concerns are

common, with the primary medium for discussion being the Fijian media. Although plentiful and frequent, such comment tends to be anecdotal, as focused research to date has been limited to my Master's study and the 2007 USP study (see p.143) which is still underway. I have several friends in the Fijian media who believe that much of the debate on this subject is driven by 'secular' anti-*yaqona* 'evangelists' within several key organisations or solicited by 'sacred' journalists seeking an opportunity to push a personal agenda. I have had a firsthand experience with the latter to illustrate this.

In December 2008 I presented a summary of my Master's findings at *The Pacific History Conference* held at The University of the South Pacific in Suva. Although I stated on numerous occasions throughout my presentation the need to balance the cultural importance of *yaqona* against educational impacts, a Fiji Times reporter focused on a single comment and quoted me out of context in a front page article the following day. *Kava Abuse: Academic Blames Poor Results on Teachers* (Ratubalavu, 2008:1) made no reference to culture or its importance to *yaqona* practice and resulted in me having to present several *matanigasau* (culturally appropriate apologies accompanied by *yaqona*) to groups who had been offended by my 'alleged' opinion. I followed this up with a complaint to the editor of the Times, including reference to the incorrect spelling of my surname within the article. The editor suggested that the reporter was anti-*yaqona* and attended a religious organisation that advocated *yaqona* prohibition. Further, this reporter's denomination had been holding their annual conference in Suva at the time the article was published and it was believed the journalist had used an isolated comment from my presentation to advance the beliefs of her faith. I did not discuss the issue with the journalist and therefore the comments of the editor are open to conjecture, but by way of an apology the Fiji Times invited me to rebut the *Kava Abuse*... article in a two-page weekend special (Aporosa, 2008a:15-17).

In this case the reporter was *iTaukei*, although such narrow rhetoric is also authored by *Fijian* journalists. Monika Singh's (2007) article *The Good and Bad of Kava* is an example of this. I would argue her lengthy piece implies mostly *bad* and very little *good* and is supported by judgemental, unsubstantiated, emotive language such

as “people have crossed the line between traditional use and abuse... concerns have been raised... but these are in vain... people are abusing it [yaqona]... Kava is mostly abused by people during their traditional functions... [and] Many men are... addicted to kava” (p.7). These comments were drawn from a very small section near the beginning of the article, and are typical of what followed. Although she is critical of *iTaukei*, her piece is clearly not ethnically singular, asserting “Indians are drinking kava at almost every function... Hindus will celebrate Shri Krishan Janmashtami (birthday celebration for Lord Krishna) this week and during this time men can be seen sitting around the grog basin after the traditional *pūja*” (p.7). During a conversation with two journalist friends, we discussed Singh’s article together with *Kava Abuse: Academic Blames Poor Results on Teachers*. One stated, “a lot of [journalistic] standard [in Fiji] is poor. People say what they want, push their own thing, and no one checks, and it gets published”.

### Reflection

Two distinct and opposing voices have emerged. The ‘sacred’ and extremist ‘secular’ opinion seeks the complete abolition of *yaqona* while the moderate ‘secular’ advocates situational bans. Alternatively those at the other end of the spectrum, the pro-use subscribers, deem such action as a threat to their cultural expression, practices and identity, and are adamant they will not be stopped from consuming their indigenous substance. The feeling of this latter group can be best summarised by paraphrasing Thomas’s rhetorical question (regarding the *Adventist*): How is it possible for us to even consider prohibitions as this would seriously eschew crucial cultural values? While it could be argued that this pro-*yaqona* view is as militant as the ‘sacred’ opinion, this is not the case, as even those from within the anti-*yaqona* league have an understanding of the complexities at stake here. Several examples of this can be found in the comments of the participants mentioned earlier (IQ184,190). In another example, the “President of the Fiji employers Federation, Thomas Raju, said [that although] *yaqona* was a major factor in loss of productivity, both during working hours and because of its ‘hangover’ effects... employers were very conscious of the tradition behind *yaqona* drinking and the fact that banning it may offend some people” (Baba, 1996:2). This draws the study to a critical point. Where to from here

considering all of the complexities? This will be discussed following a brief revisit to the methodological influences to this study.

## Addressing the Traditional/Contemporary Tension

In Chapter 2 I discussed the evolving ideology of post-development. This approach seeks the elimination of external hegemonic systems through locally driven processes informed by culture, traditional knowledge and self-determination. In Chapter 6 I explained *Vanua* Research and its application and use in investigating the research questions within this study. This led to an explanation of my own post-*yagona* consumption experience as well as my role as a participating-observer. I concluded this by explaining that although some would argue my ‘insider/outsider’ position allowed me a platform for personal comment, this was not an approach I intended to take. Instead, local voices and experiences have been relied upon to investigate the final part of the last research question concerning the action that should be taken regarding teacher *yagona* use in consideration of the traditional/contemporary tension that both negatively impacts quality education delivery while also being culturally centric and aiding school function.

To do this, participants were asked during the field research what, if anything, should happen if tests suggested the consumption of *yagona* the previous night was impairing cognition and negatively impacting the delivery of quality education to students. The responses of teachers working at the education coal-face will now be presented.

### **Local Responses to a Local Issue**

During the field research, 37 participants had explained to them the purpose of the psychometric assessments and then were asked what they proposed should happen if the results suggested *yagona* consumption impaired cognitive function (which then impacted a teacher’s ability to deliver quality education to their students). Almost half of these informants initially responded that no matter the results of the cognitive tests or directives from the Public Service Commission (PSC) limiting *yagona*

consumption, there is very little that could be done. As a reminder, it was explained in Chapter 4 that the PSC, in a 2007 circular, warned that “Government employees [which include teachers] are strictly prohibited from drinking *yaqona* during office hours” (p.127). A female *iTaukei yaqona* consumer responded, “teachers are like all Fijians who drink *grog*, they will always drink, no one will stop us” (IQ191). Another female, this time *Fijian*, stated, “you can't teach the old cat new tracks, so you can't teach a *Grog Swiper* to stop swiping *grog*” (IQ192). Other comments, one from a *iTaukei* female and the second from an *iTaukei* male, both *yaqona* consumers, suggested, “This is hard. See, it doesn't matter what the tests find, because we are part of the community, so we have to be there [at functions, as hosts for guests], so that means us teachers have to drink” (IQ193) and “People can encourage us to stop [drinking *yaqona*], but this is about our culture, *itovo*, the *vanua*.” (IQ194,195).

Participants were also asked if further regulatory measures would be of any value in curbing heavy *yaqona* consumption use or encouraging alternative drinking practices. An *iTaukei* male who consumes *yaqona* argued, “that would be a waste of time, pointless, coz no one listens to the one [indicating the PSC memo] now.” (IQ196) Seven teachers commented that a MoE directive restricting *yaqona* consumption to the weekend would be valuable (IQ197-204), however some of these same participants immediately recanted this. For example, an *iTaukei yaqona* drinking female commenced by arguing, “Maybe the Ministry [of Education] could make a law”, then, as though she had had an epiphany, a realisation as to the futility of her suggestion, she began laughing and followed with, “okay, the other one [indicating the PSC memo] don't work, so nothing will work” (IQ205). This informant was not alone in their belief that “True, laws do not work” (q206,207) “because *grog* is part of us, is part of Fiji” (IQ208). Two further participants were adamant that the Government “has no right” (a male *iTaukei yaqona* consumer, IQ209) to legislate what “we do in our own hours, at the night-time. I can drink *grog* in my house and no one can stop me” (*yaqona*-drinking male *Fijian*, IQ210). This is also a theme acknowledged and discussed in my Master's research (*ibid*, 2008:106-7).

A second Master's research theme resurfaced when this latest question was

asked. This theme was regulatory measures as an aid to altering consumption practices, I theme I discussed in Chapter 5. Several participants felt that some within the MoE contradicted their own *yaqona* policy and therefore perpetuated heavy consumption. For instance, a *Fijian* male who consumes *yaqona* commented–

They [MoE] tell us not to drink in work time but then I go to the Ministry and I mix [aqueous *yaqona*] with one Senior Education Officer in the office. See, we are Fijians, *grog* is part of the culture. No *grog*, no culture. *Grog* is like the lead actor in a film. (IQ211).

A non-*yaqona* drinking *Fijian* female HoD argued that although the MoE may stipulate that *yaqona* is not to be consumed during working hours, they equally recognise the importance of cultural practices such as the *isevusevu* including the presentation and consumption of the indigenous substance. Another stated–

The Ministry does not allow *grog* to be mixed during working hours, yet it is happening. When the officials [from the MoE] come, we do a *sevusevu*. We must do this. You [indicating me the researcher] understand. And they drink and then they go away. See, the Ministry says no but they come and drink coz they know the culture. (IQ212)

As such, some Senior Education Officer's (SEO) consume the traditional substance as part of that cultural observation and this has lent itself to the creation of 'mixed messages'. A *yaqona*-consuming *iTaukei* male principal furthered this line of discussion–

The Minister of Education can make some rules, like no *grog* in the quarters of teachers. But they cannot say 'no *grog* in the private house'. They [the MoE] can say no *grog* in the [school] compound, only for special occasions, but the problem is our lifestyle, our culture. Even when they say you can only drink on special occasions, what is a special occasion? You know *kai Viti* interpretation, we can always make one [meaning 'occasion']. See, when the guest comes, even that one from the Ministry, that is one occasion, so we *sevu* and mix the *grog*... *Kai Viti* life has lots of occasions. So how can the Ministry say we can only drink on the special occasion? (IQ213)

Interpretation and the creation of 'occasion' was a theme also alluded to by a research participant during my Master's research. "We Fijians, when it is about *grog*, give us an inch, we take a mile" (Aporosa, 2008:92). The informant went on to suggest that subjective *yaqona* consumption would continue until defined boundaries were established which would in turn clear up ambiguities.

Since these comments were obtained, the MoE (2010) has released its own *Policy in Drugs and Substance Abuse in Schools*, which was discussed at the end of Chapter 4. As a reminder, Point 2.2 in that policy states, “The MoE makes allowance for *kava* only to be used at ceremonial purposes [sic] in moderate amounts”. As the two previous participants suggest, “special occasions” is a broad term that can also be interpreted as “ceremonial purposes”. This, with the new MoE policy, was discussed with a Senior Education Officer (SEO) who frequently travels to schools as part of their role. The SEO commented that since the introduction of this policy they had noted a change to the *isevusevu* practice. While in the past it was not uncommon for aqueous *yaqona* to be mixed and consumed following the presentation of *waka* (raw *yaqona* root) by the SEO, “now *sevusevu ga, sega na lose*” (IQ214) – literally meaning the cultural presentation was still done although it now lacked the consumption aspect. This was a suggestion made in my Master’s study and discussed in Chapter 5 (p.135). However, this informant then added, “*Poy!! After [school hours], they try n’ kill you. Nothing changed (laughs)*”, indicating that once the school day had finished heavy *yaqona* consumption ensued as part of the teacher’s responsibility in hosting SOEs. The participant qualified this by stating this type of heavy consumption was more common in rural areas where it was also suggested the policy had not really made much difference. “Some [teachers, he argued] still drink in the day. They just more careful now.”

The SEO was asked for their interpretation of the policy, specifically regarding what appeared to be an inconsistency between Point 2.2, which allowed moderate *yaqona* use for “ceremonial purposes”, and Point 2.5, which “strictly prohibit[s teachers]... from drinking *yaqona* during office hours... on [school] premises”. He stated that although they had not received any specific instructions on the policy, he did not believe a contradiction existed. “Ceremonial purposes” he suggested, covered occasions such as school fundraising *bazaars*, end of year student graduation services and times when a chiefly or high-ranking (as in Government) guest visited a school. “Strictly prohibited” events were considered those that lacked a large scale or required cultural formalities such as chiefly acknowledgements. When it was pointed out that the policy states *yaqona* consumption is “strictly prohibited... on [school] premises”,

despite the SOE having indicated this continued at many campuses after hours in the school hall, his response was, “see, it is ok because it is after hours”. Then, as if hearing my question afresh<sup>78</sup>, the SOE added,

*Aww karaik [slang, in this case indicating understanding], (laughs), see, you can never stop the grog. Even after the policy, it [yaqona consumption within the campus and during schools hours] is still happening all over the place. It will always be like that. That is why it called the wainivanua ['water infused manifestation of the land, people and culture'].*

The last portion of the comment yet again alludes to the traditional substance's link with cultural form and practice. Overall though, the SOE's comments highlight the complexities of trying to change a culturally embedded practice (*isevusevu* and *gunu yaqona*) with a contemporary approach (policy). In attempting to create 'black and white' instruction and direction while simultaneously considering cultural importance, this has done little more than produce subjective 'gray areas' open to interpretation dependent on best practice at the time. This is simply a smaller manifestation of the overall theme of this study.

### **Reflection**

Overall, the present discussion suggests that most participants believe that irrespective of the results of the cognitive tests or regulatory measures aimed at curbing *yaqona* consumption levels to mitigating impacts to education delivery, little will change. This is primarily because *yaqona* is intertwined with cultural practice and identity. For many *iTaukei* and some *Fijians*, to remove or restrict *yaqona* would restrict or remove aspects of culture. This ideology has been a recurrent theme throughout the research. Additionally, the perceived futility in restricting or prohibiting *yaqona*, as expressed, further highlights the complexities involved in the traditional/contemporary tension that has unfolded concerning the culture of *yaqona* with that of education and the developmental/productivity process.

The complexity of this tension can also be seen in the new MOE *yaqona* policy. On one hand the MoE allows *yaqona* consumption within the school environment for

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<sup>78</sup> As discussed in Chapter 6 (p.186), this is an example of 'deductive reasoning', an interview technique utilised throughout the field research to aid in 'digging' below the subconscious and doxic thinking.

“ceremonial purposes” while simultaneously “strictly prohibit[ing] it... on [school] premises” to counter impacts to productivity. This perceived indecision or incongruence suggests the MoE are also struggling with exactly how to manage or deal with this culturally intertwined and sensitive situation. Although the SEO cited above did not initially identify an inconsistency, once this was recognised, they justified any such “strictly prohibited” *yagona* use by pointing to culture – again highlighting the nature of this uniquely sensitive issue.

It is one that defies a simplistic approach or answer. So far, solutions to restricting *yagona* consumption to limit suggested impacts to education delivery have ranged from prohibition to “No one can stop us from drinking...” (IQ182). Although prohibition appears to lack favour, harm reduction options are considered.

### **Prohibition and the Road to Harm Reduction**

The success of prohibition in eliminating substance use is extremely limited. According to Deitch (2003), America’s *Noble Experiment* – the alcohol prohibition of 1920–1933 – was a “miserable failure” (p.141). Rather than eliminating alcohol use, it drove consumption underground and created an organised criminal network that reaped massive profits. Deitch concluded that “Instead of uplifting everyone’s moral fiber, as it professed to do, it destroyed moral and ethical values, created disdain for the authorities, and wrecked the economy.” Goode (1993) is just as unforgiving, arguing, “Prohibition was a catastrophic failure... [and that] while alcohol consumption did decline during Prohibition, the decline was fairly modest” (p.170).

Historically, most colonially initiated *kava* prohibition in the South Pacific have mirrored the failure of the *Noble Experiment*. The only exception to this was Kosrae, Rarotonga and Tahiti as discussed in Chapter 5. More recently, situational prohibitions in the form of directives and policies (such as the PSC and MoE bans discussed above) have also been ineffective. Deitch (2003) makes an interesting point regarding the “miserable failure” of the *Noble Experiment* which has application to the *yagona* situation. Prohibition, he argues, fails because it tends to be based on the “moral convictions” of a few who attempt to impose these on ‘the many’, sentiments that are

frequently narrow and overlook wider issues (p. 141). ‘Sacred’ and extremist ‘secular’ calls for prohibition appear to illustrate this. These advocates comprise a minority voice when compared with the moderate ‘secular’ and pro-use subscribers. Further, as participants have repeatedly suggested, *yaqona*’s union with cultural expression, practice and identity is the critical inhibitor to such prohibition. In the case of Deitch’s argument, this is the critical ‘wider issue’ frequently overlooked by the ‘sacred’ and extremist ‘secular’ advocates.

A concern with prohibition, and one that also has relevance to the Fijian setting, is ‘substance switch’ (Goode, 2003:171). Experiences following the introduction of the *Kava Management Act 1998* aimed at eliminating *kava* use among Northern Territories (Australia) Aborigines exemplify this. Academics describe the influences that led to the introduction of this *Act*, and more recently the Australia-wide *Federal Kava Ban*<sup>79</sup>. Specifically concerning the theme of ‘substance switch’, O'Reilly *et al.* (2005:87-8) state that “the ban increased alcohol consumption together with marijuana usage in all communities”. To address the increase in alcohol usage, the Federal Government introduced a ban on this substance in these communities in 2007 (OIPC, 2009:n/a). This then led to the creation of a profitable black market selling illegal alcohol (ABC News, 2007; Pinomi, 2008:15) together with further increases in

<sup>79</sup> The British Medical Journal (1988:1801) reports that kava was initially introduced to the Australian Aboriginal population in the Northern Territories area in the late 1980s with the aim of curbing alcoholism and a raft of anti-social behaviours, a measure that at the time was deemed highly successful. Hunter & D'Abbs (2003:333) report that “kava offered the pleasures of mild intoxication, however it did not lead to the patterns of violence and destruction that were tearing Australian indigenous communities apart... Having failed to halt the introduction of ‘white man’s poison’ [alcohol], they hoped that kava might provide a less destructive alternative: in modern drug policy parlance, a ‘harm reduction’ measure... No sooner had it been introduced than controversy erupted. Anecdotal and often sensational reports circulated about all-night binges, with ensuing detriment to families’ health, rising absenteeism and even breakdowns in essential community services.” Over the following twenty years the N.T. Government monitored this use of kava (Trevena-Vernon, 2001:48) resulting in further reports describing a link between excessive use and decreased levels of productivity (Alexander, Watson & Fleming, 1987:21; Trevena-Vernon, 2001:48). This prompted the introduction of the *Kava Management Act* in May 1998 aimed at controlling these problems through regulated *kava* trading systems (Trevena-Vernon, 2001:48). A 2007 ABC News article reported these controls failed to limit availability. “A new kind of illegal kava trade was created by the licensing system itself... kava was being transported into the NT illegally from southern and eastern states.” To restrict cross border *kava* importation, the Australian Government instituted what has become known as the 2007 *Federal Kava Ban* through an amendment to the *Customs (Prohibited Imports) Regulations 1956* (ABC Radio Australia, 2007:n/a; DoH&A. 2011:n/a). Singh (2007:7) reported, “In June [2007], Australia effectively banned commercial kava imports, only permitting it into the country for medical or scientific purposes or in small amounts from incoming passengers”.

cannabis use. One commentator asserted, “simple bans are not dealing with the problem” (Bardon, 2009:n/a). In 2007 the Federal Government also instituted an Australia wide *kava* ban restricting imports of the indigenous substance to two kilograms per person<sup>80</sup>. This must be carried into the country on the person and cannot be shipped or posted. In early 2008 Australian *Pasifikan* communities began reporting an increase in violence levels (Pinomi, 2008:15): “What is now happening is alcohol has become the substitute for kava; kava's promotion of a gentle sense of contentment is being replaced with the violence so often associated with excessive drinking.” As such, there is express concern regarding the possibility of ‘substance switch’ resulting from a *yaqona* ban in Fiji.

Fijians have a common saying concerning alcohol, one that originated from the Church pulpit, was picked up on by school career advisors, and has since become a catch-cry – “*Ni ra gunu yaqona ni valagi sivia na kai Viti, e ra dau vakarautaka e levu na itovo kaukauwa, ka laki tini ena veivala*”. This literally means, “When iTaukei drink too much alcohol, they tend to show actions which are violent and abusive and leads to confrontation (fights)”. In New Zealand this is often paraphrased, “Mix the coconut and the *hotstuff* and you get a big bang”; meaning, when Pacific Islanders drink alcohol (*hotstuff*), fights start. Violence as a result of alcohol consumption is a reason why, in the circles I mix in, its use is discouraged and *yaqona*, with its calming unifying effects, is encouraged.

<sup>80</sup> In 2007 the Australian Health Minister Tony Abbot clarified the *Federal Kava Ban* stating that “adults will still be allowed to bring up to two kilograms of the substance into Australia in recognition of its cultural importance to Pacific Islanders.” (ABC Radio, 2007:n/a). The Australian Customs Department appears to be actively enforcing the ban, evidenced by the arrest of a “young New Zealand man... for importing nearly 20kg of kava into Australia's Northern Territory [in August 2011]... caught by... drug sniffer dog... in Arnhem Land... His luggage contained 19kg of kava separated into 18 different bags. The street value of the drugs was estimated at \$19,000.” (Stuff.co.nz., 2011:n/a). The 2007 *Federal Kava Ban* prompted the formation of *The Australian Kava Movement (AKM)*. This Australian-based lobby group, which includes several high profile academics (including Massey University's Professor Sitaleki Finau), are seeking to overturn the ban arguing it “is not a health and medicinal issue but political and commercial; which is a breach of the UN Charters on Global Democracy, Human Rights and Indigenous Peoples” (AKM, 2011:n/a). Further, the AKM argue the *Federal Kava Ban* is hegemony veiled in political correctness. Although the Australian Government suggested they respect the “cultural importance to Pacific Islanders” by allowing them to “bring up to two kilograms of the substance into Australia”, this has been interpreted to mean, ‘we recognize the cultural importance of *kava* to Pacific Islanders but will dictate how they express that culture, and that will be in quantities of two kilograms’. Therefore the ban is believed to limit the cultural expression and ceremonies that mark and bless the life-events of Pacific Islanders living in Australia.

In a 2008 ABC News (Australia) documentary entitled *Kava Culture – Vanuatu*, the former Vanuatuan Minister of Finance and Economic Management (Dec. 2010 to June 2011), made an interesting comment regarding kava and socio-cultural harmony. “Since we have had lots of *kava* drinking we have less problems. Before, drunkenness was a problem – people drink alcohol, they fight. With *kava* we don’t have any more of this problem” (7 min. 12 sec.). The reporter then explained that *nakamal* (*kava* bars) in Vanuatu were a post-1980 independence creation, a “product of social engineering designed to lower the crime rate. [This included a] prohibitive duty... [being] slapped on alcohol making *kava* the affordable brew of choice” (7 min. 25 sec.). *Kava* expert Dr. Vincent Lebot added, “If alcohol was cheaper, readily available, we would have more crimes in Port Vila than we do have today... Because of *kava* I think it is maintaining society in a harmonious manner” (ABC News, 2008:7 min. 45 sec.). Additionally, in a recent TVNZ documentary (Lumsden, 2012:6min.), former rugby league team captain Rubin Wiki, nicknamed the *King of Kava*, explained his motives behind introducing *kava* to his fellow players in an attempt to “change the culture”. He stated, “there was a lot of bad publicity... due to guys going out after the game and getting caught in the [news]papers due to to much alcohol. I wanted to change [this].”

The socio-cultural implications that are likely to result from substance switch, especially if regulatory measures as sought by ‘sacred’ and extremist ‘secular’ advocates were successful, must be considered. Experiences learned from prohibition would suggest that the elimination of *yagona* would also be a “miserable failure”. Clandestine consumption is already occurring as a result of the PSC and MoE regulations. This would no doubt increase. A black market *yagona* economy would doubtlessly develop, one that would be very difficult to police due to ideal growing conditions, the sparseness of the island nation and the remoteness of many villages. Substance switch (Goode, 2003:171) is also likely with increased alcohol use, which in turn would cause a surge in violence levels (see Footnote 79). Mental health providers in Fiji have been reporting for some time their concerns over links between cannabis use and “biopsychosocial” impacts (Norere, 2007:8). Substance switch resulting from prohibition would potentially increase cannabis use and psychological impacts. Most importantly though, such prohibition would result in massive cultural dislocation and

upheaval, a theme repeatedly alluded to by the research participants.

Gray & Wilkes (2011) make an interesting comment that hints at post-development, an approach very different to that of prohibition. They state, “blanket bans such as those imposed on remote communities [by the Australian Federal Government] are counterproductive. They take away Indigenous initiative, leading to resentment and exacerbation of existing social problems, both of which undermine willingness to work cooperatively with outsiders to address such problems” (p.508). Such calls for alternatives to prohibition have increased the popularity of harm reduction measures as discussed in Chapter 2. These include public education, needle swap programmes and decriminalisation. Key to that earlier discussion was Loue’s argument (p.94) that harm reduction is a “cultural-centric approach” which considers religion, ethnicity, class system and indigeneity and therefore considers Gray & Wilkes “Indigenous initiative”. One of the key questions then becomes, is harm reduction an option to mitigating *yaqona* consumption?

### **Harm Reduction and *Yaqona* Use**

Until prompted, only two of the 37 participants suggested actions other than enforced regulatory measures in order to curb *yaqona* consumption levels believed to impair a teacher’s ability to deliver quality education to their students. One, a male *iTaukei* academic and former *yaqona* consumer stated, “I would look at adult learning, adult education for these teachers so that they receive information on this. Looking at something like awareness programs to get them to drink less *yaqona*.” (IQ216). A former *iTaukei* school principal who consumes *yaqona* made a similar suggestion—

See, regulations never work. You have to come from the other side. You have to target them [teachers] to lift the standards on how they present, punctuality; then maybe this will put pressure on people to change their drinking behaviour. We need to think hard about this. But to tell people just to stop drinking, this will not work. Public awareness is good. Like the cigarettes. There is change happening for smokers because of awareness programs. In 2005 and 2006 there was an intensive awareness programmes and we are seeing some success. (IQ217)

This informant is not alone in their observations regarding tobacco use reduction. This is something I have also noted among my *iTaukei* family and friends, especially in the

past five years. The potential of awareness programmes was put to 12 of the participants, however thoughts were mixed. Four participants, all *yaqona*-consuming *iTaukei* males, felt such a programme “wouldn’t work” (IQ218-220). One of these, a school principal, added they would be “a waste of time, pointless.” (IQ221) He justified his comment by explaining that the use of *yaqona* comprised cultural practices and systems that had been observed for generations and, in his opinion, could not be changed by an awareness programme. “People might come [to the programme] but the culture is more important”, he added.

Two of the participants were unsure. An *iTaukei* male *yaqona* drinker suggested, “it might be valuable, but you know *kai Viti* style, we just can’t do that” – again indicating the complexities of culture (IQ222). A female *yaqona* consumer of *iTaukei* ethnicity suggested that “it might be affective for some teachers, but the ones that drink will always drink” (IQ223). The remaining six participants were more encouraging. A male *iTaukei* who consumes *yaqona* believed such a programme had merit, “but it would have to be in the Fijian [*vosa vakabau*] language” (IQ224). A non-*yaqona* drinking *Fijian* female believed “it would have some positive effect [because] they are teachers, they are learned people; it will stick in their heads” (IQ225). A non-drinking male *Fijian* suggested, “don’t tell them rules and don’t give them a book coz they never read it. But awareness programme will be good for them” (IQ226). Finally, a *yaqona*-consuming SEO stated, “you need to target the heads of the Ministry [of Education] first. The teachers can’t change until the ‘heads’ change” (IQ227).

### **Where to From Here?**

The final part of the last research question asks what action should be taken regarding teacher *yaqona* consumption, if such drinking is believed to negatively impact quality education delivery. As discussed, prohibition has essentially been ruled out as a possibility. This is chiefly because the use of *yaqona* is integral to the *vakaturaga* value system, which the stability of the culture and its identity are hinged and expressed. Secondly, it was argued that prohibition would simply lead to covert consumption and ‘substance switch’ which would mirror the “catastrophic failure” of the America’s *Noble Experiment*, the alcohol prohibition of 1920-1933 (Goode, 1993:170; also see

Deitch, 2003:141). Finally, Professor Nicholas Thomas (1997:50) acknowledged what is at stake here when he commented that *yagona* use “is visibly and manifestly a cultural practice, a ritual that is bound up with traditions, values, and social relations” and that to prohibit this “cultural keystone species” would “eschew these crucial cultural values”.

Although regulatory measures as developed by the MoE (see p.125) fared slightly better than the idea of prohibition, overall they appear to lack favour due to undefined boundaries, immeasurability and unenforceability. Additionally, although some participants felt public awareness programmes would be “a waste of time” (see IQ221 above), others felt they had some potential for success citing a reduction in tobacco use attributed to such harm reduction measures. Therefore, from the perspective of the participants who were asked what, if anything, should happen if tests suggested the consumption of *yagona* the previous night was impairing cognition and negatively impacting the delivery of quality education to students, public awareness programmes appear the most constructive way forward.

It could be asked then, after all those weeks of field research, countless hours of *yagona* consumption, the reading of over a thousand journal articles and almost one hundred books and multiple pages of discussion, is that it? Are there no other options except for awareness programmes (of which many participants felt would be fruitless)? The key to remember here is that this study is guided by *Vanua* Research – a post-development aligned approach – in which local voices were used without influence or suggestion for the purpose of encouraging internal debate. It was such domestic dialogue, originating from within the local educational arena that led to the suggestion that awareness programmes may have value. Although no further options were suggested (other than regulatory measures or prohibition) during the field research utilised (which admittedly only consulted 37 participants), this does not necessarily lead to the conclusion that alternatives are not possible.

A key to stimulating further local initiatives is the culturally embedded communicative process of *talanoa* (also see Chapter 6, p.170). Nabobo-Baba

(2005:393) discusses the value of this “culturally recognised and accepted process” in conflict resolution. “Talanoa – or more accurately veitalanoa – is traditionally used in the Fijian [*iTaukei*] process of veivakaduavatataki (to make one, to connect, to re-connect to make one, to restore peace)” (p.392). Essentially *talanoa* promotes dialogue and encourages wrestling with issues, in order to expand on them together with continual regurgitation at later times in changed environments, thus building on previous progress or seeking alternative pathways where there appears to be impasse (Nabobo-Baba, 2005:396-7; Vaka’uta, 2011:8). Robinson & Robinson (2005) explain *talanoa* at length and capture its ideals when they stated–

Talanoa ('talk' or 'discussion' in Fijian, Sāmoan and Tongan) is a Pacific Island form of dialogue that brings people together to share opposing views without any predetermined expectations for agreement. Talanoa participants set the parameters for their discussions: inclusion, reconciliation and mutual respect... Sitiveni Halapua... [who acted as a moderator during post May 2000 *coup d'état*] talanoa sessions... [stated], 'To say people have to agree to something is starting at the wrong end. Whose fault it is for not striking an agreement becomes the primary focus. People are afraid of differences but they are a fact of life. The ultimate goal is living with the differences. Understanding them better is a good start' (p.1)...  
Talanoa is a traditional Pacific Island deliberation process that goes round in circles; it does not follow a straight line, aiming towards a final decision like many Western processes. It involves a lot of repetition,... talanoa has no time restrictions... this does provide the opportunity for 'slow thinkers' to be engaged in the discussions... talanoa is centred on an open-style of deliberation, focusing on respect, tolerance, flexibility, openness and fairness... underpinned by unwritten rules and etiquette [of *vakaturaga*] (p.14).

I have experienced this “repetition” on numerous occasions, sometimes returning to a *yaqona* circle after several weeks or months to find an issue still being wrestled. This is especially so when the issue has cultural and/or political value.

Additionally Farrelly (2009) explains the importance of *talanoa* to “business *vakavanua* (p.1)... [and] local decision making processes... [as part of a successful] community-based ecotourism development” (p.2) in Taveuni, Fiji. Under normal circumstances, she explains, “the core cultural values associated with the *vanua* are incompatible with those of entrepreneurship” (p.2). However in this case, *talanoa*, with its culturally guided communication process that is “characterised by repetition and... no time constraints” (p.3) acts as the catalyst for the success of the development venture. Further, Farrelly (2009) alludes to the importance of *yaqona* to the *talanoa* process when she cites a research participant who states, “in the Fijian style – the

*va'vanua* style, we... sit together... drink [*yaqona*] together and discuss" (p.3-4).

Nabobo-Baba (2005) also explains the importance of *yaqona* to the *talanoa* process of *veivakaduavatataki* (conflict resolution)–

At the end of the *talanoa* session, the *yaqona* prepared by the dauniveivakaduavatataki is drunk together to seal the truce and bless the relationships within the *vanua*. The purpose of the *yaqona* is to submit the agreement to the ancestors and God, and also place a curse on any party that breaks the affirmation of *veiwekani* (clan relationships) made in the mediation process. This curse is known to continue for generations. It is the *yaqona* that gives weight to the whole reconciliation process (p.393-4).

Where Nabobo-Baba explained the use of *yaqona* at the conclusion of *talanoa* to affirm agreements, the use of the “cultural keystone species” is also important to the opening of *talanoa*. As previously explained, the culture and use of *yaqona* is juxtaposed with the ethos of *vakaturaga*, (p.146,159,166,256), therefore the presentation and consumption of this indigenous substance at the commencement of *talanoa* also prescribes the expected atmosphere which includes the *vakaturaga* values of *veidokai kei vakarokoroko* (respect and humility). Robinson & Robinson (2005) infer this value system when they explained–

Drinking kava before the *talanoa* session is a ritual acknowledging and apologising for harsh words or wounds that have been inflicted by people involved. It opens up the discussion and sets a peaceful tone for the following deliberation. Once the kava has been drunk, participants are obliged to sit and talk without preconceived views (p.14).

Finally, in addition to Farrelly's brief comment above, Mishra (2007:45) also explains that *talanoa* and *yaqona* consumption frequently go hand-in-hand, a practice common to both *iTaukei* and *Fijians* (also see Nabobo-Baba *et al.*, 2012:110). He adds, “*Talanoa/tanoa* echo each other, dragging one into the other through euphonic and socially semiotic connections” (p.45).

The traditional/contemporary tension that has unfolded in this research, with its cultural importance, possibilities and potential impacts for both *yaqona* consumers and non-drinkers alike, I would argue, is a topic ideal for *talanoa*. More importantly, this locally driven and culturally guided process informed by the traditional value system knowledge base manifests self-determination in forging a way ahead.

Furthermore, this is the primary goal of this research, to stimulate internal dialogue enabling those at the post-development coal-face to wrestle and build on this culturally informed complexity.

Although the Former President of the *Malvatumauri* (*Vanuatu's National Council of Chiefs*), Willie Bongmatur (1994), does not offer insight concerning the specifics of the tension being debated here, he does makes an important and valid statement that offers guidance to the task ahead for the Fijian Government:

Any national cultural policies must be based on local cultural ideas and practices. A national cultural policy must not be imposed from the top to the bottom, but must come from the bottom to the top. It must take into account matters such as... connections between cultural heritage and local identity, and people's authority over their own custom.

Cultural leaders at all levels should be advisors in local and national cultural policy formulations. Policymakers need to consult closely with existing cultural leaders. National cultural policies must address all levels of community, including the provincial and the village. These policies should coordinate all functions relating to culture that might be performed by various governmental and private bodies and agencies.

All who might be involved in cultural policy formulation and its implementation must have a clear idea of what is meant by the terms custom *and* culture. National cultural policies must attempt to make clear to the people that culture is a living thing; that it does not refer to archaic matters or objects such as artefacts in museums; and that it covers all aspects of people's lives (p.85).

*Talanoa* is an ideal setting for the addressing of cultural policies.

## Conclusion

This chapter brought a marked change to what had been, up to this point, mostly negative comment concerning *yaqona* within the teaching environment. Prior to this, the only real exception was the indigenous substance's link with identity formation and solidification and concomitantly academic achievement (p.119). By answering the first portion of the final research question, 'Does *yaqona* play other positive roles in the school environment..?', it would appear the removal of this cultural icon would create a number of difficulties in addition to identity limitation. Overall participants stated that *yaqona* was a critical element in the State/Community partnership where it aided community support, a necessity to school administrative and labour duties, infrastructure and maintenance, the supply of food items for boarding students (see p.107) and most importantly vital financial assistance. The massive loss of income at a

school fundraising event due to the absence of the indigenous substance is an overt example of this. This then raises the question of how many schools could survive without *yaqona*? Admittedly though these positives can be simply negated by reasserting the impacts of *yaqona* to teacher “professional virtues”, or simply embracing the opinions of the ‘sacred’ or ‘secular fundamentalist’ oppositionist as discussed above. This theme will comprise discussion in the final chapter which will include psychologists comment that argues “people tend to remember more negative... [than]...positive... statements” (Nairne, 2011:302), a factor that add to the complexities of this traditional/contemporary tension.

When asked how *yaqona* should be handled considering cognitive impairment and impacts to quality education delivery, participants working at the education coal-face mostly responded that little could be done due to the importance of the indigenous substance to the culture. Additionally this link with culture and expression was believed to limit the effectiveness of policies aimed at restricting consumption. Moreover, this problem also appears to be both recognised and struggled with by the MoE who, in attempting to create a ‘black and white’ policy, have done little more than produce subjectivity due to acknowledging cultural importance. Collectively the comments of the participants together with ineffectual policy attempts reiterate the complexity of this traditional/contemporary tension, a predicament that also appears unlikely to be resolved through prohibition as this has the potential to create alternate socio-cultural implications such as ‘substance switch’ and increased violence. Public awareness and harm reduction programmes, especially those with a “cultural-centric approach” (Loue, 2003:153), did receive some favourable endorsements from participants, with one participant citing tobacco use reduction in Fiji as resulting from such action. However, this idea was also criticised by a few participants who felt the cultural factors associated with *yaqona* use would overshadow and therefore void the value of awareness programmes. It could be argued that cultural reasoning is simply an excuse cited by *yaqona*-drinking *iTaukei* to justify consumption. However, the responses of several non-*yaqona* drinking *Fijians*, who acknowledged that the indigenous substance was importance to culture together with acknowledging authority (IQ194,190,212), would suggest otherwise. Yet again this highlights the

complexity of this unique issue. Regardless of the mixed reactions to awareness programmes, there was some support for these, indicating that harm reduction measures could be worth considering by those at the educational coal-face.

Finally, *talanoa* was recommended as a promising way ahead in untangling this complex and culturally important issue. *Talanoa* is a post-development, locally driven, “culturally recognised and accepted process” (Nabobo-Baba, 2005:393), a system of dialogue argued to be ideal in disentangling this unique situation. It empowers locals from all sides of the opinion base to debate, be heard and decide on issues that directly affect them, free of external influence, domination and hegemony.

The following final chapter will summarise the aims and findings of the study, the contributions this has made to the literature, and a final concluding statement.

## Chapter 10

# The Interweaving of Culture, Development and Education

### Introduction

This final chapter begins with a review of the key influences leading to this current research. This is followed by a summary of the study's aims and a discussion of its findings as they relate to the core research questions:

- What are the *yaqona* consumption habits of Fijian teachers, and what role does culture play in this?
- Does *yaqona* impact teacher cognition, sickness and absenteeism and if so, what effect does this have on education delivery?
- Does *yaqona* play other positive roles in the school environment and if so, what action should be taken regarding teacher *yaqona* use, considering that *yaqona* is central to culture?

Contributions to developmental and educational literature are then presented. The chapter finishes with suggested areas for future research followed by my concluding statements.

### Key Influences – Research Rationale

This research began with a personal narrative in which I explained my struggle to teach following a night of *yaqona* consumption. Essentially, this experience led me to consider what would happen to education delivery and Fijian national development should teachers be asked to cease consuming their “cultural keystone species” (Garibaldi & Turner, 2004:5) on nights before teaching or on the school campus. The more I considered this issue it became apparent that there were layers and complexities that defied simple cause-and-effect arguments. These factors acted as the initial key influence that compelled me to undertake this research. The second

came when I began researching material related to my experience. This proved difficult, as available literature was dominantly anecdotal in nature and characterised by subjectivity such as unsubstantiated reports in the Fijian media. Additionally, no research could be identified that had investigated the relationship between *yaqona* and education with the exception of a short comment in the Ministry of Education's (MoE) review, *Learning Together* (Tavola, 2000:169) which included an earlier statement by Jenkins & Singh (1996:35).

The *Learning Together* document presented a list of factors the MoE believed had either aided or impeded academic achievement in Fiji (Williams, 2000:186-8,214-5). This included a reference to "yaqona drinking" (Williams, 2000:187), although it did not elaborate further on this. This review also presented discussion on "quality of teaching" and "bad teaching" (Williams, 2000:187,215), terms I drew together under the focused theme of *quality education delivery*. By drawing on other literature that discussed the role of quality education delivery in facilitating academic achievement (Fraser, 2008:1; Hall, 2008:221,225; Sewell & St. George, 2008:204) and concomitantly economic and developmental betterment (Voigt-Graf, 2003:163;Williams, 2004:133; St. Clair Skeet, 2007:31-2), a fuller understanding of this theme proved relatively simple. However, discussion or information on *yaqona* within the educational arena, other than the brief comments mentioned above, was absent within the remainder of the MoE document – in fact, this was a discussion lacking in literature generally. Moreover, what limited comment was available appeared to be confusing. For example, while the MoE acknowledged the importance of *yaqona* to Fijian cultural systems, they appeared equally concerned that its over-consumption had the potential to disrupt teacher effectiveness (Tavola, 2000:169), but had no evidence to support this. Further, in this report the MoE agreed that culture (which includes *yaqona*) and its associated values (of *vakaturaga* – cultural values based on respect) play an important role in educational attainment and guide socio-cultural processes. However, they also note that culture can displace educational importance and, in turn, hinder academic achievement and subsequently, socio-economic and political development (Williams, 2000:179;184).

These comments, together with my ancestral and identity connections with Fiji, previous experience as a teacher in that country, and more recently understandings gained as a development studies student, highlighted both a traditional/contemporary tension between the traditional use of *yagona* and the contemporary pursuit of development, and acted as the key influence in undertaking this study. Finally, the complexities of the traditional/contemporary tension informed the aims of this research and are reviewed below with their key findings.

## Summary of Study Aims and Findings

### The Aims of the Study

The MoE alluded to the complexity of a traditional/contemporary tension when they stated, “*Yaqona* drinking is important in ceremonial Fijian culture and social gatherings but excessive consumption of *yagona* is becoming a problem... it substantially inhibits performance of duties in non-traditional professional environments, including the civil service and teaching” (Tavola, 2000:169, emphasis added). To assist with an understanding of this juxtaposition and the wider aspects of culture to Fijian education generally, the MoE requested that research be conducted to give understanding to the relationship between Fijian [*iTaukei*] culture and values and its system of education (Williams, 2000:188). In my case this request was formalised by a personal invitation from the Deputy Secretary for Education.

This study aimed to respond to that invitation by investigating the specific theme of *yagona* and quality education delivery as opposed to a broad-sweeping discussion of all themes and elements presented in the *Learning Together* review. The investigation was guided by the indigenous *Vanua* Research framework, an approach that embodies the principles of post-development. Post-development is an evolving anti-hegemonic, internally theorised, initiated and applied development ideology. Further, post-development acted as a resource to assist in resolving some of the theoretical aspects of “contemporary problems created by modernization and development” (Schech & Haggis, 2000:124). The contribution this current research has made to post-development is discussed following a summary of the research findings.

## **The Findings**

A total of 145 people assisted the study. Of these, 63 teachers from 18 of the schools visited, were surveyed and interviewed, providing information that enabled participant selection for cognitive assessment. 36 of these met the necessary conditions for psychometric testing, and comprised two groups ('active' and 'control'). Results of these interviews and assessments are discussed below, and are organised under headings that reflect the questions that were investigated.

### *Research Question 1: Yaqona Consumption and Culture*

The first research question focused on gathering information regarding the *yagona* drinking habits of Fijian teachers and then asked what role culture played in that consumption. The participants in this study reported that, on average, they had consumed *yagona* for six hours on nights prior to teaching in the classroom. Although there was a significant difference between this average and that which was found in my earlier Master's study (three hours) (Aporosa, 2008:24), this did not seem unrealistic. For instance, preliminary findings from a USP study suggest females consume, on average, between two and three hours and males five hours per session, whereas another researcher stated that males were observed to drink, in some cases, in excess of 40 hours per week (p.143; Newland, 2008:n/a; Tomlinson, cited in Aporosa, 2008:68). Admittedly two-thirds of the data indicating consumption volumes was collected during November, a time when the school year slows down due to examinations. However, some of my Master's data was also collected during an examination period, further supporting the likelihood of an increase between this and my earlier Master's study. The consumption period of six hours equates to an estimated 36 *bilos* and 9,576mgs of kavalactones, almost 32 times greater than the daily pharmacologically recommended dose (Mediherb, 1994b:2).

Of interest was consumption by ethnicity, which revealed what I termed the creation of *perpetual statements of inaccuracy* by *iTaukei*, as well as the importance of culture in promoting *yagona* drinking. Although the rural *iTaukei* participants were adamant they were the heaviest consumers of *their* indigenous substance, when compared to their urban and semi-urban ethnic counterparts and *Fijian* (formally

termed Indo-Fijians) consumers in all settings, this was incorrect. Rural *Fijian* teachers were shown to be the heaviest consumers (averaging 8.6 hours per session prior to teaching) while urban *iTaukei* drinkers (averaging 6.6 hours) were found to consume more than their rural ethnic counterparts (at 5.6 hours). I argued that the creation of these misconceptions by rural *iTaukei* was founded in notions of identity. Factors that supported this were *iTaukei* statements that described *yaqona* use as solidifying and reinforcing a sense of place, tradition and power. These statements echo what I described as *yaqona* representing an ingestible manifestation of *vanua* (p.132). This observation was developed by drawing on commentators who stated *vanua* is “inextricably tied to an idealized tradition” (Tomlinson, 2012:218) through “identity... spiritual roots... relationships... knowledge and language” (Nabobo-Baba *et al.*, 2012:23).

I further argued the *iTaukei* desire for identity solidification was a reaction to perceived threats to their culture from modernity, Westernisation, urbanisation and *Fijian* political, business and property ownership success. These threats to self are an active ingredient in the creation of these *perpetual statements of inaccuracy* by rural *iTaukei*. Essentially, rural *iTaukei* believe they consume more *yaqona* in this environment than their urban or *Fijian* counterparts as this solidifies their notions of traditionalism which add to their “sense of self” and identity (Brison, 2007:95). This then demonstrates the role of culture in *iTaukei yaqona* consumption, a function that also extends to the school campus. As discussed in earlier chapters, *isevusevu* is intrinsically linked to *iTaukei* traditional systems (Brison, 2007:15-6), is a ceremonial practice utilised on the school campus, and is therefore a key component in bolstering that sense of identity.

Similarly, *Fijian* *yaqona* consumption was shown to be influenced by culture even though they did not begin to consume this indigenous substance until the 1970s (Prasad, 2004:209-211). I argued this was due to “diaspora identity” (Hall, 199:235), a melding of traditional Indian cultural expression with that of *iTaukei* cultural expression and the culture of *yaqona*. This also includes practices such as *isevusevu* at some *Fijian* schools. This current research found that *diaspora identity* was linked to

increased *yagona* consumption as a response to cultural change, political and social instability, land loss and feelings of disempowerment.

*Yagona* drinking quantities by *iTaukei* females, was found to be slightly greater than their male peers – an interesting finding considering consumption volumes are traditionally associated with notions of masculinity. However, it was explained in the Limitations (Chapter 6) that this may also be somewhat misleading due to the small number of females selected for consumption assessment. Finally, this research found evidence that *yagona* use within the school arena was likely to increase inter-ethnic socialization, which in turn was argued to be a contributing factor to improved staff unity, with research suggesting staff cohesion and collegiality is a valuable input to quality education delivery.

The key theme to emerge from participant responses was the importance of *yagona* to notions of identity for *iTaukei*, and to a lesser extent *Fijians*. Academics have argued that identity and notions of self-worth aid scholastic achievement. Cumulatively these factors strongly support a relationship between *yagona* use, culture, identity and educational attainment.

#### *Research Question 2: Effects of Yagona on Cognition, Absenteeism and Education Delivery*

The cognitive effects, sickness and absenteeism resulting from *lomaloma ca*, or *yagona* hangover, and how these impact quality education delivery, was the focus of the second research question. Psychometric tests were administered to compare differences in levels of concentration, short-term memory and attention between an ‘active’ (*yagona* consuming) and ‘control’ (non-drinking) group of 36 teachers as they entered the classroom in the morning to commence education delivery. The results of this analysis indicated a 16.5% deficit in processing speed in the ‘active’ group. Although a number of constraining factors prevent conclusive statements being made (see Limitations), ethnographic reports add weight to these experimental findings. Specifically participants overwhelmingly reported a lack of motivation and short-term memory deficits which interfered with their ability to provide quality teaching. These

deficits also resulted in negative impacts on their non-*yaqona* consuming peers, including frequency of arriving late to the classroom, escalated incidents of taking sick leave and/or a lack of production while at work (presenteeism), all of which increased workloads and stresses on non-consuming peers. Overall, these impacts were described as negatively effecting teacher roles, competencies and professionalism which in turn compromised quality education delivery and impeded the achievement of developmental goals and economic growth.

When these results are considered together with the findings from the first research question, they support the notion of a traditional/contemporary tension. For example, *yaqona* has a positive impact on educational achievement through identity formation and solidification based in traditional systems and processes that strongly contribute to a *sense of self*. However, my results also suggest that the over-use of this “cultural keystone species” is simultaneously interfering with quality education delivery and, therefore, the pursuit of contemporary-styled development.

*Research Question 3: The Role of Yaqona in Education Delivery – The Past, Present and Future.*

The third question investigated whether *yaqona* played any positive role within the school setting and if so, what, and if any action, should be taken with teachers when considering the traditional/contemporary tension. Research participants reported that *yaqona* is critical not only to identity maintenance, but also to the survival of many schools. Essentially, *yaqona* is both a driver to and a facilitator of the State/Community partnership by encouraging community support, infrastructure, facility maintenance and most critically, financial backing. A number of participants were clear that the loss of *yaqona* from the educational arena had the potential to threaten the survival of many schools. These reports again demonstrate the complexity of this issue. On one hand *yaqona* use is argued to be a hindrance to quality education delivery, teacher roles, competencies, professionalism and attendance, while simultaneously considered to be central to identity formation, academic achievement and now, as discussed in Chapter 9, school continuance and education provision.

With regard to how to deal with this traditional/contemporary tension, the majority of research participants were adamant that, due to the cultural embeddedness of *yaqona*, any regulatory action would be futile. My earlier discussion, which summarised attempts by the MoE to regulate *yaqona* use in schools (p.124-6), appeared to support my participant's beliefs. However, the failure of this policy appears to be more complex than simply an issue of teachers ignoring its demands to cease consumption. This is because the MoE (2010) both acknowledge the importance of the "cultural keystone species" while simultaneously seeking its restriction. This, some participants suggest, has created a policy with mercurial boundaries which could be interpreted and applied in numerous ways. Further, most participants were opposed to any group who sought the prohibition of their indigenous substance. Again, they cited *yaqona*'s cultural importance with the suggestion that attempts to repress its use had the potential to lead to a 'substance switch' (particularly towards alcohol or marijuana) and socio-cultural disharmony.

When asked what action could be taken to assist this multi-layered and complex issue, participants had little to say, citing the cultural importance of this "keystone species". There was strong consensus from *yaqona* using teachers that they would not cease to use their indigenous substance. However, there was some marginal support for locally produced and delivered awareness programmes aimed at highlighting the problems associated with teacher *yaqona* over-consumption to quality education delivery. Overall, the "culturally recognised and accepted process" of *talanoa* (Nabobo-Baba, 2005:393) was suggested as the most promising and effective way forward in untangling this important culturally complex issue. The participant comments recorded in this study, together with the discussion around the intrinsic issues related to *yaqona* and education, can provide informed comment to aid MoE and education stakeholder *talanoa*. I believe that this process is empowering and supportive to national- and local-level decision-making processes on this complex issue.

The following section will describe the contributions this study has made to the development, education and *yaqona/kava* literature prior to discussing suggested

areas for further research.

## Contributions to the Literature

This study makes a number of contributions to the literature instead of theory. This is principally because the investigation was guided by *Vanua* Research and post-development theory, with the former being a methodological and interpretive framework and the latter an evolving school of thought (Nederveen Pieterse, 2000:176,181; 2010:111; Jakimow, 2008:321). Discussion will commence with the contributions to several areas of the development literature generally before focusing on education and post-development to add to the MoE's request for research on "culture to the current education system" (Williams, 2000:188).

### **Importance of Culture to Development**

Literature on the importance of culture *to* development is not new (Rao & Walton, 2004:9; Nederveen Pieterse, 2010:16). However, this study has added to this literature specifically as it relates to the use of indigenous substances and their union with identity (and therefore to culture) as part of the developmental process. This has been achieved by drawing together and linking several wider themes. In Chapter 3 I established the importance of a number of indigenous substances to specific cultures and the multiple impacts that colonial contact, modernity and industrialisation had on their use systems. These changes were shown to be a catalyst to the loss of a large amount of traditional knowledge, and concomitantly, aspects of identity (Veitayaki, 1995:104; Stedman-Edwards, 2000:18; Soselisa, 2007:143). This chapter and the wider discussion on *yagona* and education is the first on the specific theme of indigenous substance use and its tension with modernity and development and greatly expands the literature on indigenous substances and development. It challenges the predominant ideology that has historically viewed traditional preparations as primitive and a hindrance to development (Coomber & South, 2004:18). Such ideologies, by their very nature, result in impugning and challenging notions of identity.

Identity was also shown to be an important factor to successful development as

it aids academic achievement and socio-cultural wellbeing (Ishemo, 2002:33). With “the loss of culture ... at the heart of our educational and social problems” (Teasdale & Teasdale, 1992a:1), local identity must be factored and legitimised to ensure sustainable development. However, the dominant contemporary development ideologies deem culture and identity “acceptable provided... [it does] not interfere with economic progress or with the conventional development indicators” (Eade, 2002:ix). This current research directly challenges such thinking, and places culture and identity at the centre of development theory and practice, rather than as a nuisance that must be managed.

This present research also contributes, albeit in a small measure, to literature on spirituality and development by linking this concept with indigenous substance use and identity. Although spirituality is often feared and/or avoided by development practitioners (Kousary, 2006:22; Nabobo-Baba, Naisilisili, Bogitini *et al.*, 2012:23), there are others who understand that for many groups who embrace traditional systems, spirituality and development cannot be separated as the elements of development are “pictured *inside* spirituality” (Sanderson, 2006:7; also see Ver Beek, 2002:60-1). Therefore, spirituality must be a consideration to the processes of development. The neglect of spirituality by practitioners threatens local empowerment, collaboration and identity (Ver Beek, 2002:74). I contend that, successful development among those communities who use traditional substances will be impossible without the active involvement and legitimisation of spiritual systems as part of any developmental process (Verhelst & Tyndale, 2002:7).

The issues discussed here contribute to debates concerning Fijian development. The Government of Fiji have adopted elements of the Eurocentric-informed and prescribed developmental pursuit to increase national growth and economic development. However, their people also have woven into their cultural foundation spirituality and an indigenous substance which is intrinsically linked to notions of identity and cultural construction. This has created a macro-level traditional/contemporary tension, in that cultural aspects (*traditional*) are reported to hinder productivity whilst being simultaneously important to the achievement of

successful development (*contemporary*). This tension is mirrored at the micro-level in this current study – specifically that the use of *yaqona* is reported to inhibit quality education delivery (*contemporary*) and is also argued to concurrently aid academic achievement through identity reinforcement (*traditional*). Although a minority argue that the retention of *yaqona* within the education system has the potential to be counter-productive to the goal of national development, it is equally clear that its removal could jeopardise that aim.

### **Fijian Education – a Hybridised Form of Neo-liberalism and Self-determination**

Although neo-liberalism is having an influence on Fijian national development and education policy through IMF and WB requirements, national reforms, the introduction of a VAT, and currency devaluation to aid foreign reserves (Nabobo, 2001:57; Tuinamuana, 2005:202; Wood & Naidu, 2009:156-7; Barr, 2012:12), practical Fijian education remains highly self-determining. Indigenous cultural systems were discussed as both important to, and in use within education (Williams, 2000:186-8), an influence that has its foundations in colonial period “education with a cultural bias” (Scarr, 1983:340; also see Tavola, 1991:21). Further, the Minister of Education explained that they have sought external collaboration and “evolved our own” education system (Bole, 2009, pers.comm., Nov. 20). This suggests a hybridised post-development styled approach taking on board elements of internal (culture and self-determination) and external (the neo-liberal focus on the State/Community educational partnership) systems.

Although the State/Community educational partnership appears to be a recent invention as it fits well with the privatisation aspects of the neo-liberal agenda, it too was a product of the colonial era (in a similar manner to “education with a cultural bias”). This partnership offers the local a high level of involvement and input into the education of their children, aiding the continuance of culture together with aspects of self-determination. Further, that partnership is extremely important to the survivability of school, a function this study has shown is highly dependent upon *yaqona*. While this current research has brought new understandings to the State/Community partnership and its function in Fiji, it also adds to the educational

literature on the theoretical fit and style of Fijian education – that being a hybridised post-development styled approach.

Further, this again highlights the complex interplay between traditional practices and contemporary development endeavours. While the MoE openly state their concerns regarding *yaqona* use and education delivery (Tavola, 2000:169), they do not discuss the importance of the traditional substance to the State/Community partnership. This is a theme I will expand on in the next section which discusses the contribution this study has made to the *yaqona* literature.

### ***Yaqona***

This study has contributed to literature by offering new insights that update and identify misconceptions concerning teacher *yaqona* use, as reported in my previous Master's investigation (Aporosa, 2008). To date this current research has been the sole inquiry into the theme of *yaqona* and education in Fiji. First, teacher *yaqona* consumption volumes appear to have increased, with the survey suggesting a doubling when compared with my Masters finding four years earlier in which participants were shown to consume *yaqona* on average for three hours on nights prior to teaching to six (Aporosa, 2008:77; 2010:24). The new six-hour drinking period represents an estimated consumption volume of 36 "standard" *bilos* of the indigenous substance which equates to approximately 32 times the pharmacologically recommended daily dose. Second, it is the *Fijian* teachers who were identified as drinking the most *yaqona* in the rural and urban areas, and urban *iTaukei* who consume more than their rural ethnic peers, a finding that contradicts the beliefs of rural *iTaukei*. Such misconceptions are reported to be based on the formation and reinforcement of identity'.

Third, this investigation has made a contribution to the literature on the link between *yaqona* and *iTaukei* identity. This has been done by drawing on limited comment together with new insights – an analysis of consumption habits, a discussion of *yaqona* as *wainivanua*, and the creation of the misconceptions by *iTaukei* to aid notions of identity. Further, it has responded to assertions from members of several

new Pentecostal movements who deny this link. Identity is also recognised as a central element of empowerment (Nabobo & Teasdale, 1995:704-5; Nabobo, 2000:3), therefore adding weight to the importance of *wainivanua* to heightened notions of self and concomitantly academic achievement. *Yaqona* is also used by migrants to counter loss and disempowerment while demonstrating belonging to their homeland in absentia.

In much the same way, this study has challenged the beliefs of some commentators who report no connection between *Fijian yaqona* use and culture (and therefore identity) (Prasad, 2004:210-1; Mugler, 2004:243) by demonstrating this union comprises one aspect of “diaspora identity” (Hall, 1990:235). Fourth, this study presented the first comparison between *iTaukei* and *Fijian* consumption styles. When combined with the discussion on the cultural aspects of *Fijian yaqona* use, this makes a major contribution to the understanding of this ethnicity’s use of the Fijian “keystone species”, an idea that has had little attention in the past. This also highlights the practice of *bole* (competitive *yaqona* consumption) among *Fijians* while contributing further to the limited comment on this theme among *iTaukei*.

Fifth, the analysis of *yaqona* presented in this study – which included comment on its associated value system of *vakaturaga*, its imbued possessent and transferent powers of *mana* and its identity formation attributes – demonstrated that this creates a sense of ownership and obligation that contrasts with Eurocentric cause-and-effect understanding. Whereas the theory of production would argue a need to restrict or prohibit *yaqona* use due to productivity disruption and impacts to economic development (Frisch, 1965:iv), many *iTaukei* (and a growing number of *Fijians*) struggle to conceive life-ways without this “cultural keystone species”, essentially overriding productivity concerns. Further, as repeatedly discussed, commentators point to the value of identity to academic achievement and sustainable development. This again illustrates the complex tension between this traditional preparation and the contemporary pursuit of development. This predicament is magnified further as the associated values, *mana* aspects and identity attributes prevent many *iTaukei* from speaking negatively about their indigenous substance, essentially elevating this and

the user to a position that is beyond criticism. This thesis, then, adds to the limited literature on development and indigenous substances, which in the past has tended to focus on the more narrow perspective of traditional preparations as a hindrance to developmental systems or as an aid to primary health care.

Finally, a key contribution this study has made to literature concerning *yagona* comes out of the results of psychometric tests administered to teachers as they entered the classroom to commence education delivery in the morning. This is the first time cognitive measures have been administered for the purpose of gathering data on the impacts of *lomaloma ca* (*yagona* hangover). To date, comment has been either anecdotal media reports or ethnographic comment presented in my earlier Master's research with qualitative findings restricted to the application of ingestion calculations to estimate initial point of *yagona* intoxication and *steady-state concentration* (Aporosa, 2008:43-9,130-2; 2011:234-7). Further, this adds to the paucity of research that examines cognition following ingestion rates far in excess of pharmacologically recommended doses<sup>81</sup>. Comparative analysis suggests a 16.5% deficiency, or 0.31 second delay, in the cognitive aspect of processing speed between a 'control' (non-users) and 'active' (*yagona*-drinking) group. Admittedly a number of constraints prevented 'gold-standard' methodological procedures, therefore necessitating this be termed explorative and experimental. However, when combined with ethnographic reports, which tends to corroborate the findings, it suggests an impact on quality education delivery by post-*yagona* consuming teachers who had consumed at the average consumption duration of six hours the night prior to teaching. Further, it is suspected that these cognitive effects have the potential to last several days due to *steady-state concentration*. *Lomaloma ca* was reported to impact teacher roles, competencies and professionalism while increasing the likelihood of sickness, lateness, and/or presenteeism which in turn jeopardises the achievement of developmental goals and economic growth. Conversely, the values and sense of obligation associated with *yagona* use and the State/Community partnership which

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<sup>81</sup> As discussed in Chapter 6, the administration of cognitive tests among users who had consumed at indigenous consumption volumes and rates was conducted by Waqainabete (2003). However, these had limited applicability when assessing *lomaloma ca*.

functions on and through the use of this indigenous substance, reasserts the complexity of the traditional/contemporary tension. Moreover, this demonstrates *yaqona*'s position as the central theme of a complex web that defies simplistic cause-and-effect accusation and/or prescription, as its use and associated culture both manifest positive and negative attributes. These themes make a fresh and important addition to the literature.

### **Post-development**

Nabobo-Baba's (2006) *Vanua* Research was utilised to investigate and guide this study. She describes *Vanua* Research as "counter hegemonic... an indigenous theoretical approach embedded in indigenous Fijian worldviews, knowledge systems, lived experience, representation, culture and values. It gives power and recognition to things Fijian [*iTaukei*] as research and knowledge accumulation in its broadest sense is deeply connected to power" (p.1). *Vanua* Research then reflects the core principals of, and aligns with, post-development – these tenets being the elimination of hegemony, acknowledgement and endorsement of local decision making and governance systems, culture, traditional knowledge and self-determination. In utilising *Vanua* Research, this study therefore has contributed to the post-development literature by suggesting that the paucity of discussion on methodological approach within post-development writing can be addressed by incorporating and drawing on indigenous frameworks (such as *Vanua* Research, *Kalaka*, Māori methodologies etc.) that have a set of principles that match and align with post-development. Additionally, it joins with a limited number of academics and adds to the paucity of literature on practical post-development application (Curry, 2003; Gibson-Graham, 2005; McGregor, 2007; McKinnon, 2008), an area that some within the mainstream development community argue is a key weakness of this ideology (Nederveen Pieterse, 2010:186,187). Further, it aids to Schech & Haggis's (2000:29) call for discussion on "what is meant by development and in whose interests it operates" as part of expanding the overall post-development debate.

This study made three specific contributions to the post-development literature.

### *Post-development and Indigenous Substances*

While a key strength of this ideology is the importance it places on cultural systems and traditional knowledge (Radcliffe, 2006:4), to date it has been silent on the topic of traditional preparations, regardless that indigenous substances are central to many traditional knowledge systems (Lang, 2002:1-2; Guite & Acharya, 2006:99). This study has shown the important position that *yaqona* has on all aspects of *iTaukei* (and to a lesser extent *Fijian*) life-ways. It is clear that this indigenous substance cannot be separated from Fijian socio-cultural, political and/or economic development due to its cultural centrality, identity, empowerment and reciprocal processes. These aspects are also essential to sustainable development, however at the same time have been criticised as hindering this possibility, notably because of *yaqona*'s use systems and post-consumptive *lomaloma ca* effect to production and, specifically in terms of this study, quality education delivery. Based on historical patterns, mainstream development ideologies would recommend situational bans or the prohibition of this indigenous substance to mitigate impacts to productivity and therefore negative implications to economic development.

This study highlights the dangers of simplistic Eurocentric development prescriptions, actions that fail to consider wider issues that underpin the life-ways of non-Western peoples. It also demonstrates that cultures who embrace indigenous substance use are not necessarily "problematic population[s] in need of development assistance" (McKinnon, 2005:282). By investigating this topic through a post-development framework, it offers insights into the cultural strengths surrounding the use of Fiji's indigenous substance to development, pointing out positives that tend to be overshadowed by the economic development perspective. Further, this study adds to literature on empowerment by recommending local decision-making systems disengage from the over-simplified hegemonic development agenda that prioritises economic development over cultural values and its related currency, and instead utilise *talanoa* – a locally conceived and driven dialogue process – to assist in untangling multi-layered traditional/contemporary tensions. This in turn provides local dialogue and discussion on a local issue, enabling this topic to be filtered through culture and traditional knowledge, and providing those who have the most to lose an

atmosphere in which they can make their own choices. This then creates empowerment and self-determination, aspects that are recognised from within post-development as critical to successful development (Verhelst & Tyndale, 2002:11; Radcliffe: 2006:18).

### *Post-development and Education*

The second contribution to post-development literature has been in the area of education. Although a number of commentators have discussed education processes and applications which hint at post-development – for instance commentators of post-colonial education (as discussed in Chapter 4), to date explanation on the use of, or a suggested framework for a post-development educational approach, has been absent from the literature. This study presents this by drawing on the themes from a number of commentators. Essentially, I presented a post-development framework as consisting of, and being guided by, indigenous knowledge transfer, the importance of cultural values and protocols (which in the case of Fiji is *vakaturaga* and includes the ‘culture of *yaqona*’), the utilisation of collectivism (as opposed to individual competition), local measurement and counting processes, and teacher-student collaboration based on Freire’s (1997) “dialogical education (p.78)... [and] problem posing” (p.85), all taught in the local dialect and accorded equal status with the academic achievement standards of the Eurocentric model.

The application of such a framework counters the dominant Western education belief that ‘their’ standard is the universal authority. Further, it also challenges the notion held by many development practitioners and policy-makers that all cultures are homogeneous (Eade, 2002:ix) and therefore simply require a ‘one-size-fits-all’ development prescription (that includes education) under a Eurocentric model. This is contrasted with asking ‘what do these particular people want?’ and how best do they understand this and apply it to their own surroundings and developmental desires (Escobar, 1995a:98,222; Nederveen Pieterse, 2010:16). Moreover, the attributes of this educational framework contribute to and build notions of identity and empowerment which are critical to both academic achievement and sustainable development.

### *Post-development and Methodology*

The final contribution to the post-development literature is in the area of methodology. As stated above, this study has contributed to this by incorporating and drawing on *Vanua* Research, indigenous frameworks that has the principles of hegemony elimination, endorsement and acknowledgement of local decision making and governance systems, traditional knowledge, culture and self-determination that match and align with post-development. Further, this study administered psychometric tests as a complement to the *Vanua* Research framework/post-development approach. This is believed to be a first and is argued to push post-development and its literature in a new direction. Although this quantitative method is Eurocentric in approach, design and aim, it was utilised to bring clarity to local subjectivity and uncertainty, namely the affect of post-*yagona* consumption as raised by the MoE. Participants were compared with each other, rather than external norms which had the potential to create ‘us and them’, developed/developing, or First World/Third World comparatives. The use of this method expands on a suggested weakness of post-development, namely that this ideology is “caught in rhetorical gridlock” (Nederveen Pieterse, 2000:p.187-8) by expanding on “the lack of post-development alternatives” (McKinnon, 2008:281) and providing an additional practicality as part of the post-development methodological framework. In addition to aiding local uncertainty and subjectivity regarding post-*yagona* consumption implications, it also responds to LaPorte *et al*’s (2011:102) request for “research... on how kava affects cognition in both acute and chronic usage... [at] larger recreation doses”.

Although the themes discussed in this study are most applicable to the Fijian context, they also have relevance to the wider Pacific and international literature.

### **Contributions to Wider *Pasifika* and International Literature on *Kava* and Identity**

*Yagona/kava/’ava/’awa/sakau et al.* are used widely across the Pacific region with reports that teachers in Tonga, Vanuatu, Sāmoa and New Zealand frequently ingest this indigenous substance on nights prior to teaching. Additionally, *Pasifika* peoples,

and increasingly other ethnicities internationally<sup>82</sup>, are using this indigenous substance at volumes reflective of those observed during this research. This study then contributes to both the *Pasifika* and wider international literature concerning the use of this indigenous substance, productivity and development. Further, this study adds to the international literature on the role of indigenous substances and identity formation, especially within cultures that utilise indigenous substances such as betelnut in PNG, cocoa in South America and *kawakawa* in Māori society.

## Suggestions for Further Research

A key area for further research is the cognitive assessment of *yaqona* consumers. Although I acknowledged in the Limitations section that it is difficult to achieve a high level of test accuracy within the traditional setting due cultural constraints, this could be advanced if consumers were recruited specifically for testing in a controlled clinical environment over several days. This would allow for standardisation and randomization with a placebo control group. Such endeavours offer the opportunity to expand the literature with regards to specifying the impact of *steady-state concentration* and clarifying the initial point of intoxication. Further, tests of this nature could be broadened to assess *yaqona* effects on work place safety and driver impairment.

There is further scope to assess the use of “cultural keystone species” and spirituality and their link to identity formation and notions of empowerment within ethnic groups other than Fiji. This would offer development practitioners and policy-makers increased information when working with these communities. Additionally, it would assist in weighing potential losses and gains when formulating regulations regarding indigenous substance use, specifically as they relate to identity loss and disempowerment. This study has shown that loss of cultural identity, including forms of spirituality, can counter intended development goals.

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<sup>82</sup> I have friends, relatives and acquaintances in a variety of vocations throughout Europe, USA, China, Thailand, Great Britain, India, Afghanistan and Iraq who regularly use *yaqona/kava* at *iTaukei/Fijian* ingestion rates on nights prior to working.

This study also investigated *yaqona* use by *Fijians* and observed increasing usage as part of “diaspora identity” formation. There is a paucity within the literature on the use of *yaqona* by this ethnicity. Therefore, a great deal of latitude exists in which to build on the observations contained within this study as part of gaining a greater understanding of this theme. This also has the potential to aid developmental approaches within *Fijian* communities.

Further research is recommended on the State/Community partnership to evaluate the effectiveness of this approach to education delivery in Fiji. Surprisingly, this study found that *yaqona* both complicated and underpinned this educational relationship. It is possible then that there are other factors associated with the partnership that, once ascertained/identified, could enrich education delivery in Fiji. Further, the link between *yaqona* and the State/Community partnership opens up another area worthy of investigation. Foreign aid continues to assist education delivery in Fiji (St. Clair Skeet, 2007:55-59). This aid originates from an environment which prescribes a Eurocentric development and education model (St. Clair Skeet, 2007:47-8). I would argue that this designated development agenda would oppose the interference of a cultural practice such as *yaqona* to quality education delivery. Would that same aid system increase giving to alleviate the reliance upon the State/Community partnership which is underpinned by a culture that essentially counters the prescribed Eurocentric development agenda of the donors? Such a study has a vast scope of investigation considering the findings discussed in which identity (derived from the culture of *yaqona*) was noted as important to educational attainment and sustainable development.

## Concluding Statement

Several months ago an anonymous reviewer from a prestigious journal made an interesting comment following my submission of a paper which summarised aspects of this study. They stated, “This research topic is novel, interesting, and implicitly raises the question of what is more important to the *iTaukei*; cultural tradition or ethical work practices” (email, 2012, April 24). Considering that paper made several

references to the importance of *yaqona* to identity formation together with identity being a critical element to scholastic achievement and concomitantly sustainable development, this comment came as somewhat of a surprise. Essentially I interpreted the reviewer as suggesting that *iTaukei* must make a choice: the retention of *yaqona*, or its forfeiture to allow for appropriate and virtuous work practices to aid productivity increase. Obviously I do not know this anonymous reviewer's opinions on culture to development. However, this type of comment tends to reflect the stereotypical ideology which views cultural practices "acceptable provided... [they do] not interfere with economic progress" (Eade, 2002:ix), a Eurocentric belief that simultaneously fails to consider wider issues such as the importance of these same cultural systems to sustainable development.

Post-development purist Arturo Escobar (1988) discussed such notions. He argues that these comprise "a fictitious construct, an omnipresent... discourse... of power... [based on the] production and circulation... [of] development economics" (p.429). Further, this has elevated the Eurocentric development pursuit to a position where anything deemed to counter or stymie it – such as cultural practices and systems – are simply deemed an impediment that must be regulated or eliminated (p.429-432). Such discourse feeds the complexity of the traditional/contemporary tension of *yaqona* and education as presented in this study. This, and the wider issue of culture *to* development, is clearly of concern to the Fijian Government. The Government acknowledges the importance of culture to "the Fijian way of life" (Williams, 2000:188) but is also looking to "increased levels of labour production" (TPAF, 2009:1) as part of "the achievement of [their] national development goals" (Subramani, 2000:1; also see PSC, 2003:n/a; Fiji Times, 2008a:10; MoE, 2010).

Admittedly, discussion in Chapter 8, which explained *yagona*'s post consumptive impacts to cognition, absenteeism, presenteeism and quality education delivery, if considered in isolation from the remaining study, appears damning. However, they have been presented together with the positive attributes of this indigenous substance. These again were the substance's role in identity formation, notions of empowerment, academic achievement and sustainable development.

Comments, such as the reviewer's above, suggests an ongoing "omnipresent... discourse... of power... [within] development economics" (Escobar, 1988:429-32) which tends to delineate the negatives and in turn subvert the benefits. According to psychologists, this is not unusual, and is due to a "confirmation bias" in which people mostly recall negative aspects even though reports "contain an equal number of positive and negative statements" (Nairne, 2011:302). More interesting though is that "people are more likely to remember the negative behaviors of minorities because negative behaviors and minority members are [stereotypically] salient..." (Boniecki & Britt, 2003:59). This last statement bolsters Escobar's argument of "fictitious... discourse" construction concerning the Eurocentric attitude toward developing minority countries and those who have cultural practices that do not reflect those of the developed expectation.

This study makes a clear statement that such stereotypical discourse, present within the Eurocentric development arena – which demands and expects developing countries adopt this development prescription – is unjust, imperialistic, hegemonic and fails to understand or consider wider cultural issues that often have benefit to development. The cultural life-ways of these people must be accorded the same level of value as the Eurocentric model of development. This will allow the positive attributes of culture to be considered and legitimately balanced against what is predominantly a single-minded pursuit of entrepreneurialism, industrialisation, transformation, progression, modernity and Westernisation (Cockley, 2010:149-52). Additionally, developing countries, and those whose life-ways are deeply embedded in the cultural systems and processes that comprise a sense of 'otherness' from a Eurocentric perspective, must be supported and encouraged to consider what is at stake for them as a people group when they pursue development based upon that Eurocentric model. Teasdale & Teasdale's (1992a:1) warning is clear and identifies what is often not considered, that "the loss of culture is at the heart of our educational and social problems".

This study has focused on the theme of *yagona* and education. In considering historical Eurocentric responses to indigenous substance use, it delineates a warning,

one that has the potential to create loss, disempowerment and disenfranchisement for the Fijian people should the Fijian Government simply pursue a national growth and economic development strategy that fails to fully embrace their cultural life-ways. This study has not provided answers, but instead has presented data that demonstrates a “*simple*” solution such as “*just stop[ping] teachers from drinking yaqona on nights before teaching*” will not work. Most Fijian teachers, both *iTaukei* and *Fijian*, whether *yaqona* consumers or not, understand the importance of this indigenous substance to their identity and systems of living. Many have stated they will not cease its use regardless of MoE directives or evidence of negative implication. *Talanoa* has been suggested as the way ahead, an approach that is a “culturally recognised and accepted process” of dialogue (Nabobo-Baba, 2005:393). It encourages the wrestling of issues, considering all sides of the debate, in order to expand on them to seek a locally informed response (Nabobo-Baba, 2005:396-7; Vaka’uta, 2011:8).

This study commenced with a narrative. It will also conclude with one.

### **The Teacher Who Could be Troubled**

*Recently I was drinking yaqona with a group of friends. One commented, “Isa kai [term indicating our vanua relationship], soon you be a doctor-teacher. We proud of you man”. I replied, “But it’s not about the qualification kai. I would give that up in a heartbeat to preserve our culture, to protect our identity”. I went on to explain that this study is much more than that; it’s about the potential for loss regardless of the chosen path. On one hand there is the possible loss of quality education to our youth and the disruption of national development through the over-consumption of our cultural icon. On the other there is the potential loss of who we are – of our cultural identity should yaqona be banned – a loss that would also hinder academic achievement and sustainable development. I added that I see Fiji currently sitting at a juncture, one that has the potential to forge a new way ahead; a ‘Fijian way’ as opposed to fully capitulating to a Eurocentric expectation of what ‘they’ consider is acceptable and appropriate. I concluded with, “Whatever path we follow we could lose. Maybe we could start by asking, what’s more important, development or ‘our’ identity?” My friend hesitated for a moment, and then in a quite contemplative voice*

*offered his response, one that the others in the room unanimously agreed with. “Donu kai, ni sa yali ga na noda itovo, sa oti sara ga o keda”, literally meaning ‘True kai, once we lose our culture we are finished (we are no more, we account for nothing)’.*

## References

- Aalbersberg, B., & Sotheeswaran, S. (1991). Kava. In A. A. J. Jansen, S. Parkinson & A. F. S. Robertson (Eds.), *Food and nutrition in Fiji: A historical review* (Vol. 2, pp. 554-569). Suva: Department of Nutrition and Dietetics, Fiji School of Medicine & The Institute of Pacific Studies: University of the South Pacific.
- ABC News, (2007). Kava ban 'sparks black market boom'. Northern Territories, Australia, Aug. 23. <http://www.abc.net.au/news/stories/2007/08/23/2012707.htm>
- ABC News. (2008). Kava culture - Vanuatu., *Foreign Correspondent (Broadcast Sept. 9).* Australia. <http://www.abc.net.au/foreign/content/oldcontent/s2464188.htm>
- ABC Radio Australia, (2007). Australia introduces kava sale ban [28 June], <http://www.radioaustralia.net.au/news/stories/s1964049.htm>
- Abramson, A. (2009). The lie of the land: Suturing the jural and the ritual in Fiji, Western Pacific. In M. Freeman & D. Napier (Eds.), *Law and Anthropology: Current Legal Issues Volume 12* (pp. 269-291). USA: Oxford University Press.
- Abdel-Ghany, M., & Silver, J. L. (1989). Economic and demographic determinants of Canadian households' use of and spend on alcohol. *Family and Consumer Sciences Research Journal*, 27(1), 62-90.
- AhChing, P. L. (2005). *Polynesian interconnections: Dwayne Johnson and King Kamehameha in culture and science*. North Carolina: Lulu.
- AKM: Australian Kava Movement (2011). Kava is culture. Retrieved Sept. 6, 2011, from <http://australiankavamovement.squarespace.com/>
- Alcorn, J. B. (1995). Ethnobotanical Knowledge Systems: A resource for meeting rural development goals. In D. M. Warren, L. J. Slikkerveer & D. Brokensha (Eds.), *The Cultural Dimension of Development: Indigenous knowledge systems* (pp. 1-12.). London: Intermediate Technology Publications Ltd.
- Alexander, K., Watson, C., & Fleming, J. (1987). *Kava in the North: A research report on current patterns of kava in Arnhem Land Aboriginal communities*. Darwin: Australian National University North Australia Research Unit.
- Alley, R. (2010). Fiji under Bainimarama. *The Journal of Pacific History*, 45(1), 145-153.

- Amituana'i, T. (1986). Kava in Samoa. In G. Deverell & B. Deverell (Eds.), *Pacific rituals: Living or dying?* (pp. 36-39). Suva: Institute of Pacific Studies, University of the South Pacific, in association with the Pacific Theological College.
- Anacleti, O. (2002). Research into local culture: Implications for participatory development. In D. Eade (Ed.), *Development and culture: Selected essays from development in practice*. Oxford: Oxfam GB in association with World Faiths Development Dialogue.
- Anae, M., Coxon, E., Mara, D., Wendt-Samu, T., & Finau, C. (2001). *Pasifika education research guidelines*. Wellington: Ministry of Education.
- Ancelin, M. L., Artero, S., Portet, F., Dupuy, A. M., Touchon, J., & K., R. (2006). Non-degenerative mild cognitive impairment in elderly people and use of anticholinergic drugs: longitudinal cohort study. *British Medical Journal*, 332, 455-459.
- Andersen, J. C. (2000). *Māori place-names: Also personal names and names of colours, weapons, and natural objects*. Christchurch: Cadsonbury Publications.
- Anderson, D., Beckerleg, S., Hailu, D., & Klein, A. (2007). *The khat controversy: Stimulating the debate on drugs*. Oxford: Berg. p.206,195.
- Angrosino, M. V. (2008). Recontextualizing observation: Ethnography, pedagogy, and the prospects for a progressive political agenda. In N. K. Denzin & Y. S. Lincoln (Eds.), *Collecting and interpreting qualitative materials*. Los Angeles: SAGE.
- Aporosa, S.G. (2006). Any change will be slow. *Fiji Times: November 01*, p. 7.
- Aporosa, S.G. (2007). Yaqona and the multi-national pharmaceutical industry. *Fiji Observer. Aug./Sept*, pp. 7,18.
- Aporosa, S. G. (2008). *Yaqona and education in Fiji: A clash of cultures?* Germany: VDM Verlag.
- Aporosa, S. (2008a). Kava abuse: Academic blames poor results on teachers. The full story. *Fiji Times, Dec. 14*, pp. 15-17.
- Aporosa, S. G. (2010). Na yaqona kei na vuli: E rau veicoqacoqa li? Yaqona and education in Fiji: A clash of cultures? *Domodomo: A Scholarly Journal of the Fijian Museum*, 23(1&2), 20-43.
- Aporosa, S. G. (2011a). Is kava alcohol?: The myths and the facts. *Journal of Community Health and Clinical Medicine for the Pacific*, 17(1), 157-164.

- Aporosa, S. G. (2011b). *Yaqona (kava) as a symbol of cultural identity*. Paper presented at the 'Niu realities of Pasifika diaspora and development': Pasifika@Massey 6<sup>th</sup> Annual Conference, 1-2 Dec. Massey University, Albany Campus. [http://massey.academia.edu/Aporosa/Papers/1534676/Yaqona\\_kava\\_as\\_a\\_symbol\\_of\\_cultural\\_identity](http://massey.academia.edu/Aporosa/Papers/1534676/Yaqona_kava_as_a_symbol_of_cultural_identity)
- Aporosa, S. G. (2011c). Yaqona (kava), Education and Development in Fiji. In R. Gounder (Ed.), *Community development and managing change for growth among Pasifikans* (pp. 227-253). Auckland: Masilamea Press.
- Appleby, R. (2010). *ELT, gender and international development: Myths of progress in a neocolonial world*. Bristol: Multilingual Matters.
- Arnaiz, M. G. (2011). Culture, market and beer consumption. In W. Schiefenhövel & H. Macbeth (Eds.), *Liquid bread: Beer and brewing in cross-cultural perspectives* (pp. 209-222). New York: Berghahn.
- Arneil, B., & MacDonald, F. (2010). Multiculturalism and the social sphere. In D. Ivison (Ed.), *The Ashgate Research companion to multiculturalism* (pp. 119-140). Surrey: Ashgate.
- Arno, A. (1990). Disentangling indirectly: The joking debate in Fijian social control. In K. A. Watson-Gegeo & G. M. White (Eds.), *Disentangling: Conflict discourse in Pacific societies*. California: Stanford University Press.
- Arno, A. (1993). *The world of talk on a Fijian island: An ethnography of law and communication causation*. New Jersey: Ablex Publishing Corporation.
- Arno, A. (2005). Cobo and tabua in Fiji: Two forms of cultural currency in an economy of sentiment. *American Ethnologist*, 32(1), 46-62.
- Arweck, E., & Stringer, M. (Eds.). (2002). *Theorizing faith: The insider/outsider problem in the study of ritual*. Birmingham: University of Birmingham Press.
- Ashby, G. (1984). Sakau en Pohnpei. *Glimpses of Micronesia*, 24(38-40).
- Atal, C. K., Dhar, K. L., & Singh, J. (1975). The chemistry of Indian Piper species. *Lloydia*, 38(3), 256-264.
- 'Awa Development Council. (2005). kava.tv: Hawai'i Pacific Island Kava Festival [visual medium]. Manoa: University of Hawaii.
- Aylward, M., Bratt, D., Beaumont, D., Craig, L., Ellis, N., Emrys, G., et al. (2010). *Realising the Health Benefits of Work: Australasian Faculty of Occupational &*

*Environmental Medicine Position Statement:* Royal Australasian College of Physicians.

- Baba, P. (1996). Yaqona: It is getting the nation doped? *Weekend: The Fiji Times Magazine*, pp. 1-4, 6 April.
- Baba, T. L. (1979). A challenge to the nation: The Fijian education problem. *Directions*, 2, 15-19.
- Babor, T., Caulkins, J., Edwards, G., Fischer, B., Humphreys, K., Obot, I., et al. (2010). *Drug policy and the public good*. New York: Oxford University Press.
- Baessler, A. (1895). *Sudsee-bilder (Sudee pictures)*. Berlin: George Reimer.
- Bakalevu, S. (2009). Engendering culturally responsive teaching. In K. F. Sanga & K. H. Thaman (Eds.), *Re-thinking education curricula in the Pacific: Challenges and prospects*. (pp. 58-70). Wellington and Suva: He Parekereke, Institute for Research and Development in Maori and Pacific Education, Victoria University and The University of the South Pacific.
- Baker, J. D. (2011). Tradition and toxicity: Evidential cultures in the kava safety debate. *Social Studies of Science*, 41(3), 361–384.
- Baker, J. D. (2012). Pills, potions, products: Kava's transformations in new and nontraditional contexts. *The Contemporary Pacific*, 24(2), 233-265.
- Balick, M. J., & Lee, R. (2002). Traditional use of Sakau (kava) in Pohnpei: Lessons from integrative medicine. *Alternative Therapies*, 8(4), 96-98.
- Balick, M. J., & Lee, R. A. (2009). The sacred root: Sakau en Pohnpei. In M. J. Balick (Ed.), *Ethnobotany of Pohnpei: Plants, people, and island culture*. Honolulu: University of Hawai'i Press in association with The New York Botanical Garden.
- Ball, S. J. (2012). Show me the money! Neoliberalism at work in education. *FORUM: For promoting 3-19 comprehensive education*, 54(1), 23-28.
- Bardon, J. (2009). *Rising cannabis use linked to grog bans*. ABC News, Nov. 3. Retrieved Jan. 7, 2011, from <http://www.abc.net.au/news/2009-11-03/rising-cannabis-use-linked-to-grog-bans/1126826>
- Bargatzky, T. (1997). "The kava ceremony is a prophecy": An interpretation of the transition to Christianity in Samoa. In H. J. Hiery & J. M. MacKenzie (Eds.), *European impact and Pacific influence: British and German colonial policy in the Pacific Islands and the indigenous response* (pp. 82-99). London: Tauris Academic.

- Bargh, M. (2001). Romance and resistance in the Pacific: Neoliberalism and indigenous resistance in the Pacific. *Revue Juridique Polynésienne*, 1(118), 251-274.
- Barker, M. (2008). How do people learn?: Understanding the learning process. In C. McGee & D. Fraser (Eds.), *The professional practice of teaching* (Vol. 2, pp. 17-46). Melbourne: Thomson Learning.
- Barr, K. J. (2012). Trickle down theory. *Fiji Times*, May 26, p. 12.
- Bastin, R. (1981). Economic enterprise in a Tannese village. In M. Allen (Ed.), *Vanuatu: Politics, economics and ritual in island Melanesia* (pp. 337-355). Sydney: Academic Press.
- Beaglehole, J. C. (Ed.). (1967). *The Journals of Captain James Cook on his voyages of discovery*. Cambridge: Hakluyt Society at the University Press.
- Beattie, J. H. (1994). *Traditional lifeways of the Southern Māori: The Otago University Museum ethnological project, 1920* (Edited by A. Anderson). Dunedin: University of Otago Press in association with Otago Museum.
- Becker, A. E. (1995). *Body, self and society: The view from Fiji*. Philadelphia: University of Pennsylvania Press.
- Belshaw, C. S. (1964). *Under the ivi tree: Society and economic growth in rural Fiji*. London: Rutledge.
- Berkes, F. (2008). *Sacred ecology* (2 ed.). New York: Routledge.
- Bernard, H. R. (2006). *Research methods in anthropology: Qualitative and quantitative approaches* (4 ed.). Oxford: AltaMira.
- Bessell, B. (2009). Strengthening Fiji's education system: A view from key stakeholders. *Pacific Economic Bulletin*, 24(3), 58-70.
- Beyer, J. (2007). New trends in herbal drugs of abuse. *Therapeutic Drug Monitoring Journal (online journal of the International Association of Therapeutic Drug Monitoring and Clinical Toxicology)*, 6(2), 1-5.
- Biber-Klemm, S., & Berglas, D. S. (2006). Problems and goals. In S. Biber-Klemm & T. Cottier (Eds.), *Rights to plant genetic resources and traditional knowledge: Basic issues and perspectives* (pp. 3-55). Oxfordshire: CABI.
- Bilia, A. R., Gallori, S., & Vincieri, F. F. (2001). Kava-kava and anxiety: Growing knowledge about the efficacy and safety. *Life Science*, 70, 2581-2597.
- Blejer-Prieto, H. (1965). Coca leaf and cocaine addiction: Some historical notes.

- Canadian Medical Association Journal*, 93(13), 700-704.
- Block, K. I., Gyllenhaal, C., & Mead, M. N. (2004). Safety and efficacy of herbal sedatives in cancer care. *Integrative Cancer Therapies*, 3, 128-148.
- Blocker, J. S., Fahey, D. M., & Tyrell, I. R. (2003). *Alcohol and Temperance in Modern History: An International Encyclopaedia* (Vol. 1: A-L). California: ABC-CILO Inc.
- Bock, M. P. (2000). Māori kava (*Macropiper excelsum*). *Eleusis*, 4, 175-179.
- Bocock, R. (1992). The cultural formations of modern society. In S. Hall & B. Gieben (Eds.), *Formations of modernity* (pp. 229-274). Cambridge: Polity Press in association with the Open University.
- Bodeker, G. (2007). Traditional medical knowledge and twenty-first century healthcare: The interface between indigenous and modern science. In P. Sillitoe (Ed.), *Local science vs. global science: Approaches to indigenous knowledge in international development* (pp. 23-39). New York: Berghahn Books.
- Bole, F. (1972). *The possible conflicts which may arise as a result of individual expectations and communal demands*. Occasional Paper #8. Suva: School of Education, University of the South Pacific.
- Bone, K. (2003). *A clinical guide to blending liquid herbs: Herbal formulations for the individual patient*. Missouri: Churchill Livingstone.
- Bongmatur, W. (1994). National cultural policy. In L. Lindstrom & G. M. White (Eds.), *Culture, kastom, tradition: Developing cultural policy in Melanesia* (pp. 85). Suva: Institute of Pacific Studies, University of the South Pacific.
- Boniecki, K. A., & Britt, T. W. (2003). Prejudice and the peacekeeper. In T. W. Britt & A. B. Adler (Eds.), *The psychology of the peacekeeper: Lessons from the field* (pp. 53-70). Connecticut: Praeger.
- Booth, D. (1985). Marxism and development sociology: Interpreting the impasse. *World Development*, 13(7), 761-787.
- Bourdieu, P. (1977). *Outline of a theory of practice*. Cambridge: Cambridge University Press.
- Bourgois, P. I. (1995). *In search of respect: Selling crack in El Barrio*. Cambridge: Cambridge University Press.
- Brabyn, M. (2003). *Kawakawa*. Retrieved 5 July, 2008, from <http://www.hikingnewzealand.com/new-zealand-natural-history.htm>

- Bradbard, D., & Jankowiak, W. R. (2003a). Drugs, desire, and European economic expansion. In W. R. Jankowiak & D. Bradburd (Eds.), *Drugs, Labor, and Colonial Expansion* (pp. 3-30). Arizona: University of Arizona Press.
- Bradbard, D., & Jankowiak, W. R. (2003b). Drugs in work and trade: New directions for the study of drug use. In D. Bradburd & W. R. Jankowiak (Eds.), *Drugs, Labor, and Colonial Expansion* (pp. 177-186). Arizona: University of Arizona Press.
- Bradbard, D., & Jankowiak, W. R. (Eds.). (2003c). *Drugs, Labor, and Colonial Expansion*. Arizona: University of Arizona Press.
- Bray, M. (2003). Community initiatives in education: Goals, dimensions and linkages with governments. *Compare*, 33(1), 31-45.
- Brecher, E. M. (1972). *Licit and illicit drugs*. Boston: Little Brown.
- Briggs, J. (2008). Indigenous knowledge and development. In V. Desai & R. B. Potter (Eds.), *The companion to development studies* (pp. 107-111). London: Hodder Education.
- Brigham, W. T. (1908). *Memoirs of the Bernice Pauahi Bishop Museum of Polynesian ethnology and natural history: The ancient Hawaiian house* (Vol. 2. No.3). Honolulu: Bishop Museum Press.
- Brison, K. J. (2001). Constructing identity through ceremonial language in rural Fiji. *Ethnology*, 40(4), 309-328.
- Brison, K. J. (2007). *Our wealth is loving each other*: Lexington/Rowman and Littlefield.
- Brison, K. J. (2011). Producing “confident” children: Negotiating childhood in Fijian kindergartens. *Anthropology & Education Quarterly*, 42(3), 230–244.
- British Medical Journal. (1988). News and notes. *British Medical Journal*, 296(June 25), 1801.
- Brohman, J. (1995). Universalism, Eurocentrism, and ideological bias in development studies: from modernisation to neoliberalism. *Third World Quarterly*, 16(1), 121-140.
- Brohman, J. (1996). *Popular development: Rethinking the theory and practice of development*. Oxford: Blackwell Publishers.
- Brooker, S. G., Cambie, R. C., & Cooper, R. C. (1981). *New Zealand Medicinal Plants*. Auckland: Heinemann.
- Brown, M. (2003). 'Aina under the influence: The criminalization of alcohol on 19th-

- century Hawai'i. *Theoretical Criminology*, 7(1), 89-110.
- Brunton, R. (1981). The origins of the John Frum movement. In M. Allen (Ed.), *Vanuatu: Politics, economics and ritual in island Melanesia* (pp. 357-377). Sydney: Academic Press.
- Brunton, R. (1989). *The abandoned narcotic: Kava and cultural instability in Melanesia*. Cambridge: Cambridge University Press.
- Bureau of Fijian Affairs (1999). *Proposed tikina and village orders*. (As presented at 'The Unity Workshop', Nalotu Village, Yawe District, Kadavu). June.
- Burke, K. J. (2012). Strange bedfellows: The new neoliberalism of Catholic schooling in the United States. *Journal of Pedagogy (Special Issue: Neoliberalism, Pedagogy and Curriculum: A Global Perspective)*, (forthcoming).
- Burton-Bradley, B. G. (1966). Papua and New Guinea transcultural psychiatry: Some implications of betel chewing. *The Medical Journal of Australia*, 15(2), 744-746.
- Byant, G. (1999). *Botanica: The illustrated A-Z of over 10,000 garden plans for new Zealand gardens and how to cultivate them* (3 ed.). Albany: David Bateman Ltd.
- Cairney, S., Clough, A. R., Maruff, P., Collie, A., Currie, B. J., & Currie, J. (2003a). Saccade and cognitive function in chronic kava users. *Neuropsychopharmacology*, 28(389-396).
- Cairney, S., Maruff, P., Clough, A. R., Collie, A., Currie, J., & Currie, B. J. (2003b). Saccade and cognitive impairment associated with kava intoxication. *Human Psychopharmacology*, 18(7), 525-533.
- Campbell Live. (2009). Gisborne woman takes Maori health tonic to the world [TV]. New Zealand: 3News, May 11.
- Caplin, Y. H. (2008). Introduction: Drugs in the workplace. In S. B. Karch (Ed.), *Workplace drug testing* (pp. 1-6). Florida: CRC Press.
- Carmen, R. (1996). *Autonomous development: Humanizing the landscape: An excursion into radical thinking and practice*. London: Atlantic Highlands.
- Cassman, V., Cartmell, L., & Belmonte, E. (2003). Coca as symbol and labour enhancer in the Andes. In W. R. Jankowiak & D. Bradburd (Eds.), *Drugs, Labor, and Colonial Expansion* (pp. 149-158). Arizona: University of Arizona Press.
- Cawte, J. (1988). Macabre effects of a "cult" for kava. *The Medical Journal of Australia*, 148(June 6), 545-546.

- Chambers, R. (1983). *Rural Development: Putting the last first*. Singapore: Pearson Education Limited.
- Chanwai, L. G. (2000). Kava toxicity. *Emergency Medicine*, 12, 142-145.
- Chase, J. (2002). Introduction: The spaces of neoliberalism in Latin America. In J. Chase (Ed.), *The spaces of neoliberalism: Land, place and family in Latin America* (pp. 1-24). Connecticut: Kumarian.
- Cheong, C. Y., & Tan, K. C. (2010). A multi-objective multi-colony ant algorithm for solving the berth allocation problem. In Y. Liu, A. Sun, H. T. Loh, W. F. Lu & E. P. Lim (Eds.), *Advances of computational intelligence in industrial systems (Science in computational intelligence, Volume 16)* (pp. 333-349). Berlin: Springer.
- Cherry, A. (2002). Colombia. In A. Cherry, M. E. Dillon & D. Rugh (Eds.), *Substance Abuse: A Global View* (pp. 51-73). Connecticut: Greenwood Press.
- Cherry, A., Dillon, M. E. & Rugh, D. (2002). Introduction. In A. Cherry, M. E. Dillon & D. Rugh (Eds.), *Substance Abuse: A Global View* (pp. ix-xix). Connecticut: Greenwood Press.
- Chikritzhs, T., Gray, D., Lyons, Z., & Saggers, S. (2007). *Restrictions on the sale and supply of alcohol: Evidence and outcomes*. Perth: National Drug Research Institute Curtin University of Technology. Retrieved Dec. 5, from <http://ndri.curtin.edu.au/local/docs/pdf/publications/R207.pdf>
- Chu, N. S. (2001). Effects of betel chewing on the central and autonomic nervous systems. *Journal of Biomedical Science*, 8(3), 229-236.
- Clammer, J. (1979). Anthropological perspectives on cooperation and group farming: Fiji and Southeast Asia. In J. Wong (Ed.), *Group farming in Asia: Experiences and potentials*. Singapore: Singapore University Press.
- Clique, I. (2011). *Fiji Indian Punjabi Gujarati Muslim Hindu kava song*. YouTube: uploaded Oct. 19., from <http://www.youtube.com/watch?v=KLVZDr6LzZU>
- Clough, A. R. (2001). Does kava cause hallucinations in Aboriginal populations in eastern Arnhem Land (Australia)? *South Pacific Journal of Psychology*, 13(1), 35-38.
- Clough, A.R. (2007). *Kava's grip on NT communities must be loosened*. ABC News. Retrieved Aug. 3, 2010, from <http://www.abc.net.au/news/stories/2007/08/29/2018191.htm>
- Cockley, D. (2010). Helon Habila's neoliberal Nigeria: Free markets and subordinate

- cultures in 'Waiting for an Angel'. In W. P. Collins (Ed.), *Emerging African voices: A study of contemporary African literature* (pp. 144-177). New York: Cambria.
- Cocoagrowers.org. (2011). *Chewing leaves*. Retrieved Oct. 27, from <http://cocagrowers.org/Default.aspx?tabid=968&language=nl-NL>
- Connell, J. (1984). Betel-mania in PNG. *Island Business, October*, 57-58.
- Connew, B. (2007). *Stopover*. Wellington: Victoria University Press.
- Cook, J. (1955). *The Journals of Captain James Cook on his voyages of discovery* (Vol. 1). Cambridge: Hakluyt Society at the University Press.
- Coolican, H. (1999). *Research methods and statistics in Psychology* (3<sup>rd</sup> ed.). Bristol: Hodder & Stoughton Educational.
- Coomber, R., & South, N. (2004). Drugs, cultures and controls in comparative perspectives. In R. Coomber & N. South (Eds.), *Drug use and cultural context 'beyond the West': Tradition, change and post-colonialism* (pp. 13-26). London: Free Association Books.
- Cooper, C. (2003). *Fiji/Viti*. Auckland: Reed.
- Corbridge, S. (1995). Thinking about development. In S. Corbridge (Ed.), *Development studies: A reader* (pp. 1-16). London: Arnold
- Corbridge, S. (1998). Beneath the pavement only soil: The poverty of post-development. *Journal of Development Studies*, 34(6), 138-148.
- Coulter, D., Tamaya, C., & Sotheeswaran, S. (2007). *Assessment of the risk of hepatotoxicity with kava products*. Switzerland: WHO Press.
- Courtwright, D. T. (2001). *Forces of habit: Drugs and the making of the modern world*. Massachusetts: Harvard University Press.
- Cox, J. H., & Davenport, W. H. (1988). *Hawaiian sculpture* (Revised ed.). Hawaii: Hawaii University Press.
- Crocombe, M. (1981). Options for the Pacific's largest ethnic group. In A. Ali (Ed.), *Pacific Indians: Profiles in 20 Pacific countries* (pp. 183-216). Suva: Institute of Pacific Studies, University of the South Pacific.
- Crocombe, M. (1983). *Cannibals and Converts*: Institute of Pacific Studies, University of the South Pacific in association with the Ministry of Education, Rarotonga.
- Crocombe, R. (1987). Overview: The pattern of change in Pacific land tenure. In S. Arutangai & R. Crocombe (Eds.), *Land tenure in the Pacific* (3 ed., pp. 1-24). Suva:

- University of the South Pacific.
- Crowley, T. (1994). Proto who drank kava? In A. Pawley & M. Ross (Eds.), *Austronesian terminologies: Continuity and change (Pacific linguistics. Series C-127)* (pp. 87-100). Canberra: Dept. of Linguistics, Research School of Pacific and Asian Studies, Australian National University.
- Crowley, T. (1995). The national drink and the national language of Vanuatu. *Journal of the Polynesian Society*, 104(1), 7-22.
- Crowley, T. (2004). *Bislama reference grammar*. Oceanic Linguistic Special Publication No.31. University of Hawai'i Press.
- Cowling, W. (1988). Kava drinking in contemporary Tonga. In J. Prescott & G. McCall (Eds.), *Kava use and abuse in Australia and the South Pacific: Proceedings from the Symposium on Kava, University of New South Wales, 11th November. In (Monograph no.5)*. (pp. 40-49). Sydney: National Drug and Alcohol Research University.
- Cummings, C. H. (2008). *Uncertain peril: Genetic engineering and the future of seeds*. Boston: Beacon.
- CUS (Closer Union Society). (1957). *State of South Africa*. South Africa: Da Gama Publishers.
- Curry, G. (2003). Moving beyond postdevelopment: Facilitating indigenous alternatives for "development". *Economic Geography*, 79(4), 405-423.
- Cuzent, G. (1867). On kava or ava (*Piper Methysticum*). In P. L. Simmonds (Ed.), *The Technologist: A monthly record of science applied to art, manufacture and culture* (Vol. 2, pp. 305-308). London: Kent and Co.
- Cyr, A., & Hagen, S. (2007). Measurement and quantification of presenteeism. *Journal of Occupational & Environmental Medicine*, 49(12), 1299-1300.
- Dahlstedt, M. (2012). Schooling entrepreneurs: Entrepreneurship, governmentality and education policy in Sweden at the turn of the millennium. *Journal of Pedagogy. Special Issue: Neoliberalism, Pedagogy and Curriculum: A Global Perspective*, (forthcoming).
- Dakuidreketi, M. R. (2004). *Contexts of science teaching and learning in Fiji primary schools: A comparative study of ethnic Fijian and Indo-Fijian communities*. Unpublished PhD, University of Canterbury, Christchurch.

- Dalton, J. H., Elias, M. J., & Wandersman, A. (2001). *Community psychology: Linking individuals and communities*. USA: Wadsworth.
- Daniel, M. H. (1997). Intelligence testing: Status and trends. *American Psychologist*, 52(10), 1038-1045.
- Darby, W. J., Ghalioungui, P., & Grivetti, L. (1977). *Food: The gift of Osiris* (Vol. 2). London: Academic Press.
- Davis, J. (2002). Alcohol and Aboriginal society: Is racism dead in the alcohol and drug field? In M. Hamilton, A. Kellehear & G. Rumbold (Eds.), *Drug use in Australia: A harm minimisation approach* (pp. 84-97). Melbourne: Oxford University Press.
- Davis, R. I., & Brown, J. F. (1999). *Kava (Piper methysticum) in the South Pacific: Its importance, methods of cultivation, cultivars, disease and pests*. Australian Centre for International Agricultural Research (ACIAR) Technical Report Series No.46. Canberra: ACIAR.
- Davison, G. C., Neale, J. M., & Kring, A. M. (2004). *Abnormal psychology* (9<sup>th</sup> ed.). USA: John Wiley & Sons.
- Deahl, M. (1989). Betelnut -induced extrapyramidal syndrome: An unusual drug interaction. *Movement Disorders*, 4, 330-333.
- Dean, E., & Ritova, S. (1988). *Rabuka: No other way*. Sydney: Doubleday.
- Deci, E. L., & Ryan, R. M. (1992). The initiation and regulation of intrinsically motivated learning and achievement. In A. K. Boggiano & T. S. Pittman (Eds.), *Achievement and motivation: a social-developmental perspective* (pp. 9-36). Cambridge: Cambridge University Press.
- Degei, S. B. (2008). *Yaqona and Methodism in Fiji*. Paper presented at Kava: 'The golden shrub', 18th Biennial Pacific History Association Conference, Suva, 8-12 Dec.
- Deitch, R. (2003). *Hemp: American history revisited: The plant with a divided history*. New York: Algora.
- Delaivoni, C. (2009). Kava ban: Teleni cracks down. *Fiji Sun*, June 15, pp. 1,3.
- Derrick, R. A. (1946). *A history of Fiji*. Suva: Government Press.
- De Garine, I. (2011). Beer, ritual and conviviality in Northern Cameroon. In W. Schiefenhövel & H. Macbeth (Eds.), *Liquid bread: Beer and brewing in cross-cultural perspectives* (pp. 133-146). New York: Berghahn.

- Deraniyagala, S. (2005). Neoliberalism in international trade: Sound economics or a question of faith? In A. Saad-Filho & D. Johnston (Eds.), *Neoliberalism: A critical reader* (pp. 99-105). London: Pluto Press.
- Dev-Zone. (2006). Religion and spirituality. *Just Change*, July(6).
- Diamond, J. (1998). *Guns, germs and steel: A short history of everybody for the last 13,000 years*. London: Random House.
- Dieffenbach, E. (1843). *Travels in New Zealand: With contributions to the geography, geology, botany and natural history of that country*. London: Murray.
- Dodd, C. H. (1998). *Dynamics of Intercultural Communication* (5<sup>th</sup> ed.). USA: McGraw-Hill.
- DoH&A - Department of Health and Aging. (2011). *Importation of Kava*. Australian Government (July 8). Retrieved Sept. 6, from <http://www.health.gov.au/internet/main/publishing.nsf/content/importation-of-kava>
- Domenech, E., & Mora-Ninci, C. (2009). World Bank discourse and policy on education and cultural diversity for Latin America. In D. Hill & R. Kumar (Eds.), *Global neoliberalism and education and its consequences* (pp. 151-170). London: Routledge.
- Donnelly, R. A. (2004). *The complete idiot's guide to statistics*. Indianapolis: Penguin.
- Donnelly, T. A., Quanchi, M., & Kerr, G. J. A. (1994). *Fiji in the Pacific: A history and geography of Fiji* (4<sup>th</sup> ed.). Milton: John Wiley & Sons Australia Ltd.
- Dove, M. R. (2000). The life-cycle of indigenous knowledge, and the case of natural rubber production. In R. Ellen, P. Parkes & A. Bicker (Eds.), *Indigenous environmental knowledge and its transformations* (pp. 213-253). London: Gordon & Breach.
- Dragull, K., Yoshida, W. Y., & Tang, C. S. (2003). Piperidine alkaloids from *Piper methysticum*. *Phytochemistry*, 6, 193-198.
- Duncan, R. (2003). Controlling kava [Radio]. In L. McGinnis (Producer), *Background Briefing*. Australia: Australian Broadcasting Corporation. Download available at <http://www.abc.net.au/rn/talks/bbing/specials/kava/default.htm>
- Durkheim, E., & Pickering, W. S. F. (1975). *Durkheim on religion: A Selection of readings with bibliographies*. London: Routledge & Kejan Paul.

- Durie, M. (2003). *Mauri ora: The dynamics of Māori health*. Melbourne: Oxford University Press.
- Durrant, R., & Thakker, J. (2003). *Substance use & abuse: Cultural and historical perspectives*. California: Sage.
- Duve, R. N., & Prasad, J. (1984). Efficacy of extraction of constituents in the preparation of yaqona beverage. Part 2: Major active constituents. *Fiji Agricultural Journal*, 46(1), 11-16.
- Eade, D. (2002). Preface. In D. Eade (Ed.), *Development and culture: Selected essays from development in practice* (pp. ix-xiv). Oxford: Oxfam GB in association with World Faiths Development Dialogue.
- Earth Energies NZ. (2011). *Kawakawa: Creams, ointments and vibrational essences (Printed product list)*. Also available Aug. 18, from <http://www.earthenergiesnz.com>
- Edelman, M., & Haugerud, A. (2005). Introduction: The anthropology of development and globalization. In M. Edelman & A. Haugerud (Eds.), *The anthropology of development and globalization: From classical political economy to contemporary neoliberalism* (pp. 1-74). Edinburgh: Blackwell.
- Elliott, B. J. (2005). *Using narrative in social research: Qualitative and quantitative approaches*. London: SAGE.
- Emerson, O. P. (1903). The awa habit of the Hawaiians. *Hawaiian Annual*, 130-140.
- Ernst, E. (2007). A re-evaluation of kava (*Piper methysticum*). *British Journal of Clinical Pharmacology*, 64(4), 415-417.
- Erskine, J. E. (1967). *Journal of a cruise among the islands of the Western Pacific, including the Feejees and others inhabited by the Polynesian Negro races, in Her Majesty's Ship Havannah. A reprint of the 1853 edition*. London: Dawsons of Pall Mall.
- Escobar, A. (1992a). Imagining a post-development era? Critical thought, development and social movements. *Social Text*, 31-32, 20-56.
- Escobar, A. (1992b). Reflections on 'development': Grassroots approaches and alternative politics in the Third World. *Futures*, 24(5), 411-436.
- Escobar, A. (1995a). *Encountering development: The making and unmaking of the Third World*. New Jersey: Princeton University Press.

- Escobar, A. (1995b). Imagining a post-development era. In J. Crush (Ed.), *Power of development* (pp. 211-227). London: Routledge.
- Escobar, A. (1997). The making and unmaking of the Third World through development. In M. Rahnema & V. Bawtree (Eds.), *The Post-Development Reader* (pp. 85-93). London: Zed Books. (p.87).
- Escobar, A. (2012). Preface to the 2012 edition. In A. Escobar (Ed.), *Encountering development: The making and unmaking of the Third World*. (pp. vii-xliv). New Jersey: Princeton University Press.
- Esteva, G. (1992). Development. In W. Sachs (Ed.), *The development dictionary: A guide to knowledge as power* (pp. 6-24). New York: St. Martin's Press.
- Fa'asi'i, U. (1993). Gospel and culture in the ava ceremony. *Journal of Theology*, series II, no. 10, pp.61-3.
- Fägerlind, I., & Saha, L. J. (1983). *Education and national development: A comparative perspective*. New York: Pergamon Press.
- Farrell, J. P. (2007). Equality of education: A half-century of comparative evidence seen from a new Millennium. In R. F. Arnove & C. A. Torres (Eds.), *Comparative education: The dialectic of the global and the local* (3<sup>rd</sup> ed., pp. 129-150). New York: Rowman & Littlefield.
- Farrelly, T. (2009). *Democracy and development: An indigenous Fijian example*. Paper presented at the 11<sup>th</sup> Pacific Islands Political Studies Association (PIPSA) Conference, University of Auckland, New Zealand, 3-4 December.
- Faulkner, A. (1958). Medical lore of olden day Māori. *The New Zealand Nursing Journal*, 51(6), 221-223.
- Ferdon, E. N. (1981). *Early Tahiti as the explorers saw it: 1767-1797*. Tucson: University of Arizona Press.
- Finau, S. A., Stanhope, J. M., & Prior, I. A. M. (1982). Kava, alcohol and tobacco consumption among Tongans with urbanization. *Social Science and Medicine*, 16, 35-41.
- Firth, S. (1997). Colonial administration and the invention of the native. In D. Denoon, M. Meleisea, S. Firth, J. Linnekin & K. Nero (Eds.), *The Cambridge history of the Pacific Islanders* (pp. 253-288). Cambridge: Cambridge University Press.
- Fiji Commerce Commission. (2010). *Chair – Dr Mahendra Reddy*. Retrieved March 5,

- from [http://www.comcomm.gov.fj/Dr\\_Mehendra.html](http://www.comcomm.gov.fj/Dr_Mehendra.html)
- Fiji Islands Bureau of Statistics. (2007). *Country statistics: 20 July (2007 Census)*. Retrieved from <http://www.spc.int/prism/Country/fj/stats/Fiji%20Facts%20%20Figures%20As%20At%20Jul%2007.pdf>
- Fiji Islands Bureau of Statistics. (2011). *Key statistics: Population*. Retrieved Nov. 21, from <http://www.statsfiji.gov.fj/>
- Fiji Times. (1999). The disagreements. *Fiji Times*, Aug. 15, p. 13.
- Fiji Times. (2005). No drinking yaqona at work. *Fiji Times*, Dec. 21, p. 2.
- Fiji Times. (2007a). Doped on yaqona. *Fiji Times*, Feb. 9, p. 6.
- Fiji Times. (2007b). Mixed reaction to kava debate. *Fiji Times*, Feb. 9, p. 5.
- Fiji Times. (2007c). Kava ban stirs debate. *Fiji Times*, Feb. 8, p. 4.
- Fiji Times. (2007d). No kava at work law 14-years-old. *Fiji Times*, Feb. 13, p. 11.
- Fiji Times. (2008a). Bole advises against yaqona. *Fiji Times*, Dec. 12, p. 10.
- Fiji Times. (2008b). Kava is evil, says minister. *Fiji Times*, Aug. 24, p. 2.
- Fiji Times. (2008c). New Methodist warns on kava. *Fiji Times*, Aug. 22, p. 2.
- Fiji Times. (2008d). Teleni warns against yaqona. *Fiji Times*, Dec. 13, p. 18.
- Fiji Times. (2009a). Kava council happy with review. *Fiji Times*, Sept. 9, p. 12.
- Fiji Times. (2009b). Officers deep in muddy water. *Fiji Times*, June 16, p. 16.
- Finau, S. A. (1992). Traditional medicine in the modern Pacific: A re-emerging opinion? In S. A. Finau (Ed.), *Tongan Medical Association: Selected papers (50th anniversary commemorative issue)* (pp. 83-99). Nuku'alofa: Masilamea Press.
- Foo, H., & Lemon, J. (1997). Acute effects of kava, alone or in combination with alcohol, on subjective measures of impairment and intoxication and on cognitive performance. *Drug and Alcohol Review*, 16, 147–155.
- Foster, R. J. (1992). Take care of public telephones: Moral education and nation-state formation in Papua New Guinea. *Public Culture*, 4(2), 31-45.
- Foster, R. J. (2002). *Materializing the nation: Commodities, consumption, and media in Papua New Guinea*. Indiana: Indiana University Press.
- Fox, C. E. (1924). *The threshold of the Pacific: An account of the social organization, magic and religion of the people of San Cristoval in the Solomon Islands*. London: Kegan Paul, Trench, Trubner.

- Fraser, D. (2008a). Developing classroom culture: Creating a climate for learning. In C. McGee & D. Fraser (Eds.), *The professional practice of teaching* (Vol. 3, pp. 1-16). Melbourne: Thomson Learning.
- Fraser, D. (2008b). Teaching that makes a difference. In C. McGee & D. Fraser (Eds.), *The professional practice of teaching* (Vol. 3, pp. 47-64). Melbourne: Thomson Learning.
- Freire, P. (1993). *Pedagogy of the oppressed* (New rev. 20th-Anniversary ed.). New York: Continuum.
- Fremont-Barnes, G., & Noon, S. (2005). *Nelson's Sailors*. Oxford: Osprey Publishing.
- Frisch, R. (1965). *Theory of production*. Netherlands: D. Reidel.
- Fu, T., Kan, K., & Liu, J. (2001). Health risk perception and betel quid consumption in Taiwan. In M. Grossman & C. R. Hsieh (Eds.), *The economic analysis of substance use and abuse* (pp. 135-154). Cheltenham, UK: Edward Elgar Publishing.
- Fulton, R. (1922). *Medical practice in Otago and Southland in the early days: A description of the manner of life, trials, and difficulties of some of the pioneer doctors, of the places in which, and of the people among whom, they laboured*. (2<sup>nd</sup> ed.). Dunedin: Otago Daily Times & Witness Newspapers Co. Ltd.
- Fugh-Berman, A., & Ernst, E. (2001). Herb-drug interactions: Review and assessment of report reliability. *British Journal of Clinical Pharmacology*, 52(5), 587–595.
- Gardēre, F., & Routledge, D. (1991). *Histoire de Macuata (History of Macuata)*. Fiji: Archidiocēse de l'Eglise Catholique à Suva.
- Gardner, K., & Lewis, D. (2005). Beyond development? In M. Edelman & A. Haugerud (Eds.), *The anthropology of development and globalization: From classical political economy to contemporary neoliberalism* (pp. 352-359). Edinburgh: Blackwell.
- Garibaldi, A., & Turner, N. (2004). Cultural keystone species: implications for ecological conservation and restoration. *Ecology and Society*, 9(3), [online] URL: <http://www.ecologyandsociety.org/vol9/iss3/art1/>
- Gaskell, I. (2001a). Introduction. In I. Gaskell (Ed.), *Beyond ceremony: An anthology of drama from Fiji* (pp. 5-8). Suva: Institute of Pacific Studies, University of the South Pacific.
- Gaskell, I. (2001b). Staging the Community: Jo Nacola's *Grurdial and the Land*. In I. Gaskell (Ed.), *Beyond ceremony: An anthology of drama from Fiji* (pp. 10-84). Suva:

- Institute of Pacific Studies, University of the South Pacific.
- Gegeo, D. W. (1998). Indigenous knowledge and empowerment: Rural development examined from within. *The Contemporary Pacific*, 10(2), 289-315.
- Gajdusek, D. V. (1967). Recent observations on the use of kava in the New Hebrides. In D. H. Efron, B. Holmstedt & N. S. Kline (Eds.), *Ethnopharmacologic search for psychoactive drugs. Proceedings of a Symposium held in San Francisco, California, January 28-30* (pp. 119-125). Washington, D.C.: Public Health Service Publication No. 1645.
- Geraghty, P. (1996). "When I was a lad...": Thoughts on our national drink. *Fiji Post*, pp. 16, April 28.
- Geraghty, P. (2007). The Fijian dictionary experience. In J. T. Siegle, J. Lynch & D. Eades (Eds.), *Language description, history and development: Linguistic indulgence in memory of Terry Crowley*. (Creole Language Library volume 30). (pp. 383-394). Philadelphia: John Benjamins.
- Geraghty, P. (2008). *When I was a lad... observations on the prevalence of social yaqona drinking in Fiji's history*. Paper presented at Kava: 'The golden shrub', 18th Biennial Pacific History Association Conference, Dec. 8-12, Suva.
- German, J. B., & Walzem, R. L. (2000). The health benefits of wine. *Annual Review of Nutrition*, 20, 561–593.
- Gewirtz, S., Mahony, P., Hextall, I., & Cribb, A. (2009). Policy, professionalism and practice: Understanding and enhancing teachers' work. In S. Gewirtz, P. Mahony, I. Hextall & A. Cribb (Eds.), *Changing teacher professionalism: International trends, challenges and ways forward* (pp. 3-16). New York: Routledge.
- Ghelardini, C., Galeottin N, Lelli, C., & Bartolini, A. (2001). M1 receptor activation is a requirement for arecoline analgesia. *Il Farmaco*, 56(5-7), 383-385.
- Gibson-Graham, J. K. (2005). Surplus possibilities: Postdevelopment and community economics. *Singapore Journal of Tropical Geography*, 26(1), 4-26.
- Gifford, E. W. (1971). *Tongan society*. B.P.Bishop Museum Bulletin No.61. Honolulu & New York: Bishop Museum Press & Krauss Reprint Co.
- Gilson, R. P., & Crocombe, R. (1980). *The Cook Islands, 1820-1950*. Wellington and Suva: Victoria University and Institute of Pacific Studies of the University of the South Pacific.

- Global Investment & Business Center. (2011). *Fiji: Country study guide*. (Vol. 1: Strategic information and development). Washington: International Business Publications.
- Goldberg, E., & Dillon, P. (2005). *Hallucinogens*. Sydney: The National Drug and Alcohol Research Centre.
- Goldie, W. H. (1905). Māori medical lore: Notes on the causes of disease and treatment of the sick among the Māori people of New Zealand, as believed and practised in former times, together with some account of various ancient rites connected with the same. *Transactions and Proceedings of the Royal Society of New Zealand 1868-1961*, 37, 1-120.
- Goode, E. (1993). *Drugs in American society* (4<sup>th</sup> ed.). New York: McGraw-Hill.
- Goodrich, R. (2002). Confessional drinking: Catholic workingmen's clubs and alcohol consumption in Wilhelmine Germany. In R. Koshar (Ed.), *Histories of Leisure* (pp. 233-252). Oxford: Berg.
- Gossop, M. (2007). *Living with drugs* (6<sup>th</sup> ed.). Vermont: Ashgate Publishing.
- Gould, W. T. S. (1993). *People and education in the Third World*. Essex: Longman Scientific & Technical.
- Government of Fiji. (2010). *iTaukei now replaces 'Fijian' and 'Indigenous Fijian'*, Public Service Commission Circular No. 39/2010, File: 29/685/23/2, July 28.
- Government of Sāmoa, (2005). Chinese-Samoan Relations: Minisheet (stamp set), Nov. 6.
- Gravetter, J., & Wallnau, L. B. (2007). *Statistics for the behavioural sciences* (8<sup>th</sup> ed.). Belmont: Wadsworth.
- Gray, D. A., & Wilkes, E. T. (2011). Alcohol restrictions in indigenous communities: An effective strategy if indigenous-led. *The Medical Journal of Australia*, 194(10), 508.
- Gregory, R. J., Gregory, J. E., & Peck, J. G. (1981). Kava and prohibition in Tanna, Vanuatu. *British Journal of Addiction*, 76, 299-313.
- Grieve, M. (1977). *A modern herbal: The medicinal, culinary, cosmetic, and economic properties, cultivation, and folklore of herbs, grasses, fungi, shrubs, and trees with all their modern scientific uses*. London: Jonathan Cape.
- Griffith, A. (2007). *SPSS for dummies*. Indiana: Wiley.
- Groth-Marnat, G. (2003). *Handbook of psychological assessment* (4<sup>th</sup> ed.). New Jersey:

- John Wiley & Sons.
- Guite, N., & Acharya, S. S. (2006). Indigenous medicinal substances and health care: A study among Paite tribe of Manipur, India. *Study of Tribes and Tribals*, 4(2), 99-108
- Gurney, O. R. (1959). *The Hittites*. Baltimore: Penguin Books.
- Haddon, A. C. (1916). Kava-drinking in New Guinea. *Man (N.S.)*, 16(Oct.), 145-152.
- Hall, S. (1990). Cultural identity and diaspora. In J. Rutherford (Ed.), *Identity: Community, culture, difference* (pp. 222-237). London: Lawrence & Wishart.
- Hall, S. (1992). Introduction. In S. Hall & B. Gieben (Eds.), *Formations of modernity* (pp. 1-16). Cambridge: Polity Press in association with the Open University.
- Haggett, P. (2002). *Encyclopedia of world geography: Australasia, The Pacific Islands, Antarctica*. Oxfordshire: Andromeda Oxford.
- Haggis, J., & Schech, S. (2002). Introduction: Pathways to culture and development. In S. Schech & J. Haggis (Eds.), *Development: A cultural studies reader* (pp. xiii-xxiii). Oxford: Blackwell Publishing.
- Hanlon, D. (1988). *Upon a stone altar: A history of the island of Pohnpei to 1890*. Honolulu: University of Hawaii Press.
- Hanson, D. J. (1995). History of alcohol and drinking around the World. *Adapted from Preventing alcohol abuse: Alcohol, culture and control*. Retrieved 4 April, 2008, from <http://www2.potsdam.edu/hansondj/Controversies/1114796842.html>.
- Harari, P., & Legge, K. (2001). *Psychology and health*. Oxford: Heinemann Educational Publishers.
- Hart, G. P. (2002). *Disabling Globalization*. California: University of California Press.
- Harrison, L. E. (2000). Why culture matters. In L. E. Harrison & S. P. Huntington (Eds.), *Culture matters: How values shape human progress* (pp. xvii-xxxiv). New York: Basic Books.
- Havea, J. (Ed.). (2010). *Talanoa ripples: Across borders, cultures, disciplines*. New Zealand: Office of the Directorate Pasifika@Massey.
- Henn, M., Weinstein, M., & Foard , N. (2009). *A critical introduction to social research* (2<sup>nd</sup> ed.). Los Angeles: SAGE
- Heron, C. (2003). *Booze: A distilled history*. Toronto: Between the Lines.
- Hettne, B. (1990). *Development theory and the three worlds*. England: Longman Scientific & Technical.

- Hill, M. (2008). Using classroom assessment for effective learning and teaching. In C. McGee & D. Fraser (Eds.), *The professional practice of teaching* (Vol. 3, pp. 136-153). Melbourne: Thomson Learning.
- Hirsch, E. (1990). From bones to betelnuts: Processes of ritual transformation and the development of "national culture" in Papua New Guinea. *Man (N.S.)*, 25, 18-34.
- Holmes, L. D. (1967). The function of kava in modern Samoan culture. In D. H. Efron, B. Holmstedt & N. S. Kline (Eds.), *Ethnopharmacologic search for psychoactive drugs. Proceedings of a Symposium held in San Francisco, California, January 28-30* (pp. 107-118). Washington, D.C.: Public Health Service Publication No. 1645.
- Holmes, M. (2011). Gendered identities. In A. Elliott (Ed.), *Routledge handbook of identity studies* (pp. 186-202). New York: Routledge.
- home-psychiatrist.com. (2009, Feb. 1). *Anxiolytics, tranquilizers & neuroleptics*. Retrieved June 16, 2010, from <http://home-psychiatrist-2.blogspot.com/2009/02/atarax-hydroxyzine.html>
- Horn, J. (2000). Looking from the South, speaking from home: African women confronting development. *Development*, 43(4), 32–39.
- Hornsey, I. S. (2003). *A history of beer and brewing*. Cambridge: Royal Society of Chemistry.
- Howard, M. C. (1991). *Fiji: Race and politics in an island state*. Vancouver: University of British Columbia Press.
- Howitt, W. (1865). *The history of discovery in Australia, Tasmania, and New Zealand: From the earliest date to the present day*. (Vol. 1). London: Longman, Green, Longman, Roberts, and Green.
- Hunter, E. & D'Abbs, P. (2003). In 'modest but practical ways': Medical practitioners and substance misuse in Aboriginal Australians. *Internal Medicine Journal*, 33(8), 333-335.
- Huntington, S. P. (2002). A universal civilization? Modernization and Westernization. In S. Schech & J. Haggis (Eds.), *Development: A cultural studies reader* (pp. 19-31). Oxford: Blackwell Publishers.
- Iontchev, A. (1998). Central and Eastern Europe. In M. Grant (Ed.), *Alcohol and emerging markets: Patterns, problems, and responses* (pp. 177-201). Philadelphia: Brunner Mazel.

Indian Weekender. (2010). Teleni quits as Fiji police chief. *The Indian Weekender online*, Sept. 7.

<http://www.indianweekender.co.nz/Pages/ArticleDetails/14/1458/Fiji/Teleni-quits-as-Fiji-Police-chief>

Insel, P. M., Turner, R. E., & Ross, D. (2006). *Discovering Nutrition* (2<sup>nd</sup> ed.). Canada: Jones & Bartlett.

Insel, P.M, Ross, D., McMahon, K., & Bernstein, M. (2011). *Nutrition* (4<sup>th</sup> ed.). Canada: Jones & Bartlett.

Ishemo, S. L. (2002). Culture, liberation, and 'development'. In D. Eade (Ed.), *Development and culture: Selected essays from development in practice* (pp. 25-37). Oxford: Oxfam GB in association with World Faiths Development Dialogue.

Jakimow, T. (2008). Answering the critics: The potential and limitations of the knowledge agenda as a practical response to post-development critiques. *Progress in Development Studies*, 8, 311-323.

Janzen, M. D. (2008). The women of Agabagaya: Education and post-development theory. *Canadian Journal of Education*, 31(1), 8-31.

Jenkins, D., & Singh, G. (1996). *Improving rural education: Report of the action research on Koro, 1994-1995*. Suva: School of Humanities, University of the South Pacific, Ministry of Education, Fiji Government, Koro Teachers.

Jobs, S. M., Fiedler, F. E., & Lewis, C. T. (1990). Impact of moderate alcohol consumption on business decision making. In S. W. Gust, J. W. Walsh, L. B. Thomas & D. J. Crouch (Eds.), *Drugs in the workplace: Research and evaluation data. Volume II* (Research Monograph 100). (pp. 147-166). Maryland: US Department of Health and Human Services.

Johnston, J. F. (1859). *The chemistry of common life* (10<sup>th</sup> ed. Vol. 2). New York: D. Appleton & Co.

Johnston, K., Westerfield, W., Momin, S., Phillipi, R., & Naidoo, A. (2009). The direct and indirect costs of employee depression, anxiety, and emotional disorders: An employer case study. *Journal of Occupational and Environmental Medicine*, 51, 564-577.

Jolly, D. N. (2009). *DUI / DWI: The history of driving under the influence*. Colorado: Outskirts Press.

- Kalat, J. W. (2005). *Introduction to Psychology* (8<sup>th</sup> ed.). California: Thomson Wadsworth.
- Kalix, P. (1987). The pharmacology of khat. *The British Journal of Addiction*, 82, 47-53.
- Kallen, E. (1982). *The Western Samoan kinship bridge: A study in migration, social change, and the new ethnicity*. The Netherlands: E.J. Brill.
- Kanahele, G. D. (1995). *Waikiki 100 B.C. to 1900 A.D.: An untold story*. Hawaii: University of Hawaii Press.
- Kasaipwalova, J. (1987). Betelnut is bad magic for aeroplanes. In G. Powell (Ed.), *Through Melanesian eyes: An anthology of Papua New Guinean writing* (pp. 69-77). Melbourne: MacMillan.
- Kate, K. T., & Laird, S. A. (1999). *The commercial use of biodiversity: Access to genetic resources and benefit-sharing*. London: Earthscan.
- Kautai, N. (1984). *Atiu: An Island Community*. Suva and Rarotonga: Institute of Pacific Studies, University of the South Pacific in association with the Cook Islands Ministry of Education and the Atiu Island Trust.
- Kay, R. (2006). *Yaqona (kava) drinking*. Retrieved on 1/12/06 from <http://www.fijiguide.com/Facts/kava.html>
- Keenan, K. (2007). Cutting out: A book and exhibition document the labour and longings of Fiji's landless Indian sugar-cane workers. *Time, Sept.* 24, 58-59.
- Keesing, F. M. (1934). *Modern Samoa: Its government and changing life*. London: Allen & Unwin.
- Keith-Reid, R. (2002). Kava's safety questioned. *Pacific Magazine, February*, 14-16.
- Kelly, T. H., Foltin, R. W., & Fischman, M. W. (1990). Effects of alcohol on human behaviour: Implications for workplace performance. In S. W. Gust, J. W. Walsh, L. B. Thomas & D. J. Crouch (Eds.), *Drugs in the workplace: Research and evaluation data. Volume II* (Research Monograph 100, pp. 129-146). Maryland: US Department of Health and Human Services.
- Keltner, N. L., & Folkes, D. G. (2005). *Psychotropic drugs* (4<sup>th</sup> ed.). Missouri: Elsevier Mosby.
- Kepler, A. K. (1998). *Hawaiian heritage plants*. Honolulu: University of Hawai'i Press.
- Kiddle, L. (2009). Vakavanua settlement in Fiji. *Just Change: Rural-urban migration* (12), 23.

- Kikau, R. (2001). From Veiuto, with best wishes. *Fiji Times*. June 30, p. 5.
- Kikau, R. (2006). PSC sets yaqona drinking policy. *Fiji Times*: October 13, p. 4.
- Kilham, C. (1996). *Kava: Medicine hunting in paradise. The pursuit of a natural alternative to anti-anxiety drugs and sleeping pills*. Vermont: Park Street Press.
- Kishor, N. (1983). Locus of control and academic achievement: Ethnic discrepancies among Fijians. *Journal of Cross-Cultural Psychology*, 14(3), 297-308.
- Ki-Zerbo, J., Kane, C. H., Archibald, J. A., Lizop, E., & Rahnema, M. (1997). Education as an instrument of cultural defoliation: A multi-voice report. In M. Rahnema & M. Bawtree (Eds.), *The post-development reader* (pp. 152-160). London: Zee Press.
- Knishinsky, R. (1998). *The Prozac alternative: Natural relief from depression with St. Johns Wort, Kava, Ginkgo, 5-HTP, Homeopathy, and other alternative therapies*. Vermont: Healing Arts Press.
- Korugl, P. (2007). Telikom develops zero tolerance over betelnuts. *The National*. August 8, p.6.
- Kousary, L. (2006). Extending traditional boundaries of the development paradigm. *Just Change*, July(6), 22.
- Krauss, B. H. (1993). *Plants in Hawaiian culture*. Honolulu: University of Hawaii Press.
- Kremelberg, D. (2011). *Practical statistics*. Los Angeles: SAGE.
- Kumar, R., & Hill, D. (2009). Introduction: Neoliberal capitalism and education. In D. Hill & R. Kumar (Eds.), *Global neoliberalism and education and its consequences* (pp. 1-12). London: Routledge.
- Kumar, S. (2002). *Methods for community participation: A complete guide for practitioners*. New Delhi: Vistaar Publications.
- Lal, B. V. (1985). Review of Fiji: The three-legged stool. Selected writings of Ratu Sir Lala Sukuna. *Historical Studies*, 21(84), 433-466.
- Lang, C. (2008). Beginning teachers. In C. McGee & D. Fraser (Eds.), *The professional practice of teaching* (Vol. 3, pp. 242-254). Melbourne: Thomson Learning.
- Lange, R. (1999). *May the people live: A history of Māori health development 1900-1920*. Auckland: Auckland University Press.
- Langi, J. (1992). The history of the Methodist Church in its Rotuman setting. In Forman Charles W. (ed) *Island churches: Challenge and change*. Institute of Pacific Studies of the University of the South Pacific, Suva, 3-65.

- Lavia, J. (2006). The practice of postcoloniality: A pedagogy of hope. *Pedagogy, Culture & Society (Special issue: Postcolonialism and Education)*, 14(3), 279-293.
- Lawlor, B. A., Sunderland, T., Martinez, R. A., Molchan, S. E., & Weingartner, H. (1991). Drugs and memory. In T. Yanagihara & R. C. Petersen (Eds.), *Memory disorders: Research and clinical practice* (pp. 97-110). New York: Marcel Dekker.
- Laws, S., Harper, C., & Marcus, R. (2003). *Research for development*. London: SAGE.
- Lebot, V. (1991). Kava (*Piper methysticum* Forst. f.): The Polynesian dispersal of an Oceanian plant. In P. A. Cox & S. A. Banack (Eds.), *Islands, plants, and Polynesians: An introduction to Polynesian ethnobotany* (pp. 169-201). Oregon: Dioscorides Press.
- Lebot, V., & Cabalion, P. (1988). *Kavas of Vanuatu: Cultivars of Piper methysticum Frost*. Technical Paper No.195. Noumea: South Pacific Commission.
- Lebot, V., & Levesque, J. (1989). The origin and distribution of kava (*Piper methysticum* Frost. f., *Piperaceae*): A phytochemical approach. *Allertonia*, 2, 223-281.
- Lebot, V., Merlin, M., & Lindstrom, L. (1997). *Kava, the Pacific elixir: The definitive guide to its ethnobotany, history and chemistry*. Vermont: Healing Arts Press.
- LaFromboise, T., Coleman, H. L. K., & Gerton, J. (1993). Psychological impact of biculturalism: Evidence and theory. *Psychological Bulletin*, 114(3), 395-412.
- Lee, R., Yee, P. S., & Naing, G. (2007). Western herbal medicines. In J. H. Lake & D. Spiegel (Eds.), *Complementary and alternative treatments in mental health care* (pp. 87-114). Washington: American Psychiatric Publishing Inc.
- Lemert, E. M. (1967). Secular use of kava in Tonga. *Quarterly Journal of Studies on Alcohol*, 28, 328-341.
- Lemert, E. M. (1979). Forms and pathology of drinking in three Polynesian societies. In M. Marshall (Ed.), *Beliefs, behaviours, and alcoholic beverages: A cross-cultural survey* (pp. 192-207). Michigan: The University of Michigan Press.
- Lemert, E. M., Lemert, C. C., & Winter, M. F. (2000). Alcohol comes to the south seas. In E. M. Lemert (Ed.), *Crime and deviance: Essays and innovations* (pp. 138-224). Oxford: Rowman & Littlefield.
- Lepowsky, M. (1982). A comparison of alcohol and betelnut use on Vanatinai (Sudest Island). In M. Marshall (Ed.), *Through a glass darkly: Beer and modernization in Papua New Guinea*. Monograph 18 (pp. 325-342). Papua New Guinea: Institute of

- Applied Social and Economic Research.
- Lester, R. H. (1941). Kava drinking in Vitilevu, Fiji. *Oceania*, XII(2), 97-121.
- Lewin, L. (1964). *Phantastica: Narcotic and stimulating drugs, their use and abuse*. London: Rutledge & Kegan Paul Ltd.
- Lewin, L., & Wirth, P. H. A. (1931). *Phantastica: Narcotic and stimulating drugs, their use and abuse*. London: K. Paul, Trench, Trübne.
- Lester, R. H. (1941). Kava drinking in Vitilevu, Fiji. *Oceania*, XII(2), 97-121.
- Liang, W. M., Kuo, H. W., & Wang, C. B. (2002). Prevalence of tobacco smoking, drinking and betelnut chewing among Taiwanese workers in 1999. *Mid-Taiwan Journal of Medicine*, 7, 146-154.
- Lie, K. H. (1971). *Productivity and economic growth*. Singapore: McGraw-Hill Eastern Publishers Ltd.
- Lindstrom, L. (1987). Drunkenness and gender on Tanna, Vanuatu. In L. Lindstrom (Ed.), *Drugs in Western Pacific societies: Relations of substance*. ASAO Monograph No.11 (pp. 99-118). Maryland: The Association of Social Anthropology in Oceania & University Press of America.
- Lindstrom, L. (1990). Straight talking on Tanna. In K. A. Watson-Gegeo & G. M. White (Eds.), *Disentangling: Conflict discourse in Pacific societies* (pp. 375-411). California: Stanford University Press.
- Lindstrom, L. (2004). History, folklore, traditional and current uses of kava. In Y. N. Singh (Ed.), *Kava: From Ethnology to Pharmacology (Medicinal and Aromatic Plants - Industrial Profiles Volume 37)* (Vol. 10-28). Boca Raton: CRC Press.
- Lindstrom, L. (2009). Kava Pirates in Vanuatu? *International Journal of Cultural Property*, 16(Special Issue 03), 291-308.
- Linnekin, J. (1990). The politics of culture in the Pacific. In J. Linnekin & L. Poyer (Eds.), *Cultural identity and ethnicity in the Pacific* (pp. 149-174). Honolulu: University of Hawaii Press.
- Linnenik, J. (1997). The ideological world remade. In D. Denoon, M. Meleisea, R. Firth, J. Linnekin & K. Nero (Eds.), *The Cambridge history of the Pacific Islanders* (pp. 397-438). Cambridge: Cambridge University Press.
- Lintzeris, N., & Spry-Baily, P. (2002). Harm reduction with problem users. In M. Hamilton, A. Kellehear & G. Rumbold (Eds.), *Drug use in Australia: A harm*

- minimisation approach* (pp. 231-245). Melbourne: Oxford University Press.
- Lipp, T. (1989). Kava: Drink of the gods. [Video]. Germany.
- Loreman, T., Deppeler, J., & Harvey, D. (2005). *Inclusive education: A practical guide to supporting diversity in the classroom*. Australia: Allen & Unwin.
- Loue, S. (2003). *Diversity issues in substance abuse treatment and research*. New York: Kluwer Academic / Plenum Publishers.
- Loup, S. (1994). Drugs and Alcohol in the Workplace. *Journal of Workplace Learning*, 6(5), 19 - 23.
- Lu, C. T., Yen, Y. Y., Ho, C. S., Ko, Y. C., Tsai, C. C., & Hsieh, C. C. (1996). A case-control study of oral cancer in Changhua County, Taiwan. *Journal Oral Pathology & Medicine*, 25, 245–248.
- Lumsden, A. J. (2012). Radar across the Pacific: Epilogue (Episode 6). New Zealand: TVNZ (broadcast July 24). <http://tvnz.co.nz/radar-across-the-pacific/s2011-ep6-video-4970982>
- Lynch, J. (1999). Language change in Southern Melanesia: Linguistic aberrancy and genetic distance. In R. Blench & M. Spriggs (Eds.), *Archaeology and language IV: Language change and cultural transformation* (pp. 149-159). London: Routledge.
- Mancall, P. C., Robertson, P., & Huriwai, T. (2000). Maori and alcohol: A reconsidered history. *Australian & New Zealand Journal of Psychiatry*, 34(1), 129-134.
- Mandelbaum, D. (1979). Alcohol and culture. In M. Marshall (Ed.), *Beliefs, behaviours, & alcoholic beverages: A cross-cultural survey* (pp. 14-30). Michigan: University of Michigan Press.
- Mangos, T., & Utanga, J. (2011). *Patterns of the past: Tattoo revival in the Cook Islands*. Auckland: Punarua.
- Marshall, M. (1987). An overview of drugs in Oceania. In L. Lindstrom (Ed.), *Drugs in Western Pacific societies: Relations of substance. ASAO Monograph No.11* (pp. 13-50). Maryland: The Association of Social Anthropology in Oceania & University Press of America.
- Marshall, M. (2004). Market highs: Alcohol, drugs and the global economic economy in Oceania. In V. S. Lockwood (Ed.), *Globalization and culture change in the Pacific Islands* (pp. 200-221). New Jersey: Pearson Education.
- Marshall, M., & Marshall, L. B. (2002). Holy and unholy spirits: The effects of

- missionization on alcohol use in Eastern Micronesia. In N. J. Goetzfridt & K. M. Peacock (Eds.), *Micronesian histories: An analytical bibliography and guide to interpretations* (pp. 130-141). Connecticut: Greenwood Press.
- Matau, R. (2008). Na ca ni yaqona: Sivia nodra gunu yaqona na gasenivuli. *Nai Lalakai* (22-28 Oct.), pp. 1-2.
- Mathewson, K. (2004). Drugs, moral geographies, and indigenous peoples: Some initial mappings and central issues. In M. K. Steinberg, J. J. Hobbs & K. Mathewson (Eds.), *Dangerous harvest: Drug plants and the transformation of indigenous landscapes* (pp. 11-23). New York: Oxford University Press.
- Matza, D., & Morgan, P. (2003). Controlling drug use: The great prohibition. In T. G. Blomberg & S. Cohen (Eds.), *Punishment and Social Control* (Vol. 2, pp. 133-148). New York: Aldine De Gruyter.
- McCready, W. C. (1996). Applying sampling procedures. In F. T. L. Leong & A. Austin (Eds.), *The psychology research handbook* (pp. 98-112). London: SAGE.
- McDermott, P. (2005). The great Mersey experiment: The birth of harm reduction. In J. Strang & M. Gossop (Eds.), *Heroin Addiction and the British System: Origins and evolution* (pp. 139-156). New York: Routledge.
- McElroy, A., & Townsend, P. (1989). *Medical Anthropology in Ecological Perspective*. London: Westview Press.
- McEwan, C. (2008). Post-colonialism. In V. Desai & R. B. Potter (Eds.), *The companion to development studies* (2nd ed., pp. 124-129). London: Hodder Education.
- McEwan, C. (2009). *Postcolonialism and development*. New York: Routledge.
- McGee, C. (2008). Classroom interaction. In C. McGee & D. Fraser (Eds.), *The professional practice of teaching* (Vol. 3, pp. 81-99). Melbourne: Thomson Learning.
- McGee, C., & Fraser, D. (2008). Introduction. In C. McGee & D. Fraser (Eds.), *The professional practice of teaching* (Vol. 3, pp. xvii-xviii). Melbourne: Thomson Learning.
- McGee, C., & Fraser, D. (Eds.). (2008). *The professional practice of teaching* (Vol. 3). Melbourne: Thomson Learning.
- McGee, C., & Taylor, M. (2008). Planning for effective teaching and learning. In C. McGee & D. Fraser (Eds.), *The professional practice of teaching* (Vol. 3, pp. 116-

- 135). Melbourne: Thomson Learning.
- McGowan, R. E. (2000). *The contemporary use of rongoa Maori: Traditional Maori medicine*. Unpublished Master of Social Science, University of Waikato, Hamilton.
- McGowan, R. E. (2009). *Rongoa Maori: A practical guide to traditional Maori medicine*. Tauranga: R. McGowan.
- McGrath, T. B. (1973). Sakau in tomw, sarawi in tomw. *Oceania*, 44, 64-67.
- McGregor, A. (2007). Development, foreign aid and post-development in Timor-Leste. *Third World Quarterly*, 28(1), 155 -170.
- McGrew, W. C. (2011). Natural ingestion of ethanol by animals: Why? In W. Schiefenhövel & H. Macbeth (Eds.), *Liquid bread: Beer and brewing in cross-cultural perspectives* (pp. 13-20). New York: Berghahn.
- McKenzie, D. (2002). What's the difference between coca and cocaine? *The Pitt News: The daily student newspaper of the University of Pittsburgh*. Section: Opinions, 17 Jan.
- McKinnon, K. (2008). Taking post-development theory to the field: Issues in development research, Northern Thailand. *Asia Pacific Viewpoint*, 49(3), 281-293.
- McMichael, P. (2000). *Development and social change: A global perspective* (2<sup>nd</sup> ed.). California: Sage.
- McNaughton, N. (2008). The neurobiology of anxiety: Potential for co-morbidity of anxiety and substance use disorders. In S. H. Stewart & P. J. Conrad (Eds.), *Anxiety and substance use disorders: The vicious cycle of comorbidity* (pp. 19-36). New York: Springer.
- Meador, K. (1998). Cognitive side effects of medications. *Neurologic Clinics*, 16(1), 141-155.
- MediHerb. (1994a). Kava - A safe herbal treatment for anxiety. *MediHerb Professional Newsletter, No.38 April (part 1)*.
- MediHerb. (1994b). Kava - A safe herbal treatment for anxiety. *MediHerb Professional Newsletter, No.38 May (part 2)*.
- Medina-Mora, M. E. (1998). Mexico. In M. Grant (Ed.), *Alcohol and Emerging Markets: Patterns, Problems, and Responses* (pp. 263-286). Philadelphia: Brunner Mazel.
- Melanesian Mission. (1925). North Mala report. *The Southern Cross Log*, Sept.
- Menter, I. (2009). Teachers for the future: What have we got and what do we need? In

- S. Gewirtz, P. Mahony, I. Hextall & A. Cribb (Eds.), *Changing teacher professionalism: International trends, challenges and ways forward* (pp. 217-228). New York: Routledge.
- Meo-Sewabu, L. (2010). *Talanoa and the role of insider/outsider as a contribution to Ethnography: A Fijian case study. "Nai Talanoa mai Narocivo, Nayau, Lau"* (The sharing of conversations from Narocivo, Nayau, Lau). Paper presented at the Contemporary Ethnography Across the Disciplines (CEAD) Conference, Waikato University, Nov. 17.
- Merlin, M., & Raynor, W. (2005). Kava cultivation, native species conservation, and integrated watershed resource management on Pohnpei Island. *Pacific Science*, 59(2), 241–260.
- Miller, K. C. (2008). *A community of sentiment: Indo-Fijian music and identity discourse in Fiji and its diaspora*. Unpublished thesis, Doctor of Philosophy in Ethnomusicology, University of California.
- Mills, S., & Bone, K. (2005). *The essential guide to herbal safety*. Missouri: Elsevier.
- Mincer, J. (1958). Investment in human capital and personal income distribution. *Journal of Political Economy*, 66(4), 281-302.
- Ministerial Council on Drug Strategy, (2006). *National drug strategy: Aboriginal and Torres Strait Islander peoples complementary action plan 2003–2009*. Canberra: National Drug Strategy Unit.
- Ministry of Finance and National Planning. (2004). *Millennium Development Goals; Fiji national report*. Suva: Government of Fiji.
- Ministry of Information, National Archives & Library Services. (2010). Going back to our roots: IILC to preserve iTaukei identity. *New Dawn: Government of Fiji*, March 13, 2(5).
- Mishra, V. (2007). *The literature of the Indian diaspora: Theorizing the diasporic imaginary*. New York: Routledge.
- Mitchell, P. D. (2004). *Medicine in the crusades: Warfare, wounds and the medieval surgeon*. Cambridge: Cambridge University Press.
- MoE: Ministry of Education. (2000). *Learning together: Directions for education in the Fiji Islands. Report of the Fiji Islands Education Commission / Panel*. Suva: Government Printer.

- MoE: Ministry of Education. (2004). *PMS Training workshop for teachers: Section III, Report on qualities and performance of duties*. In association with PSC circular No. 1/2004, issued on 15/1/04. Ministry of Education. Suva: Special Projects Unit.
- MoE: Ministry of Education, National Heritage, Culture & Arts, Youth & Sports. (2010). Policy in drugs and substance abuse in schools. June 19. Suva: Government of Fiji.
- Momsen, J. H. (2006). Women, men and fieldwork: Gender relations and power structures. In V. Desai & R. B. Potter (Eds.), *Doing development research* (pp. 44-51). London: SAGE.
- Moon, P., & Kereopa, H. (2004). *Tohunga*. Auckland: David Ling.
- Moore, J. D. (2009). Pierre Bourdieu: An anthropology of practice. In J. D. Moore (Ed.), *Visions of culture: An introduction to anthropological theories and theorists*. (3<sup>rd</sup> ed.). New York: Altamira.
- Mosley, A. (2001). *The role of education in development in an indigenous Mexican community: Indigenous perspectives*. Unpublished Master of Philosophy, Massey, Palmerston North.
- Moulds, R. F. W., & Malani, J. (2003). Kava: Herbal panacea or liver poison? *Medical Journal of Australia*, 178, 451-453.
- MUHEC. (2010). *Code of ethical conduct for research, teaching and evaluations involving human participants*. Palmerston North: Massey University Human Ethics Committee.
- Mugler, F. (2004). The spice of life: Borrowing and Fiji's Indian languages. In J. Tent & P. Geraghty (Eds.), *Borrowing: A Pacific perspective* (pp. 233-252). Canberra: Pacific Linguistics, Research School of Pacific and Asian Studies, Australian National University.
- Münte, T. F., Heinze, H. J., Matzke, M., & Steitz, J. (1993). Effects of oxazepam and an extract of kava roots (*Piper methysticum*) on event-related potentials in a word-recognition task. *Pharmacoelectroencephalog*, 27, 46–53.
- Myers, D. G. (2000). *Exploring social psychology* (2<sup>nd</sup> ed.). Boston: Mc Graw Hill.
- Nabobo, U. (2000). Indigenous Fijian educational ideas. In K. H. Thaman (Ed.), *Educational ideas from Oceania* (pp. 85-93). Suva: Institute of Education & UNESCO Chair of Teacher Education and Culture, The University of the South Pacific.

- Nabobo, U. (2001). Education and indigenous Fijians: Challenges - the year 2000 and beyond. *Directions*, 23(1), 56-74.
- Nabobo, U., & Teasdale, J. (1995). Education for cultural identity: A Fiji case study. *Prospects*, 25(4), 695-706.
- Nabobo-Baba, U. (2005). Talanoa: From traditional to modern conflict resolution. In J. Henderson & G. Watson (Eds.), *Securing a peaceful Pacific*. Christchurch: Canterbury University Press.
- Nabobo-Baba, U. (2006). *Knowing and learning: An indigenous Fijian approach*. Suva: Institute of Pacific Studies, University of the South Pacific.
- Nabobo-Baba, U. (2007). *Vanua research framework*. Paper presented at the Sustainable Livelihoods and Education in the Pacific (SLEP) Workshop, University of the South Pacific, Suva. 12-16th February.
- Nabobo-Baba, U. (2009). Fijian epistemology: Examining aspects of Vugalei cultural pedagogies, processes and possible futures. In K. F. Sanga & K. Thaman (Eds.), *Rethinking education curricula in the Pacific: Challenges and prospects* (pp. 137-158). Wellington and Suva: He Parekereke, Institute for Research and Development in Maori and Pacific Education, Victoria University and The University of the South Pacific.
- Nabobo-Baba, U., Naisilisili, S. V., Bogitini, S., Baba, T., & Lingam, G. (2012). *Rural and remote schools in Udu, Fiji: Vanua, indigenous knowledge, development and professional support for teachers and education*. Suva: The University of the South Pacific and Native Academy Publishers.
- Nabuka, J. (1984). The influence of home background variables on the achievement of Fijian and Indian students. *Directions*, 13, 34-35.
- Nagalu, M. (2007). Grog makes Fijians lazy. *Fiji Times*, May 26, p. 9.
- Naidu, R. (1983). Kava: Problem or panacea? *Islands Business*, February, 34-37.
- Nairne, J. S. (2011). *Psychology: Enhanced fifth edition*. California: Wadsworth.
- Narayan, D. (1993). How native is a 'native' anthropologist? *American Anthropologist*, 95, 671-686.
- Nederveen Pieterse, J. (1992). *White on black: Images of Africa and blacks in Western popular culture*. New Haven: Yale University Press.
- Nederveen Pieterse, J. (2000). After post development. *Third World Quarterly*, 21(2),

175-191.

- Nederveen Pieterse, J. (2010). *Development theory: Deconstructions/reconstructions*. SAGE: Los Angeles.
- Negin, J., Roberts, G., & Lingam, D. (2010). The evolution of Primary Health Care in Fiji: Past, present and future. *Pacific Health Dialog. Special edition: Fiji School of Medicine 1885-2010.*, 16(2), 13-23.
- Neil, J. F. (1889). *The New Zealand family herb doctor: A book on the botanic eclectic system of medicine, containing the latest discoveries in medicine and surgery for cure of disease; also a description of the herbs, roots, barks, seeds, extracts, essential oils, &c; of the most important medicinal plants growing in New Zealand, Australia, and elsewhere, together with numerous carefully selected valuable remedies, recipes, &c., with a successful treatment for horses and cattle*. Dunedin: Mills, Dick &Co.
- Nelson, B. S., & Heischober, B. (1999). Betelnut : A common drug used by naturalized citizens from India, Far East Asia, and the South Pacific Islands. *Annals of Emergency Medicine*, 34(2), 238-243.
- Nerurkar, P. V., Dragull, K., & Tang, C. S. (2004). In vitro toxicity of kava alkaloid, Pipermethystine, in HepG2 cells compared to kavalactones. *Toxicological Sciences*, 79, 106-111.
- Newland, L. (2008). *The socio-economic impact of kava consumption in two Fijian villages*. Paper presented at the Association for Social Anthropology in Oceania, Australian National University, Canberra (13-16 February).
- Newman, B. M., & Newman, P. R. (2011). *Development through life: A psychosocial approach* (11<sup>th</sup> ed.). California: Wadsworth/Cengage Learning.
- Ng, D. (1997). *How long does it take for food to go through you?* MadSci Network: Anatomy, Thu Apr 3: School of Pharmacy and Medical Sciences, University of South Australia.
- Niukula, S. (2003). A Fijian woman's faith journey. In L. Johnson & J. A. Filemoni-Tofaeno (Eds.), *Weavings: Women doing theology in Oceania* (pp. 204-214). Suva: South Pacific Association of Theological Schools and The Institute of Pacific Studies, University of the South Pacific. (p.208-9).
- Nordegren, T. (2002). *The A-Z encyclopaedia of alcohol and drug abuse*. Florida: Brown

- Walker Press.
- Norere, D. (2007). Substance abuse in Primary Health Care. *General Practitioner*, 15(2), 8-10.
- Norton, S. A. (1998). Herbal medicines in Hawaii: From tradition to convention. *Hawaii Medical Journal*, 57(January), 382-386.
- Norton, S. A., & Ruze, P. (1994). Kava dermatopathy. *Journal of the American Academy of Dermatology*, 31(1), 89-97.
- Oetting, E. R., & Beauvais, F. (1990-91). Orthogonal cultural identification theory: The cultural identification of minority adolescents. *The International Journal of Addictions*, 25(5A & 6A), 655-685.
- Oetting, E. R. (1993). Orthogonal cultural identification: Theoretical links between cultural identification and substance use. In M. R. De La Rosa & J. L. R. Adrados (Eds.), *Drug abuse among minority youth: Advances in research and methodology* (NIDA Research Monograph 130) (pp. 32-56). Maryland: National Institute on Drug Abuse.
- OIPC: Office of the Indigenous Policy Coordination. (2009). *Northern Territory Emergency Response (NTER) monitoring report: Measuring progress of NTER activities - July 2008 to December 2008*. Canberra: Department of Families, Housing, Community Services and Indigenous Affairs. Retrieved June 23, 2011, from  
[http://www.fahcsia.gov.au/sa/indigenous/pubs/nter\\_reports/mon\\_report/Documents/default.htm](http://www.fahcsia.gov.au/sa/indigenous/pubs/nter_reports/mon_report/Documents/default.htm)
- Ogden, J. A. (2001). First do no harm. Culturally-appropriate neuropsychological assessment for indigenous people: A position paper. *Brain Impairment*, 2, 1-10.
- Oliver, D. (1989). *Oceania: The native cultures of Australia and the Pacific Islands*. Hawaii: University of Hawaii Press.
- Onyemelukwe, C. C. (2005). *The science of economic development and growth: The theory of factor proportions*. New York: M.E. Sharpe.
- O'Reilly, B., Carr, S., & Bolitho, F. (2005). Globalization of human services for indigenous youth in the Northern Territory, Australia. In A. J. Marsella, A. Austin & B. Grant (Eds.), *Social change and psychosocial adaptation in the Pacific Islands: Cultures in transition*. New York: Springer SBM Publications.

- Overton, J. D. (1988). The study of rural Fiji. In J. D. Overton & B. Banks (Eds.), *Rural Fiji* (pp. 1-12). Suva: Institute of Pacific Studies, University of the South Pacific.
- Overton, J. D., & van Diermen, P. (2003). Using quantitative techniques. In R. Scheyvens & D. Storey (Eds.), *Development Fieldwork: A practical guide*. (pp. 37-56). London: SAGE.
- Pallant, J. (2009). *SPSS survival manual* (3<sup>rd</sup> ed.). Australia: Allen & Unwin.
- Panapasa, G. (2010a). Kava effects. *Fiji Times*, May 17, p. 2.
- Panapasa, G. (2010b). Yaqona concerns. *Fiji Times*, May 13, p. 3.
- Park, T. K. (1993). Confucian values and contemporary economic development in Korea. In T. Brook & H. V. Luong (Eds.), *Culture and economy: The shaping of capitalism in Eastern Asia* (pp. 125-136). Michigan: University of Michigan Press.
- Parkinson, S. (1972). *A journal of a voyage to the South Seas, in his Majesty's ship, the Endeavour. Faithfully transcribed from the papers of the late Sydney Parkinson, draughtsman to Joseph Banks, esq. on his late expedition, with Dr. Solander, round the world. Embellished with views and designs, delineated by the author, and engraved by capital artists*. Adelaide: Australiana Facsimile Editions No. A34: Reproduced by the Libraries Board of South Australia.
- Parsons, O. A. (1998). Neurocognitive deficits in alcoholics and social drinkers: A continuum? *Alcoholism: Clinical and Experimental Research*, 22(4), 954–961.
- Passer, M. W., & Smith, R. E. (2001). *Psychology: Frontiers and applications*. New York: McGraw-Hill.
- Patrick, C. H. (1952). *Alcohol, culture, and society*. New York: Duke University Press, Reprint edition by AMS Press, New York, 1970.
- Pearson-Chinnery, E. W. (1922). Piper methysticum in betel-chewing. *Man (N.S.)*, 22(Feb.), 24-27.
- Peet, R. (1999). *Theories of development*. New York: Guilford Press.
- Peet, R., & Hartwick, E. (2009). *Theories of development: Contentions, arguments, alternatives* (2 ed.). New York: Guilford Press.
- Pene, F., Tavola, H., & Croghan, A. (Eds.). (2000). *Learning together: Directions for education in the Fiji Islands*. Suva: Government Printer.
- Pendergrast, M. (1999). *Uncommon grounds: The history of coffee and how it transformed our world*. New York: Basic.

- Per, Z. (2007). Cops warned against buai. *The National*. Oct. 10, p. 10.
- Perkins, C. A. (1967). *Fiji: Many flowering islands*. Auckland: Collins.
- Perminow, A. A. (1993). *The long way home: Dilemmas of everyday life in a Tongan village*. Oslo: Scandinavian University Press.
- Petersen, G. (1995). The complexity of power, the subtlety of kava. *Canberra Anthropology*, 18 (Special volume, *The power of kava*)(1&2), 34-60.
- Petersen, R. C., & Weingartner, H. (1991). Memory nomenclature. In T. Yanagihara & R. C. Petersen (Eds.), *Memory disorders: Research and clinical practice* (pp. 9-22). New York: Marcel Dekker.
- Peterson, K. W., & Smith, D. R. (2007). Alcohol and drug abuse in industry. In W. N. Rom & S. B. Markowitz (Eds.), *Environmental and occupational medicine* (4<sup>th</sup> ed., pp. 836-845). Philadelphia: Lippincott, Williams & Wilkins.
- Petrie, A., & Sabin, C. (2000). *Medical statistics at a glance*. Massachusetts: Blackwell Science.
- Philbrick, N. (2007). *Mayflower: A voyage to war*. London: Harper Perennial.
- Phinney, J. S. (1992). The multi-group ethnic identity measure: A new scale for use with diverse groups. *Journal of Adolescent Research*, 7(2), 156-176.
- Pieterse, J. N. (1998). My paradigm or yours? Alternative development, post development, reflexive development. *Development and Change*, 29(2), 343-373.
- Pigliasco, G. C. (2011). Are the grassroots growing? Intangible cultural-heritage lawmaking in Fiji and Oceania. In E. Hvding & K. M. Rio (Eds.), *Made in Oceania: Social movements, cultural heritage and the state in the Pacific* (pp. 321-337). Wantage: Sean Kingston Publishing.
- Pillemer, D. B. (1991). One- versus two-tailed hypothesis tests in contemporary educational research. *Educational Researcher*, 20(9), 13-17.
- Pina, N. (2000). California cracks down on kava-drinking drivers. *Fiji Times*, December 9, p.7.
- Pinomi, S. (2008). Kava restriction puts an unfair burden on Pacific culture. *The Sydney Morning Herald*. May 30.
- Piscopo, G. D. N. (2002). Kava kava: Gift of the Islands. In S. A. Finau, J. Pryor, M. Fong, M. Koli, V. Chand, A. Mazid, A. Ali & M. Diloi (Eds.), *Kava and Pacific Health (Anthology Series No. 2)* (pp. 1-11). Suva: Pacific Health Research Council.

- Porter, R. (1990). Introduction. In J. C. Sournia (Ed.), *A history of alcoholism*. (pp. ix-xvi). Oxford: Basil Blackwell.
- Poyer, L. (1990). Being Sapwuahfik: Cultural identity and ethnic identity in a Micronesian society. In J. Linnekin & L. Poyer (Eds.), *Cultural identity and ethnicity in the Pacific* (pp. 127-147). Honolulu: University of Hawaii Press.
- Poyer, L., Falgout, S., & Carucci, L. M. (2001). *The typhoon of war: Micronesian experiences of the Pacific war*. Honolulu: University of Hawai'i Press.
- Prasad, R. (2004). *Tears in paradise: A personal and historical journey, 1879-2004*. Auckland: Glade Publishers.
- Prasad, M. (2009). Vijay Singh's Indo-Fijian work ethic: The politics of diasporic definition. In M. Keown, D. Murphy & J. Procter (Eds.), *Comparing postcolonial diasporas* (pp. 168-188). Basingstoke: Palgrave Macmillan.
- Pratibha, J. (2008). Judge orders yaqona ban. *Fiji Sun*, May 30, pp. 1-2.
- Prescott, J., Jamieson, D., Emdur, N., & Duffield, P. (1993). Acute effects of kava on measures of cognitive performance, physiological function and mood. *Drug and Alcohol Review*, 12, 49-58
- Provino, R. (2009). Toxicology: Piper methysticum, kava kava. *Australian Journal of Medical Herbalism*, 21(4), 104-105.
- Puamau, P. (1999). Understanding Fijian under-achievement: An integrated perspective. *Directions*, 21(2), 100-112.
- Puamau, V. Q. L. (1999). *Affirmative action and racial inequality in education: The case of Fiji*. Unpublished Ph.D, The University of Queensland, St. Lucia, Brisbane.
- PSC: Public Service Commission. (1993). Yaqona drinking in Government Offices (Memo), File: 29/660: Government of Fiji.
- PSC: Public Service Commission. (2007). Prohibition of drinking yaqona in Government workplaces, *PSC Circular No. 22/2007*: Government of Fiji.
- Qerequeretabua, M. (2006). *Yaqona drinking session in a Fijian village*. Paper presented at the Department of Anthropology, Waikato University. May 17.
- Radcliffe, S. A. (2006). Culture in development thinking: Geographies, actors, and paradigms. In S. A. Radcliffe (Ed.), *Culture and development in a globalizing world: Geographies, actors, and paradigms* (pp. 1-29). New York: Routledge.
- Radcliffe, S. A., & Laurie, N. (2006). Indigenous groups, culturally appropriate

- development, and the socio-spatial fix of Andean development. In S. A. Radcliffe (Ed.), *Culture and development in a globalizing world: Geographies, actors, and paradigms* (pp. 83-106). New York: Routledge.
- Raduege, K. M., Kleshinski, J. F., Ryckman, J. V., & Tetzlaff, J. E. (2004). Anesthetic considerations of the herbal, kava. *Journal of Clinical Anesthesia*, 16(4), 305-311.
- Raghavan, V., & Baruah, H. K. (1958). Areca nut: India's popular masticatory — history, chemistry and utilization. *Economic Botany*, 12(4), 315-345.
- Rahnema, M. (1997). Toward post-development: Searching for signposts, a new language and new paradigms. In M. Rahnema & M. Bawtree (Eds.), *The post-development reader* (pp. 377-403). London: Zed Books.
- Rahnema, M., & Bawtree, V. (Eds.). (1997). *The post-development reader*. New Jersey: Zed Books.
- Raicola, V. (2008). Yaqona ban lifts villagers. *Fiji Times*. July 10, p. 2.
- Raicola, V. (2009). Teleni threat. *Fiji Times*, Feb. 18. p. 1.
- Railway Safety Act Review Committee. (1984). Substance use and abuse. In *On track: The future of railway safety in Canada*. Canada: Transport Canada. Retrieved 6 Jan, 2009, from  
<http://www.tc.gc.ca/RailSafety/Publications/OnTrack/Section8.htm#15>
- Ralogaivau, T. (2008). Carrier operators stage protest. *Fiji Times*, Sec. 11, p. 14.
- Ralogaivau, T. (2009). Cops sacked over kava. *Fiji Times*, July 31, p. 4.
- Ramacake, S. (2007). *Fijian models of social work practice: Academic research report*. Unpublished Masters, Massey University, Palmerston North.
- Ramonet, I. (1997). The one and only way of thinking. In M. Rahnema & M. Bawtree (Eds.), *The post-development reader* (pp. 179-181). London: Zed Books.
- Ramzan, I., & Tran, V. H. (2004). Chemistry of kava and kavalactones. In Y. N. Singh (Ed.), *Kava: From Ethnology to Pharmacology (Medicinal and Aromatic Plants - Industrial Profiles Volume 37)* (pp. 76-103). Boca Raton: CRC Press.
- Rancière, J. (1991). *The ignorant schoolmaster: Five lessons in intellectual emancipation*. California: Stanford University Press.
- Rao, V., & Walton, M. (2004). Culture and public action: Relationality, equality of agency, and development. In V. Rao & M. Walton (Eds.), *Culture and public action* (pp. 3-36). Stanford: Stanford Social Sciences.

- Rates, S. M. (2001). Plants as source of drugs. *Toxicon*, 39(5), 603-613.
- Ratuva, S. (2002). Re-inventing the cultural wheel: Re-conceptualizing restorative justice and peace building in ethnically divided Fiji. In S. Dinnen, A. Jowett & T. Newton (Eds.), *A kind of mending: Restorative justice in the Pacific Islands* (pp. 149-163). Canberra: Pandanus.
- Ratuva, S. (2007). Na kilaka a vaka-Viti ni veikabula: Indigenous knowledge and the Fijian cosmos: Implications for bio-prospecting. In A. T. P. Mead & S. Ratuva (Eds.), *Pacific genes & life patents: Pacific indigenous experiences & analysis of the commodification & ownership of life* (pp. 90-101). Wellington: Call of the Earth Llamado de la Tierra and the United Nations University of Advanced Studies.
- Ravuvu, A.D. (1987). *The Fijian ethos*. Suva: Institute of Pacific Studies of the University of the South Pacific.
- Ravuvu, A. D. (1988). *Development or dependence: The pattern of change in a Fijian village*. Suva: University of the South Pacific.
- Restall, M., & Schwaller, R. (2011). The gods return: Conquest and conquest society (1502-1610). In W. H. Beezley (Ed.), *A companion to Mexican history and culture* (pp. 195-208). Chichester: Wiley-Blackwell.
- Richardson, W. N., & Henderson, L. (2007). The safety of kava: A regulatory perspective. *British Journal Of Clinical Pharmacology*, 64(4), 418-420.
- Riley, G. M. (1973). *Fernando Cortés and the Marquesado in Morelos, 1522-1547: A case study in the socioeconomic development of sixteenth-century Mexico*. Mexico: University of New Mexico Press.
- Riley, M. (1994). *Māori healing and herbal: New Zealand ethnobotanical sourcebook*. Paraparaumu: Viking Sevenseas N.Z. Ltd.
- Rizvi, F., Lingard, B., & Lavia, J. (2006). Postcolonialism and education: Negotiating a contested terrain. *Pedagogy, Culture & Society (Special issue: Postcolonialism and Education)*, 14(3), 249-262.
- RNZL: Radio New Zealand International. (2010). *Fiji police commander Teleni quits*. *Radio NZ International*, Aug. 26. Retrieved 10 Oct., from <http://www.rnzi.com/pages/news.php?op=read&id=55522>
- Robinson, D., & Robinson, K. (2005). *Pacific 'ways of talk': Hui and talanoa*. Wellington: The New Zealand Trade Consortium in association with the New Zealand Institute

- of Economic Research (Inc).
- Robert, J. (1992). Production. In G. Esteva (Ed.), *The development dictionary: A guide to knowledge as power* (pp. 177-191). New York: St. Martin's Press.
- Roberts, S. (2001). Surprises from self-experimentation: Sleep, mood, and weight. *Chance*, 14(2), 7-18.
- Robertson, R., & Sutherland, W. (2001). *Government by the gun: The unfinished business of Fiji's 2000 coup*. Australia: Pluto Press.
- Rosman, A., & Rubel, P. G. (1995). *The tapestry of culture: An introduction to cultural anthropology* (5 ed.). USA: McGraw-Hill.
- Rostow, W. W. (1956). The take-off into self-sustained growth. *Economic Journal*, 66, 25-48.
- Royal Australian and New Zealand College of Psychiatrists, (2000). *Submission to the House of Representatives Standing Committee on Family and Community Affairs, in Health is Life: Report on the Inquiry into Indigenous Health*. Canberra: Commonwealth of Australia.
- Rumbarger, J. J. (1989). *Profits, power, and prohibition: Alcohol reform and the industrializing of America, 1800-1930*. Albany: State University of New York Press.
- Rumbold, G., & Hamilton, M. (2002). Addressing drug problems: The case for harm minimisation. In M. Hamilton, A. Kellehear & G. Rumbold (Eds.), *Drug use in Australia : a harm minimisation approach* (pp. 130-144). Melbourne: Oxford University Press.
- Russell, P. N., Bakker, D., & Singh, N. N. (1987). The effects of kava on alerting and speed of access of information from long-term memory. *Bulletin of the Psychonolis Society*, 25(4), 236-237.
- Ruze, P. (1990). Kava-induced dermatopathy: A niacin deficiency? *The Lancet*, 335, 1442-1445.
- Ryle, J. (2010). *My God, my land: Interwoven paths of Christianity and tradition in Fiji*. Surrey: Ashgate.
- Sachs, W. (Ed.), (2000). *The development dictionary*. London: Zed.
- Sachs, W. (1992). Introduction. In W. Sachs (Ed.), *The development dictionary: A guide to knowledge as power* (pp. 1-5). New York: St. Martin's Press.
- Saletu, B., Grünberger, J., Linzmayer, L., & Anderer, D. P. (1989). EEG-brain mapping,

- psychometric and psychophysiological studies on central effects of kavain-a kava plant extract derivative. *Human Psychopharmacology*, 4, 169-190.
- Sardar, Z. (1997). Beyond development: An Islamic perspective. *European Journal of Development Research*, 8(2), 36-55.
- Sadock, B. J., Kaplin, H. L., & Sadock, V. A. (2007). *Kaplan & Sadock's synopsis of psychiatry: Behavioural sciences / clinical psychology*. (10<sup>th</sup> ed.). Philadelphia: Lippincott Williams & Wilkins.
- Sadock, B. J., & Sadock, V. A. (2003). *Kaplan & Sadock's Synopsis of psychiatry: Behavioural sciences / clinical psychology*. Philadelphia: Lippincott Williams & Wilkins.
- Saggers, S., Gray, D., & Strempel, P. (2006). Sex, drugs and indigenous young people. In P. Aggleton, A. Ball & P. Mane (Eds.), *Sex, drugs and young people: International perspectives. Sexuality, culture and health*. (pp. 200-218). New York: Routledge.
- Sahlins, M. D. (1962). *Moala: Culture and nature on a Fijian island*. Michigan: University of Michigan Press.
- Sahlins, M.D. (2004). *Apologies to Thucydides: Understanding history as culture and vice versa*. Chicago: University Of Chicago Press.
- Said, E. W. (1993). *Culture and imperialism*. New York: Alfred A. Knopf.
- Saletu, B., Grünberger, J., Linzmayer, L., & Anderer, D. P. (1989). EEG-brain mapping, psychometric and psychophysiological studies on central effects of kavain-a kava plant extract derivative. *Human Psychopharmacology*, 4, 169-190.
- San, G., Huang, T. C., & Huang, L. H. (2006). The establishment and application of a labor quality index: The case of Taiwan's manufacturing industry. *Journal of Social Indicators Research*, 79(1), 61-96.
- Sanderson, E. (2006). Weaving together development and spirituality: Perspectives from a Melanesian settlement in Fiji. *Just Change*, July(6), 7.
- Sanga, K. F., & Thaman, K. (Eds.). (2009). *Re-thinking education curricula in the Pacific: Challenges and prospects*. Wellington and Suva: He Parekereke, Institute for Research and Development in Maori and Pacific Education, Victoria University and The University of the South Pacific.
- Sardar, Z. (1997). Beyond development: An Islamic perspective. *European Journal of Development Research*, 8(2), 36-55.

- Sarris, J., & Kavanagh, D. J. (2009). Kava and St. John's Wort: Current evidence for use in mood and anxiety disorders. *Journal Of Alternative And Complementary Medicine*, 15(8), 827-836.
- Sarris, J., Kavanagh, D. J., Byrne, G., Bone, K. M., Adams, J., & Deed, G. (2009). *The Kava Anxiety Depression Spectrum Study (KADSS): A randomized, placebo-controlled crossover trial using an aqueous extract of Piper methysticum*, online publication, Journal of Psychopharmacology, from <http://www.springerlink.com/content/d067511634876461/fulltext.pdf>
- Saunders, K. (2002). Towards a deconstructive post-development criticism. In K. Saunders (Ed.), *Feminist postdevelopment thought: Rethinking modernity, postcolonialism and representation* (pp. 1-38). London: Zed.
- Scarr, D. (1980). *Ratu Sukuna: Soldier, statesman, man of two worlds*. London: Macmillan Education.
- Scarr, D. (1983). *Fiji: The three legged stool. Selected writings of Ratu Sir Lala Sukuna*. London: MacMillan Education for the Ratu Sir Lala Sukuna Biography Committee.
- Schech, S., & Haggis, J. (2000). *Culture and development: A critical introduction*. Oxford: Blackwell Publishers.
- Schech, S., & Haggis, J. (2008). Culture and development. In V. Desai & R. B. Potter (Eds.), *The companion to development studies* (pp. 50-54). London: Hodder Education.
- Scheepers, L. M. (2004). Jidda: The traditional midwife of Yemen? In E. R. Van Teijlingen, G. W. Lowis, M. Porter & P. McCaffery (Eds.), *Midwifery and the medicalization of childbirth* (pp. 259-264). New York: Nova Science Publishers.
- Scheyvens, R. (2002). *Tourism for development: Empowering communities*. England: Pearson Education.
- Scheyvens, R. (2011). *Tourism and poverty*. New York: Routledge.
- Scheyvens, R., & Leslie, H. (2000). Gender, ethics and empowerment: Dilemmas of development fieldwork. *Women's Studies International Forum*, 23(1), 119-130.
- Schieffelin, E. (1982). The cultural dimensions of alcohol abuse in a South Pacific nation. In M. Marshall (Ed.), *Through a glass darkly: Beer and modernization in Papua New Guinea. Monograph 18*. (pp. 49-55). Papua New Guinea: Institute of Applied Social and Economic Research.

- Schmidt, M., Morgan, M., Bone, K., & McMillan, J. (2005). Kava: A risk-benefit assessment. In S. Mills & K. Bone (Eds.), *The essential guide to herbal safety* (pp. 155-221). Missouri: Elsevier, Churchill, Livingstone.
- Schutz, A. J. (1994). *The voices of Eden: A history of Hawaiian language studies*. Honolulu: University of Hawaii Press.
- Schultz, J. T., Vatucawaqa, P., & Tuivaga, J. (2007). *2004 Fiji national nutrition survey: Main report, September 2007*. Suva: National Food and Nutrition Centre.
- Schuurman, F. J. (2000). Paradigms lost, paradigms regained?: Development studies in the twenty-first century. *Third World Quarterly*, 21(1), 7-20.
- Schuurman, F. J. (2002). The impasse in development studies. In V. Desai & R. B. Potter (Eds.), *The companion to development studies* (pp. 12-15). London: Arnold.
- Schwimmer, E. (1982). Betelnut: The beer of the Orokaiva. In M. Marshall (Ed.), *Through a glass darkly: Beer and modernization in Papua New Guinea. Monograph 18* (pp. 319-323). Papua New Guinea: Institute of Applied Social and Economic Research.
- Schütz, A. J. (2003). *Say it in Fijian: An entertaining introduction to the language of Fiji*. Suva: Textbook Wholesalers Ltd.
- Serpenti, L. M. (1965). *Cultivators in the swamps: Social structure and horticulture in a New Guinea society*. Netherlands: Van Gorcum.
- Semali, L. M., & Kincheloe, J. L. (1999). Introduction: What is indigenous knowledge and why should we study it? In L. M. Semali & J. L. Kincheloe (Eds.), *What is indigenous knowledge?: Voices from the academy*. New York: Garland.
- Sewell, A., & St. George, A. (2008). The classroom as a community of learners. In C. McGee & D. Fraser (Eds.), *The professional practice of teaching* (Vol. 3, pp. 204-220). Melbourne: Thomson Learning.
- Shaffer, D. R., & Kipp, K. (2010). Development and the self and social cognition. In K. L. Krause, S. Bocher, S. Duchesne, A. McMaugh, D. R. Shaffer & K. Kipp (Eds.), *Child development and learning* (2<sup>nd</sup> ed., pp. 376-421). Victoria: Cengage Learning.
- Shaw, V. N. (2002). *Substance use and abuse: Sociological perspectives*. London: Praeger.
- Shoup, B. (2008). *Conflict and cooperation in multi-ethnic states: Institutional incentives, myths, and counterbalancing*. London: Routledge.

- Shulgin, A. T. (1966). Possible implication of myristicin as a psychotropic substance. *Nature*, 210(5034), 380-384.
- Simon, D. (1997). Development reconsidered; New directions in development thinking. *Human Geography*, 79(4, December), 183-201.
- Simon, D. (2008). Neoliberalism, structural adjustment and poverty reduction strategies. In V. Desai & R. B. Potter (Eds.), *The companion to development studies* (2<sup>nd</sup> ed., pp. 86-92). London: Hodder Education.
- Singh, M. (2007). The good and bad of kava. *Fiji Sunday Times*, Sept. 2, p. 7.
- Singh, N. N., Singh, S. D., & Singh, Y. N. (2004). Kava: Clinical studies and therapeutic implications. In Y. N. Singh (Ed.), *Kava: From ethnology to pharmacology (Medicinal and Aromatic Plants - Industrial Profiles Volume 37)* (pp. 140-164). Boca Raton: CRC Press.
- Singh, Y. N. (1981). A review of the historical, sociological and scientific aspects of kava and its uses in the South Pacific. *Fiji Medical Journal*, April/May, 61-64.
- Singh, Y. N. (2004a). An introduction to kava Piper methysticum. In Y. N. Singh (Ed.), *Kava: From Ethnology to Pharmacology (Medicinal and Aromatic Plants - Industrial Profiles Volume 37)* (p.1-9). Boca Raton: CRC Press.
- Singh, Y. N. (2004b). Botany and ethnobotany of kava. In Y. N. Singh (Ed.), *Kava: From Ethnology to Pharmacology (Medicinal and Aromatic Plants - Industrial Profiles Volume 37)* (pp. 50-75). Boca Raton: CRC Press.
- Singh, Y. N. (2004c). Kava: Production, marketing and quality assurance. In Y. N. Singh (Ed.), *Kava: From Ethnology to Pharmacology (Medicinal and Aromatic Plants - Industrial Profiles Volume 37)* (pp. 29-49). Boca Raton: CRC Press.
- Singh, Y. N. (2004d). Pharmacology and toxicology of kava and kavalactones. In Y. N. Singh (Ed.), *Kava: From Ethnology to Pharmacology (Medicinal and Aromatic Plants - Industrial Profiles Volume 37)* (pp. 104-139). Boca Raton: CRC Press.
- Singh, Y. N., & Blumenthal, M. (1997). Kava: An overview. Distribution, mythology, botany, culture, chemistry and pharmacology of the South Pacific's most revered herb. *HerbalGram (The Journal of the American Botanical Council)*, 39, 34-56.
- Singh, Y. N., & Singh, N. N. (2002). Therapeutic potential of kava in the treatment of anxiety disorders. *CNS Drugs*.
- Skog, M. (2010). *Fiji government wants term 'Fijian' replaced*. ABC Asia Pacific News,

- Aug. 27. Retrieved Nov. 12, from  
<http://abcasiapacificnews.com/stories/201008/2994994.htm?mobile>
- Slikkerveer, L. J., & Slikkerveer, M. K. L. (1995). Taman Obat Keluarga (TOGA): Indigenous Indonesian medicine for self-reliance. In D. M. Warren, L. J. Slikkerveer & D. Brookensha (Eds.), *The cultural dimension of development: Indigenous knowledge systems* (pp. 13-34). London: Intermediate Technology Publications Ltd.
- Smith, A. (1852). *An inquiry into the nature and causes of the wealth of nations*. Edinburgh: T. Nelson & Son.
- Smith, D. C. (2007). *The 6-month effect on absenteeism and cost savings from a workplace pedometer-based intervention: Australian Model*. Retrieved May, 21, 2010, from <http://www.hddp.org/reports.aspx>
- Smith, L. T. (1999). *Kaupapa Maori methodology: Our power to define ourselves*, School of Education, University of British Columbia.
- Smith, W. (1813). *Journal of a voyage in the missionary ship Duff to the Pacific Ocean in the years 1796, 7, 8, 9, 1800, 1, 2, &c: Comprehending authentic and circumstantial narratives of the disaster which attended the first effort of the 'London Missionary Society'*. London: Collins & Co.
- Soselisa, H. L. (2007). A comparison of traditional and innovative subsistence strategies on Buano during periods of socio-environmental stress, 1980-2003. In R. Ellen (Ed.), *Modern crisis and traditional strategies: Local ecological knowledge in island Southeast Asia* (pp. 143-165). Brooklyn: Berghahn.
- Sotheeswaran, S. (2002). *Anticancer activity studies on kava (Piper Methysticum) extracts*. Paper presented at the Pacific Kava Research Symposium, Suva.
- Sournia, J. C. (1990). *A History of Alcoholism*. Oxford: Basil Blackwell.
- Spate, O. H. K. (1959). *The Fijian people: Economic problems and prospects. Legislative Council, Paper No. 13*. Suva: Government Press.
- Spedding, A. (2004). Coca use in Bolivia: A tradition of thousands of years. In R. Coomber & N. South (Eds.), *Drug use and cultural context 'beyond the West': Tradition, change and post-colonialism* (pp. 46-64). London: Free Association Books.
- Speiser, F. (1996). *Ethnology of Vanuatu: An early twentieth century study*. Hawaii:

- University of Hawaii Press.
- Srebrnik, H. (2008). Indo-Fijians: Marooned without land and power in a South Pacific archipelago? In P. Raghuram, A. K. Sahoo, B. Maharaj & D. Sangha (Eds.), *Tracing an Indian diaspora: Contexts, memories, representations* (pp. 75-95). California: SAGE.
- St Clair Skeet, S. (2007). *Education provision in the Third World: The actors, and the lessons of a study in Fiji*. Ontario: Queen's University Press.
- Stafford, P. (2005). *Heavenly highs: Ayahuasca, kava-kava, DMT, and other plants of the gods*. California: Ronin Publishing.
- Stanley, D. (1996). *South Pacific handbook* (6<sup>th</sup> ed.). California: Moon.
- Starr, M. J., McGurn, B., Whiteman, M., Pattie, A., Whalley, L. J., & Deary, I. J. (2004). Life long changes in cognitive ability are associated with prescribed medications in old age. *International Journal of Geriatric Psychiatry*, 19(4), 327-332.
- Stedman-Edwards, P. (2000). A framework for analyzing biodiversity loss. In A. Wood, P. Stedman-Edwards & J. Mang (Eds.), *The root causes of biodiversity loss* (pp. 11-35). London: Earthscan.
- Steinberg, M. K. (2004). Introduction. In M. K. Steinberg, J. J. Hobbs & K. Mathewson (Eds.), *Dangerous harvest: Drug plants and the transformation of indigenous landscapes*. New York: Oxford University Press.
- Steiner, G. G. (2000). The correlation between cancer incidence and kava consumption. *Hawaii Medical Journal*, 59(11), 420-422.
- Steinmetz, E. F. (1960). *Piper Methysticum - kava - kava-kava - yaqona: Famous drug plant of the South Sea Islands*. Amsterdam: Steinmetz.
- Steinmetz, G. (2007). *The devil's handwriting: Precoloniality and the German colonial state in Qingdai, Samoa, and Southwest Africa*. Chicago: University of Chicago.
- Steinkraus, K. H. (1996). *Handbook of indigenous fermented foods: Food science and technology*. New York: Marcell Dekker.
- Storey, A. (2000). Post-development theory: Romanticism and Pontius Pilate politics. *Development*, 43(4), 40-46.
- Strelecek, A., Duckworth, J., Symonds, J., & Ball, V. (2006). Vox pops: Religion and spirituality in development. *Just Change*, July(6), 6.
- Stuff.co.nz. (2011). *NZ man faces jail over kava haul*. Retrieved Aug. 6, from

- <http://www.stuff.co.nz/world/australia/5402247/NZ-man-faces-jail-over-kava-haul>
- Suaalii, F. (2010). *Learning year 12 chemistry in Samoa: Barriers and support*. Paper presented at the Whenua Pasifika@Massey 5<sup>th</sup> Annual Conference:, Massey University, Albany Campus, 11-12 Nov.
- Suaalii, F. (2011). Learning year 12 chemistry in Samoa: Barriers and support. In R. Gounder (Ed.), *Community development and managing change for growth among Pasifikans* (pp. 209-226). Auckland: Masilamea Press.
- Subramani, A. (2000). Re-inscribing vision. In F. Pene, H. Tavola & A. Croghan (Eds.), *Learning together: Directions for education in the Fiji Islands* (pp. 1-17). Suva: Government Printer.
- Szalavitz, M., & Perry, B. D. (2010). *Born for love: Why empathy is essential - and endangered*. New York: HarperCollins.
- Szasz, T. S. (2003). *Ceremonial chemistry: The ritual persecution of drugs, addicts, and pushers* (Revised ed.). New York: Syracuse University Press.
- Tabudravu, J. N., & Jaspars, M. (2005). Anticancer activities of constituents of kava (*Piper methysticum*). *South Pacific Journal of Natural Science*, 23, 26-29.
- Tabureguci, D. (2008). *Getting the basics right to save kava: Otherwise, look for alternative crop*, from [http://www.islandsbusiness.com/islands\\_business/](http://www.islandsbusiness.com/islands_business/)
- Tabureguci, D. (2012). Reviving Kava: Is a 'kava comeback fight' here at last? *Island Business, June*, 16-18.
- Taofinu'u, P. (1973). *O le 'ava o se peloferaga: The kava ceremony as a prophecy*. Apia: Roman Catholic Church.
- Taofinu'u, P. (1995). *O le 'ava o se peloferaga: The kava ceremony as a prophecy*. Apia: Roman Catholic Church.
- Taufa, S. M. (2010). The sum of us: Contesting and contours of Tongan young women's identity in the diaspora. In J. Havea (Ed.), *Talanoa ripples: Across borders, cultures, disciplines* (pp. 98-119). Palmerston North: Pasifika@Massey.
- Taufe'ulungaki, A. (2009). Engendering culturally responsive teaching. In K. F. Sanga & K. H. Thaman (Eds.), *Re-thinking education curricula in the Pacific: Challenges and prospects*. (pp. 125-136). Wellington and Suva: He Parekereke, Institute for Research and Development in Maori and Pacific Education, Victoria University and

- The University of the South Pacific.
- Talbot, L., & Verrinder, G. (2010). *Promoting health: The primary health care approach* (4<sup>th</sup> ed.). Sydney: Churchill Livingstone Elsevier.
- Tapu, T. (1986). The tattoo ritual in Samoa. In G. Deverell & B. Deverell (Eds.), *Pacific rituals: Living or dying?* (pp. 166-170). Suva: Institute of Pacific Studies, University of the South Pacific, in association with the Pacific Theological College.
- Tavola, H. (1991). *Secondary education in Fiji: A key to the future*. Suva: Institute of Pacific Studies of the University of the South Pacific.
- Tavola, H. (2000). Other ethnic groups. In F. Pene, H. Tavola & A. Croghan (Eds.), *Learning together: Directions for education in the Fiji Islands* (pp. 226-233). Suva: Government Printer.
- Tavola, H. (2000). Status report. In F. Pene, H. Tavola & A. Croghan (Eds.), *Learning together: Directions for education in the Fiji Islands* (pp. 17-33). Suva: Government Printer.
- Taylor, R. (1848). *A leaf from the natural history of New Zealand*. Auckland: Robert Stokes, at the Office of the New Zealand Spectator and Cook's Strait Guardian.
- Taylor, R. (n.d.). *Māori Race Notebooks GNZ MSS 297/33*. Taylor Collection. Auckland Public Library.
- Teasdale, B., & Teasdale, J. (1992a). Introduction. In B. Teasdale & J. Teasdale (Eds.), *Voices in a seashell: Education, culture and identity* (pp. 1-5). Suva: Institute of Pacific Studies, University of the South Pacific and United Nations Educational, Scientific and Cultural Organisation.
- Teasdale, J., & Teasdale, B. (1992b). Culture and the context of schooling. In B. Teasdale & J. Teasdale (Eds.), *Voices in a seashell: Education, culture and identity* (pp. 54-70). Suva: Institute of Pacific Studies, University of the South Pacific and United Nations Educational, Scientific and Cultural Organisation.
- Tesche, C. D., & Karhu, J. (2000). Theta oscillations index human hippocampal activation during a working memory task. *Proceedings of the National Academy of Sciences*, 97(2), 919-924.
- Thaman, K. (1992a). Cultural learning and development through cultural literacy. In B. Teasdale & J. Teasdale (Eds.), *Voices in a seashell: Education, culture and identity*. (p.24-36). Suva: Institute of Pacific Studies, University of the South Pacific and

- United Nations Educational, Scientific and Cultural Organisation.
- Thaman, K. (1992b). Looking toward the source: Cultural context in teacher education. *Directions*, 14(2), 3-13.
- Thaman, K. (1995). Concepts of learning, knowledge and wisdom in Tonga and their relevance to modern education. *Prospects*, 25(4: December), 723-748.
- Thaman, K. H. (2009). Introduction. In K. F. Sanga & K. Thaman (Eds.), *Re-thinking education curricula in the Pacific: Challenges and prospects* (pp. 13-27). Wellington and Suva: He Parekereke, Institute for Research and Development in Maori and Pacific Education, Victoria University and The University of the South Pacific.
- Thomas, K. (2011). Beer: How it's made - the basics of brewing. In W. Schiefenhövel & H. Macbeth (Eds.), *Liquid bread: Beer and brewing in cross-cultural perspectives*. New York: Berghahn.
- Thomas, N. (1997). *In Oceania: Visions, artifacts, histories*. Durham: Duke University Press.
- Thompson, R., Ruch, W., & Hasenohrl, R. U. (2004). Enhanced cognitive performance and cheerful mood by standardized extracts of Piper methysticum (Kava-kava). *Human psychopharmacology*, 19(4), 243-250.
- Thomson, P. (1999). *Kava in the blood: A personal and political memoir from the heart of Fiji*. Auckland: Publishing Press.
- Thornley, A. (2002). *Exodus of the i Taukei: The Wesleyan Church in Fiji 1848-74*. Suva: Institute of Pacific Studies, University of the South Pacific.
- Time Magazine. (2009). Decriminalizing drugs. *Sept.* 7, p.7.
- Tiriman, C. (2005). Fiji: Struggling parents use kava to pay school fees [Radio]. In ABC Australia Radio, *Pacific Beat*. Australia. <http://abc.net.au/ra/pacbeat/stories/s1501292.htm>
- Tisdell, C. A., & Ward, J. T. (1981). *Economics in our society*. Auckland: Jacaranda Press.
- Titcomb, M. (1948). Kava in Hawaii. *Journal of the Polynesian Society*, 57, 105-171.
- Tittler, R. (1999). The Cookes and the Brookes: Uses of portraiture in town and country before the Civil War. In G. M. MacLean, D. Landry & J. P. Ward (Eds.), *The country and the city revisited: England and the politics of culture, 1550 - 1850* (pp. 58-73). Cambridge: Cambridge University Press.
- Titus, P. (2009). Fijian Methodist Church challenges military government. *Touchstone*:

- Monthly newspaper of The Methodist Church of New Zealand.* Aug., pp. 1,8.
- Todaro, M. P., & Smith, S. C. (2006). *Economic development* (9<sup>th</sup> ed.). London: Pearson Addison Wesley.
- Tomlinson, M. (2004). Perpetual lament: Kava-drinking, Christianity and sensations of historical decline in Fiji. *Journal of the Royal Anthropological Institute*, 10, 653-673.
- Tomlinson, M. (2006). A consuming tradition: Kava drinking in Fiji. *Expedition: The magazine of the University of Pennsylvania Museum of Archaeology and Anthropology*, 48(2), 8-17.
- Tomlinson, M. (2007). Everything and its opposite: Kava drinking in Fiji. (Photo Essay). *Anthropological Quarterly*, 80(4), 1065-1081.
- Tomlinson, M. (2008). Our wealth is loving each other: Self and society in Fiji, by Karen J Brison (book review). *The Contemporary Pacific*, 20(2), 495-497.
- Tomlinson, M. (2009). *In God's Image: The Metaculture of Fijian Christianity. The Anthropology of Christianity 5*. Berkeley: University of California Press.
- Tomlinson, M. (2012). Passports to eternity: Whales' teeth and transcendence in Fijian Methodism. In L. Manderson, W. Smith & M. Tomlinson (Eds.), *Flows of faith: Religious reach and community in Asia and the Pacific* (pp. 215-231). New York: Springer.
- Tooley, J. (2001). *The global education industry: Lessons from private education in developing countries*. Washington DC: The International Finance Corporation.
- Toren, C. (1990). *Making sense of hierarchy: Cognition as social process in Fiji*. London: The Athlone Press.
- Toren, C. (1999). *Mind, materiality and history: Explorations in Fijian ethnography*. London: Routledge.
- Toren, C. (2005). Laughter and truth in Fiji: What we may learn from a joke. *Oceania*, 75(3), 268-283.
- Toren, C. (2007). How do we know what is true? In R. Astuti, J. Parry & C. Stafford (Eds.), *Questions of anthropology* (pp. 307-336). Oxford: Berg.
- Tonks, A. (2003). Treating generalised anxiety disorder. *British Medical Journal*, 326(7391), 700-701.
- TPAF (Training & Productivity Authority of Fiji). (2009). Productivity measurement report launched. *Training News*, 3(13), 1-2.

- TravelPod. (2003). *Caves and bush beer*. (Nov. 26). Retrieved May 7, 2010, from [http://blog.travelpod.com/travel-blog-entries/mclubbe/mikeski\\_rtw\\_2/1069880400/tpod.html](http://blog.travelpod.com/travel-blog-entries/mclubbe/mikeski_rtw_2/1069880400/tpod.html)
- Trevena-Vernon, M. (2001). Kava. In J. Condon, G. Warman & L. Arnold (Eds.), *The Health and Welfare of Territorians* (pp. 47-48). Australia: Epidemiology Branch, Territory Health Services, Northern Territory Government.
- Troost, J. M. (2006). *Getting stoned with savages: A trip through the islands of Fiji and Vanuatu*. New York: Broadway Books.
- Tsai, S. P., Wen, C. P., Hu, S. C., Cheng, T. Y., & Huang, S. J. (2005). Workplace smoking related absenteeism and productivity cost in Taiwan. *Tobacco Control*, 14(1), i33-i37.
- Tuinamuana, K. (2005). International policy convergence in higher education: An analysis from the periphery. In P. Ninnis & M. Hellsten (Eds.), *Internationalizing higher education: Critical explorations of pedagogy and policy. Comparative Education Research Center studies in comparative education 16*. (pp. 199-214). Netherlands: Springer.
- Tukai, M. (1988). Modernisation theory and a Fijian village. In J. D. Overton & B. Banks (Eds.), *Rural Fiji* (pp. 13-17). Suva: Institute of Pacific Studies, University of the South Pacific.
- Turner, J. W. (1981). Blessed to give and receive: Ceremonial exchange in Fiji. *Ethnology*, 26(3), 209-219.
- Turner, J. W. (1986). 'The water of life': Kava ritual and the logic of sacrifice. *Ethnology*, 25(3), 203-214.
- Tuwere, I. S. (2002). *Vanua: Towards a Fijian theology of place*. Suva and Auckland: Institute of Pacific Studies, The University of the South Pacific and College of St. John the Evangelist.
- UNESCO. (1995). *The cultural dimension of development: Towards a practical approach. Culture & development series*. Paris: UNESCO Publishing.
- Urbanowicz, C. F. (1975). Drinking in the Polynesian Kingdom of Tonga. *Ethnohistory*, 22(1), 33-50.
- USP News. (2009). *Rethinking Pacific education initiative publishes books*. University of the South Pacific Marketing & Communications Office (March 17). from

<http://www.usp.ac.fj/news/story.php?id=345>

- Vakabua, J. N. (2007). A Fijian's perspective on the uses and ownership of intellectual property. In A. T. P. Mead & S. Ratuva (Eds.), *Pacific genes & life patents: Pacific indigenous experiences & analysis of the commodification & ownership of life* (pp. 102-109). Wellington: Call of the Earth Llamado de la Tierra and the United Nations University of Advanced Studies.
- Vaka'uta, N. (2011). Dancing the rhythms of talanoa. In N. Vaka'uta (Ed.), *Talanoa rhythms: Voices from Oceania* (pp. 8-13). Auckland: Masilamea Press.
- Valou, N. (2009). Total kava ban on Police: Not in work plan - Teleni. *Fiji Sun, July 6*, pp. 1,3.
- Van der Grijp, P. (2004). *Identity and development: Tongan culture, agriculture, and the perenniability of the gift*. Leiden: KITVL Press.
- Van Fossen, A. (1998). Race, ethnicity and language. In R. A. Maidment & C. MacKerras (Eds.), *Culture and Society in the Asia-Pacific* (pp. 89-114). London: Routledge.
- Van Gils, C., & Cox, P. A. (1994). Ethnobotany of nutmeg in the Spice Islands. *Journal of Ethnopharmacology*, 42, 117-124.
- Vanualailai, P. (2008). Integrated costal zone management of small islands in the Pacific: Examples of Fiji. In N. Mimura (Ed.), *Asia-Pacific coasts and their management: States of environment. Costal systems and continental margins*. (pp. 241-253). The Netherlands: Springer.
- Veitayaki, J. (1995). *Fisheries development in Fiji: The quest for sustainability*. Suva: Institute of Pacific Studies and the Ocean Resources Management Programme, University of the South Pacific.
- Veramu, J. C. (1992). *Let's do it our way: A case study of participatory education in a rural Fijian school and community*. Suva: Institute of Pacific Studies, University of the South Pacific.
- Ver Beek, K. A. (2002). Spirituality: A development taboo. In D. Eade (Ed.), *Development and culture: Selected essays from development in practice* (pp. 60-77). Oxford: Oxfam GB in association with World Faiths Development Dialogue.
- Verhelst, T., & Tyndale, W. (2002). Cultures, spirituality, and development. In D. Eade (Ed.), *Development and culture: Selected essays from development in practice* (pp. 1-24). Oxford: Oxfam GB in association with World Faiths Development Dialogue.

- Vernon, R. (1890). *James Calvert, or, from dark to dawn in Fiji*. London: Partridge.
- Voigt-Graf, C. (2003). Fijian teachers on the move: Causes, implications and policies. *Asia Pacific Viewpoint*, 44(2), 163 -175.
- Voigt-Graf, C. (2004). Twice migrants' relationship to their ancestral homeland: The case of Indo-Fijians and India. *Journal of Pacific Studies*, 27(1-2), 177-201.
- Volz, H. P., & Kieser, M. (1997). Kava-kava extract WS 1490 versus placebo in anxiety disorders. A randomized placebo-controlled 25-week outpatient trial. *Pharmacopsychiatry*, 30, 1-5.
- Vulaono, A. (2001). *Revelation on kava/snake*. Retrieved Aug. 20, 2010, from <http://www.visionprovider.net/prophecies/yaqona-prophecy.html>
- Vunidilo, K. (2006). Rites and practices of kava ceremonies for highland people of Fiji (The Case of Namosi). (prepared for, although not at the presentation at, the Australian Anthropological Society Annual Conference: Beyond science and art. 'Relationality, rationality and religious experience in the contemporary Pacific'. James Cook University, Cairns.
- Wade, W. R. (1842). *A journey in the northern island of New Zealand: Interspersed with various information relative to the country and people*. Hobart: George Rolwegan.
- Walker, A. R. (2005). Indians in Fiji. In M. Ember, C. R. Ember & S. I.A. (Eds.), *Encyclopedia of diasporas: Immigrant and refugee cultures around the world* (pp. 836-849). New York: Springer Science & Business Media.
- Waqainabete, I. (2003). *Neropsychological effect of kava*. Unpublished Masters of Surgery, Fiji School of Medicine, Suva.
- Ward, M. C. (2005). *Nest in the wind: Adventures in anthropology on a tropical island* (2<sup>nd</sup> ed.). Illinois: Waveland.
- Warnakulasuriya, S., Trivedy, C., & Peters, T. J. (2002). Areca nut use: An independent risk factor for oral cancer. The health problem is under-recognised. *British Medical Journal*, 324(7341), 799–800.
- Warner, J. (1992). Before there was 'alcoholism': Lessons from the medieval experience with alcohol. *Contemporary Drug Problems*, 19, 409-429.
- Warren, D. M., Slikkerveer, L. J., & Brokensha, D. (1995). Introduction. In D. M. Warren, L. J. Slikkerveer & D. Brokensha (Eds.), *The Cultural Dimension of Development: Indigenous knowledge systems* (pp. xv-xvii). London: Intermediate Technology

Publications Ltd.

- Watson, E. E. (2006). Culture and conservation in post-conflict Africa: Changing attitudes and approaches. In S. A. Radcliffe (Ed.), *Culture and development in a globalizing world: Geographies, actors, and paradigms* (pp. 58-82). New York: Routledge.
- Watt, A. C. P. (1896). *Twenty-five years' mission life on Tanna, New Hebrides (1896)*. Glasgow: J & R Parlane-Paisley.
- Webster, A. (1990). *Introduction to the sociology of development*. (2<sup>nd</sup> ed.). London: Macmillan Education Ltd.
- Wechsler, D. (1997a). *WAIS-III: Administration and scoring manual*. San Antonio: The Psychological Corporation.
- Wechsler, D. (1997b). *WAIS-III: Technical manual*. San Antonio: The Psychological Corporation.
- Week, D. (2009). A new vision for rural high school education in the Pacific. *Just Change: Rural-urban migration* (16), 20.
- Weiner, M. A. (1969). *Secrets of Fijian medicine*. Berkeley: University of California.
- Weiss, L. G., Saklofske, D. H., & Prifitera, A. (2003). Clinical interpretation of the Wechsler Intelligence Scales for children: Third edition (WAIS-III) Index scores. In C. R. Reynolds & R. W. Kamphaus (Eds.), *Handbook of psychological and educational assessment of children: Intelligence, aptitude, and achievement*. (2<sup>nd</sup> ed., pp. 147-174). New York: Gilford Press.
- White, C. M. (2001). Between Academic Theory and Folk Wisdom: Local Discourse on Differential Educational Attainment in Fiji. *Comparative Education Review*, 45(3), 303-333.
- Whiteside, N., & Salais, R. (1998). Political economy and modernisation. In N. Whiteside & R. Salais (Eds.), *Governance, industry, and labour markets in Britain and France: The modernising state of the mid-twentieth century* (pp. 1-23). London: Routledge.
- Williams, E. B. (2000). Facing the challenges of Fijian education: Planning for the future. In F. Pene, H. Tavola & A. Croghan (Eds.), *Learning together: Directions for education in the Fiji Islands* (pp. 179-225.). Suva: Government Printer.
- Williams, J. (2004). *50 facts that should change the world*. Cambridge: Icon books.

- Williams, J. (2010). Towards a model of indigenous research. In B. Hokowhitu, N. Kermoal, C. Anderson, A. Peterson, M. Reilly, I. Altamirano-Jimenez & P. Rewi (Eds.), *Indigenous identity and resistance: Researching the diversity of knowledge* (pp. 107-123). Dunedin: Otago University Press.
- Williams, W. (1975). *The country and the city*. Oxford: Oxford University Press.
- Williamson, R. W. (1939). Kava in Samoa and Tonga. In R. Piddington (Ed.), *Essays in Polynesian Ethnology* (pp. 51-200). Cambridge: University Press.
- Willis, J. (2002). *Potent brews: A social history of alcohol in East Africa, 1850-1999*. Oxford: James Currey Publishers.
- Wilm, J. (2011). Nicaragua, back from the dead? An anthropological view of the Sandinista movement in the early 21st century. In. Oslo: New Left Notes.
- Wilson, D. G. (1975). Plant remains from the Graveney boat and the early history of *Humulus Lupulus L.* in West Europe. *New Phytologist*, 75(3), 627–648.
- Winkelman, M. (2009). *Culture and health: Applying medical anthropology*. San Francisco: Wiley.
- Winter, K. (2004). *Hawaiian 'awa (Piper methysticum): A study in ethnobotany*. Unpublished Masters of Science in Ethnobotany, University of Hawai'i.
- Wolfers, E. P. (1975). *Race relations and colonial rule in Papua New Guinea*. Sydney: Australia and New Zealand Book Co.
- Wollin, S. D., & Jones, P. J. H. (2001). Alcohol, red wine and cardiovascular disease. *Journal of Nutrition*, 131, 1401-1404.
- Wood, A. H. (1978). *Overseas missions of the Australian Methodist Church: Fiji* (Vol. 2). Melbourne: Aldersgate Press.
- Wood, T., & Naidu, V. (2009). Gender security and trade: The Millennium Development Goals in the Pacific. In J. Leckie (Ed.), *Development in an insecure and gendered world: The relevance of the Millennium Goals*. (pp. 147-172). Surrey: Ashgate.
- Worsley, P. (1988). *The three worlds: Culture and world development*. London: Weidenfeld & Nicolson..
- Wyatt, T. A. (1996). Betelnut chewing and selected psychophysiological variables. *Psychological Reports*, 79(2), 451-463.
- Yanagihara, T. (1991). Memory disorders in encephalitides, encephalopathies, and demyelinating diseases. In T. Yanagihara & R. C. Petersen (Eds.), *Memory*

- disorders: Research and clinical practice* (pp. 397-412). New York: Marcel Dekker.
- Yate, W. (1970). *An account of New Zealand and of the formation and progress of the Church Missionary Society's mission in the northern island*. Auckland: A.H. & A.W. Reed.
- Yates, R., & Ussher, B. (2008). Managing learning environments. In C. McGee & D. Fraser (Eds.), *The professional practice of teaching* (Vol. 3, pp. 100-115). Melbourne: Thomson Learning.
- Young, M. W. (1995). Kava and Christianity in Central Vanuatu: With an appendix on the ethnography of kava drinking in Nikaura, Epi. *Canberra Anthropology*, 18 (*Special volume, The power of kava*)(1&2), 61-96.
- Youngman, F. (2000). *The political economy of adult education and development*. London: Zed.
- Zhou, S. (2006). Herbal medicine and drug interactions. *Innovation*, 6(2), 44-45.
- Zhu, J., Weiss, L. G., Prifitera, A., & Coalson, D. (2004). The Weschler Intelligence Scales for children and adults. In M. Hersen, G. Goldstein & S. R. Beers (Eds.), *Comprehensive handbook of psychological assessment: Intellectual and neuropsychological assessment* (Vol. 1, pp. 51-76). New Jersey: John Wiley & Son.
- Zi, X., & Simoneau, A. R. (2005). Flavokawain A: A novel chalcone from kava extract, induces apoptosis in bladder cancer cells by involvement of Bax protein-dependent and mitochondria-dependent apoptotic pathway and suppresses tumour growth in mice. *Cancer Research*, 65(8), 3479-3486.
- Ziai, A. (2007). Development discourse and its critics: An introduction to post-development. In A. Ziai (Ed.), *Exploring post-development: Theory and practice, problems and perspectives* (pp. 3-17). London: Routledge.

## Appendix A

### Public Service Commission (PSC) Ethnicities Memo (2010)

## PSC CIRCULAR

Public Service Commission, Berkeley Crescent, P.O. Box 2211  
Government Buildings, Suva. Telephone 3314 588

### PSC Circular No. 39 /2010

TO: Permanent Secretaries and  
Heads of Departments

FILE: 29/685/23/2

SUBJECT: 'ITAUKEI NOW REPLACES  
'FIJIAN' AND 'INDIGENOUS FIJIAN'

DATE: 28/07/2010

1. The Cabinet at its meeting on 30 June, 2010 approved the Fijian Affairs [Amendment] Decree 2010, which comes into effect on 1<sup>st</sup> July 2010. The new law effectively replaces the word 'Fijian' or 'Indigenous' or 'Indigenous Fijian' with the word 'iTaukei' in all written laws, and all official documentations when referring to the original and native settlers of Fiji.
2. All Fiji citizens are now called 'Fijians'
3. It also requires all Government agencies to apply these changes in all their official communication in any form whatsoever.
4. Accordingly, the following changes become effective forthwith:

<u>Existing Title</u>	<u>New Title</u>
1. Fijian	iTaukei
2. Fijian Affairs Act	iTaukei Affairs Act
3. Fijian Development Fund Act	iTaukei Development Fund Act
4. Fijian Trust Fund Act	iTaukei Trust Fund Act
5. Ministry of Indigenous Affairs	Ministry of iTaukei Affairs
6. Fijian Affairs Board	iTaukei Affairs Board
7. Fijian Trust Fund	iTaukei Trust Fund
8. Institute of iTaukei Language and Culture	iTaukei Institute of Language & Culture

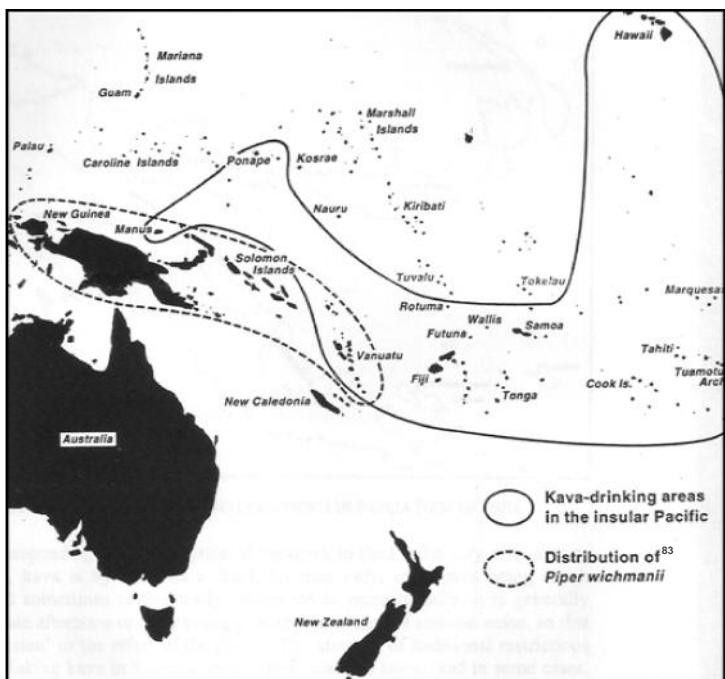
5. Consequentially, all State documents of any nature whatsoever, must also be amended by replacing the word "Fijian" (wherever it currently refers to indigenous Fijians) with the word "I Taukei"
6. If you require any clarification, please contact Mr. Sekove Degei on phone 3100909 ext 1043 or email-sdegei@govnet.gov.fj.



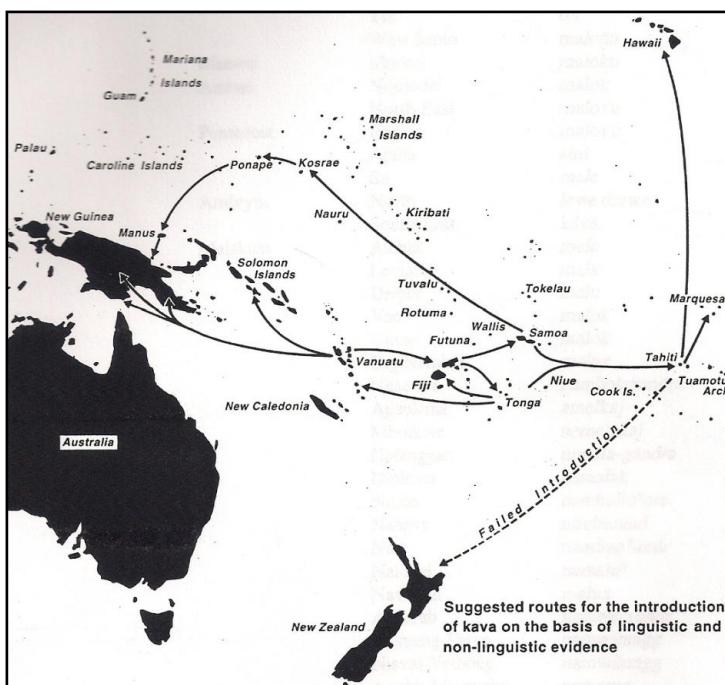
Parmesh Chand  
Permanent Secretary for the Public Service

## Appendix B

### Kava Distribution Routes



"Distribution of kava-drinking areas in the Pacific" (Crowley, 1994:88)



"Suggested routes for the introduction of kava on the basis of linguistic and non-linguistic evidence" (Crowley, 1994:97).

<sup>83</sup> *Piper wichmanii* is a Papua New Guinean species of kava.

## Appendix C

### Public Service Commission (PSC) Yaqona Memo 1993



**P.S.C.**

**PUBLIC SERVICE COMMISSION**

ALPORT BARKER HOUSE, BERKLEY CRESCENT OFF CAKOBAU ROAD

P.O. BOX 2211, SUVA, FIJI

TELEPHONE—314 588; TELEGRAMS—PSC SUVA; TELEX—FJ2224 FAX—(679)—302379

**CIRCULAR MEMORANDUM**

TO : Permanent Secretaries and  
Heads of Departments

FILE: 29/660

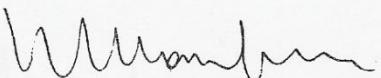
SUBJECT : YAQONA DRINKING IN GOVERNMENT  
OFFICES

DATE: 24/8/93

In addition to its traditional significance, yaqona has come to be used as a means of maintaining interpersonal and good industrial relations in the workplace. An offer of a bilo of yaqona is a polite gesture in an office situation bringing about better understanding, not only amongst fellow workers but with the members of the public as well.

2. However, instances have been reported of yaqona drinking being abused and carried to excess. This has led to some officers leaving their desks to congregate for extended periods where yaqona is served thus unnecessarily bringing down negative reactions on the practice.

3. Permanent Secretaries/Heads of Departments are requested to monitor yaqona drinking in their Ministries/Departments and, if necessary, issue guidelines to ensure it does not become counter-productive.

  
(Winston Thompson)  
Secretary for the Public Service

## Appendix D

### Public Service Commission (PSC) Yaqona Memo 2007

## PSC CIRCULAR

Public Service Commission, Berkley Crescent, P. O. Box 2211  
Government Buildings, Suva. Telephone 3-314-588

### PSC Circular No.22/2007

To: Permanent Secretaries and  
Heads of Departments

Subject: Prohibition of Drinking Yaqona  
In Government Workplaces

File No.: 29/660

Date: 6<sup>th</sup> July, 2007

- 1.0 The abuse and excessive drinking of yaqona in government offices and in the work premises is of increasing concern. This trend is bringing unnecessary negative impression on the Civil Service.
  - 1.1 It is unprofessional
  - 1.2 It adversely affects service delivery
  - 1.3 It is inconsistent with the Public Service Values and the Public Service Code of Conduct.
- 2.0 The common abuse of yaqona drinking is also denigrating its proper place in the indigenous customs and tradition. Continued abuse of such rites is eroding its ceremonial value and the protocols and decorum of the yaqona ceremony.
- 3.0 Government employees are strictly prohibited from drinking yaqona during office hours including on government premises.
- 4.0 Permanent Secretaries and Heads of Departments are instructed to monitor full compliance of this instruction.

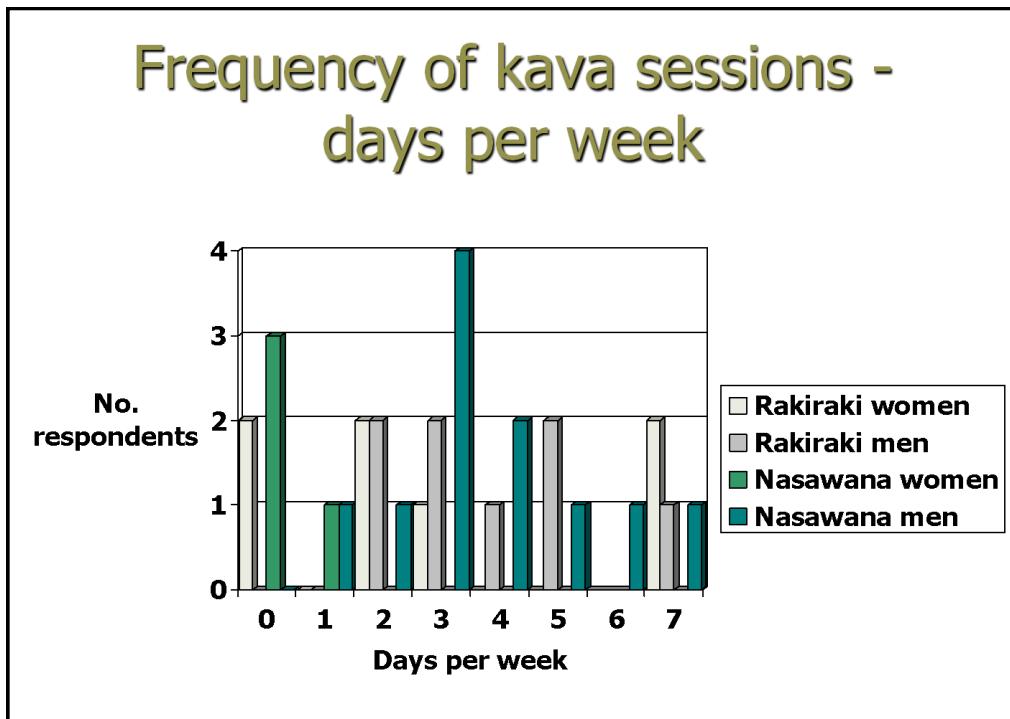
This Circular supersedes any prior instruction / policies issued on this subject.



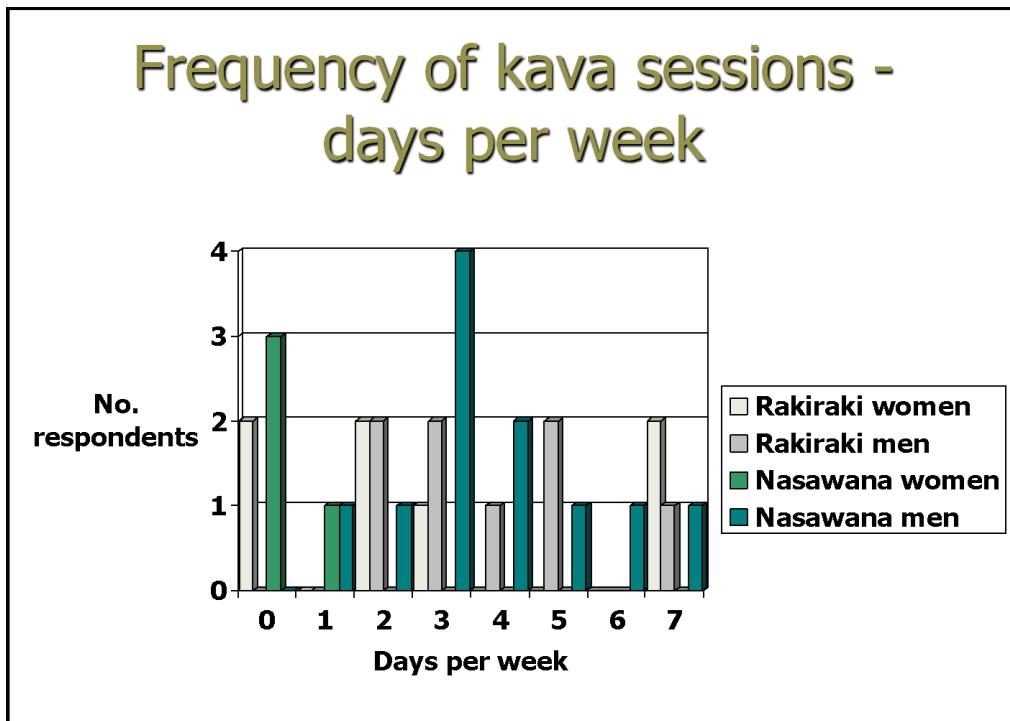
[Taina Tagicakibau]  
Permanent Secretary for Public Service, Public Enterprises  
and Public Sector Reform

## Appendix E

Preliminary Findings: Socio-Cultural Impacts of *Yaqona* (Newland, 2008)



PowerPoint slide 12



PowerPoint slide 13

## Appendix F

### Ministry of Education (Fiji) Research Authority

----- Original Message -----

**From:** Joji Qaranivalu

**To:** aporosa@ [REDACTED]

**Sent:** Tuesday, March 25, 2008 10:44 AM

**Subject:** Approval to Conduct Research

Mr. S.G. Aporosa,

[REDACTED]  
Hamilton,  
New Zealand.

Dear Sir,

#### Re: Approval to Conduct Research

I am pleased to inform you that your request to conduct further research work on the topic "Yaqona[kava]: A Study of its Impact upon education and development in Fiji" has been approved for 2008 and 2009.

You are to liaise directly with the target schools and personnel to conduct the research. Since "kava" is used in most of the traditional functions and ceremonies in Fiji you are asked to tread on the research work with caution bearing in mind its value and impact on the society as a whole.

As a condition of this approval it would be appreciated that all your findings remain confidential until this Ministry has been furnished with them.

As a proof that this letter is authentic is the use of my personal government e-mail address which is available to government listed users only.

Please contact the undersigned if you need further assistance in this regards. We wish you well in your research work.

Thank you.

Joji Qaranivalu [Mr]  
for Permanent Secretary [Education,National Heritage,Culture&Arts]

## Appendix G

### Ethics Approval: Massey University

 **Massey University**

31 March 2008

S.G. Aporosa  
[REDACTED]

**HAMILTON**

Dear S [REDACTED]

**Re: Yaqona and Education in Fiji**

Thank you for your Low Risk Notification which was received on 28 March 2008.

Your project has been recorded on the Low Risk Database which is reported in the Annual Report of the Massey University Human Ethics Committees.

Please notify me if situations subsequently occur which cause you to reconsider your initial ethical analysis that it is safe to proceed without approval by one of the University's Human Ethics Committees.

**A reminder to include the following statement on all public documents:**

*"This project has been evaluated by peer review and judged to be low risk. Consequently, it has not been reviewed by one of the University's Human Ethics Committees. The researcher(s) named above are responsible for the ethical conduct of this research."*

*If you have any concerns about the conduct of this research that you wish to raise with someone other than the researcher(s), please contact Professor Sylvia Rumball, Assistant to the Vice-Chancellor (Research Ethics), telephone 06 350 5249, e-mail [humanethics@massey.ac.nz](mailto:humanethics@massey.ac.nz)".*

Please note that if a sponsoring organisation, funding authority or a journal in which you wish to publish requires evidence of committee approval (with an approval number), you will have to provide a full application to one of the University's Human Ethics Committees. You should also note that such an approval can only be provided prior to the commencement of the research.

Yours sincerely



Sylvia V Rumball (Professor)  
Chair, Human Ethics Chairs' Committee and  
Assistant to the Vice-Chancellor (Research Ethics)

cc Assoc Prof Regina Scheyvens  
School of People, Environment and  
Planning  
PN331

Dr Henry Barnard, HoS  
School of People, Environment and  
Planning  
PN402

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Massey University Human Ethics Committee  
Accredited by the Health Research Council



## Appendix H

### Participant Information Sheet

#### PARTICIPANT INFORMATION SHEET O DAUNIVAKADIDIKE BHAAG LENE KI SOOCHNA PATR.

### YAQONA (KAVA), EDUCATION AND DEVELOPMENT IN FIJI

My name is S.G. "Apo" Aporosa and I am a Doctoral student at The Institute of Development Studies at Massey University, Palmerston North, New Zealand.

NA YACAQU O S.G. "APO" APOROSA KAU CAKAVA TIKO NA NOQU KOROI NI DOKETA ENA INSTITUTE OF DEVELOPMENT STUDIES ENA MASSEY UNIVERSITY E PALMERSTON NORTH, NIUSILADI. Mera naam "Apo" Aporosa hay aur main Institute of Developmental Studies, Massey University, Palmerston North, New Zealand ka ek vidhyaarthi hoon.

As part of my Ph.D degree I am writing a thesis that is investigating *yaqona*, education and development in Fiji. E TIKI NI NOQU KOROI NA NOQU VOLA NA IVOLA NI VAKADIDIKE VAKAVULI (THESIS) ME DIKEVI KINA NA YAQONA, VULI KEI NA VEIVAKATOROCAKETAKI E VITI.

Main apne Ph.D ke degree ke liye ek research kar raha hoon jo ki Yaqona aur Fiji ki siccha me parivartan se milti hain.

Permission has been granted to conduct this research by the Fijian Ministry of Education and has been assessed as 'low risk' by the Human Ethics Committee at Massey University.

SA VAKADONUA NA TABACAKACAKA NI VULI E VITI NA KENA QARAVI NA VAKADIDIKE QO KA SA RAICA TALE GA NA KOMITI NI IVAKARAU DODONU ENA UNIVESITI E MASSEY NI NA SEGA NI RIRIKOTAKI.

Mujhe is research ko sanchaalan karne ke liye Fiji ki Siccha Mantralay (Ministry of Education, Fiji) se izazat mil chuki hain au isse kisi ko "koi khatra" nahi hain.

I would like to invite you to participate in a brief survey (duration 5 minutes), cognitive test (duration 5 minutes), and/or interview (duration 30 minutes) in which you will be able to share your experiences as they relate to *yaqona* and education.

AU KEREI KEMUNI MONI VAKAITAVI ENA DUA NA VAKADIDIKE (5 NA MINITI NA KENA DEDE, SAUMI TARO (5 NA MINITI NA KENA DEDE), KEI NA VEITAROTAROGI (30 NA MINITI NA KENA DEDE) MONI NA WASEA KINA NA NOMUNI VAKASAMA ME BAleta NA YAQONA KEI NA VULI.

Main aapko ek choti si sarvekshan (survey) (5 minutes ka) me amanrit kartा hoon, aur gyaan sambandhi pariccha (cognitive test) (5 minutes ka), phir kuch sawaal (30 minutes ka) jis me aap apni kuch tajurba (experience) hame bata sakte hain jo ki yaqona aur siccha se milta hai.

This research is guided by the principles of *Vanua Research*, a methodology developed by Dr. Unaisi Nabobo-Baba from the University of the South Pacific.

NA VAKADIDIKE QO E YAVUTAKI MAI ENA VEIVAKASAMA NI VAKADIDIKE ENA VANUA (VANUA RESEARCH), E DUA NA IVAKARAU A VOLA O DOKETA UNAISI NABOBO-BABA ENA UNIVESITI NI CEVA NI PASIVIKA.

Ya research ko *Vanua Research* dwara salah diya jaata hay jo ki University of the South Pacific ke Dr Unaisi Nabobo-Baba dwara likha gaya hain.

*Vanua Research* takes into account indigenous knowledges and ways of understanding, relational protocols and vakaturaga.

NA IVOLA NA VANUA RESEARCH E VAKAMACALATAKI KINA NA NODRA VUKU NA TUKADA KEI NA IVAKARAU NI KILAKA, IVAKARAU NI VEIWEKANI KEI NA VAKATURAGA.

*Vanua Research* sthaaniye gyaan aur samajhne ki taur, tareeka ko dhyaan me rakhti hain.

Data collected during the surveys, cognitive tests and interviews will be massed together so that individuals and schools cannot be identified.

NA ITUKUTUKU KECE E VAKASOKUMUNI ENA VAKADIDIKE, SAUMI NI TARO KEI NA VEITAROTAROGI ENA BIUVATA ME KUA NI KILAI NA TAMATA YADUA KEI NA KORONIVULI. Sarvekchan (research) se mili jaankari ko mila diya jaayga jisse kisi vekti ya paathshaala (school) ko pahechaana nahi ja sakta hain.

Schools will only be named generally as part of geographic locality and school classification. In the limited cases where I wish to identify a person by name, I will first obtain permission from them.

ENA CAVUTI RARABA GA NA VANUA ERA WILI KINA NA VEIKORONIVULI KEI NA KENA IWASEWASE. ENA VEITIKINA SARA GA AU NA VINAKATA ME KILAI KINA NA YACA NI TAMATA, AU NA QAI KEREI IRA RAWA E LIU.

Research mein paathshaalaon ka zikr sarranch mein kiya jaayga par kewal unki ilaaka ki pahechaan diya jaayga. Agar mujhe kisi ka naam istemaal karana parega to main pahle unki izazat loonga.

Confidential data collected during the research will only be seen by myself and my supervisor.

NA VEITUKUTUKU BIBI E VAKASOKUMUNI MAI ENA VAKADIDIKE AU NA RAICA GA KEI NA NOQU ILIULIU VAKAVULI.

Jo kuch bhi soochna (information) aapse milega use kewal main aur mere parvekchak (supervisor) dekh sakege.

Upon completion of my thesis, a copy will be lodged at the Massey University Library, the library at the University of the South Pacific and the Fijian Ministry of Education.

NIU SA VOLA OTI NA NOQU VAKADIDIKE VAKAVULI, ENA BIU E DUA NA KENA ILAELAVE ENA VALENIVOLA ENA UNIVESITI E MASSEY, UNIVESITI NI CEVA NI PASIVIKA KEI NA TABACAKACAKA NI VULI E VITI.

Mere is research ki samaapti par, is ka ek nakal (copy) Massey University Library, University of the South Pacific Library, aur Fiji ki siccha mantralay (Ministry of Education) ko diya jaayga.

A summary of the research findings will be made available to those who are interested.

E DUA NA IVAKALEKALEKA NI MACALA NI VAKADIDIKE ENA VAKARAUTAKI BALETI KEMUNI NA VIA TAROGA.

Research ka saaranch uun logon ko bhi diya jaayga jo is me dilchaspri rakhte hain.

Additionally the research may be published in academic journals, presented at conferences, and distributed to interested parties.

ME KENA IKURI, NA VAKADIDIKE QO ENA RAWA NI TABAKI ENA IVOLA VAKAVULI (ACADEMIC JOURNALS), LAI VAKAMACALATAKI ENA VEI BOSE, ENA WASEI TALE GA YANI VEI IRA ERA KAUWAITAKA MAI.

Ye anusandhaan (research) siccha sambandhi patrika me prakashith kiya jaayga, sammelan me pesh kiya jaayga, aur dischasp logonn ko bhi baata jaayga.

Thank you for your assistance with this research.

VINAKA VAKALEVU SARA NA VEIVUKE ENA VAKADIDIKE QO.

Is anusandhaan me aap ki sahaayta ke liye aapko Dhanyavaad.

S.G. "Apo" Aporosa

E-mail: aporosa@ihug.co.nz

Ph: 0064 21838478E-mail:

Associate Professor Regina Scheyvens

(Supervisor. ILIULIU VAKAVULI. Pravechak.)

E-mail: R.A.Scheyvens@massey.ac.nz

Ph: 0064 6350 5701 ext. 2509

## Appendix I

### Participant Consent Form

#### PARTICIPANT CONSENT FORM FOMU NI VEIVAKADONUI BHAAG LENE KE LIYE SWIKRITI PART.

### YAQONA (KAVA), EDUCATION AND DEVELOPMENT IN FIJI

This consent form will be held for a period of five (5) years.

NA FOMU QO ENA MAROROI TU ENA LOMA NI LIMA (5) NA YABAKI.  
E SWIKRITI PART KO PAANCH (5) SAAL TAK KAAM ME LAAYA JAAYGA.

Hello, I (S.G. "Apo" Aporosa) am doing a research study on yaqona as part of my PhD at Massey University, Palmerston North, New Zealand.

SA BULA SI'A, O AU O "Apo" APOROSA KA'U CAKAVA TIKO E DUA NA VAKADIDIKE NI YAQONA. NA VAKADIDIKE NI VULI TOROCAKE (KOROI NI VUKU) NI NOQU VULI ENA MASSEY UNIVESITI, PALMERSTON NORTH, NIUSILADI.

NAMASKAR, MAIN "APO" APOROSA APNA PHD KI PARDHAAI MASSEY UNIVERSITY, PALMERSTON NORTH, NEW ZEALAND PAR NANGONA PAR EK RESEARCH KAR RAHA HOOON.

My supervisor for this research is Associate Professor Regina Scheyvens.

NA NOQU LIULIU NI VAKADIDIKE O A/PROFESOR REGINA SCHEYVENS.  
MERE IS PARDHAAI KE LIYE, MUJHE MADAD KAR RAHE HAY ASSOCIATE PROFESSOR REGINA SCHEYVENS.

This study has been approved by the Ministry of Education.

NA VAKADIDIKE QO E SA SOLIA NA KENA VEIVAKADONUI MAI NA TABACAKACAKA NI VULI.

MERE IS PARDHAAI KO MINISTRY OF EDUCATION NE BHI MAOKA DIYA HAY.

Can you please assist me by allowing me to interview you so that I can better understand your school and how it functions.

AU KEREA NA NOMU VEIVUKE MEU VAKATAROGI IKO ME RAWA NIU NA KILA VAVI-NAKA KINA NA VEIQARAVI ENA KORONIVULI.

KYA AAP MERI MADAD KAR SAKTE HAIN, AUR MAIN AAP SE KUCH SAWAAL KAR SAKTA HOOON, JO KI MUJHE AAP KI SCHOOL KO ACHI TARAH JAANNE ME MADAD KAR SAKTA HAY.

But first I would like to tell you your rights as a participant:

TAUMADA, AU VIA WASEA NA NOMUNI DODONU KE O VAKAITAVITAKI IKO:  
PAHLE, MAIN AAPKO APKE ADHIKAAR, ISME BHAAG LENE KE LIYE BATA DETA HOOON.

- This study is voluntary, and you do not have to partake in it.
- NA VAKADIDIKE QO E SEGA NI VEIVAKASURARATAKI.
- E AAPKA ADHIKAAR HAY, AUR ISME BHAAG LENA AAP PAR NIRBHAR HAI.
- The information you provide will be treated with utmost confidentiality and your name will not be used unless you first give permission.
- NA I TUKUTUKU O NA SOLIA ENA MAROROI KA NA SEGA NI SOLI VAKAVEITALIA NA YACAMU VAKA VO KE SA SOLIA TAUMADA NA NOMU VEIVAKADONUI.
- JO JAANKARI AAP SE MILEGA, WO GUPT RAKHA JAAYGA, AUR AAPKE NAAM KO BHI KAHISTEMAAL NAHI KIJA JAAYGA.

- You are free to refuse to answer any particular question.
- **E SOLI TU NA GALALA MO KUA NI SAUMA EDUA NA TARO.**
- AAP KISI SAWAAL KA JAWAAB NAHI DENA CHAHTE WO AAP PAR HAI.
- You can withdraw from the study at any time.
- **E SOLI TU NA GALALA MO KAKUA NI VAKAITAVI ENA VAKADIDIKE QO.**
- AAP KISI BHI SAMAY IS KAAM ME BHAAG LENE SE MANA BHI KAR SAATE HAIN.
- You have the right to ask any question about the study at any time during participation.
- **E SOLI TU NA GALALA MO TARO.**
- E AAP KA ADHIKAAR BANTA HAY KI AAP JO BHI SAWAAL CHAHTE, WO KAR SAKTE HAIN.
- Once the study is completed, you can have access to the findings.
- **ENA SOLI VEI IKO NA MACALA NI VAKADIDIKE NI SA CAVA NA VULI QO.**
- E PADHAAI SAMAPT HONE PAR, AAP KO IS KI JAANKARI MIL SAKTI HAY.

Your participation in this research study will be greatly appreciated.  
**NA NOMU VAKAITAVI E VAKAVINAVINAKATAKI SARA VAKALEVU.**  
 AAP KA BHAAG LENA, AAP KO BAHOT HI AADAR KIYA JAATA HAY.

If you have any questions now or later, please feel free to speak to me.  
**KE DUA NA NOMU TARO, E SOLI TU NA GALALA ME DARU VEITALANOA.**  
 AGAR AAP KE PASS KOI SAWAAL HAY TO AAP BE JHIJHAK HUM SE POOCH SAKTE HAY.

Again, your participation in this research is voluntary. You are free to say no. If you agree to participate in this research, please sign below.  
**NA NOMU VAKAITAVI E SEGA NI VAKASURARATAKI. KE O VAKADONUYA MO VAKAITAVI, KEREI MO SAINI GA ERA.**  
**EK BAAR PHIR SE, IS RESEARCH ME BHAAG LENA AAP PAR NIRBHAR HAY. AAP INKAAR BHI KAR SAKTE HAY. AGAR AAP BHAAG LENA CHAHTE HAY, KIRPYA NICHE SIGN KI JIYEGA.**

Thank you very much.  
**VINAKA VAKALEVU SARA.**  
**DHANYAVAAD.**

My signature confirms that I have read and understand my rights, and I am happy to participate in Aporosa's PhD research entitled Yaqona (kava), Education and Development in Fiji.  
**NA NOQU SAINI ESA VAKADINADINATAKA NIU SA WILIKA KA KILA NA NOQU DODONU KAU SA MARAU MEU VAKAITAVI TAKI AU ENA VADIDIKE NEI APOROSA NA Yaqona (kava), Education and Development in Fiji.**  
**MAIN YAHAN SIGN KAR KE YE MAANTA HOON KI MAIN APOROSA KI PHD JO KI NANGONA PAR HAY, USME BHAAG LENE SE KHUSH HOOON.**

\_\_\_\_\_  
 Sign. **SIGN . SIGN.**

\_\_\_\_\_  
 Print. **NA YACAMU . NAAM.**

\_\_\_\_\_/\_\_\_\_/08

## Appendix J

### Teacher Survey Form

#### C O N F I D E N T I A L

#### TEACHER SURVEY - PAGE 1

Your answers will be kept CONFIDENTIAL and individual results will not be discussed or disclosed.

- ◆ Your participation in this research is greatly appreciated.  
◆ NA NOMU VAKAITAVI E VAKAVINAVINAKATAKI SARA VAKALEVU.  
● AAP KA BHAAG LENA, AAP KO BAHOT HI AADAR KIYA JAATA HAY.
  
- ◆ Your participation in this research is voluntary. You are free not to participate.  
◆ NA NOMU VAKAITAVI E SEGA NI VAKASAURARATAKI.  
● EK BAAR PHIR SE, IS RESEARCH ME BHAAG LENA AAP PAR NIRBHAR HAY.  
AAP INKAAR BHI KAR SAKTE HAY.

PLEASE PRINT CLEARLY

NAME: \_\_\_\_\_ AGE: \_\_\_\_\_

SCHOOL: \_\_\_\_\_ No. OF YEARS TEACHING: \_\_\_\_\_

MALE:  tick  
FEMALE:  tick

ETHNICITY: Indigenous  tick  
Fijian   
Indo-Fijian  tick  
Other  tick

ARE YOU MARRIED? NO  tick YES  tick

HOW MANY DAYS DID YOU  
TAKE OFF LAST YEAR  
BECAUSE OF SICKNESS?  No. of days

DO YOU DRINK YAQONA? NO  tick YES  tick

► WHY NOT?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

PLEASE TURN  
OVER AND  
CONTINUE ON  
THE NEXT  
PAGE

THANK YOU FOR COMPLETING THIS SURVEY.  
YOUR ASSISTANCE MAY BE REQUIRED  
AT A LATER DATE.

# C O N F I D E N T I A L

## TEACHER SURVEY - PAGE 2

Thank you for assisting my research and filling in the following questionnaire. Your answers will be kept confidential and individual results will not be discussed or disclosed.

**PLEASE ANSWER THE QUESTIONS IN THE FOLLOWING TABLE. THE QUESTIONS RELATE TO **THE LAST 7 DAYS**.**

**IF ANY OF THE QUESTIONS ARE NOT CLEAR, PLEASE FEEL FREE TO ASK ME TO CLARIFY THEM.**

DURING THE PAST 7 DAYS, ON WHICH DAYS DID YOU DRINK YAQONA, PLEASE INDICATE WITH A TICK. ✓	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
ON EACH OF THE DAYS YOU DRANK YAQONA, PLEASE INDICATE YOUR MAIN REASON FOR DRINKING (traditional, formal/ceremonial, meeting, social, etc.)							
ON EACH OF THE DAYS YOU DRANK YAQONA, PLEASE INDICATE THE TIME YOU <u>STARTED</u> DRINKING.	Started am/pm						
ON EACH OF THE DAYS YOU DRANK YAQONA, PLEASE INDICATE THE TIME YOU <u>STOPPED</u> DRINKING.	Stopped am/pm						
ON EACH OF THE DAYS YOU DRANK YAQONA, PLEASE INDICATE HOW DRUNK OR INTOXICATED YOU FELT YOU WERE WHEN YOU FINISHED DRINKING. Circle one.	NO intoxication MILD intox' HEAVY intox'						

Please tick one box

**DO YOU CONSIDER YOURSELF  LIGHT  MEDIUM  or HEAVY  A YAQONA DRINKER?**

**DO YOU CURRENTLY HAVE KANIKANI?  NO  YES**

► PLEASE DESCRIBE HOW YOUR KANIKANI HAS MANIFESTED (eg. peeling hands, dry flaky arms, sore eyes, etc)? \_\_\_\_\_

► THANK YOU FOR COMPLETING THIS SURVEY. YOUR ASSISTANCE MAY BE REQUIRED AT A LATER DATE.

# Appendix K

## Semi-Structured Interview Questions

### A. SCHOOL PRINCIPAL INTERVIEW:

1. School description/demographic:
  - a. Religious affiliation/community board, rural isolated/semi-urban/urban.
  - b. Student numbers, student demographic?
  - c. Teacher numbers, teacher demographic?
2. How many years have you been teaching? Rural/urban? Boarding/day scholar? Government/community? (vocational overview)
3. Can you please explain, as a *iTaukei/Fijian*, the importance of *yaqona* to your ethnicity?
4. Do you drink *yaqona*?
  - a. No – why not?
  - b. Yes – frequency?
    - i. How do you feel, body and mind, after a big night of *yaqona* consumption?
    - ii. Do you drink *yaqona* on nights prior to teaching?
    - iii. How many hours, on average, would you drink *yaqona* on a night before teaching?
5. Is there a difference between the *yaqona* drinking styles of rural teachers and urban teachers? Please explain?
6. Is there a difference between the *yaqona* drinking styles of *iTaukei* and *Fijian* teachers? Please explain?
7. Is there a difference between the *yaqona* drinking styles of men and women? Please explain?
8. What about *Fijian* and *iTaukei* women? Please explain?
9. Does *yaqona* play a role in the activities of this school? How/what?
  - a. How would you explain the importance of *yaqona* to the functioning of your school (identity, cultural, community...)?
10. If a teacher drinks *yaqona* for more than 5 hours, finishing at midnight, do you think that this has an impact on the teacher and their teaching as they enter the classroom in the morning?
  - a. Yes - explain.
  - b. No – have you noticed a difference between the performance standards of a *yaqona* drinking teacher and a non-*yaqona* drinking teacher?
    - i. Yes - explain.
    - ii. No - (go to next question).
11. During my Masters field research in 2006 several teacher supervisors commented that teachers who consumed *yaqona* tended to score low in the Performance Management System, especially measure one: Initiative and Resourcefulness, and measure five, Punctuality and Attendance. What is your comment regarding this?
  - a. Agree – have you ever spoken to a teacher about the impact that *yaqona* appears to be having on their teaching?
    - i. No – why not?
    - ii. Yes – please explain?
12. Do you allow the consumption of *yaqona* within the school compound? Under what circumstances? (Board meeting, sporting events, fundraisers, during/after school hours?)

13. Is it standard practice for visitors to the school to present *isevusevu*?
  - a. Do presentations include the mixing and consumption of *yaqona*?
  - b. Do teachers attend the *isevusevu*? What about their students during this time?
  - c. How often is *yaqona* consumed on the school campus? Once a week, once a month?
  
14. (Show PSC Circular 22/2007): This PSC memo forbids the consumption of *yaqona* within government establishments, which includes schools in Fiji. However *yaqona* is being consumed in many school compounds around the country. Can you explain why this is?
  
15. The MoE, in their *Learning Together* (2000:214-5) report cited 15 “barriers that impede student learning” and lead to under-achievement in Fiji. These “include: poor attitude to learning, truancy, failure, lack of parental support, conflict between parental expectations and school programmes, family problems, financial problems, environmental restrictions, poor health and nutrition, bad teaching, inadequate student support, insufficient learning resources, and lack of study and learning skills”. There is no specific mention of *yaqona*.
  - a. Why do you think this was not added as a factor?
  - b. Do you think it should be added as a factor? Why, why not?
  
16. Research has found that *Fijian* students perform academically better than *iTaukei* students. However, at the same time research has also shows that more *Fijians* drink grog than *iTaukei*. How do you explain this? (day v.s night drinking – longer recovery, solo drinking limits intake).
  
17. What about *Fijian* teachers and *yaqona* consumption? If they are drinking more, is this impacting their teaching?
  
18. During my research I have often heard the term “*grog abuse*”. I would like to now talk about the abuse of *yaqona* and what is meant by this term.
  - a. Do you think people around here abuse *grog*?
    - i. (Yes). Please explain?
    - ii. (No). Do you know any *grog* abusers? (Yes). Please explain?
  - b. How much *grog* do you have to drink to be an abuser? (Quantify acceptable/non-acceptable use levels).
  - c. How can I tell an abuser from a non-abuser?
  
19. If tests on teachers revealed that the consumption of *yaqona* the previous night was impairing memory and processing speed in the brain and impacting a teacher’s ability to teach, what would you suggest should happen?
  - a. Nothing – why? (Individual choice – what about student learning choice?)
  - b. Forbid – how do you police this? What about cultural obligations?
  - c. Any other suggestions?
  - d. Value of culturally appropriate awareness programmes?
  
20. Explain my desire to compare sick leave between *yaqona* drinkers and non-consumers. Is it possible to have those records which will be merged with other schools so as not to identify individuals of schools?
  - a. Do you think there is link between *yaqona* consumption and sickness? Why/why not?
  
21. Comments you would like to add?

## **B. YAQONA DRINKING TEACHER PARTICIPANT INTERVIEW:**

1. How many years have you been teaching? Rural/urban? Boarding/day scholar? Government/community? (vocational overview).
  
2. Is *yaqona* grown in this area? Do teachers farm *yaqona* here?
  
3. How far would I have to travel to purchase *yaqona*?

4. What is the standard quantity in which *yaqona* is purchased here and what is the price?
5. How much would you estimate the average teacher at this school spends on *yaqona* per week?
6. When there is a drinking session, who mainly supplies the *yaqona* for consumption?
7. You have worked at different schools. What are the differences in *yaqona* drinking styles and habits between the schools you have worked at?
  - a. What reasons do you believe contributed to these differences?
8. *Fijian* (questions specifically for):
  - a. Is *yaqona* important to your culture? What function does it serve?
  - b. I have consumed a lot of *yaqona* with *iTaukei* and with *Fijians* in rural (predominantly) *iTaukei* schools but I have very little understanding regarding the consumption styles and habits of *Fijians* in their own communities. Is there a difference in drinking styles between *Fijians* and *iTaukei* when you drink as a group? Please explain. (Consumption hours, *taki* style,...)
  - c. Do you have *tauvu* type relationships that encourage competitive drinking? Explain?
  - d. Do you have cultural obligations that encourage heavy drinking?
  - e. Please explain the *yaqona* consumption habits of *Fijian* women?
9. *iTaukei* (questions specifically for):
  - a. Is there a difference in drinking styles between *Fijians* and *iTaukei*? Please explain. (Consumption hours, *taki* style,...)
  - b. What is the difference between competitive consumption driven by masculinity and that driven by culture?
10. *Female* (questions specifically for):
  - a. Have you noticed a difference in the teaching styles between male *yaqona* drinkers and non-drinkers? Explain?
  - b. Have you noticed a difference in the teaching styles between female *yaqona* drinkers and non-drinkers? Explain?
  - c. Do you feel that male teachers who drink *yaqona* impact female teachers in any way? How?
  - d. Issues of masculinity (*bole*) are major aspects in male *yaqona* consumption. Do women have similar pressures? Explain?
  - e. What is the difference between competitive consumption driven by masculinity and that driven by culture?
11. How do you feel, body and mind, after a big night of *yaqona* consumption?
12. Do you drink *yaqona* on nights prior to teaching?
13. How many hours, on average, would you drink *yaqona* on a night before teaching?
14. Do you ever drink *yaqona* in the school compound? Explain (during working hours, Board meeting, sports events).
15. During the past month, were you ever late for work?
  - a. IF YES, how many times?
    - i. were you drinking *yaqona* the previous night?
    - ii. do you believe the *yaqona* was a factor in your lateness? Explain.
16. How many sick days have you had in the past 12 months?
  - a. Have any of these sick days been because of *yaqona*?
    - i. IF YES, how many sick days would you attribute to *yaqona*?
    - ii. Do you believe the *yaqona* was a factor in your lateness? Please explain?
  - b. Do you believe *yaqona* drinkers take more sick days than non-drinkers?

17. Have you ever been spoken to by a supervisor, or a Principal, or HOD, regarding your *yagona* consumption and work performance? (when, discipline action?)
18. Do you believe teachers who come to work *lomaloma ca* impact the learning of their students? How?
19. Research has found that *Fijian* students perform academically better than *iTaukei* students. However, at the same time research has also shows that more *Fijians* drink *yagona* than *iTaukei*. How do you explain this? (day v.s night drinking – longer recovery, solo drinking limits intake).
20. What about *Fijian* teachers and *yagona* consumption? If they are drinking more, is this impacting their teaching?
21. During my research I have often heard the term “*grog abuse*”. I would like to now talk about the abuse of *yagona* and what is meant by this term.
  - a. Do you think people around here abuse *grog*?
    - i. (Yes). Please explain?
    - ii. (No). Do you know any *grog* abusers? (Yes). Please explain?
  - b. How much *grog* do you have to drink to be an abuser? (Quantify acceptable/non-acceptable use levels).
  - c. How can I tell an abuser from a non-abuser?
22. If tests on teachers revealed that the consumption of *yagona* the previous night was impairing memory and processing speed in the brain and impacting a teacher’s ability to teach, what would you suggest should happen?
  - a. Nothing – why? Individual choice – what about student choice?
  - b. Forbid – how do you police this? What about cultural obligations?
  - c. Any other suggestions?
  - d. Value of culturally appropriate awareness programmes?
23. Comment you would like to add?

## **C. SPOUSE OF TEACHER:**

1. I am trying to understand *lomaloma ca* and thought that it would be good to speak to the wife/husband of a *yagona* drinker. Can you please think about when your husband/wife wakes in the morning after drinking *yagona* and when they have not drunk *yagona*. Is there a difference in their mood, alertness? What do you notice? (motivation, sleep late, fail to attend to duties, interaction with spouse and kids, eat/don’t eat?)
2. Do you believe your husband/wife teaches the same or worst after drinking *yagona* the night before? Please explain?
3. During my research I have often heard the term “*grog abuse*”. I would like to now talk about the abuse of *yagona* and what is meant by this term.
  - a. Do you think people around here abuse *grog*?
    - i. (Yes). Please explain?
    - ii. (No). Do you know any *grog* abusers? (Yes). Please explain?
  - b. How much *grog* do you have to drink to be an abuser? (Quantify acceptable/non-acceptable use levels).
  - c. How can I tell an abuser from a non-abuser?

## **D. QUESTIONS FOR NON-YAGONA DRINKING TEACHER:**

1. Why don’t you drink *yagona*?

2. What do you think about teachers who drink *yaqona*?
3. What do you think of teachers who drink *yaqona* the night before they teach?
4. Do you believe that drinking *yaqona* the night before teaching has an impact on a teacher's ability to deliver education? Please explain?
5. Do you feel that teachers who drink *yaqona* impact you in any way? How?
6. During my research I have often heard the term “*grog abuse*”. I would like to now talk about the abuse of *yaqona* and what is meant by this term.
  - a. Do you think people around here abuse *grog*?
    - i. (Yes). Please explain?
    - ii. (No). Do you know any *grog* abusers? (Yes). Please explain?
  - b. How much *grog* do you have to drink to be an abuser? (Quantify acceptable/non-acceptable use levels).
  - c. How can I tell an abuser from a non-abuser?
7. Do you feel that teachers who drink *yaqona* impact you in any way? How?
8. Research has found that *Fijian* students perform academically better than *iTaukei* students. Research has also shows that more *Fijians* drink *yaqona* than *iTaukei*. How do you explain this? (day v.s night drinking – longer recovery, solo drinking limits intake).
9. What about *Fijians* teachers and *yaqona* consumption? If they are drinking more, is this impacting their teaching?

## **E. MINISTER OF EDUCATION, Mr. Filipe Bole.**

1. What do you see as the role of education in Fijian national development?
2. What education model/country most influences contemporary Fijian education?
3. What theoretical basis do you believe most influences contemporary education in Fiji? (Modernisation/Human Capital collectivist approach in order to stimulating growth<sup>84</sup>/ Freir-ian<sup>85</sup> influenced education for human development, associated with the ideals of individual difference and empowerment<sup>86</sup>)
4. What does the MoE consider as being the role of *yaqona* within the education system? (*isevusevu*, meeting facilitator, build cultural identity..)?
5. Apologise for the story in the Fiji Times “Academic blames poor results on teachers” which required a rebuttal to clarify this miss-quote. Therefore, realising that the media often misrepresents sources, can I please ask you some questions regarding comments in the Fiji Times which quote you. (Refer article Dec. 12. 08) - This article appeared in the Fiji Times<sup>87</sup> last December in which you “advised [teachers] against *yaqona*”.
  - a. “He responded..... saying *yaqona* abuse by rural teachers...” Please explain.
  - b. The article quotes you as saying “teachers should not in any way be affected by over-consumption of *yaqona*”. What do you consider to be “over-consumption”?

<sup>84</sup> Fagerlind, I., & Saha, L. J. (1983). *Education and national development: A comparative perspective*. New York: Pergamon Press. (p.18)

<sup>85</sup> Freire, P. (1993). *Pedagogy of the oppressed* (revised 20th-Anniversary ed.). New York: Continuum. (p.53)

<sup>86</sup> Delors, J., Al Mufti, I., Amagi, I., Carneiro, R., Chung, F., Gerrmek, B., et al. (1996). *Learning: The Treasure Within. Report to UNESCO of the International Commission on Education for the Twenty-First Century*. France: UNESCO Publishing. (p.257:14) World Bank. (Ed.). (1999). *World development report: Knowledge for development*. Oxford: Oxford University Press. (p.16-18).

<sup>87</sup> Unknown. (2008). Bole advises against *yaqona*. *Fiji Times*, p. 10.

- c. You were also quoted as saying that for teachers, “it [was] absolutely vital that minds are alert and in tune to the daily classroom procedures.” Do you consider that the “over-consumption” of *yaqona* alters a teacher’s alertness? Please explain?
  - d. The article finishes by quoting you as saying that “We should take *yaqona*... in moderate amounts.” Can you please quantify “moderate amounts”.
6. The MoE, in their Learning Together (2000:214-5) publication, cited 15 “barriers that impede student learning” and lead to under-achievement in Fiji. These “include: poor attitude to learning, truancy, failure, lack of parental support, conflict between parental expectations and school programmes, family problems, financial problems, environmental restrictions, poor health and nutrition, bad teaching, inadequate student support, insufficient learning resources, and lack of study and learning skills”. There is no specific mention of *yaqona*.
- a. Why do you think this was not added as a factor?
  - b. Do you think it should be added as a factor? Why, why not?
7. In May last year you were quoted in the Fiji Times as saying that <sup>88</sup> “The Education Ministry has identified 72 under-performing schools”. I realise that the main reason cited was a lack of resources, but do you consider *yaqona* also played a role in the under-performance? Why, why not?
8. During my previous research several teacher supervisors commented that teachers who consumed *yaqona* tended to score low in the Performance Management System, especially measure one: Initiative and Resourcefulness, and measure five, Punctuality and Attendance. Is this something that has ever been discussed with you? What are your thoughts regarding this?
9. Does the MoE have a policy regarding the consumption of *yaqona* by teachers during working hours?
10. What about after hours?
11. The PSC in their Circular 22/2007: “Prohibition of drinking of *yaqona* in Government workplaces”, “strictly prohibit[s] the] drinking [of] *yaqona* during office hours on government premises”. Do you consider that this directive also applies to schools?
- a. What about the *isevusevu*, especially during formal occasions or the visiting of dignitaries?
12. Research has found that *Fijian* students perform academically better than *iTaukei* students. Do you believe *yaqona* plays a role in this? How? What about teacher’s *yaqona* consumption?
13. If cognitive tests on teachers revealed that the consumption of *yaqona* the previous night was impairing memory and processing speed in the brain and impacting a teacher’s ability to teach, what would you suggest would be the response of the MoE?
- a. Nothing – why? Individual choice – what about student choice?
  - b. Forbid – how do you police this? What about cultural obligations?
  - c. Any other suggestions?
  - d. Value of a culturally appropriate awareness programme?
14. Any comments you would like to make.

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<sup>88</sup> Fiji Times, (2008). 72 schools 'under-perform'. May 9, p.2.

## Appendix L

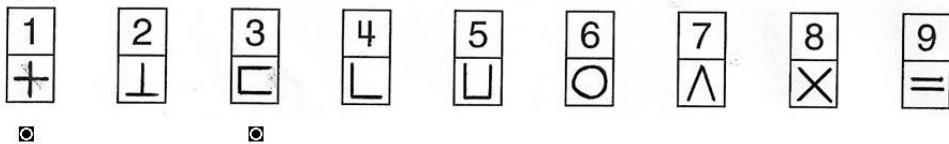
### Digit Symbol-Coding Subtest

# Digit Symbol - Coding Test

NAME: \_\_\_\_\_

SCHOOL: \_\_\_\_\_

Consumption hours previous night: Start: \_\_\_\_\_  
Finish: \_\_\_\_\_ TOTAL: \_\_\_\_\_ hrs



Sample Items

2	1	3	7	2	4	8	2	1	3	2	1	4	2	3	5	2	3	1	4

5	6	3	1	4	1	5	4	2	7	6	3	5	7	2	8	5	4	6	3

7	2	8	1	9	5	8	4	7	3	6	2	5	1	9	2	8	3	7	4

6	5	9	4	8	3	7	2	6	1	5	4	6	3	7	9	2	8	1	7

9	4	6	8	5	9	7	1	8	5	2	9	4	8	6	3	7	9	8	6

2	7	3	6	5	1	9	8	4	5	7	3	1	4	8	7	9	1	4	5

7	1	8	2	9	3	6	7	2	8	5	2	3	1	4	8	4	2	7	6

This test has been adapted and modified from the Wechsler Adult Intelligence Scale (WAIS-III):  
Third Edition (Wechsler, 1997:93-6).

# Digit Span Test

## Appendix M

### The Digit-Span Subtest

Digits Forward			Digits Backward		
Trial	Item/Response	Trial Score	Trial Item/Response	Trial Score	Item Score (0,1 or 2)
1.	1 7-4	vitu, va. saath, chaar. dua, ono. ek, che.		1 8-5 walu, lima. aath, piach. va, ria. chaar, do.	
2	1-6	vihi, ciwa, tolu. saath, no, tin. lima, walu, ria. piach, aath, do.		2 4-2 tolu, dua, lima. tin, ek, piach. vitu, ria, ciwa. saath, do, no.	
2.	1 7-9-3	ono, ria, walu, vitu. che, do, aath, saath. va, vihi, tolu, ciwa. chaar, saath, tin, no.		2 1 3-1-5 tolu, ctw, vitu, walu. tin, no, saath, aath.	
2	5-8-2	on, lima, walu, va, vitu. tolu, ono, va, chaar. tin, do, che, chaar, ek.		2 7-2-9 va, ria, ono, ciwa. chaar, do, che, no.	
3.	1 6-2-8-7	va, vihi, tolu, ciwa. chaar, no, tin, do, aath, che.		3. 1 3-9-7-8 tolu, ctw, vitu, walu. tin, no, saath, aath.	
2	4-7-3-9	on, lima, walu, va, vitu. tolu, ono, va, chaar. tin, do, che, chaar, ek.		2 4-2-6-9 va, ria, ono, ciwa. chaar, do, che, no.	
4.	1 6-5-8-4-7	vihi, ciwa, tolu, ria, walu. piach, aath, chaar, saath. tolu, ria, ono, va, dua. tin, do, che, chaar, ek.		4. 1 7-1-8-3-4 saath, ek, saath, fin, chaar. dua, lima, ria, walu, vitu. ek, piach, do, aath saath.	
5.	1 4-9-3-2-8-6	va, vihi, tolu, ria, walu, ono. chaar, no, tin, do, aath, che. vihi, ciwa, tolu, ria, ono, va.		5. 1 6-2-3-8-5-7 ono, ria, tolu, walu, lima, vitu. che, do, fin, aath, piach, saath, lima, va, ciwa, tolu, ria, walu. piach, chaar, ria, fin, ek, aath.	
2	7-1-9-3-6-4	tolu, dua, ono, va, walu. tin, ek, no, fin, che, chaar.		2 5-4-9-3-1-8 tolu, ono, va, ciwa, dua, ria, walu. fin, che, chaar, no, ek, do, aath.	
6.	1 3-1-6-9-4-8-7	lima, ciwa, ria, ono, tolu, ria, walu. piach, no, ek, che, fin, do, aath.		6. 1 3-6-4-9-1-2-8 walu, dua, ria, ciwa, va, vitu, lima. aath, ek, do, no, chaar, saath, piach.	
2	5-9-1-6-3-2-8	va, walu, ria, ciwa, lima, dua, ono, tolu. chaar, aath, do, no, piach, ek, che, fin.		7. 1 6-2-8-1-9-7-5-8 oni, ria, walu, dha, ciwa, vitu, lima, walu. che, do, aath, ek, no, saath, piach, aath.	
7.	1 4-8-2-9-5-1-6-3	lima, walu, dha, ciwa, ria, ono, tolu. piach, aath, ek, no, do, che, fin, che.		2 9-3-4-6-7-2-5-8 ciwa, tolu, va, ono, vitu, ria, lima, walu. no, fin, chaar, che, saath, do, piach, aath.	
2	5-8-1-9-2-6-3-6	ono, dha, va, ciwa, tolu, ria, lima, walu, vitu. che, ek, chaar, no, fin, do, piach, aath, saath.		Digits Backward Total Score (Maximum = 14)	
8.	1 6-1-4-9-3-2-5-8-7	ria, ono, lima, walu, vitu, ria, lima, walu, vitu. do, che, piach, aath, saath, do, piach, aath, fin.			
2	2-6-5-8-7-2-5-8-3				

Digits Forward Total Score  
(Maximum = 16)

$$\boxed{\text{Forward}} + \boxed{\text{Backward}} = \boxed{\text{Max. = 30}}$$

This test has been adapted and modified from the Wechsler Adult Intelligence Scale (WAIS-III): Third Edition (Wechsler, 1997:133-5).

## Appendix N

### Cognitive Test Cue Card

#### **Cognitive test instructions:**

**(participant must be aged between 20-24 years of age)**

#### **DIGIT SPAN TEST (this test second)**

Digits Forward - "I will say some numbers. Please listen carefully and when I finish, I want you to say them strait after me. Just repeat what I say. So if I say 9-6 (ciwa-ono/nor-chee), you will say?" "Correct."

Digits Backward – "I am now going to say some more numbers. But this time, when I finish, I want you to repeat the numbers backward. Let's practice. If I say 9-1-7 (ciwa-dua-vitu/nor-eek-saat), what would say?" Participant, "7-1-9" (vitu-dua-ciwa/saat-eek-nor). "Yes, that is correct. Ok, here we go".

Discontinue test when participant scores 0 on **both** trial items.

## Appendix O

### Full SPSS Output File of Digit-Span Subtest Independent Samples *t*-test.

	Levene's Test for Equality of Variances			<i>t</i> -test for Equality of Means						
	F	Sig.	<i>t</i>	df	Sig. (2- tailed)		Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
					Lower	Upper				
Digits-Span Scaled Score	Equal variances assumed	.823	.371	.357	34	.723	.278	.777	-1.302	1.858
	Equal variances not assumed			.357	32.755	.723	.278	.777	-1.304	1.860

The Sig. value within the "Levene's Test for Equality of Variances" is greater than .05, therefore the "Equal variances assumed" are used and the "Equal variances not assumed" are ignored (Pallant, 2007:234-5).

*t* indicates the "number of degrees of freedom" (Griffith, 2007:328).

The '95% Confidence Interval of the Difference' is the "range around an average into which a specified percentage of the values appear" (Griffith, 2007:324). An example this is the upper and lower quartiles of Figures 8.3 and 8.4.

## Appendix P

### Full SPSS Output File of Digit Symbol-Coding Subtest Independent Samples *t*-test.

	Levene's Test for Equality of Variances			<i>t</i> -test for Equality of Means					
	F	Sig.	<i>t</i>	df	Sig. (2- tailed)	Mean	Std. Error	95% Confidence Interval of the Difference	
					Difference	Difference	Difference	Lower	Upper
Digit Symbol- Coding Scaled Score	Equal variances assumed	3.529	.069	2.564	.34	.015	1.778	.693	.369    3.187
	Equal variances not assumed			2.564	27.885	.016	1.778	.693	.357    3.198

The Sig. value within the “Levene’s Test for Equality of Variances” is greater than .05, therefore the “Equal variances assumed” are used and the “Equal variances not assumed” are ignored (Pallant, 2007:234-5).

*t* indicates the “number of degrees of freedom” (Griffith, 2007:328).

The ‘95% Confidence Interval of the Difference’ is the “range around an average into which a specified percentage of the values appear” (Griffith, 2007:324). An example this is the upper and lower quartiles of Figures 8.3 and 8.4.