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Tuku iho, he tapu te upoko. From our ancestors, the head is sacred. Indigenous theory building and therapeutic framework development for Māori children and adolescents with traumatic brain injury.

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Abstract

International research shows 'minority' culture and indigeneity are risk factors for traumatic brain injury (TBI) and for differential responses by rehabilitation services. New Zealand epidemiological studies align with those findings showing that Māori tamariki (children) and taiohi (adolescents) are significantly over represented in TBI populations with poorer outcomes, including higher mortality rates.

This study asked two questions. Firstly, what do Māori people say about tamariki and taiohi TBI in the context of the Māori cultural belief that the head is the most sacred part of the body? Secondly, how could this information be used to build theory and inform a framework to address the rehabilitation needs of this group?

Eighteen marae wānanga (culture specific fora in traditional meeting houses) were held in urban, rural and remote locations. Participation in these marae wānanga established an overt collective Māori cultural orientation at the entry point of the study. This collective view meant that marae themselves were considered as respondents. Data were analysed using Rangahau Kaupapa Māori (Māori indigenous research methods) and informed by elements of grounded theory.

The central aspect of the theory proposes that TBI not only injures anatomical structures and physiology but also injures wairua. Wairua is defined here as a uniquely Māori dimension of wellbeing characterised by profound connection with all elements of the universe. The wairua injury means culturally determined interventions are both indicated and expected. The cultural knowledge required to address the wairua injury is housed within whakapapa (genealogy). This knowledge is activated by a cascade of events. The wairua theory in mokopuna TBI thereby provides a guide to intervention. The interventional framework underpinned by this theoretical position is called Te Waka Oranga. This framework uses the metaphor of a waka, a traditional Māori sailing vessel, preparing for journeys, in the process of moving across the ocean and finally arriving at it's destination. In this way this framework provides a Māori space where both Māori and clinical world views and their respective interventions can co-exist and be jointly monitored. This framework is therefore a practical tool that clarifies the interface where the two world views of the whānau and clinicians meet, suggesting opportunity for improved outcomes.

This is the first study to propose and operationalise an indigenous theoretical construct for Māori child and adolescent TBI rehabilitation. Methods including noho puku, whanaungatanga, kaitiakitanga and centrifugal thinking were employed in novel ways. Future application of this work includes non-accidental traumatic brain injury, youth forensic populations, incarcerated groups and virtual rehabilitation.

Preface and acknowledgements:

Ko te mauri o Ngāpuhi he mea kua huna i te moana The essence of Ngāpuhi is hidden in the ocean

I would like to preface this thesis with description of a number of events that influenced this research journey. Their linkages have become clearer to me as I progressed into the final stages of writing this report. By presenting them here I invite the reader into a more personal understanding of the lived experienced of my doctorate. I hope in this way to exemplify the unfolding of understandings and learning that I experienced along the way and to set the scene for reading this work.

As the only Māori child and adolescent psychiatrist assessing and providing assessment and treatment regarding the neuropsychiatric sequelae of traumatic brain injury (TBI) in tamariki and taiohi, including the crucial involvement of their whānau, I found that Māori cultural practices and approaches were valued and seemed to help progress better outcomes. I was intrigued by this observation and began mulling over how to find out more. This doctoral programme has been a central focus of pursuing that inquiry. I discuss the underpinnings of my world view in more detail in the methods section.

"Ko te mauri o Ngāpuhi he mea kua huna i te moana" is a whakatauki (proverbial saying) that I first heard from Shane Wikaira on Matai Ara Nui Marae in the Hokianga, Northland, Aotearoa, New Zealand on 29th November 2008. He was sharing his understanding of the Ngāpuhi classification system of the mind, passed on to him by kaumātua (elders), with a small group of whanaunga (relatives). One aspect of the whakatauki speaks about the best place to hide something being right in front of you. The whakatauki suggests that the ordinary aspects of life have imbedded within them the mauri, the life force, the essence of being. How this whakatauki would influence my doctoral journey was something I did not anticipate at that time.

Glass Murray was one of our precious Te Tai Tokerau kaumātua who strongly supported my research. He attended the hui were I sought permission from my whānau to proceed with this endeavour as well as both of the rangahau wānanga (research meetings) at Potahi marae as part of this project. Glass had been a kaihoe (paddler) on the Ngātokimatewhaorua waka, launched in 1940, at the centenary of the signing of Te Tiriti O Waitangi (The Treaty of Waitangi). I have included a photograph of the waka taken in 1940 with kind permission of The Alexander Turnbull Library on page vii. In 2010 Glass was photographed at Waitangi standing beside the waka he had paddled 70 years before (p viii). Three photos of him and the waka, taken that day at Waitangi have watched over me writing this thesis. Sadly, Glass passed away in August 2011. I took one of these photos to give to

his wife, Aunty Wini at his tangihanga (traditional Māori funeral) in Te Kao. Uncle Glass' passing further strengthened my resolve to ensure his legacy of support was brought to fruition. These photos of Uncle Glass and the waka have been right in front of me, just as articulated in the whakatauki, and yet their significant influence evaded me until recently. As I immersed myself in my findings and wondered how to bring together the voices of my participant marae wānanga (traditional fora held on traditional meeting houses), a framework in the form of a waka began to take shape. Interestingly, as you can see in the photograph, the waka has a head at it's prow, this is a common adornment of waka which shows another connection between the head and waka in Te Ao Māori (the Māori world). Over the last year, as I focussed more and more on writing, the idea of a waka has grown to become the framework that I present in this thesis. This framework has been constructed on the premise that it is by bringing on board all those involved in tamariki and taiohi (child and adolescent) traumatic brain injury rehabilitation in a manner that enables the active participation by whānau using culturally determined interventions which are likely to improve both the process and outcomes.

This thesis is intended for a broad audience. This is because tamariki and taiohi TBI have a wide ranging impact in our society; youth courts, prisons, alternative education, mental health services and substance abuse rehabilitation facilities all have an over representation of young Māori with a history of TBI. So I have written with a variety of readers in mind including whānau, iwi (tribal) leaders, community workers, academics, clinicians, service managers, policy makers, judges and teachers among others. It is my hope that this framework can be used to enhance opportunities for early rehabilitation of tamariki and taiohi Māori with TBI and their whānau to reduce the risk of poor outcomes for the Māori community and enhance Māori development. Importantly, this work could also be used to inform prevention strategies, an aspect central to the thinking of those of us providing specialist rehabilitation services.

I would like to acknowledge a number of people who have helped me to navigate this journey of rangahau (research). Firstly, my husband Paddy who has been a wonderful confidante, keen-eyed proof reader and who attended some of the wānanga helping me with both cultural protocols by speaking for me and with the technology of recording. My children have kept me on track with their encouragement and have buoyed me along with their humour. My dad, John has provided wise counsel and support. The Murray whānau, especially Glass, Wini, Errol and Pineaha as well as Uncle Joe and Aunty Loui have afforded me enormous support and their contribution has been invaluable. My Aunty Thelma Munro helped with organising many of the marae wānanga, thank you Aunty! My cousin Hera was always cheering me on from where ever she was in the world. And my cousin Monica whose music continued to inspire the journey. I am so grateful to you all.

I have been truly privileged with my supervisory panel. Professor Chris Cunningham, Professor Sir Mason Durie and Professor Richard Faull have been generous with their time and thoughtful feedback. A special thanks to Chris who made time for face to face meetings and responded to my many emails and texts. I have been blessed with the guidance of my Rōpū Kaitiaki which included Professor Sir Mason Durie and Professor Richard Faull as well as Naida Glavish, Amster Reedy, Dr Greg Finucane and Associate Professor Juan-Carlos Arango-Lasprilla from Virginia College University, Washington D.C. A special thanks to Rangahau Te Roro me te Hinengaro; The Centre for Brain Research staff for assisting with hosting these annual hui.

Whaea Moe Milne attended several of my rangahau wānanga and provided invaluable reflections and support, ngā mihi e te rangatira. Dr Waiora Port was able to attend the first hui in Waitara which was a wonderful gift, ngā mihi e te rangatira. I would also like to thank Professor Te Tuhi Robust and Ngā Pae o te Maramatanga for their scholarship in 2009 and Massey University for the Purehuroa Scholarship in 2011 both of which helped to support the costs of the eighteen wananga, Ropū Kaitiaki hui and conference travel. Kathryn McPherson, Professor of Rehabilitation (Laura Fergusson Chair), AUT University, was enthisiastic about the project from the start and generously put me in touch with Jo Fadyl, one of her doctoral students. Having Jo as a fellow research colleague was invaluable, her exacting critique thought provoking, thank you Kath and Jo! Dr. Melanie Cheung, Dr Amy Norman, Kimiora Henare and the Māori doctoral writing group in Auckland provided a enriching writing environment, providing meetings that were like coming up for air from the depths of solitary persistent writing. Ngā mihi kau atu anō ki a koutou. Hohepa Renata (Ngāpuhi, Ngati Kahu) at Taurahere Marae, Te Noho Kotahitanga, UNITEC, tolerated numerous emails with my drawings of the features of Te Waka Oranga and transformed the template into a colourful and engaging taonga (treasure), sincere thanks, e hoa. Finally, I would like to acknowledge ethics approval obtained from Southern A 09/48 Massey University Human Ethics Committee.

As I come to the end of writing this thesis I am reminded that the next stage of hard work is already underway; developing pilot projects to test the findings. Writing funding proposals and fostering partnerships to ensure this work doesn't just sit on a shelf.

This process has been hugely rewarding. I hope that other Māori clinicians consider pursuing their areas of interest in this manner. In my view, this is a valuable process for Māori clinicians to hone much needed research skills, to better question and understand the underlying drivers of our approaches, the complex situations within which we work and how to improve outcomes that have meaning for whānau.





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