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Trading off

*A grounded theory on how Māori women
negotiate drinking alcohol
during pregnancy*

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for the degree of Master of Public Health
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Abstract

This study aimed to understand how Māori women negotiate decisions about alcohol and pregnancy. It was based in the recognition that Māori women's decisions about drinking alcohol when pregnant are shaped by social and cultural expectations about gender roles, as well as their knowledge about alcohol and pregnancy. Māori attitudes to alcohol have also been influenced by colonisation and Māori responses to it. Alcohol use in pregnancy also exists in the context of potential impacts, including fetal alcohol spectrum disorder. There is little knowledge about how and why women may or may not drink during pregnancy.

The research used grounded theory methods. Information was gathered through in-depth interviews with ten Māori women. The information they provided was analysed using constant comparative analysis, and a series of categories was generated.

The grounded theory proposes that Māori women manage decisions about drinking alcohol when pregnant using a process of *Trading off*. *Trading off* is supported by three key processes: *drawing on resources*, *rationalising*, and *taking control of the role*. Māori women start by *learning the rules* about alcohol, *get messages* about alcohol and pregnancy, change their alcohol use while *making role transitions*, and use alcohol in the processes of *fitting in where you are*, *releasing the pressure*, and *carrying on as normal*. *Trading off* is an individual process, but exists in a complex social context. The process is fluid, conditional, and continues throughout pregnancy. The theory must be recognised as my interpretation, although I believe it is grounded in the data, accounts for the data, and offers a new, modifiable and potentially useful interpretation. While the body of theory that can be compared to the theory of *Trading off* is limited, the interpretation is consistent with several models of health behaviour, including Māori health models. This research has implications for future research, and for the development of programmes to support Māori women.

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Table of contents

	<i>Page</i>
Abstract	ii
Acknowledgements	iii
List of tables	viii
List of figures	viii
Chapter 1: Introduction and overview	1
1.1 Introduction	1
1.2 Origins of this kaupapa	1
1.2.1 <i>Healing Our Spirit Worldwide: A new view</i>	1
1.2.2 <i>Understanding FAS as a Māori and gender issue</i>	3
1.3 Guiding assumptions of this research	9
1.4 Shaping a research project	10
1.5 Organisation of the thesis	12
1.6 Summary	13
Chapter 2: Alcohol, gender and culture	15
2.1 Introduction	15
2.2 Alcohol in a cultural context	15
2.3 Alcohol in the lives of women	21
2.3.1 <i>Women's alcohol consumption in New Zealand</i>	25
2.5 Summary	27
Chapter 3: Alcohol and pregnancy in the context of Māori health	29
3.1 Introduction	29
3.2 Alcohol as part of Māori society	29
3.3 Māori women's relationship to alcohol	33
3.4 Effects of alcohol on the fetus	38
3.4.1 <i>Effects and costs of FASD</i>	39
3.4.2 <i>Link between alcohol consumption and FASD</i>	40
3.4.3 <i>Interacting risk factors</i>	41
3.4.4 <i>Prevalence of FASD</i>	42
3.5 Māori women's alcohol consumption during pregnancy	44
3.6 Related Māori women's health factors	46

3.7	Summary	48
Chapter 4: Research design		49
4.1	Introduction	49
4.2	Selecting a research methodology	49
4.3	Qualitative research	51
4.4	Researching as a Māori	55
4.5	Grounded theory: development and applications	56
	4.5.1 <i>Symbolic interactionism</i>	56
	4.5.2 <i>The development of grounded theory</i>	57
4.6	Grounded theory research	58
	4.6.1 <i>Developing research questions</i>	58
	4.6.2 <i>Theoretical sampling</i>	59
	4.6.3 <i>Data collection</i>	59
	4.6.4 <i>Coding</i>	59
	4.6.5 <i>Constant comparative analysis</i>	60
	4.6.6 <i>Memo-writing</i>	60
	4.6.7 <i>Generating a grounded theory</i>	60
	4.6.8 <i>Literature reviews in grounded theory development</i>	61
4.7	Applying grounded theory in this research project	62
4.8	Research design	64
	4.8.1 <i>Research questions</i>	64
	4.8.2 <i>Ethical issues and tikanga Māori</i>	65
	4.8.3 <i>Sampling and the research participants</i>	66
	4.8.4 <i>Interviewing</i>	67
	4.8.5 <i>Limitations and exclusions</i>	69
4.9	Data analysis	69
	4.9.1 <i>Coding</i>	69
	4.9.2 <i>Revising questions and theoretical sampling</i>	70
	4.9.3 <i>Analytic memos</i>	72
4.10	Developing the categories	72
	4.10.1 <i>Revising questions and sampling</i>	73
	4.10.2 <i>Developing conceptual categories and their relationships</i>	74

4.10.3	<i>Relationship between the literature and the data</i>	75
4.11	Summary	76
Chapter 5: Developing the theory		77
5.1	Introduction	77
5.2	Final categories	77
5.2.1	<i>Learning the rules</i>	78
5.2.1.1	<i>Learning the rules: defining “drinking”</i>	84
5.2.1.2	<i>Learning the rules and drinking during pregnancy</i>	86
5.2.2	<i>Making role transitions</i>	87
5.2.3	<i>Fitting in where you are</i>	91
5.2.4	<i>Getting the messages</i>	95
5.2.5	<i>Releasing the pressure</i>	99
5.2.6	<i>Carrying on as normal</i>	101
5.7	Emergence of a core category	106
5.8	Summary	107
Chapter 6: Trading off: a grounded theory on how Māori women negotiate drinking alcohol during pregnancy		108
6.1	Introduction	108
6.2	Developing the theory	108
6.3	Trading off: the story	110
6.4	Key process categories	113
6.4.1	<i>Drawing on resources</i>	113
6.4.1.1	<i>External resources</i>	114
6.4.1.1.1	<i>Partner support</i>	115
6.4.1.1.2	<i>Whānau resources</i>	116
6.4.1.1.3	<i>Health professionals and maternity caregivers</i>	118
6.4.1.2	<i>Internal resources</i>	118
6.4.2	<i>Rationalising</i>	120
6.4.3	<i>Taking control of the role</i>	123
6.5	Reflections on the theory	125
6.6	Evaluating a grounded theory	143
6.7	Summary	145

Chapter 7: From theory to action	146
7.1 Introduction	146
7.2 General implications of my interpretation	146
7.3 Reducing alcohol-exposed pregnancy in Māori women: what this research may contribute	148
7.3.1 <i>Research implications</i>	148
7.3.2 <i>Research participants' suggestions for action</i>	149
7.3.3 <i>Implications for action</i>	151
7.4 Research reflections	152
7.5 Final reflections: the whale riders	155
7.6 Summary	156
References	157
Appendices	
Appendix A: Information letter for potential participants	186
Appendix B: Consent form for participants	188
Appendix C: Tape consent form for participants	189
Appendix D: Star names used as pseudonyms for participants	190

List of tables *Page*

Table 1.	First list of codes	71
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List of figures *Page*

Figure 1.	Final categories	77
Figure 2.	Carrying on as normal category: the continuum	101
Figure 2.	Trading off and its process categories: Relationships of the categories	113

Chapter 1

Introduction and overview

Researchers recognise that their own background shapes their interpretation, and they “position themselves” to acknowledge how their interpretation flows from their own personal, cultural, and historical experiences. (Creswell, 2007, p. 21)

1.1 Introduction

This opening chapter explains how the aims and scope of this research project developed, and outlines the positions and values underpinning it. It sets out what fiction writers call the “backstory” of this study, as well as providing an overview of what will be presented.

Critical qualitative research openly acknowledges the researcher’s own positioning, as Creswell (2007) notes above. For this reason, I begin with my first exposure to what was then termed fetal alcohol syndrome (FAS), and how this shaped my commitment to wanting to contribute to fetal alcohol spectrum disorder (FASD) prevention in New Zealand. I then outline how the framework for this research project emerged, and set out the underpinning assumptions of this research. The last section of this chapter presents an overview of the organisation of the thesis.

1.2 Origins of this kaupapa

1.2.1 Healing Our Spirit Worldwide: A new view

This journey started in Rotorua on a hot February afternoon in 1998, at the third Healing Our Spirit Worldwide Gathering. The Healing Our Spirit Worldwide

movement (HOSW) is “an international forum and movement focused on the alcohol and drug abuse issues and programs in Indigenous communities throughout the global community” (Jeffries, 2003, p. 174). The first international Gathering (a name that describes the flavour of the event far better than “conference”) was held in Edmonton in 1992. The Rotorua Gathering attracted around a thousand people from New Zealand, Australia, the Pacific, the US and Canada. It may have been critical for the direction of this project that my first exposure to FAS¹ came not in the context of a clinical presentation or in a mainstream environment, but as a community health problem for indigenous peoples.

In 1998, I was the Māori women’s health senior policy analyst in Te Ohu Whakatupu, the Māori policy unit of the Ministry of Women’s Affairs. I can’t recall how I picked the “fetal alcohol syndrome” workshop to attend on the Gathering’s first afternoon from the other ten or more streams – perhaps because I thought it related to women somehow. I had heard something about drinking in pregnancy being bad for children, but had no idea of what the problem was, or even if there really was a problem.

It became clear within a few minutes of the workshop starting that while I wasn’t the only person there who knew little or nothing about FAS, we were in the minority. To Canadian and American indigenous peoples, FAS was an accepted, prevalent, and serious problem. So when indigenous community researcher Marilyn van Bibber² presented an FAS resource kit for community health workers called *It takes a community* (Van Bibber, 1997) it is not an overstatement to say that I was “blown away”. Van Bibber’s presentation was only one of a series in which people talked of isolated communities in which as many as a quarter of all children born were affected by their mother’s alcohol consumption; of children struggling with intellectual disability and severe health problems; and of the burden on already disadvantaged indigenous communities. But presenters also

¹ At this time, the term generally used was fetal alcohol syndrome or FAS; more recently the broader term Fetal Alcohol Spectrum Disorder (FASD) has come into use. Both terms are defined in Chapter 3.

talked of indigenous groups developing their own initiatives, working with provincial and national governments, training, intervening to support women and their families, and most importantly, they talked of taking action, not remaining helpless.

At the end of the workshop, I walked away with my head reeling, incredulous. Why on earth didn't I know about this? Why didn't *everyone* know about it? And why wasn't something being done about FAS in New Zealand? Or if something was being done, why didn't I know about it?

Essentially, it was a conversion experience. This was a topic that clearly related to my life, and to my commitment to improving Māori women's health. In retrospect, the "fit", or the deep sense of relevance FAS had for me may have been influenced by the fact that I had recently made a decision to stop drinking alcohol. This had led me to see more clearly how much alcohol the women around me – at work, in my whānau, and among my friends – were drinking. I could see the potential importance that fetal alcohol syndrome might have to Māori women (and to all New Zealand women) straight away. I wanted to talk about this topic to everyone I met, and probably did.

1.2.2 Understanding FAS as a Māori and gender issue

At the end of the HOSW gathering, I came back to Wellington with a new commitment: to use my policy role and my policymaking skills to make some contribution to preventing FAS in New Zealand, and to try to make sure that Māori and gender analysis underpinned prevention action. I enrolled in a post-graduate Diploma of Public Health in part to improve my skills in interpreting public health research. I also wanted to have the knowledge and skills to advocate effectively for more and better New Zealand research on alcohol and pregnancy.

² Marilyn van Bibber was a founding member of Canada's Indian Nurses Association, a pioneer in indigenous community health research, and continues to work on First Nations FASD prevention.

The Ministry of Women's Affairs at that time was a fruitful place to be working while thinking about alcohol and pregnancy. It allowed me to source information, and to discuss my ideas with people who had a strong understanding of gender issues (including Māori gender analysis). It also gave me the opportunity to have contact with international experts on gender and women's health such as Lesley Doyal (United Kingdom), Dorothy Broom (Australia) and Kathy Teghtsoonian (Canada). For these reasons, I immediately saw FAS prevention as an issue with gender implications. I was engaged by the "gender challenge" presented by researchers such as Dorothy Broom and Adele Stevens (1990, n.p.) in *Doubly deviant: Women using alcohol and other drugs*:

In the past, attention to women within the [alcohol and drug] field has frequently actually reinforced women's subordinate status rather than questioning it. However, some recent Australian work has begun to develop in new directions. One key element in a feminist perspective is the consideration of women not as a homogeneous category, but as a diverse group.

Equally influential was working in Te Ohu Whakatupu, the Ministry of Women's Affairs' policy unit set up to put Treaty of Waitangi principles into organisational practice. The focus of my work was to ensure not only that health issues for Māori women were addressed in health policy and service development, but that this was done in a way that respected Māori rights to self-determination, and addressed Māori disadvantage not just at the individual or whānau level but at the level of social structures. This analytical framework led to me seeing FAS prevention as having social, political and historical dimensions.

In the late 1990s, under a National-New Zealand First coalition government, issues of women's reproductive autonomy were the daily currency of policy work, internal discussion, and debate with government advisors such as Treasury analysts. Attacks on the validity and value of gender and Māori perspectives on health, sometimes theoretical and occasionally personal, were valuable in helping clarify my analysis.

Early on, I found that some FAS work *was* being done in New Zealand. The Alcohol Advisory Council (ALAC) had produced a resource on alcohol and pregnancy (Curtis, 1994), and brochures for women. Pediatricians Alison Leversha and Rosemary Marks had done preliminary research on FAS, and brought the issue to the attention of the medical profession (Leversha & Marks, 1995a, 1995b; Marks, 1996). And the Fetal Alcohol New Zealand Trust (set up in 1994) was promoting FAS prevention, supporting families, and advocating for New Zealand research and policy (Rogan, 2001).

What I found confirmed that there was work I could do. It was clear even on the basis of overseas information on FAS, and the limited New Zealand information available in 1998 (Leversha & Marks, 1995b; Marks, 1996), that this could be an important health area for Māori. Māori women were significant consumers of alcohol (Dacey, 1997) and had high birth rates (“Titiro Hāngai”, 1999).

Researchers and advocates knew of many Māori children with diagnosed and undiagnosed FAS (Symes, 2004). At the same time, research was showing that Māori alcohol consumption was as much the product of influences such as colonisation as other health issues (Cullen, 1984; Hutt, 1999). While in the 1990s the link between FAS and socio-economic deprivation was still being established, it was widely accepted by the presenters at *Healing Our Spirit Worldwide* and by other public health workers. That view has recently been encapsulated by Dr. Kim Barker, public health adviser with the Canadian Assembly of First Nations, who said of fetal alcohol spectrum disorder that:

It knows no colours or creeds, but what it does know is poverty, and unfortunately in Canada one of our largest groups of marginalized populations at risk are First Nations. (Cook, 2007, p. 2)

Another influence on my developing thinking was the discourse then emerging in the United States and other countries, in which a woman as mother:

... is regarded as the cause of her infant's medical problems and as the primary obstacle to the care of the child in utero, rather than as a subject worthy of attention in her own right. The interests of mother and child are posed as antithetical, and as the "innocent" party the child's interests are granted priority. (Broom & Stevens, 1990, n.p.)

In the United States these discourses were being accepted in policy, and in some states in legislation. This led to the imprisonment of women for drinking when pregnant, and to babies being removed from their mothers (Boyd & Marcellus, 2007; Golden, 2005). My fear was that if this view took hold in New Zealand's social welfare system, Māori women would be particularly at risk, in the same way that First Nations women have been in Canada (Poole, 2003). Michael Webb had already expressed concerns in the *Social Policy Journal of New Zealand* (1994) about the potential for New Zealand to follow the United States model. Webb talked about the tension between the individual and the state's rights in the context of current knowledge that FAS was largely preventable, with the possibility that New Zealand might follow countries in seeking "to control maternal behaviour in order to protect the unborn child" (Webb, 1994, p. 36). Webb identified New Zealand's drinking culture as contributing to the risk of FAS, concluding that "until the place of alcohol in our society comes under scrutiny, we are unlikely to find a lasting and effective solution to the preventable tragedy of FAS and FAE [fetal alcohol effects]" (Webb, 1994, p. 36).

My broader aim was to do what I could to promote a women-centred approach to FAS prevention for Māori. I was committed to trying to ensure that prevention policies did not stigmatise or single out Māori women, and that whatever policies were developed for Māori were done from a Māori basis, and as much as possible by Māori.

I took the FAS kaupapa and my study to my next job as Māori public health advisor with the Ministry of Health. While in that role I became aware of two bodies of research that showed me how social and cultural factors, including gender roles, influenced patterns of alcohol use in pregnancy.

I was introduced to research on cultural influences by a paper unpromisingly titled “Epidemiology of Fetal Alcohol Syndrome among American Indians of the Southwest” from a University of New Mexico research group led by sociologist Philip May (May, Hymbaugh, Aase, & Samet, 1983). The paper reported on a research project established by the U.S. Indian Health Service in 1979 in response to the perception that FAS was a significant problem for tribal health. The research confirmed significant FAS rates, but also found major variations in rates between the Indian nations studied. May and his colleagues asked: What is it about these different Indian nations that mean that some have high rates of FAS and others low? They concluded that “In general, the gross social and cultural patterns of the tribes studied can readily explain the variation in incidence of FAS” (May et al., 1983, p. 374).

Those cultural patterns included the role and status of women in a particular nation, the role alcohol played in that nation’s social interaction, and its rules about women’s alcohol consumption. Those roles were determined not only by tradition, but by factors mediating how alcohol had become integrated into that nation, such as different colonisation experiences, or the impacts of different missionary groups on spiritual belief systems.

Describing these ideas in 2009, they hardly seem groundbreaking. But in an environment where Māori were struggling to establish that not only were we equal to “other New Zealanders” but were diverse in ourselves (Durie, 2001), the ideas that our history had mediated Māori relationships with alcohol, and that variations inside the Māori population were an appropriate and important subject of study, was exciting and validating.

Internal variation within populations is still a challenging idea to many policymakers and health service providers. In the last decade, I have spent a lot of time pointing out (to Māori as well as to non-Māori) that Māori do not have a single pattern of alcohol consumption; for instance, Māori are still much more likely than non-Māori to abstain from drinking (Ministry of Health, 2007a). Māori who do not drink alcohol (such as myself) are not a homogeneous group, being

made up of people who have never consumed alcohol, those who have given up alcohol for reasons such as health or religious beliefs, and others about whose reasons we know nothing because no research has been done.

May and colleagues (1983; 1995) were pioneers in identifying the importance of understanding cultural variances not just to explain differences in FAS prevalence between tribal groups, but as a basis for developing effective FAS prevention programmes. This project team has gone on to pilot and evaluate education and training for communities and health (May & Moran, 1995), as well as sharing their methods for estimating the prevalence of fetal alcohol spectrum disorder with different countries (May et al., 2006).

The second body of work was that of Lee Kaskutas, Sharon Wilsnack and other researchers studying women and alcohol in different cultural contexts (for example, Kaskutas, 2000; Wilsnack, Vogeltanz, Wilsnack, & Harris, 2000). Their focus was on studying “ordinary” women rather than women with alcohol dependence, and on looking at the roles alcohol played in those women’s lives. These researchers saw alcohol use as shaped by different cultures (such as workplaces), and were interested in comparing behaviours and attitudes. Ellen Branco and Lee Kaskutas’ (2001) research article “ ‘If it burns going down ..’: How focus groups can shape fetal alcohol syndrome (FAS) prevention” showed how much could be learned by finding out directly from women the meanings that alcohol had for them.

These researchers showed that it was important to understand the contexts in which women might use alcohol during pregnancy. Their ideas guided me to focus my study on what might *influence* Māori women’s alcohol use in pregnancy. They also contributed to the theoretical framework that guided the development of this research project.

1.3 Guiding assumptions of this research

Qualitative research practice requires researchers to acknowledge their personal positioning. This may be particularly so when the topic has the high emotional content of alcohol and pregnancy.

Research in the area takes place at the intersection of alcohol (already a highly charged subject) and the even more emotive subject of the role of women, their autonomy in pregnancy and as mothers, and the nature of controls exerted by society over women's reproductive rights (Boyd & Marcellus, 2007; Poole, 2003). For Māori women, as for other indigenous women, this content is overlaid by the impacts of colonisation which broke down societal structures and rules, including those affecting women's role and status. In New Zealand it affected Māori women's autonomy, making them subject to new kinds of patriarchy, through religion, new cultural norms (Hoskin, 2000; Mikaere, 1994), new laws, and how those laws were enforced (Mikaere, 1994; Park, 1985).

The first assumption of this research project is that, as Christine Rogan and I wrote in a publication for alcohol and other drug treatment workers:

... women do not deliberately choose to harm their unborn child. They may not be aware of their pregnancy; they may use alcohol to self-medicate, to deal with fears or stresses relating to the pregnancy or other aspects of their life; they may not be aware of the damage their substance abuse is causing; or they may have received advice that alcohol was not as big a problem as everyone makes out. (Stuart & Rogan, 2006, p. 6)

The second assumption is that the best way to understand how Māori women manage alcohol and pregnancy is by asking Māori women *themselves* what they believe the influences are and how women manage those influences. Māori women are not only experts in their own lives, but have the ability to understand and reflect deeply on their experiences and those of other women.

While resisting the demonisation of Māori women, I also resist positioning them as victims. Māori women are not passive consumers or recipients, but actively try to make the best choices they can about alcohol use, recognising the information available and the social, gender and economic circumstances that affect the choices available to them.

Finally, this project depends on my belief that the experiences, views, knowledge, and understandings of Māori women are of value. In contemporary New Zealand, Māori women have very much been seen as objects about whom things are claimed and to whom things are done (Hoskin, 2000). As a Māori woman I have also experienced this objectification, as a public servant, a health consumer, and as a researcher.

In this project, therefore, I am positioning myself not only as Māori, but as a Māori feminist. This arises from my ancestry, and from my identification with the strong Māori women (past and present) in my whānau and my iwi. It also arises from my upbringing in a whānau where my parents (one Māori/Irish/English and one English-born) saw the world through a “social justice” lens based on their working-class origins and their subsequent education, and where both worked actively in their own fields to improve Māori wellbeing. Working in the Ministry of Women’s Affairs increased my theoretical and analytical understanding of Māori and gender analysis, as well as increasing my sensitivity to the structural and personal discrimination that Māori women face in their everyday lives.

1.4 Shaping a research project

When I started scoping a research project in 2000-2001, my aim was to carry out research with Māori women about what health messages and/or methods they thought would be effective in reducing alcohol use during pregnancy.

Experienced researchers and alcohol policymakers whom I consulted thought the idea had value, but pointed out that little was known about what might influence

Māori women to change their behaviour. They advised me to go back further, to look at the meanings (about alcohol and/or pregnancy) that might affect Māori women's drinking behaviour. This changed the focus of my research.

I carried out a search for research reports that could provide ideas for my research design, studies where women (ideally but not necessarily indigenous) had been interviewed to analyse their experiences and understandings about alcohol and pregnancy, or their ideas about how to support women making choices about drinking alcohol when pregnant. With the exception of Branco and Kaskutas (2001), discussed earlier, I found no research on this topic. In Chapter 4, I explain how the research design developed and how the literature available was used.

Working from my theoretical framework, I wanted a study design that did not position Māori women as the problem, or as more (or less) problematic than non-Māori women. I had noticed a common assumption among people to whom I mentioned my study that alcohol and pregnancy would be a "special problem" for Māori, linked to an often unrecognised assumption that alcohol use is a "special problem" for Māori. Non-Māori, including some alcohol researchers, are usually surprised to find that research has consistently shown that Māori and non-Māori women are equally likely to stop using alcohol during pregnancy (Ministry of Health, 2007a; Parackal, S., Parackal, M., Ferguson, & Harraway, 2006). This construction of alcohol and pregnancy as a problem belonging to "alcoholic" women, and the stereotypical association of alcoholism with indigenous women, is deep-seated (Saggers & Gray, 1998; Tait, 2003). Instead, I wanted to base my study in the reality of Māori women's alcohol use and look at how "average" Māori women understood influences on alcohol use in pregnancy.

I also rejected many suggestions to do a comparative study of Māori and non-Māori. I wanted to treat Māori as normative, not as "the other". As Durie says of Māori research, I aimed to "deliberately place[s] Māori people and Māori experience at the centre of the research activity" (1996, p. 2), and my research interest was in exploring commonalities and variations among Māori women.

The initial research aims that emerged were:

- a. to identify the factors that Māori women believe influence their decisions about drinking alcohol during pregnancy
- b. to identify the factors that Māori women believe influence their decisions to continue or cease drinking alcohol during pregnancy.

Chapter 4 describes how these aims changed as the research design developed.

1.5 Organisation of the thesis

This thesis is presented in three sections. Section One, comprising the first three chapters, sets the background to the research and review literature showing the complex environment in which Māori women make decisions about drinking when pregnant. Section Two (Chapters 4-6) explains the methods and processes of the research project, details the research findings, and discusses the final theory. Section Three (Chapter 7) discusses the implications of the research and reflects on the project.

This opening chapter has set the background to the research and introduced the central ideas underpinning the study.

Chapter 2 reviews and synthesises literature on alcohol, gender and culture, and positions the study against this intersection of the cultural anthropology of alcohol and gender, public health research, and research on New Zealand women and alcohol.

Chapter 3 gives a background picture of the contexts in which Māori women in the 21st century use alcohol, and about Māori women's alcohol use during pregnancy. While FASD is not the focus of this thesis, it has important potential long-term implications for Māori health and development. For this reason, I present a brief review of the potential effects of alcohol use in pregnancy,

including its impacts, risk factors, and what is currently known about FASD prevalence in Aotearoa New Zealand, to provide context.

Chapter 4 describes the research design. It explains why a qualitative research style, grounded theory, was chosen for the study, then describes the basis of grounded theory and its research processes. I then explain the research design and how the research was carried out, including sampling, data collection and analysis, and how the study questions and sampling were refined.

Chapter 5 sets out the main categories that emerged from the research interviews, and explains how they were generated, illustrating the discussion with quotations from the interviews.

In Chapter 6, I describe the theory that emerged from analysis of the data, and discuss it as it may relate to other models of explanation, as well as possible implications for extending this research or testing the theory.

In Chapter 7, I discuss implications of my findings for New Zealand policy and practice. I suggest ways that the theory might contribute to efforts to reduce alcohol-exposed pregnancies among Māori women, including some recommendations for action. Finally, I reflect on the learnings from this research project for an “emerging researcher”.

1.6 Summary

This study originated in my own experience, becoming aware of FAS and its potential impact on Māori (especially Māori women) and recognising the need for New Zealand-specific research which could help shape effective FAS prevention programmes for Māori. I realised that to contribute to that research base, I needed to understand Māori women’s own understandings about alcohol use in pregnancy.

The development of the study, its aims and its values, have been influenced by my Māori identity and my experience of working in the area of Māori and gender health. These factors inform the underlying approach taken in this study, which asserts the importance of taking Māori women's own voices into account and recognising their experience and wisdom when developing health promotion for them, as well as focusing on the majority of Māori women with "normal" drinking behaviour.

The original aims of this project as they emerged from my reading, study of qualitative research methods, and my own interests in the subject area, were to identify factors that Māori women believe influence their decisions about drinking alcohol during pregnancy, and factors that Māori women believe influence their decisions to continue or cease drinking alcohol during pregnancy.

Chapter 2

Alcohol, culture and gender

2.1 Introduction

This chapter describes how alcohol is used in the context of cultural factors, gender roles and expectations about drinking behaviour. This research project takes place at the intersection of alcohol, gender, and culture, so that this chapter draws on literature from a variety of disciplines including cultural anthropology and public health research.

The chapter starts by reviewing how “culture” is seen as setting the context for alcohol use. I then discuss how gender influences women’s use of alcohol. In the second part of the chapter I outline the historical and social context of New Zealand women’s use of alcohol, and their current drinking patterns.

2.2 Alcohol in a cultural context

Alcohol is the most widely used mind-altering drug around the world and throughout history, and remains so even where other psychoactive drugs are available. (Heath, 1995, 2000; Marshall, 1979)

Anthropological perspectives are valuable for a study such as this which focuses on “ordinary” alcohol use. Douglas (1987) says that the anthropological approach is to treat alcohol as not necessarily a problem. The cultural anthropology of alcohol use consumption studies it within its social context rather than as an individually determined behaviour (Heath, 1995, 2000; Park, 1985).

Anthropological research is also inductive and aims to develop understandings of people’s “behaviours, and the meanings they attach to them, from their own

perspectives” (Carlson, 2006, p. 201). Chapter 1 described an example of how such approaches have increased understanding about alcohol and pregnancy, May et al’s (1983) research project that found that differences in FAS prevalence between three Native American nations could best be explained by the very different roles alcohol played in each society, particularly the role and status of women in a particular nation, and its rules about women’s alcohol consumption.

Wilson (2005, p. 12) defines *culture* as:

...*both* (author’s italics) the meanings and values that arise among distinctive social groups and classes, on the basis of their given historical conditions and relationships, through which they handle and respond to the conditions of existence; and as the lived traditions and practices through which those understandings are expressed and in which they are embodied.

I find this definition helpful for my study as it distinguishes between meanings (e.g. definitions of “health”) and values (e.g. what value is placed on children), and between “traditions” and “lived practices”. It also recognises culture as located in historic contexts, which many definitions do not (see Hruschka & Hadley, 2008, for other definitions). Hruschka & Hadley (2008) point out that all definitions of culture are based on the notion that the characteristics are *shared*.

Hruschka & Hadley (2008, p. 948) have summarised theories about how cultural values, beliefs, norms and behaviours about such matters as alcohol are transmitted. Two primary ways are *psychological biases* and *social structural factors*. Biases include context bias (e.g. drinking alcohol because everyone else does), prestige bias (e.g. valuing the behaviour of elders) and content bias (where the content of a message makes it more acceptable to a target group, such as the Māori anti-smoking messages on cigarette packets). Social structural factors influence how fast or how well cultural innovations (new patterns of behaviour) spread through a population. Structural factors include network density (how much a network of people interact) and barriers to social interaction (such as

where a minority language group is isolated inside a wider community). Social structural analysis is based on Rogers' (1995) diffusion of innovations theory.

Wilson (2005, p. 10) describes anthropologists as “view[ing] drinking cultures in their wider social, political, and economic contexts, as practices of ethnic, national, class, gender, sexual, racial and other identities”. This recognises that in many societies, people see themselves as belonging to more than one cultural group or sub-group. *Ethnicity* is one set of cultural boundaries, often similar to but not synonymous with culture (Baxter, 1998). Baxter (1998, p. 66), defines ethnicity as “the characterisation of a group in terms of common nationality, language and affiliation”, and quotes Betancourt and Lopez (1995) as saying that “ethnicity becomes the means by which culture is transmitted” (Baxter, 1998, p. 66).

Ethnic and cultural identities are also contextual, so that people may see themselves differently or present themselves differently in different settings (Cunningham, 2008). In my study, for example, the participants actively defined themselves as Māori for the purposes of taking part in the research, although they may belong to or participate in other cultures. Culture and ethnicity can also overlap with other identities such as religious belief, or identification with international youth culture (discussed later in this chapter) so that one identity may have more influence on a particular behaviour than another (Cunningham, 2008; Mäkelä et al., 2006).

How cultural anthropologists view the relationship of alcohol and cultures differs. Wilson (2005) analyses drinking culture using a framework involving drinking places (sites where drinking takes place), drinking economics (the role alcohol plays in the culture's economy, e.g. as a commodity, gift, or a signifier of value), drinking politics (such as whether alcohol is consumed in public, and where), drinking expressions (e.g. where sharing alcohol acts as a powerful form of non-verbal communication) and what Wilson calls *drinking memories*, a term which he uses to describe the way alcohol can link people to their personal and social history and traditions, such as the significance of wine to the French. Heath's (2000) framework analyses alcohol use by “drinking occasions”, categorising

alcohol use according to what kind of alcohol is consumed on particular occasions, when (e.g. at what time of day, or which days of the week), who is allowed to drink, and the rules and expectations that guide behaviour.

These models for comparing alcohol use behaviours address variation in behaviour between groups and to some extent inside groups, although they are not intended to address the complex individual processes involved in using alcohol.

From the literature, I identified six key themes relating to alcohol consumption. These themes are interlinked and highly relevant to the concepts which underpin this study.

In drinking societies, alcohol pervades all aspects of life

There are different ways to identify “drinking societies”. Until recently alcohol researchers divided developed nations into “wet” or “dry” societies. Wet countries are those where alcohol is integrated into daily life and is widely accessible, is generally consumed with meals, wine is largely the preferred drink, and abstinence rates are low. Classic examples are France and Italy (Bloomfield, Stockwell, Gmel, & Rehn, 2003, p. 96). In dry countries, alcohol is generally not part of meals, but is consumed at specific drinking occasions. Access to alcohol is often restricted, and abstinence is more common, but when people drink alcohol they are likely to do so to intoxication, with beer and spirits drinking predominant. New Zealand is a classic dry country (Bloomfield et al., 2003). However, these categories are breaking down, with people in dry countries becoming wine drinkers, and young people in many different countries drinking similar mass-marketed alcohol products in similar ways (Mäkelä et al., 2006). Related changes in women’s alcohol use are discussed later in this chapter.

By international standards New Zealand is a society in which alcohol is pervasive (Park, 1985). New Zealand is in the top 25% of drinking countries as measured by per capita alcohol consumption, consuming 9.68 litres of pure alcohol a year for every person over 15 years (WHO, 2003). Around 85% to 90% of the total

New Zealand population drink alcohol (Ministry of Health, 2007a), and an international review of alcohol use found that “In general, the highest proportion of drinkers is found in Europe, Australia, and New Zealand”¹. New Zealand is also considered to have a liberal/permissive attitude to alcohol (McMillen, Kalafatelis, & de Bonnaire, 2004).

One interesting indicator of alcohol’s pervasiveness in a society is language. Heath (1995, p. 2) cites as one example that:

... in many languages, the verb “to drink” often implies alcohol rather than just any liquid. For example, “she drinks, you know”...

The experience of my research illustrated this notion well. Research participants would use phrases such as “she drank when she was pregnant” or “he doesn’t drink” in the unquestioned understanding that their meaning was clear, and in writing this text it seemed clumsy to constantly qualify “drinking” or “consumption” with “alcohol”.

In drinking societies, drinking alcohol is a public act rather than a private one

People often feel they have the right to comment on a person’s alcohol use – or their abstention from alcohol – in a way that they would not on other behaviours or consumptions. This is important for women when it comes to negotiating decisions about drinking alcohol in pregnancy, as their alcohol consumption can become a subject of public comment, to the extent of being openly refused alcohol service (Boyd & Marcellus, 2007; Golden, 1999).

Alcohol use takes place within a framework of rules and norms

Heath (1976, p. 43) points out that:

... alcohol is almost universally subject to rules and regulations unlike those that pertain to other drinks. Not only are there usually special rules

¹ By comparison, 65% of the U.S. population drink alcohol (Ahlström & Österberg, 2004/5, p. 260).

about alcohol beverages, but the rules tend to have peculiarly emotional charge.

Cultural anthropologists distinguish between norms from behaviour – what people are observed to do, norms of behaviour – what most people do, and norms for behaviour – what people are supposed to do (Wilson, 2005). As will be seen later in this study, norms about alcohol use were recognised and expressed by study participants.

Alcohol is used to create and express community solidarity

In New Zealand, a common example of the expression of community solidarity is co-workers drinking alcohol together after work on Friday. It also provides an example of Heath's concept of the "drinking occasion" (2000). Marshall (1979) asserts that across cultures, drinking is mainly done with friends and relatives, and only rarely with strangers. Drinking is used as way to mark progress from child to adult, and from outsider to insider (Douglas, 1985), connecting this theme with the theme of marking boundaries.

Alcohol is used by communities to mark boundaries between themselves and other communities

According to Douglas (1985) not only the acts of drinking or not drinking alcohol, but particular types of alcoholic drink, act as markers of inclusion/exclusion. An example that recurred in my study is the way the participants referred to types of alcohol as markers of distinct groups, particularly wine which they associated both with being a "mature adult" and with social status. Women in the interviews also talked about the stereotypes of "Māori-style drinking" or "Once Were Warriors" drinking, which they compared to "white-style" drinking. These shorthand phrases represent a collection of understood concepts such as settings where alcohol is drunk, who drinks alcohol and when, the type of alcohol drunk, patterns of drinking and associated behaviours such as intoxication (Heath, 2000).

Alcohol is a key element of ritual and ceremony

This is true not only for religious rituals, but also for community or family rituals (Heath, 2000; Marshall, 1979). Women interviewed in my study vividly recalled Christmas and New Year rituals in which whānau, or sometimes wider communities such as pā or townships, drank particular types of alcohol in particular ways and in particular places. Such rituals also reinforced whānau solidarity, as suggested above. Often participating in such rituals for the first time was a marker of acceptance into that community. Douglas (1987) notes in a ritual context – for instance, a wedding, or a farewell to a work colleague – it can be particularly difficult to refuse alcohol.

It should also be noted that while alcohol use is a behaviour with health consequences, cross-cultural studies have found that in most societies it is seen as primarily a *social* rather than health behaviour (Douglas, 1987; Park, 1985).

2.3 Alcohol in the lives of women

... questions of power, autonomy, and control are to be answered when the cultural differences in women's drinking are investigated. (Allamani, 2008, p. 1091)

Alcohol is considered almost certainly the most gendered substance or food worldwide (Allamani, 2008; Gefou-Madianou, 2002).

Comparative international studies of gender differences in alcohol consumption such as Allamani (2008) and Wilsnack et al. (2000) show consistent differences in drinking patterns between genders, and strong commonalities between women in different countries. In almost all societies, women are less likely to drink alcohol than men; in societies with strong gender differentials, women may be expected to avoid alcohol entirely. Women are not only less likely to drink alcohol, but they drink it much less often, and in smaller amounts. All societies have specific rules about women's alcohol consumption, and these rules are strongly enforced

(Heath, 1995). In particular, most societies “label” or judge women for appearing drunk, while visible intoxication in men is often ignored and in some societies (such as New Zealand) may even be praised (Allamani, 2008; Lyons, 2006; Park, 1985).

Wilsnack et al. (2000, p. 261) say that “variations in gender rates and ratios, observed across studies and drinking measures, cannot be readily explained by any current biological theory or by ageing effects”. They suggest that while the biological basis for gendered patterns of alcohol consumption sets the rules, these rules are then modified by social changes in gender roles. Wilsnack, Wilsnack and Obot (2005) reviewed international literature on alcohol, gender and culture, and identified four common theoretical explanations for the gender differential:

- Power: alcohol consumption is “a privilege men have reserved for themselves and denied to women” (Wilsnack, Wilsnack, & Obot, p. 7)
- Sex: women are socially influenced to drink less “partly as a way to restrain women’s sexual behaviour” (Wilsnack, Wilsnack, & Obot, p. 9)
- Risks: the belief that men “naturally” take risks more than women do, with alcohol use not only having its own risks, but enabling risk-taking
- Responsibilities: women may have greater or more complex role responsibilities than men, which limit their drinking; male drinking has been linked to avoiding some role responsibilities, especially domestic ones; or conversely, is seen as a way to manage men’s heavy responsibilities (Wilsnack, Wilsnack, & Obot, 2005).

Little research has been done on cultural rules around women’s alcohol consumption when pregnant. Heath (2000) discusses it briefly, describing it as an area of “ambivalence.” He contrasts the contemporary American “no amount is safe” discourse with traditions in Mediterranean countries such as France where pregnant women were encouraged to drink wine, and the promotion of beer to pregnant women in Germany and Austria. Heath (2000) also notes the traditional use of specific home brews to promote fetal growth in much of Africa and Latin America. However, the international spread of knowledge on the potential effects

of drinking alcohol during pregnancy is breaking down these traditions, with countries such as France introducing FASD prevention campaigns and labelling alcohol containers with cautionary information (Tache, 2006).

Since the middle of the 20th century, most developed countries have reported significant increases in women's alcohol consumption (Allamani, 2008; Holmila & Raitasalo, 2005; Kerr-Corrêa, Igami, Hiroce, & Tucci, 2006). The last fifteen years have seen sharp increases in drinking among young women, including teenagers, in a number of countries including New Zealand (Kerr-Corrêa et al., 2006; McPherson, Casswell, & Pledger, 2004). Much of that increase has been in "heavy episodic drinking," usually called binge drinking in New Zealand (McPherson et al., 2004). The result has been some convergence between the drinking patterns of women and men (Allamani, 2008; McPherson et al., 2004). The women most likely to drink often and in high amounts are younger, employed or in higher education, and without children (Allamani, 2008; Kuntsche et al., 2006; McPherson et al., 2004). Gladstone, Nulman and Koren (1996, p. 5) argue that in many social settings, young women's binge drinking has become so normative that:

A binge drinker, rather than being identified or classified as a problem drinker, may today fit the definition by Keller et al. [1968] of a "social drinker" One who takes alcoholic beverages in compliance with social custom, and in company; or one who drinks only for socially acceptable reasons and in socially acceptable ways, rather than moved by some individual problem, anomaly or disease.

There has been considerable research on the reasons behind this trend, as well as high levels of media coverage (Stirling, 2002). These trends have been associated with changes in women's social status and with women moving into the paid work force. Allamani (2008, pp. 1090-1091) summarises the most common explanation as:

... the higher the women's position, or the more emancipated women are, the smaller the difference between men and women's drinking rates.

Related theories are that emancipation is leading young women to act like "one of the boys," adopting male values and behaviour patterns (Holmila & Raitasalo, 2005; Lyons, 2006), and that new expectations and role demands are increasing stresses on women, particularly the young (Holmila & Raitasalo, 2005; Kuntsche et al., 2006). Another possible factor is the high number of women in countries such as New Zealand entering tertiary study, which is strongly associated with high alcohol consumption (Bradstock et al., 1998).

Some researchers link increased female drinking to women starting childbearing much later and having fewer children (Wilsnack et al., 2000). Another explanation suggested is that women's higher drinking rates are a natural consequence of more permissive attitudes to alcohol in the society as a whole (Holmila & Raitasalo, 2005), a concept similar to explanations proposed for New Zealand's binge-drinking culture (McMillen, Kalafatellis, & de Bonnaire, 2004). Lastly, many public health researchers believe a contributing factor is intensive marketing of alcohol to women, especially of wine and ready-to-drink mixed spirits, as the female alcohol market is one of the few not yet saturated (Holmila & Raitasalo, 2005).

Allamani cautions against extreme reactions to the convergence trend, noting that "historically women's drinking became a focus of public attention just when they claimed to increase status, wealth, or other power" (2008, p. 1091). Holmila & Raitasalo (2005, p. 1764) reviewed the evidence for an international symposium on social change and gendered drinking, and concluded that "No-one has yet produced a theory that explains adequately why gender differences in drinking occur so consistently but are so variable in magnitude."

2.3.1 Women's alcohol consumption in New Zealand

Banwell's social history of New Zealand women and alcohol (1991) shows that in common with other countries, alcohol use in New Zealand has been strongly gendered, with radically different rules and norms applying to women and men. For example, in the settler period, the ideal Pākehā colonial wife or "good woman" was usually presented as an abstainer, and alcohol consumption characterised the "good woman's" antithesis (Banwell, 1991). As the colonial image of women changed through the 20th century, so did the acceptability of women drinking alcohol, but distinct rules remained. For example, early in the 20th century "fortified and sweet wines" were acceptable but women were not expected to drink beer or spirits (Banwell, 1991).

By the late 1980s, when Banwell (1991), Park (1995) and other researchers carried out a series of studies on alcohol and New Zealand women, alcohol consumption was perceived as having class or social group dimensions. Drinking spirits (mixed with soda or soft drinks) was common in some social groups, and wine drinking became both common – between 1980 and 1989 wine consumption among women almost doubled – and a status marker (Banwell, 1991; Wyllie & Casswell, 1989). Park (1990, in Banwell, 1991, p.177) argues that Pākehā women became alcohol drinkers while retaining their status as "good women" by drinking mainly wine, and by associating wine with "traditional womanly virtues".

The place of alcohol in the lives of New Zealand women project involved six studies in geographically different communities, supplemented with targeted research with specific groups (Banwell, 1991). The research included participant observation, interviews, group discussions and individual alcohol diaries. The women interviewed were very aware of the different norms set for women and men. Some of the women subscribed to norms such as the social disapproval of women who get drunk in public, while others, mainly younger and with higher education, consciously rejected what they perceived as discrimination against women (Banwell, 1991). Findings from the study on Māori women are reviewed in the next section of this chapter.

Gray and Norton (1998) interviewed small groups of New Zealand women as background for a study of women with alcohol problems. They included one group of Māori women, but did not present the data from that group. Their analysis of the reasons women gave for drinking alcohol identified five themes. The first was that women saw alcohol as an integral part of New Zealand social behaviour, a theme that Gray and Norton summarised as “If you don’t drink, you get left out” (1998, p.13). Related to this was a theme of alcohol consumption as “learned behaviour”. Women also identified alcohol as a relaxant, and as a way to signal to others that “it’s my time”. The fourth theme was that alcohol was an agent of transformation; young women in particular saw alcohol as giving them confidence and allowing them to “pretend to be someone else” (1998, p. 7). Lastly, alcohol was a way of managing stress, helping women to escape the pressures of their lives, such as poverty, and the stigma of “being on a benefit” (Gray & Norton, 1998, pp. 7-8). Women who drank to “get wasted” did so because of stress, and research participants believed that stress came from a lack of family/whānau support.

In the same year, Wyllie and Casswell (1989) carried out the most detailed analysis of New Zealand women’s drinking patterns, based on information from a national survey. While they were not able to separate out data on Māori women, the analysis is still of interest. Wyllie and Casswell identified five clusters or groups of women drinkers, with some clusters accounting for much more of the total alcohol consumed than others. Thirty percent of women were “light drinkers”, drinking mainly at home and on special occasions, and another 18% were light drinkers who said they felt socially pressured to drink more. About half of the total amount of alcohol was consumed by a group called “frequent at-home drinkers” (around 30% of the population), mainly older, married women who drank wine and spirits, generally with meals. Young women fell into two main groups. The larger group comprised women under 25, who were about 12% of the sample population but drank almost a third of the alcohol. Around half of these women were single, from lower SES groups, and were mainly beer drinkers. There was also a small distinct group (2%) of “very young” women who drank

mainly in pubs and clubs, consuming primarily mixed spirits as well as some wine and beer (Wyllie & Casswell, pp. 15-18).

As mentioned earlier, the last two decades have been marked by a trend for New Zealand women to drink more and differently. McPherson et al. (2004) and the Ministry of Health (2007a) found increases in alcohol consumption, not just in teens but in all women up to 39 years. In 2004, 78.4% of all New Zealand women had drunk alcohol in the last twelve months (Ministry of Health, 2007a)². As well as increased alcohol consumption (McPherson et al., 2004) and more positive attitudes to intoxication (McMillen, Kalafatelis, & de Bonnaire, 2004), New Zealand women are facing more alcohol-related problems. In 2001, the number of women admitted to hospital with severe alcohol poisoning surpassed men for the first time, and has continued to climb, notably among 15 to 24-year-olds (Savage & Coursey, 2007).

The scale and speed of changes in New Zealand women's alcohol consumption has been one reason for the development of concern about alcohol and pregnancy both among researchers, and in public discourse. This trend is a significant contextual issue for my study.

2.4 Summary

Alcohol is the world's most widely used mind-altering drug. Its use in any society is influenced by a range of factors specific to a particular cultural group, including gender, class, ethnic and social organisation. Alcohol is a key part of rituals, and is used for bonding and for defining groups. Across diverse societies, women drink less alcohol and drink less often than men, and their alcohol consumption is subject to gender-specific rules defined by their particular cultural group.

² For comparison purposes, in the United States around 55% of women are current drinkers, and over 40% have never consumed any alcohol (Centres for Disease Control, 2006).

New Zealand women share in these patterns, and also share with women in many developed countries a changing trend towards drinking more alcohol, more often. This trend may be linked to changes in New Zealand's women's status and roles. In the next chapter, I look specifically at Māori women and alcohol in the context of gender, culture and alcohol, and in the broader context of Māori health.

Chapter 3

Alcohol and pregnancy

in the context of Māori health

3.1 Introduction

This chapter gives a background picture of the contexts in which Māori women in the 21st century use alcohol, and the potential issue of alcohol-exposed pregnancy.

I start by summarising the historical and social context of Māori alcohol use, then discuss in more detail Māori women's drinking patterns, and what is known about the influences on those patterns.

The next section briefly describes fetal alcohol spectrum disorder (FASD) and other potential effects of alcohol consumed by pregnant women, including the impacts; risk factors; and current knowledge about FASD prevalence in Aotearoa New Zealand¹.

The last section of the chapter outlines current knowledge about Māori women's alcohol consumption during pregnancy.

3.2 Alcohol as part of Māori society

Often traditional cultural values and practices have been subsumed by a culture of drinking that not only replaces tribal heritage but undermines

¹ The text in the section on FASD draws in part on material I have published in other forms, including an evidence review written for the New Zealand Drug Foundation.

the values that communities have long held dear. Although a global phenomenon among fourth world nations, the scenario is well-known in New Zealand. (Durie, 2002, p. 6)

The relationship between Māori and alcohol has been described as characterised by diversity and ambivalence (Durie, 1998a, 2001; Mancall & Robertson, 1999). Māori society was one of the few that did not independently discover or use the processes of fermentation and distillation (Hutt, 1999), and as a result had no cultural systems to regulate the use of alcohol before colonisation. For this reason, the introduction of alcohol to Māori is integrally related to colonisation (Hutt, 1999).

Diverse responses and ambivalence about alcohol's value can be seen in reactions to its introduction into Aotearoa New Zealand. Alcohol was introduced initially into the Bay of Islands and other Northern coastal communities, and by 1840 had become common enough in Taitokerau to be mentioned by rangatira in discussions before the signing of the Treaty of Waitangi (Hutt, 1999). Hutt (1999) and Cullen (1984) have found a mixture of resistance (such as that shown in the reo Māori term for alcohol, "waipiro" or "stinking water") and moderation in use, with no real evidence of early adoption of binge drinking. Historical documents from this time do not mention Māori women drinking alcohol at all at this stage. However, since the accounts on which they draw were written by Pākehā men it is hard to know whether Māori women were not drinking alcohol, or whether women's drinking was unseen or ignored by recorders (Hutt, 1999).

Contemporary writers caution against the simplistic presentation of Māori relationships with alcohol in older accounts which portray Māori as passive victims of alcohol. Instead, Durie describes a complex dynamic "reflecting adaptation to new lifestyles, opportunities for trade, new regulatory roles for tribal leaders and frankly discriminatory laws purporting to protect Māori interests" (Durie, 1998a, p. 53). Both Durie (1998a) and Mancall and Robertson (1999) argue that legislation giving colonisers sole control of alcohol distribution limited

the ability of hapū and iwi to develop their own strategies to manage the social impact of alcohol.

By the 1850s, alcohol had become a tool of colonisation, with Māori landowners encouraged to run up bills at hotels, and their land taken to settle debts (Cullen, 1984). The growth of the Kingitanga (Māori King movement), Māori religious movements such as that of Te Whiti o Rongomai and Tohu Kakahi at Parihaka, and stands against land sales, were linked to resistance to alcohol and attempts to control its use (Lange, 1999; Park, 1985).

From around 1860, accounts start to mention Māori women consuming alcohol. Some Pākehā described Māori women as drinking spirits, which as noted earlier was very rare among non-Māori women, and may have marked Māori as not “good women” (Banwell, 1998; Park, 1985). Anderson (as cited in Park, 1985, p. 52) found in 1840-1870 court records that “Drunken women were regarded as more reprehensible than men [and] Māori women were treated more severely than Pākehā women”.

Alcohol use by Māori seems to have increased significantly after the Land Wars (from 1860 to around 1872), when large areas of Māori land were seized by the colonial government as punishment for “rebellion” (Cullen, 1984). Many Māori turned to alcohol as a response to dispossession, economic hardship, disease, and the loss of social and cultural supporting structures (Cullen, 1984). Banwell (1991, p. 175) says that “Under Pākehā control, alcohol was instrumental in alienating many Māori from their land, their culture and their health”. This link was recognised even by Pākehā, with the New Zealand Herald commenting in 1877 on the King Country aukati (alcohol ban) that “Only the Kingites, who are not gradually selling land and drinking the proceeds, are not rapidly decreasing in numbers” (Hutt, 1999, p. 92). Iwi and hapū responded in different ways: some argued for a complete ban on alcohol, while others sought the right to sell alcohol in their own territories, wanting to have the same economic and social rights as Pākehā (Durie, 1998a). Despite overriding legislation, iwi, hapū and marae continued efforts to enforce their own controls over alcohol, such as the aukati

within the limits of the King Country, the codes at Parihaka which included forbidding drunkenness (Hutt, 1999; Lange, 1999), or Māori councils making informal bylaws (Durie, 1998a).

By the early 20th century, the government perceived a problem with Māori women drinking. In the 1910 Licensing Amendment Act “All North Island Māori women (except those married to Europeans) were barred from licensed premises and could not drink alcohol except on doctors’ orders” (Park, 1995, p. 205). Māori men were only allowed to drink alcohol on licensed premises (and often were allowed only in certain bars by hoteliers). While the legal ban was lifted in 1948, informal bans remained for many years (Cullen, 1984).

Early 20th century accounts by Māori doctors such as Te Rangihiroa (Peter Buck) described alcohol as a major social problem (Dow, 1999; Hutt, 1999). Some Māori linked this to closer contact between Māori and Pākehā, as Māori were increasingly employed in jobs such as forestry and freezing works, a trend that increased with Māori urbanisation (Durie, 2001; Hutt, 1999). Urbanisation from the 1940s onwards also brought Māori women into cities, giving them both independent income and access to alcohol (Hutt, 1999), as well as detaching them from traditional support structures.

In the early 21st century, ambivalence and diversity remain. Durie (2001) cites as examples bans on alcohol at many marae, and high rates of abstinence from alcohol in Māori compared to non-Māori, at the same time noting that Māori have high rates of alcohol-related problems, including alcohol-related illness and death (Connor, Broad, Jackson, Vander Hoorn, & Rehm, 2005).

In the most recent statistics 72% of Māori women and 76.7% of Māori men had consumed alcohol in the last 12 months² (Ministry of Health, 2007a). Almost a quarter of Māori do not drink alcohol. However, this group is mainly made up of older Māori, and it appears to be decreasing (Bramley, Broad, Harris, Reid, &

² This compares to 79.3% for non-Māori women and 83.3% for non-Māori men (Ministry of Health, 2007a)

Jackson, 2003; Ministry of Health, 2007a). Alcohol use by Māori aged 14-18 years has increased, and these young people say they drink with the aim of getting drunk (Kalafatelis, 2000). Bramley et al. (2003) combined data from several studies to compare Māori and non-Māori patterns of alcohol consumption. This analysis showed that while Māori and non-Māori drank similar total volumes of alcohol, there was a distinctive overall pattern of Māori drinking. Both Māori women and men drank less frequently than their non-Māori counterparts, but on each drinking occasion Māori drank 40% more alcohol on average than non-Māori (Bramley et al., 2003). Commenting on this study, Kypri (2003, n.p.) concluded that while the research confirmed drinking styles, the underlying factors have not been researched:

We know little about the likely reasons for the differences in drinking patterns described by Bramley et al. We know less still about what policies and interventions benefit Māori.

3.3 Māori women's relationship to alcohol

To set the context for a study of what may affect Māori women's alcohol use when pregnant, it is important to know about Māori women's alcohol consumption in general. Not only do women's decisions about drinking during pregnancy exist in the context of their alcohol use before and after pregnancy, but pre-pregnancy drinking is highly predictive of drinking habits in pregnancy (May et al., 2006).

There is relatively little information, either quantitative or qualitative, about Māori women and alcohol. Much of the published research focuses on problematic drinking (e.g. Ministry of Social Development, 2008) and other studies have not had enough power to identify variations within the Māori female population, or have not analysed data by gender and ethnicity. However, from the data available it is possible to identify some key points.

First, until very recently a characteristic of Māori women has been the relatively high proportion that did not drink alcohol. This has been shown in a range of studies over time including the *Rapuaora* Māori women's health study (Murchie, 1984), Te Ao Waipiro (Dacey, 1997), and the 2004 national alcohol use survey which found that 28% of Māori women had not drunk any alcohol in the previous 12 months (Ministry of Health, 2007).

Secondly, of the 72% of Māori women who do drink alcohol (Ministry of Health, 2007a) more than a quarter drink in ways that health experts describe as “potentially hazardous” (Ministry of Social Development, 2008, p. 33). Around 40% of Māori said they drank alcohol less than once less once week, but when they did drink, nearly half of all Māori women said they drank “large amounts of alcohol”³ on a typical drinking occasion (Ministry of Health, 2007a, p. 19). Similarly, 10.3% of Māori women drank enough to feel drunk at least once a week (Ministry of Health, 2007a, p. 25). These patterns were consistent with Bramley et al's (2003) analysis discussed earlier. However, commenting on Bramley et al's findings, Kypri (2003) noted reservations that need to be recognised. The Māori population is disproportionately young, with 69% of Māori aged under 35 years (Kypri, 2003) and as previously shown, young drinkers seem to be drinking a high proportion of the total amount of alcohol consumed (Wyllie & Casswell, 1998).

Thirdly, there is some evidence that Māori women have significant rates of alcohol use disorders (a term which includes alcohol dependence). In the 2004 New Zealand mental health survey) over 21% of the Māori women surveyed met criteria for having had a substance use disorder, although the survey was not able to separate alcohol-related disorders from those related to other drugs (Baxter, Kingi, Tapsell, & Durie, 2006).

The few qualitative studies on the contexts or meanings of Māori women's alcohol use add some depth and colour to this picture.

³ A “large amount” for women was defined as more than four standard drinks per occasion, in accordance with World Health Organization standards (Ministry of Health, 2007a).

In 1984, Debbie Kūpenga interviewed Māori individuals and groups in Otago, Auckland. She asked about the interviewees' own drinking and their views on the drinking of those around them. The study included 46 women, most aged between 15-25 years. Kūpenga did not report separately on Māori women's and men's interviews, but did note where there were gender differences. Most of those interviewed said alcohol use was common in their whānau. Women in this study said they did not drink alcohol with meals, and it did not form part of hospitality to visitors. Often women did not keep alcohol in their homes, but bought it on particular occasions with the expectation that it would be completely consumed on that occasion. Participants said that whether they were drinking at home, or in public venues such as sports clubs, drinking was done with groups of whānau or friends. Some people described meeting at pubs or clubs to drink as "just like being home on the marae" (Kūpenga, 1984, p. 53).

The consensus of Kūpenga's research participants was that "there was a time and place for getting drunk," and that the main reason for drinking alcohol was to get drunk. A key theme was escape: "More than half of the individual informants said that Māoris used drink for a temporary escape from hardships and oppression and to help them face the next day" (Kūpenga, 1984, p. 50). They linked this with Māori experience of social deprivation, a typical comment being that "For Māoris, if you're not rich enough to join a club, to develop other talents or hobbies or your potential like people do ordinarily then you have no choice but to use booze as a means of escape" (Kūpenga, p. 51). Many women in this study also saw alcohol as having political dimensions, linking it to land loss, and describing it as a tool of colonisation or a way of "keeping Māori down".

As part of the *Place of alcohol in the lives of New Zealand women* project discussed in Chapter 2, a 1988 report studied alcohol in the lives of Māori women. The research involved interviews with groups including rural and urban women, younger and older women, and a group of Māori lesbians. The interviews covered drinking patterns and preferred types of alcohol, reasons for drinking, and the social contexts of alcohol use. There was a particular emphasis on alcohol's relationship to tikanga Māori, and Durie's (1998b) Whare Tapa Whā

model was used as an organising framework for the findings. The drinking patterns found were summarised narratively as:

Women like us drink in public bars frequently (in the company of men and women). We also drink frequently in sports clubrooms, at weekends and when sport is being played. We drink at birthdays when the occasion arises, and at parties at home which are mainly at the weekend. (“Te hunga wāhine”, p. 42)

Many themes identified from the interviews were common to other studies, such as alcohol being seen as normative among Māori; alcohol as an agent of social interaction; and stress as a key driver for alcohol consumption among Māori women. This study found linkages between location and stress-related alcohol use, particularly for women living in isolated rural areas, who often had transport problems, and large whānau crowded into small homes. However, women also felt there were “differences between drinking patterns in a city and those ‘back home’, which were more leisurely and involved a higher expectancy for community social participation” (“Te hunga wāhine”, p. 54).

In this study, a significant proportion of older women drank very little alcohol or none at all. The researchers concluded that “The older the women, the stronger the spirituality and the abstinence from alcohol” (“Te hunga wāhine”, p. 54). Older women interviewed talked about experiencing “a lot of changes ... in women’s drinking over the last 20 years. More women drink openly. More women drink in Hotels. The social lady-like graces have almost disappeared. The equality of the sexes is now being recognised” (“Te hunga wāhine”, p. 45).

In their conclusions, the report’s authors expressed their concern for younger Māori women and their consumption of alcohol, in the wider context of healthy young Māori women who begin their childbearing early, with an increased potential for “at risk pregnancy” (“Te hunga wāhine”, p. 56). The research team recommended that priority be given to “education campaigns and further research

to be developed by Māori people” on the effects of alcohol on “pregnant Māori women and the newborn” (“Te hunga wāhine”, pp. 56-57).

These two studies from the 1980s should be considered in the context of the information on Māori women’s alcohol use presented earlier in this section, which shows significant changes in Māori women’s patterns of alcohol use.

Only two recent qualitative studies on Māori women and alcohol have been found. The first was by Lorraine Brooking, who interviewed young Māori women (aged 16-25 years) for an ALAC studentship (1996), and a thesis (1999). Brooking compared young women in an urban area (Wellington) with a rural community. The young women described alcohol use as an “essentially” Māori activity. They also asserted a distinctive Māori pattern of drinking, where Māori are occasional drinkers but “go hard” when they do drink, and group drinking is the expected norm. The young women described learning their attitudes to alcohol – for example, the moral importance attached to drinking – from whānau. Brooking concluded that “there is wide and usually complete agreement between members of such families on what can be called “ground rules of drinking” (1999, p. 19). Rural women in Brooking’s study started drinking alcohol at a younger age than the urban women. The rural women described accessing alcohol from their homes, while the urban group started drinking alcohol with their peers, at parties.

The young women in Brooking’s study did not think they had experienced peer pressure to drink alcohol. Their analysis was that they drank alcohol as a community bonding activity, and the rural rangatahi wāhine described alcohol as one of the few recreational activities available where they lived. The women saw themselves as social drinkers, with Brooking saying that “Māori wāhine seek a comfort zone when drinking” (Brooking, 1999, p. 22). Other differences Brooking found were that rural women’s alcohol consumption was more influenced by the behaviour of whānau and friends, while young urban women were influenced by exposure to alcohol marketing. For young rural women, the association between alcohol and a sports culture was particularly strong.

The women interviewed were under 25 years of age, and said that they expected their alcohol use to change over time as they took on new responsibilities. Brooking (1999, p. 41) summarised this as: “Older wāhine participants feel it is time to grow up and make something of themselves”. Brooking attributed such changes to “self-identification”, which she described as “the establishment of self-belief and independence” that gave young women “freedom to decide the direction of their lives” (Brooking, 1999, p. 75), and meant they were less influenced by external messages about drinking.

Finally, Maria Taiwhati studied three young Māori women’s expectations of disinhibition from alcohol (1999). She interviewed the women before and after the Christmas holidays, comparing the effects they had expected alcohol would have on them with what they perceived had actually happened. From detailed interviews, Taiwhati identified discourses about alcohol. The women associated drinking alcohol with positive outcomes, in particular “acceptability”. Alcohol enabled the women to project a positive image, acting “as a catalyst in appearing colourful, loveable and attractive” (Taiwhati, 1999, p. 18). The women also believed that drinking “breaks down tension and allows people to speak freely” (Taiwhati, 1999, p. 13). Alcohol also acted as a comfort and companion, helping the women to push things away. Taiwhati believed that contradictory discourses were operating: the women saw themselves as moderate drinkers, while at the same time saying that they drank alcohol specifically for its disinhibitory effects. She concluded that the women’s positive “discourse of self remains in tension with another discourse which disavows responsibility for any lack of control or overindulgence in alcohol” (Taiwhati, 1999, p. 20).

3.4 Effects of alcohol on the fetus

Of all the substances of abuse, including heroin, cocaine, and marijuana, alcohol produces by far the most serious neurobehavioral effects in the fetus. [Institute of Medicine report to the United States Congress] (Stratton, Howe, & Battaglia, 1996, p. 34)

Since the late 1960s it has been recognised that alcohol drunk by a pregnant woman can have damaging effects on the fetus (Golden, 2005; Jones & Smith, 1973). Alcohol crosses the placenta, so that whatever the mother consumes is taken in by the fetus, and fetal blood alcohol levels will be similar to the mother's (Briggs, Freeman, & Yaffe, 2005; Ministry of Health, 2007c). Alcohol has significant teratogenic (cell mutating) effects (Streissguth, 1997); while they are particularly damaging in the early stages of pregnancy, alcohol-related damage may occur at any stage during pregnancy (Maier & West, 2001; Olney, 2004).

3.4.1 Effects and costs of FASD

Fetal alcohol spectrum disorder (FASD) describes the *range* of effects of prenatal alcohol exposure, from fetal alcohol syndrome (FAS) at the most severe end to low-level disabilities and behavioural problems that are often not attributed to fetal alcohol exposure (Chudley et al., 2005). Fetal alcohol syndrome (FAS) is the diagnostic label for a cluster of developmental delays, usually accompanied by distinctive facial features (Stratton et al., 1996; Streissguth, 1997).

FASD is a lifelong disability and cannot be outgrown (Streissguth, 1997). Children with FAS have physical problems including heart and kidney defects, leading to high childhood mortality, and may have moderate to severe intellectual disability (Burd, Cotsonas-Hassler, Martsolf, & Kerbeshian, 2003; Streissguth, 1997). Children with FAS and FASD can have learning difficulties, as well as learning and behavioural problems such as hyperactivity and impulsivity (Coles, 2001) and often struggle with education (Green, 2007). Many have difficulty living independently, and have problems finding and keeping employment (Streissguth, 1997). People with FASD are over-represented in the criminal justice system (Ramsey, 2006; Streissguth et al., 1991). They have high rates of alcohol and other drug problems, mental health problems and suicide (Baer, Sampson, Barr, Connor, & Streissguth, 2003; Miller & Spear, 2006). Two New Zealand studies of the lived experience of FAS and FASD (Salmon, 2006; Symes, 2004) found that New Zealanders with FASD had multiple physical, mental and behavioural problems. FASD carries substantial financial costs to the person with

FASD and their family, as well as to educational, health, and social services. The most recent study estimated that each person with FASD cost about \$1 million Canadian over their lifetime, or \$14,342 Canadian each year (Stade, Ungar, Stevens, Beyene, & Koren, 2006), which would equal around NZ\$20,000 each year.

3.4.2 Link between alcohol consumption and FASD

While it was once thought that FASD only affected children of “alcoholic” women (Abel & Hannigan, 1995) alcohol-related damage is now known to be related to high maternal peak blood alcohol concentration. Heavy sporadic drinking (binge drinking) is a prime risk factor for FASD (Maier & West, 2001; Parackal, 2003). Alcohol-dependent women are at greater risk of having children with FASD than women who binge drink regularly, as they have high blood alcohol concentration much more often; while regular binge drinkers have higher risks than women who binge drink but only rarely (Maier & West, 2001; Symes, 2004). Timing of alcohol use is also critical to the amount and type of fetal damage. The facial features associated with FAS result from binge drinking around 21-28 days after conception (Maier & West, 2001). Many women are unaware that they are pregnant until a month after conception, so women who have unplanned pregnancies are at particular risk of having a child with FAS (Floyd, Decoufle, & Hungerford, 1999; Naimi, Lipscomb, Brewer, & Gilbert, 2003).

There is continuing debate about how much alcohol is needed to cause FASD, whether there is any “safe level” of drinking during pregnancy, and whether there is any stage of pregnancy after which no impairment occurs (Jacobsen & Jacobsen, 1994a ; Nathanson, Jayasinghe, & Roycroft, 2007; O’Brien, 2007). It now seems that while low exposure to alcohol has few if any effects on growth and physical health, it can lead to reduced visual and spatial skills, memory, academic performance, hyperactivity and other behavioural problems (Goldschmidt, Richardson, Cornelius, & Day, 2004; Jacobsen & Jacobsen, 1994a, 1994b ; Olney, 2004).

The continuing debate about the safety of alcohol use in pregnancy has contributed to conflicts inside and between organisations that influence health policy and messages. As a result, pregnant women, their whānau/families and their communities, are being given unclear and conflicting information through the media and general public discourse (Black, 2001; O’Leary, Heuzenroeder, Elliott, & Bower, 2007).

As well as FASD, alcohol has other reproductive effects. Drinking more than three drinks a week increases the risk of miscarriage in the first trimester, and can also affect fertility and conception (Emanuele, Wezeman, & Emanuele (2002; Kesmodel, Wisborg, Olsen, Henriksen, & Secher, 2000b). Alcohol contributes to low birthweight, and has been linked to premature birth, stillbirth, and early fetal death (Kesmodel, Wisborg, Olsen, Henriksen, & Secher, 2002a; Okah, Cai, & Hoff, 2005).

3.4 3 Interacting risk factors

Alcohol consumption is essential for FASD and other alcohol-related fetal damage, but it is almost certainly not enough by itself. For example, many women drink regularly or at high levels when pregnant, but have children with no detectable effects (Stratton et al., 1996). Interacting factors may act at different levels: contributing independently to the risk of FASD; contributing to drinking alcohol at risk levels when pregnant, or to other risk behaviours; or contributing both directly and indirectly (Abel & Hannigan, 1996; Project Choices, 2002).

The longest-established contributing factor for FASD is socio-economic status (SES) and social deprivation, although they may also be proxies for factors such as poor nutrition and stress (Abel, 1995; May et al., 2004; Poole, 2003). Stress may be a connected or independent factor, as women whose partners are violent or have alcohol problems also have a high risk of having a child with FASD (Flynn & Chermack, 2008; May & Gossage, 2001). “Race” is not an independent risk factor, but individual or population genetic susceptibility may explain some

differences in FASD risk between women with similar alcohol use (Ebrahim, Diekman, Floyd, & Decoufle, 1999; Chambers & Jones, 2002). Having FASD is a risk factor for having one's own children with FASD (Miller & Spear, 2006; Rouleau, Levichek, & Koren, 2003).

Mothers over the age of 30 are 2-5 times more likely to have children with alcohol-related impairment than women under 30 (Jacobson, Jacobson, & Sokol, 1996). Parity is a strong risk factor, and the risk of having a child with FASD increases with each birth (May et al., 2004). This may be linked to the fact that aging can increase the speed with which a woman's body metabolises alcohol, as individual differences in alcohol metabolism are considered highly likely to contribute to risk variation (Maier & West, 2001).

Drinking in pregnancy is linked to poor dietary habits (Watson & McDonald, 1999), and alcohol reduces the uptake of nutrients, particularly vitamins and minerals (Parackal, 2003). Women with low body mass index (BMI) have "lower thresholds of drinking for producing FAS symptoms than larger women" (May et al., 2004, p. 17). Other drugs, particularly tobacco, interact with alcohol, and women who drink most alcohol when pregnant also have a high likelihood of smoking or using illicit drugs (Ebrahim et al., 1998; Johnson, Vicary, Heist, & Corneal, 2001).

However, it must be noted that many mothers of children with FASD have few or none of these interacting factors (May et al., 2006; Project Choices, 2002).

3.4.4 Prevalence of FASD

Estimates on the prevalence of FASD vary widely. In developed countries, the prevalence of FAS ranges between 0.5 and 2.0 cases per 1000 live births, and FASD from 3 per 1000 to 9 per 1000 live births (May & Gossage, 2001; Sampson et al., 1997). However, a recent study in Italy, considered a low-risk country, estimated FAS prevalence to be in the range of 3.7-7.4 cases per 1000 children, and FASD at between 20.3-40.5 cases per 1000 children (May et al., 2006).

At present, there is no data on FASD prevalence in New Zealand, let alone on prevalence in the Māori population. There are three reasons for this: New Zealand has no FASD register, it has never carried out any systematic FASD surveillance, and few New Zealand clinicians are trained to diagnose FASD (Rogan, 2007).

New Zealand diagnosticians, and advocates for families with FASD-affected children, are certain that the numbers in New Zealand are significant; however, since Leversha and Marks (1995b), there has been no national survey of numbers of diagnosed FASD cases. They have also noted that many health providers seem reluctant to diagnose FASD or to refer a child for diagnosis (Leversha & Marks, 1995b; Rogan, 2007). This experience is consistent with research from other countries, where health professionals cite concerns about stigmatisation and fear of parents' reactions as reasons for not acting on suspicions of FASD (Elliott, Payne, Haan, & Bower, 2006; Russell, 2005; Streissguth, 1997).

In 1993, Alison Leversha and Rosemary Marks carried out a limited New Zealand prevalence study of all New Zealand specialist pediatricians. The postal study returned 112 responses. The study found 130 children under 10 years of age with recognised alcohol-related birth defects, including 63 cases of FAS, and an additional 78 other possible cases. The survey did not ask about ethnicity. Comparing their results to overseas prevalence data, Leversha and Marks estimated that New Zealand cases of "alcohol-related birth defects" (an earlier term for FASD) might range from 200 to 3540 per year, and predicted that anywhere from 20-114 babies, could be born with FAS each year (Leversha & Marks, 1995).

In 2001, the Ministry of Health estimated that "two or three babies per 1000 live births have foetal alcohol syndrome and four or five per 1000 have partial effects" (Black, 2001), although the Ministry did not say on what basis the estimate was made. In 2007 advice to pregnant women, the Ministry of Health (2007c) has taken a precautionary approach to the possibility that New Zealand has more than the small number of diagnosed FASD cases, advising women to avoid alcohol

during pregnancy. The Ministry of Health and ALAC have commissioned research on women's knowledge about alcohol risk and their intent to stop or reduce alcohol use when pregnant (Ministry of Health, 2007a; Parackal et al., 2006).

3.5 Māori women's alcohol consumption during pregnancy

No study has yet been done on Māori women's alcohol consumption when planning pregnancy or around the time of conception. However, the data presented earlier in this chapter shows that around three-quarters of all Māori women drink alcohol, nearly 18% of those consume more than four standard drinks at least once a week, and those most likely to binge drink are aged between 18-34 (Ministry of Health, 2007a).

There is little information on Māori women's drinking patterns during pregnancy, but this section summarises studies that have made some contribution to the knowledge base.

The first nationwide study on alcohol consumption during pregnancy was carried out in 1994. It involved personal interviews with women around six weeks after giving birth, and included a significant sample of Māori women (512 of the total 4265). The research found that 46% of the Māori women drank alcohol at least occasionally⁷ during pregnancy (Counsell, Smale & Geddis, 1994, p. 280). Of the women who drank alcohol when pregnant, 67.7% drank less than once a week, and 19% drank more than once a week. This project helped alert both health professionals and the public to the risk of alcohol-exposed pregnancy in New Zealand. Unfortunately its value was limited by the fact in 1994 the importance of intensity of drinking (binge drinking) was only becoming recognised, so the study asked only about frequency of drinking (Parackal, 2003). As a result, it did not present an accurate profile of "at risk" women in New Zealand.

The most detailed New Zealand research on alcohol consumption in pregnancy was done in 1999 as part of a study of nutrition during pregnancy. Of the sample of 322 women, 102 were Māori. Before pregnancy, 79% of the Māori women usually drank alcohol, most of them drinking between once a week and once or twice a month; with 6.3% saying they were daily drinkers (Watson & McDonald, 1999, p.109). The researchers calculated the percentages of women drinking alcohol “to intoxicating levels”⁴ and found that 64% of the Māori women who drank alcohol followed this pattern. The researchers noted that this binge drinking was often done in long drinking sessions, with little or no food being eaten.

Only 23% of the Māori women drank any alcohol once their pregnancy was recognised (Watson & McDonald, 1999, p. 114). However, of the Māori women who did continue to drink, 44% drank to intoxicating levels, although the researchers cautioned that this group was very small (ten women) (Watson & McDonald, p. 110). Both before and during pregnancy, Māori women tended to drink more beer and spirits than wine. The researchers found beer and spirit drinking strongly associated with drinking to intoxication.

Watson and McDonald’s study linked alcohol use to socio-economic status and employment status, although with low sample sizes in most subgroups it did not carry out analysis by ethnicity. There were qualitative differences between women in employment and those on government benefits. Before pregnancy, women living on benefits had much higher alcohol intake than women in paid work. When they became pregnant, these women drank alcohol much less often, but did not drink less alcohol on each drinking occasion.

In 2002, McLeod, Pullon, Cookson, and Cornford surveyed a group of Wellington women on their alcohol use at 20-24 weeks into pregnancy, and 6-10 weeks after giving birth. Of the 66 Māori women in the survey, 19.7% said at the

⁴ This study defined “intoxicating level” as more than six standard drinks, or around 45g of alcohol – an amount also likely to give a blood alcohol level (BAC) of over 80mg/100ml, the current New Zealand limit for driving.

20-24 week stage that they had not used any alcohol in the last seven weeks; 6-10 weeks after giving birth, 46.8% said they had drunk some alcohol in the previous seven days (McLeod, Pullon, Cookson, & Cornford, 2002, n.p.). The researchers concluded that increased alcohol use after giving birth implied that women had reduced their consumption during the pregnancy.

The 2004 Ministry of Health “Health Behaviours Survey” included two questions on alcohol use for women aged 16-39 years who said they were pregnant or planning a pregnancy at the time of their survey interview. Of the Māori women who were pregnant when interviewed, 82.4% said they had stopped drinking alcohol, and 79.2% of those planning a pregnancy at the time of the study said they had stopped drinking alcohol (Ministry of Health, 2007a, p. 52).

A nationwide phone survey was carried out in 2006. Of the 1249 participants, 16.1% were Māori women. Unfortunately, the research report did not provide results as numbers or proportions, only as odds ratios comparing different population and age groups. For example, the report says that “Women aged 16-24 years and women who were “European”, “Māori” or “Pacific” ethnicity had higher odds of drinking prior to realising pregnancy” than other ethnic groups (“Asian” and “other”) (Parackal, S., Parackal, M., Ferguson, & Harraway, p. 28) but gives no detail to put these findings in context. This study also asked women about their knowledge of the effects of alcohol on the fetus, but reports only that Māori women were found to be “highly knowledgeable” (giving correct answers to at least six of seven questions on the effects of alcohol on the fetus) at about the same odds as “European” women (Parackal et al., 2006, pp. 21-23).

3.6 Related Māori women's health factors

Around 25% of all births in New Zealand are Māori, linked both to relatively high fertility rates (Ministry of Social Development, 2008) and the fact that the Māori population has a younger age structure than non-Māori (Kypri, 2003). I have not

been able to find any research on Māori women's rates of unplanned pregnancies, but Dickson, Wilson, Herbison & Paul (2002) found that around 60% of pregnancies to all New Zealand women under 25 were "unintended".

A number of studies have looked at the interaction of women's alcohol use with other drug use, particularly tobacco. While smoking among Māori women has declined in recent years, in 2006 50.6% of Māori women were smokers, with smoking being highest among the 20-39 age group (Ministry of Health, 2007d). Māori women have high rates of drug use, particularly cannabis, and 21.8% of Māori women have had a substance use disorder at some time in their life (Baxter, Kingi, Tapsell, & Durie, 2006; Ministry of Health, 2007c).

Māori women as a whole have significantly poorer economic, health and social outcomes than other New Zealanders (Ministry of Women's Affairs, 2008; Robson, 2008). For example, many Māori women also suffer from poor nutrition, both in general and during pregnancy (Ministry of Health, 2007c; Watson & McDonald, 1999). They also have high rates of experiencing violence in their lives (Ministry of Women's Affairs, 2008).

The possibility that racial/ethnic discrimination may affect Māori health and contribute to FASD risk (through stress mechanisms, or by leading to alcohol use as a way to relieve stress) has not been directly studied. However, Harris et al. (2006) reviewed data on discrimination and health from the 2002/3 New Zealand Health Survey and reported Māori to have the highest rates of discrimination (34%) of any ethnic population group. Experience of discrimination was associated with poorer health, including poor mental health (Harris et al., 2006). There is some evidence from overseas studies of links between discrimination and stress operating through, for example, immune responses (Harrell, Hall, & Taliaferro, 2003).

Māori also have a number of positive health factors which must be recognised. As discussed earlier in this chapter, around 20% of Māori women do not drink any alcohol (Ministry of Health, 2007a). The majority of Māori women stop using alcohol when pregnancy is recognised (Macleod et al., 2002; Ministry of Health,

2007a). Māori women also start and finish childbearing at relatively young ages (Ministry of Women's Affairs, 2008).

3.7 Summary

Māori attitudes to alcohol have developed in the context of colonisation and Māori responses to colonisation, and have been described as “ambivalent”. In contemporary New Zealand, Māori women share with Māori men a distinctive “binge drinking” pattern of drinking alcohol sporadically, but drinking large amounts of alcohol in one drinking occasion. For Māori women alcohol plays a number of roles including social bonding, and reducing stress.

Alcohol use exists in the context of potential impacts, including FASD and other alcohol-related conditions. FASD is strongly related to heavy or binge drinking, and contributing factors such as low socio-economic status, nutrition, and use of other drugs, may interact to increase that risk. There is currently no data available on the prevalence of FASD in New Zealand.

The limited data on Māori women's alcohol use in pregnancy indicates that the majority of Māori women intended to reduce or stop alcohol use when they became pregnant. In the absence of prevalence studies or large-scale social research, my qualitative study aimed to increase understanding on the meanings that might lie behind some of the information presented in this chapter. How this study was developed using a grounded theory approach is discussed in the following chapter.

Chapter 4

Research design

4.1 Introduction

Choosing and understanding an appropriate research design is essential to achieving the aims of the research. This chapter explains why and how grounded theory, a distinctive qualitative research methodology, was used in this study.

I start by presenting criteria for selecting a research methodology, and the elements of this study that influenced the choice. I define and discuss qualitative research, especially the aspects relevant to this research. This is followed by a summary of the development of grounded theory, its guiding theoretical framework and characteristics. I explain why grounded theory met the needs of this particular research study.

The second section presents the design of this research project. It explains how I developed the initial research questions, sampling frame and research processes. It then describes how I collected and analysed the data from the interviews, through coding, developing categories, and generating a core category. It also explains how aspects of the research were modified as the study developed, and how the literature review process developed alongside data collection.

4.2 Selecting a research methodology

Methodology can be defined as a “research strategy informed by an epistemological stance,” and *method* as connoting the practical techniques of research (McKinlay, Plumridge, & Daley, 1999, p. 38). Rice and Ezzy (2000, p. 10) suggest that the

choice of methodology and appropriate research methods can be guided by three questions:

- What is the substantive issue being addressed?
- What are the desired outcomes of the research?
- What is the theoretical framework of the research and the researcher?

Applying that framework to this project, the substantial issue of this research was the problem of alcohol-exposed pregnancy for Māori women, conceptualised within a broad context based on women's meanings and understandings rather than as a "lifestyle" or "personal responsibility" problem. The immediate outcome of the research was to understand Māori women's perspectives on influences on alcohol and pregnancy. The theoretical framework which I brought to this research was discussed in Chapter 1. As Rice and Ezzy note, "the general theoretical framework used fundamentally shapes the sorts of things that the research focuses on, and therefore, fundamentally shapes the methods and techniques required for the research" (Rice & Ezzy, 2000, p. 11). They add that "When qualitative research is conducted *without* [my emphasis] a reference to theoretical frameworks, the researcher effectively takes for granted a particular framework without acknowledging it" (Rice & Ezzy, 2000, p. 11).

The appropriate research methodology for this project needed to have processes for gathering, analysing and presenting data that accorded with my theoretical framework. Not only did I want to understand how the research participants perceived influences on alcohol use in pregnancy, I also wanted to present their views and experiences in a "rich" and respectful way. The choice was also influenced by the fact that the research was in an area about which very little was known, and that no relevant models could be found in New Zealand or elsewhere. An approach also needed to allow for openness and flexibility, rather than pre-determining the questions to be asked or the framework into which the data gathered would be organised. All these factors supported the choice of a qualitative research design.

4.3 Qualitative research

Qualitative research is a field of inquiry in its own right, as well as a form of inquiry that cuts across disciplines and subject matter (Denzin & Lincoln, 2000, p. 1). Creswell (2007) notes that defining “qualitative research” has become increasingly more complex and challenging. He cites as a useful definition that offered by Denzin and Lincoln in the most recent edition of their *Handbook of Qualitative Research* (2005, p. 3):

Qualitative research is a situated activity that locates the observer in the world. It consists of a set of interpretive, material practices that make the world visible. These practices transform the world. They turn the world into a series of representations, including fieldnotes, interviews, conversations, photographs, recordings, and memos to the self. At this level, qualitative research involves an interpretive, naturalistic approach to the world. This means that qualitative researchers study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them.

This definition, while long, reflects many of the elements of this study. Creswell (2007) notes that Denzin and Lincoln’s new definition differs from many others in its orientation towards the role qualitative research can play in “transforming the world.” It also differs from definitions in previous editions of the *Handbook* (e.g. Denzin & Lincoln, 2000, p. 2) in its opening assertion that qualitative research is a “situated activity”, in which the observer cannot detach themselves completely from the research. This definition also describes qualitative research in its own right, rather than by contrast with quantitative research as has been common in the past (Pope & Mays, 1995).

Other definitions of qualitative research refer more to its epistemological and ontological bases, in particular the belief that human behaviour is so complex that much of life (such the meanings that people ascribe to experiences) cannot be captured in a quantitative way (Davidson & Tolich, 2003; Ulin, Robinson, &

Tolley, 2005). It is also presented as an appropriate way to explore “phenomena or event[s] about which little is known (Appleton, 1995, p. 993) and to capture complex systems or patterns (Pope & Mays, 1995).

Qualitative research approaches have become increasingly diverse, developing into “traditions” or “schools.” Traditions such as interpretivism, critical social science and post-modernism differ in their epistemological views (for instance, what can really be known, and how that knowledge can be represented), their guiding values, and the relationship of the researcher to the researched (Creswell, 2007; Denzin & Lincoln, 2000).

Some aspects of qualitative research relevant to this study are discussed in more detail.

Naturalistic research design

As noted in Denzin and Lincoln’s definition, qualitative research is primarily naturalistic, that is “... actually talking directly to people and seeing them behave and act within their context” (Creswell, 2007, p. 37). According to Lincoln and Guba, naturalistic research designs are based on a set of axioms, including that reality is complex, constructed and ultimately subjective; the research act is an interactive process, in which the researcher is ultimately inseparable from the subject of the inquiry; and that truth is best achieved by initiating the encounter with subjects of inquiry in their natural environments without prior theorising (Lincoln & Guba, 1985, pp. 36-38).

Focus on meanings and constructions

While qualitative school or traditions differ in how they view particular meanings and constructions, they share the assumption that human beings constantly “create meaning and ... make sense of their worlds”, rather than being “self-interested and rational individuals who are shaped by external forces” (Davidson & Tolich, 2003, p. 27). Meanings and constructions can belong to an individual, or be shared by group of people. Ezzy (2002) points out that this focus on

meanings is not as esoteric as sometimes perceived, since people construct and use interpretive frameworks every day.

Emergent design

Qualitative researchers aim to be responsive to the environment researched and prepared to change the research questions, sample population, research sites or data collection methods as necessary (Patton, 2002; Ulin, Robinson, & Tolley, 2005). Flexible researchers constantly monitor the research process through field notes, analytic memos, research group discussions or supervision (Charmaz, 2006; Creswell, 2007).

Inductive analysis

Qualitative research is inductive, moving from observation to hypothesis (Pope & Mays, 1995). Questions are generally open, producing extensive data sets (Patton, 2002), and inductive analysis aims to build patterns from the data by organising it into categories or abstractions (Creswell, 2007). This kind of analysis does not lend itself to replication, although it can be guided by detailed directions set by the particular methodological tradition – grounded theory being an obvious example (Morse, 2001; Neale et al., 2005).

Interpretive inquiry

Qualitative research recognises that the researcher cannot be separated from the research, as their theoretical framework, whether conscious or not, will influence every stage of the research. The result is that “There are no objective observations, only observations socially situated in the worlds of the observer and the observed” (Denzin & Lincoln, 2000, p. 12), and the research relationship is interactive (Guba & Lincoln, 1994). Qualitative analysis is described as “explicitly interpretive, creative and personal” (Neale et al., 2005, p. 1585). Creswell (2007) notes that readers also take part in that interpretation.

Particularly in critical approaches such as feminist or kaupapa Māori research, researchers are encouraged or required to develop self-awareness, and to make their values, beliefs and worldview transparent. Reflection is expected to continue

throughout the research (Kuper, Lingard, & Levinson, 2008). Qualitative research places demands not only on the researcher's intellect but also on their social skills (for instance, in developing rapport with interviewees) and on their emotions (Opie, 1999; Patton, 2002).

Holistic approach

Qualitative researchers search for explanations that cover the entire phenomenon or range of phenomena being studied rather than isolating variables, and that capture complex systems in a way that is “more than the sum of its parts” (Patton, 2002, p. 41). Qualitative approaches are often described as rejecting reductionist explanations for human behaviour (Neale et al, 2005). They are also holistic in that they consider values and beliefs (whether supported by “the facts” or not) as valid forms of data, along with documents, observations and other forms (Patton, 2002).

Validation

Qualitative research establishes its “validity” in different ways. While each tradition or school has its own criteria, common criteria include auditability (keeping notes and research records showing the processes and stages of the research); applicability or generalisability of the findings, and respondent validation (Appleton, 1995; Chiovitti & Piran, 2003).

Transformative aim

While not all qualitative research aims to change conditions or situations, as Creswell notes at the beginning of this chapter it has increasingly become an aim of qualitative researchers. Studies in the critical theory tradition are most likely to aim at transformation (Guba & Lincoln, 1994). Patton (2002, p. 131) describes critical theory as providing a framework for “approaching research and evaluation as fundamentally and explicitly political, and as change-oriented forms of engagement”. Whether aiming at social transformation or not, many researchers want to see their findings used in some way (Charmaz, 2005).

4.4 Researching as a Māori

The Hongoeka declaration of Māori researchers asserted that “Māori reserve the right to use any approach to health research which will benefit our people (“Hongoeka Declaration”, 1996, p. 7).

When I had a small part in the group that drafted that text, I did not fully appreciate how much value that statement would have. My recollection is that much of the discussion that led up to that statement being included was about whether statistical analysis could be said to be part of a truly “Māori” research methodology. From a 2009 perspective, I see the Hongoeka Declaration’s assertion as an expression of what Sir Apirana Ngata directed in his famous whakatauki: “Ko tō ringa ki ngā rākau a te Pākehā, hei ara mō tō tinana” (translated as “Put your hands to the tools of the Pākehā, to provide physical sustenance”). Just as weavers have adopted new and foreign materials in making korowai without taking any mana from their skill, Māori researchers can adopt and adapt methods which they believe will help produce research outcomes that will benefit Māori. In a study at this level, I have not been concerned with exploring competing theories of Māori research. Instead I take on board Ngata’s injunctions to take up Pākehā tools for the benefit of Māori. I follow Wilson (2004) and others in using grounded theory, within a broader context of qualitative research, as an appropriate Māori research tool.

At the same time, as a Māori qualitative researcher I follow a reflective research process which includes “keeping the heart centred on the treasures of Māori ancestors as a plume for the head” (“Ko tō ngākau ki ngā tāonga a ō tipuna Māori, hei tikitiki mō tō māhuna”). An experienced Māori researcher, Te Ahukaramū Charles Royal, (1996, p. 4.) describes the importance of the reflective approach in qualitative research with Māori:

So my advice to the new researcher in Te Ao Mārama is to be prepared for a journey that is much more abstract, subjective and personal than

other kinds of research: a journey whose success will be dependent upon the state of your heart as much as your intellectual capabilities.

My theoretical positioning as a researcher has been set out in Chapter 1 and in the opening of this chapter, conveying some of the subjective and personal bases of this project. Later in this chapter I describe some of the ways that my research processes were supported in a Māori context. In the final chapter I reflect on the journey that Royal describes, its impact on my research skills as well as some of the “subjective and personal” aspects.

4.5 Grounded theory: development and applications

Grounded theory takes its name from its aim to develop usable theories about social phenomena that are grounded in the research data, and derived or “discovered” through intensive and systematic analysis (Glaser & Strauss, 1967).

4.5.1 Symbolic interactionism

Grounded theory has its base in the philosophical tradition of “symbolic interactionism”. Blumer (1969, p. 2), defined symbolic interactionism as based on three premises: first, that “human beings act toward things based on the meanings that those things have for them”, whether those things are material objects, people or institutions”; second, that “the meaning of such things is derived, or arises out of, from the social interaction that one has with one’s fellows”; and third, that “these meanings are handled in, and modified through, an interpretive process used the person dealing with the things he [sic] encounters.” Meaning arises out of interaction, which is reflected in grounded theory’s focus on the search for the *basic social process* (Glaser & Strauss, 1967). Charmaz (2006, p. 7) says that “symbolic interactionism assumes that people can and do think about their actions rather than respond mechanically to stimuli”, and Chenitz and Swanson (1986) emphasise that in symbolic interactionist theory the meaning of an event must be understood from the perspectives of the *participants*.

4.5.2 *The development of grounded theory*

Sociologists Glaser and Strauss developed grounded theory while studying the interaction between hospital staff and dying patients. They asserted the value of understanding how individuals understand or interpret their world, and searched for ways to explain both variation and commonality *inside* a social system, comparison of how one person's interpretations might be similar or different to others in their group (Charmaz, 2006). Glaser and Strauss also rejected reductive approaches to research and argued for a humanistic approach in which emotional experience was valued (Glaser & Strauss, 1967).

Grounded theory was seen as a departure from other qualitative approaches in that:

- the conceptual framework is generated directly from the data rather than from other studies
- the researcher is looking to discover/uncover one or more key processes, not just to describe the phenomenon or phenomena
- every piece of data is compared with every other piece
- data collection is modified in the light of the developing theory
- data collection is modified as theory develops. (Strauss, 1990, p. 5)

Grounded theory was intended to move beyond descriptive studies to theories that explained observed processes, that could be tested and that could provide a basis for action and/or for further work (Charmaz, 2006). It also rejected “grand social theories” in favour of theories about social behaviour that were “more reflective of practical situations” (Corbin & Holt, 2005, p. 49).

Shortly after publishing *The Discovery of Grounded Theory* (1967), Glaser and Strauss' approaches diverged (Boychuk Duchscher & Morgan, 2004; Heath & Cowley, 2004). Strauss focused on the analytical processes and verification aspects of grounded theory (e.g. Strauss & Corbin, 1990), while Glaser focused on his belief

that categories should always emerge naturally from the data, rather than being, in his words, “forced” (Glaser, 1992). Grounded theory has been critiqued, both from within and from without. Charmaz (2006, p. 133) notes a common critique that it is too prescriptive, and produces empirical generalisations that are abstracted from time and place. Dey (1999) challenges the concept of “saturation”, and Gilmour (2001) notes the critique that subsuming all views into a single category can be seen as privileging the dominant discourse and marginalising minority perspectives. Other researchers have moved grounded theory into different areas, for example using it in explicitly feminist ways (Keddy, Sims, & Noerager Stern, 1996; Wuest, Merritt-Gray, Berman, & Ford-Gilboe, 2002). Charmaz’s development of “constructivist” grounded theory (2000, 2005, 2006) is described in more detail later.

4.6 Grounded theory research

According to Charmaz (2005, p. 507) “Grounded theory refers both to a method of inquiry and a product of inquiry,” and Strauss (1987) has described it as a *style* rather than a methodology. The key elements of the grounded theory style are outlined here. It is important to note that these are not discrete stages, with researchers expected to collect and analyse data simultaneously in an iterative, cyclical process (Charmaz, 2006).

4.6.1 *Developing research questions*

Dey (1999) says that grounded theory researchers must set aside theoretical ideas so that a theory can emerge. However, researchers are not expected to be uninformed or naïve, and may begin with a research interest and a set of general concepts which provide a loose frame for initial questioning, and serve as points of departure, out of which the sampling frame emerges (Charmaz, 2005). Corbin and Holt (2005) note that useful questions in grounded theory do not contain variables, instead allowing significant variables to emerge during the research.

4.6.2 Theoretical sampling

Grounded theory sampling is *purposeful* (Glaser & Strauss, 1967), and the sample is identified by asking “which people, groups, or other sources (such as documents) can provide the information needed to answer the research questions?” (Strauss, 1987, pp. 38-39). Dey (1999, p. 6) says that grounded theory sampling should be driven by “comparison in terms of the *concepts being investigated* “. To explore the questions, researchers may start with one data-gathering method and revise it as they continue; or start by interviewing people in one group, then see the need to compare data from them with another group (Charmaz, 2006).

4.6.3 Data collection

As noted above, data collection, data analysis, and theory development are cyclical; Keddy et al. (1996, p. 450) calls them “circular and fluid.” As with other qualitative methods, *data* can include interview data, observational data, and documents (Corbin & Holt, 2005). According to Dey (1999), data collection often starts in an unfocused way, but should become more focused and structured. Ideally, sampling continues until data gathering produces no new information on the categories; this is the point of *saturation*. However, in practice the sample may be limited by subject availability, so this point may also be reached when the researcher decides that new information is not important or does not relate to the categories (Charmaz, 2006).

4.6.4 Coding

Grounded theory emphasises intensive reading of the interview data (interview texts, observations or other forms) searching for *patterns* in segments of data (Kirby & McKenna, 1989). These are then given labels or codes that describe what each segment is about; the researcher is constantly asking “what is happening here?” (Glaser, 1992, p. 51). In grounded theory, codes and categories must be constructed directly from data, “not from preconceived logically deduced

hypotheses” (Eaves, 2001, p. 655). Charmaz (2006, p. 3) describes codes as “conceptual units that can be used in the development of theory”.

4.6.5 Constant comparative analysis

Constant comparison, comparing every piece of data with every other piece, is the central method of grounded theory (Strauss & Corbin, 1990). Comparative analysis looks for both similarities and dissimilarities, and is done within interviews or other texts; between texts; between codes; and between categories as they emerge. The aim of constant comparative analysis is to identify the *processes* underlying the behaviours described in initial codes (Charmaz, 2006).

4.6.6 Memo-writing

Analytical memos (recording thoughts and discussions) supplement coding. “Memoing” is a critical element of grounded theory (Boychuk Duchscher & Morgan, 2004). In a team, it allows for explicit discussion of underlying issues; for a single researcher (as in this study) it provides an opportunity to clarify categories, analyse their characteristics, and reflect on relationships. Charmaz (2006) urges new researchers to use memos as creative tools. Glaser recommends sorting memos so that they shape the outline of the written product (Glaser, 1992), and this text often forms part of the final analysis (Charmaz, 2006).

4.6.7 Generating a grounded theory

Categories emerge from clusters of codes that relate or fit; Hood (in Charmaz, 2006, p. 98) calls them “developing a grounded concept.” Charmaz advises researchers developing categories to look at actions and processes as well as words; to look for the *conditions* under which processes emerge; to focus on “words and phrases to which participants seem to attribute particular meaning” (Charmaz, 2006, p. 20); and to look for “taken-for-granted and hidden assumptions of various participants, showing how they are revealed through and affect actions” (Charmaz, 2006, p. 20). Researchers compare categories, and

analyse them according to different methods. Strauss and Corbin (1990) provide a detailed process for analysing categories according to their “dimensions”, “properties,” or “conditions”. Glaser (1978) rejects this approach as rigid and proposes theoretical coding, described as “refitting and refinement of categories which integrate around the emerging core” (Heath & Cowley, 2004, p. 146). The emerging theory is constantly modified by comparing new “incidents” (pieces of data) to existing ones (Charmaz, 2006; Corbin & Holt, 2005). The *core integrating category* emerges as one that addresses the central question of the research, is central to other categories, relates to as many other categories as possible, and does so in “an easy and significant way” (Starrin, Dahlgren, Larsson, & Styrborn, 1997, p. 44).

The final theory is the label – such as Glaser and Strauss’ theory of the process of dying as one of “status passage” – that accounts for the behaviours described. It is also called the *basic social process*, as it organizes social action over time in a fundamental way (Charmaz, 2006; Starrin et al, 1997). There are different ways of testing the final theory, including parsimony; fit; usefulness; predictive value; and modifiability (Starrin et al, 1997). Glaser (1978) also advises the researcher to look for “grab” – the relevance of the theory to research participants and to the group to whom the theory applies. Theories can be presented in different ways, including graphically (Charmaz, 2006; Corbin & Holt, 2005).

4.6.8 Literature reviews in grounded theory development

Grounded theory departs from some other forms of qualitative research in which the research design is only finalised after a detailed review of existing literature. By contrast, Glaser (1992) warns students that grounded theory can be “derailed” by taking on board others’ preconceived views, or other models. Instead, literature in grounded theory helps show “gaps or bias in existing knowledge, thus providing a rationale for this type of qualitative study” Creswell (2007, p. 190).

4.7 Applying grounded theory in this research project

Grounded theory was appropriate for this study for a number of reasons. First, it is based in a commitment to understanding the perspectives of the people concerned. Grounded theory had a strong fit with my cultural and ethical values as a researcher. Denise Wilson in her dissertation on Māori women's health and wellbeing describes grounded theory as meeting her criteria for:

A process that (a) respects the cultural values, beliefs and practices of Māori women; (b) acknowledges that the worldviews of Māori women may differ from the worldviews that inform “mainstream” methodologies, and thus influences the way in which the data is analysed; and (c) acknowledges the historical and contemporary influences on, and experiences of Māori with research, and the potential impact that this research may have. (Wilson, 2004, p. 60)

Grounded theory also met my other criteria. It has been shown to be effective in exploring areas about which little is known: its research processes are designed to help researchers avoid their preconceptions (Kearney, Murphy, & Rosenbaum, 1994), and “offer a set of general principles and heuristic devices rather than formulaic rules” (Charmaz, 2006, p. 2). Grounded theory aims to develop frameworks that explain variations in behaviour (Charmaz, 2005, 2006), which as discussed in Chapter 1 was one of the drivers of this research project. A grounded theory is intended to have explanatory power, and to predict what may happen when conditions change (Starrin et al., 1997), so has the potential for practical application to social problems.

While I read most of the key texts on grounded theory, I found Glaser's guidance on constant comparison and theory generation (1978, 1992) more helpful than Strauss and Corbin's (1990) more prescriptive analytical approach. Heath and Cowley (2004), and Boychuk Duchscher and Morgan (2004) were useful in clarifying the differences between these two approaches to grounded theory.

My approach to using grounded theory has largely been guided by that of Kathy Charmaz (2000, 2005, 2006). Charmaz distinguishes her own approach from other writers by explicitly rejecting what she sees as a movement in grounded theory towards a positivist approach in which grounded theory is treated as a science, characterised by as focus on verification (Charmaz, 2005). Charmaz argues that the implication of this is that there is an objective truth to be found: for example, she critiques Glaser for treating data “as something separate from the researcher ... untouched by the competent researcher’s interpretations” (Charmaz, 2005, p. 510). Charmaz’s approach to grounded theory is a form of *constructivism*, which she defines (2006, p. 187) as:

A social science perspective that addresses how realities are made. This perspective assumes that people, including researchers, construct the realities in which they participate. Constructivist inquiry starts with the experience and asks how members construct it. Constructivists acknowledge that their interpretation of the studied phenomenon is itself a construction.

Constructivist grounded theory “adopts grounded theory guidelines as tools but does not subscribe to the objectivist, positivist assumptions in its earlier formulations” (Charmaz, 2005, p. 509). The emphasis is on the phenomenon being studied rather than the methods of studying it, and Creswell describes Charmaz’s grounded theory as:

... squarely within the interpretive approach to qualitative research with flexible guidelines, a focus on theory developed that depends on the researcher’s view, learning about the experience within embedded, hidden networks, situations and relationships ... Charmaz places more emphasis on the views, values, beliefs, feelings, assumptions and ideologies of individuals than on the methods of research, although she does describe the practices of gathering rich data, coding the data, memoing, and theoretical saturation. (Creswell, 2007, p. 65.)

Mills, Bonner, & Francis (2006, n.p.), add that “With an emphasis on keeping the researcher close to the participants through keeping their words intact in the process of analysis, Charmaz has striven to maintain the participants’ presence throughout.” Charmaz’s analysis is informed by her focus on social justice, and her analysis of issues of power and control in social groups (Charmaz, 2005).

At a practical level, Charmaz (2006) provides clear guidance on many aspects of using grounded theory. She draws research techniques from Glaser and to a lesser extent from Strauss and Corbin, and notes that in *Discovery of Grounded Theory*, Glaser and Strauss invited readers to use grounded theory flexibly and in their own ways (2006). Charmaz’s combination of a socially engaged and well articulated perspective, and a clear and flexible approach to method, fitted the framework I brought to the research and provided positive guidance for the novice grounded theory researcher. At stages of the research when I found Charmaz lacking in detail, I used techniques from other writers on grounded theory.

4.8 Research design

4.8.1 Research questions

Given the lack of information about the research topic, it was hard to develop questions that would produce good information without making assumptions or leading the interviewee. I used pilot interviews to test possible questions, as well as to find out whether interviews could produce substantial data. The interviews showed that undirected interviews structured around very broad questions could produce rich and relevant data. As a result, the initial research questions were “broad and general, so that the participants can construct the meaning of a situation, a meaning typically forged in discussions or interactions with other persons” (Creswell, 2007, p. 21). As the research developed, questions became more focused to collect data relevant to the developing categories.

4.8.2 Ethical issues and tikanga Māori

Ethical approval for the study was received from the Massey University Human Ethics Committee (Palmerston North). The research topic was identified as sensitive: as well as the usual issues of confidentiality, anonymity and data security, there was the possibility that during or after the interview, a participant's reflections might bring back painful experiences that could cause emotional or spiritual distress. I developed protocols to manage this risk, as well to as to provide support to myself as the researcher. I acknowledge the contribution of my late mother, Ephra Garrett, who as a kuia was a member of Massey University ethics committees for many years, to this process. She provided helpful advice on possibilities for support for Māori women as participants, and how that information could be given to the women.

Although I was experienced in some aspects of tikanga Māori, I did not see myself as having significant expertise. Similarly, my competence in te reo Māori was limited. I was fortunate to get advice and support from kaumātua in my whānau. I also consulted with Māori with expertise on research and on Māori women's health. I also received advice from Massey University's Centre for Māori Health Research and Development in developing my research and ethical protocol, as well from kaumātua and other members of the Te Atiawa iwi (my own iwi, as well as the iwi kāinga for the area in which much of the research was done), and the Wellington Tenth's Trust, as well as members of Te Awakairangi Hauora (the Māori partnership board for the Hutt Valley District Health Board). The chair of the Wellington Tenth's Trust provided a letter of support for the research.

Over the course of the interviews, I received advice on tikanga from my kaumātua as needed, such as before interviewing kuia. In analysing the data, I discussed ideas arising from the coding with kaumātua and with younger women in my whānau (which could perhaps be seen as an oral form of analytical memoing), and their understanding of tikanga contributed to my analysis.

4.8.3 Sampling and the research participants

Participation criteria were that women identify as Māori, be over 18 years of age (for ethical reasons), and not be pregnant at the time of the interview. The university's ethics committee required "whānau" to be excluded; in practice, it was not always easy to determine how far that boundary might extend. An implicit criterion was interest in the research topic, which proved to be how potential participants selected themselves.

Glaser and Strauss note that different groups help generate categories by highlighting both differences and similarities (1967). Before starting data collection it was hard to see what kinds of variability might be significant: for instance, how differently women with or without children might see the questions; or whether age, education, religious belief or location (e.g. city vs. rural) might elicit different categories. Initial sampling aimed to establish some boundaries by indicating variance or similarity between categories, but was developed over the study.

The whakatauki "He māramatanga anō tō tēnā whetū" (Each star has its own radiance) came to mind when rereading the interview texts. Each of the women brought their own combination of life experience, knowledge, reflection and generosity to the interviews. I returned to this thought when looking for pseudonyms to identify each of the women in the study, so that the final names are those of Māori stars with female identities (Best, 1922; Leather & Hall, 2004). A list of the names and some explanation forms Appendix D. The women who participated ranged in age from around twenty to over seventy years. Most lived in the Wellington area, but many had come to this rohe from a variety of locations, iwi and hapū around Aotearoa New Zealand. All but one were themselves mothers, which may have influenced their interest in the research topic: some had younger children, some had teenagers and others were grandmothers.

The initial sample used “networking”, a form of snowball sampling (Kuper, Lingard, & Levinson, 2008). I asked people who had shown interest in the study and/or had strong networks among Māori women, if they knew of women who might be interested in being interviewed. Those people made initial contact with potential participants, and gave me contact details if the potential participants were interested. Women interviewed were asked about (and often actively suggested) further possibilities, extending the network. Further into the study, sampling followed theoretical sampling guidelines (Charmaz, 2006) as detailed later in this chapter.

Following my research protocol, the first conversation was informal so that the potential participant could get to know me as a person (for instance, establishing our whakapapa links), as well as my opportunity to explain the research and discuss the information sheet and consent forms. It was important ethically for me that women could read over the information and decide in their own time whether to take part, without feeling any pressure or obligation from the researcher’s presence.

4.8.4 Interviewing

In developing my interview approach, I drew on previous interviewing experience, and also reviewed sources such as Charmaz (2006) and Opie (1999). Almost all interviews took place at the participant’s home, and generally were preceded by tea and other hospitality (I brought food as an initial koha). This also provided another opportunity for women to have questions answered before they signed the consent forms. In fact, many interviews took place at the kitchen table. My approach was as described by Charmaz (2006), using the in-depth interview to explore rather than to interrogate. I tried to limit my participation in interviews to questioning, reflective listening, and reflective or clarification statements. However, I wanted to avoid the style of interviewing in which disclosure is entirely one-sided; not only does this create a power imbalance between researcher and research participant, but it has never seemed to me to be appropriate in a Māori context. As well as sharing information about my

background and about the research, I tried to respond fully and openly to questions asked.

In the first set of interviews, following an initial question to introduce the topic, the interviews were largely unstructured. There were three reasons for this: to see how the research participants interpreted the question, and how they conceptualised the issues; to avoid forcing the participants into categories determined (consciously or unconsciously) by the interviewer; and because it gave women taking part the power to determine how much personal information they shared and at what point. In practice, some of the women went straight to their own experience, while others started by considering the questions at a broad or abstract level. The women shared some very personal information, and I sometimes felt overwhelmed by the degree of trust they were placing in me. Some women commented positively that they found the interview had given them an opportunity to reflect on their experience or think about the issue as it might relate to their future action (for instance, supporting whānau members through pregnancy).

The interviews flowed freely, taking from 45 minutes to over 2½ hours, and were taped. A small koha was given after the interview. The women were offered the opportunity to review the tape transcript if they wanted, and to have the tape returned to them after the research was finished. I also committed myself to giving each participant a summary of the finished research, or a full copy of the thesis if they wanted it. Interview tapes were transcribed by professional transcribers who signed a confidentiality form for each transcription. Following each interview, I made notes on what in my interview approach had been successful or not. I also listened to tapes and reviewed the transcripts, both to ensure accuracy and fill gaps (such as te reo Māori words), and to review my interviewing. All identifying information (names, places, etc.) was removed from the transcript, but transcripts were still kept in storage during the research, and tapes were kept in separate secure storage.

4.8.5 Limitations and exclusions

Women who knew they were pregnant were excluded from the research. This decision had to be defended in some arenas. However, as stated in my ethics application, “the research is not intended to put women in a place of stress”, and I felt strongly that pregnant women were already subject to so much advice about what they should or should not do, eat, or drink, that to ask them to consider such a sensitive topic was likely to add guilt or stress to their load. While the sample size was not limited by time, time constraints in the later stages of analysis excluded the possibility of returning to the research participants to get their perspective on the emerging theory.

As my skills in te reo Māori are limited, interviews were conducted in English, although on some occasions participants who were fluent or native speakers slipped naturally into te reo Māori where English did not offer the right words for what they were trying to describe.

4.9 Data analysis

4.9.1 Coding

The first coding stage was “open coding”. At this stage I was trying to be completely open to what I was reading in the text while recognising that “researchers hold prior ideas and skills” (Charmaz, 2006, p. 46). Transcripts (generally 20+ pages in length) were read in full and coded, primarily following the guidance of Charmaz (2006) which includes doing initial coding quickly to keep spontaneity, keeping codes short, and “staying close to the material” Charmaz (2006, p. 49). I also used *in vivo* codes (the exact words of the participants) where appropriate. In vivo labels were often “insider shorthand terms” (Charmaz, 2006, p. 55) that had meaning to my research participants. In vivo codes can also capture participants’ fresh perspectives, and I found that using

a participant's term as a code served to remind me of how fresh or transformative a concept had been when first identified.

The second stage was comparative analysis of coded excerpts to identify patterns of similarity or difference within and between the texts, which also led to recoding. Charmaz (2006) says that comparing excerpts at this focused coding stage helps the researcher look for tacit assumptions, and draw out meanings that are implicit in the text. Coded excerpts were collected in excerpt files which allowed quick reference for comparison, and brought differences/similarities out. I also maintained a list of concepts for which I had been unable to find the "right" codes or which did not seem to fit, many of which I explored in analytical memos. Data collection took place over almost three years as most of that time I was combining study and full-time work, so most transcripts were read repeatedly over time to see what new codes might emerge, and for comparison with new concepts. This process also revealed relevant text that had been missed with the limited analytical view available at the beginning of the research.

The first three interviews set the basis for the specific points I tried to cover in the next interviews. They were helpful for identifying variation, as they were from three very diverse women: a middle-aged woman with teenage children, with strong iwi connections, now managing a professional city business; a younger woman from a more Pākehā background but who had consciously re-entered her Māori heritage; and a kuia from a very "traditional" pā upbringing, with strong background in community work in her own rohe, but also experience in national organisations. Each woman brought not only different experiences, but also different perspectives on the research, and those perspectives helped shape my approach to the interviews.

4.9.2 Revising questions and theoretical sampling

Reviewing the first set of interviews, I could see that questions needed to be better focused, so in the next set of interviews I focused more closely on what women believed influenced drinking alcohol *during pregnancy*.

At this point I also moved to *theoretical sampling*, which “directs you where to go” (Charmaz, 2006, p. 100). To explore emerging concepts such as “changing drinking patterns over time,” I specifically searched for some much younger women, to see if very different concepts would emerge. It should be noted that theoretical sampling does not sample research participants but events “that give greater understanding and definition to the evolving concepts” (Corbin & Holt, 2005, p. 50). New codes did emerge, although many fewer than in the first interviews. I also found more appropriate codes, and was able to review and improve the coding on earlier texts. Following the second set of interviews, the codes were refined to produce a long list (Table 1).

My whānau /compared to others	Gender expectations
“What is normal for us – it just is”	Men’s behaviour influences
Changing drinking patterns over time	“Strength of the woman”
Settings – home vs. pubs/clubs	Beliefs about pregnancy/birth
Drinking vs. “not drinking”	“Rarking it up”
Reasons to drink – stressful events	Losing control
Drinking as a connective opportunity	Drinking more with men around
Privileging wine “Just wine with dinner”	Having experience of others’ (problem) drinking
Drinking and being Māori	Looking good/”sexy to drink”
Asking for and getting advice	Pregnancy as change point
Negotiating/maintaining choice	Work culture
Modelling	Isolation/unconnected
Managing deprivation	“Pushing things away”
Sporting culture	Doing what women are expected to do
Listening to my body	Waiting for someone to tell her to stop
Getting health information	Leaving home, “stepping out”
Freedom/defiance	

Table 1: First list of codes

4.9.3 Analytic memos

Memos were a very helpful part of the process, justifying Charmaz's description of them as a "crucial method" in grounded theory (2006, p. 72). In the early stages, some memos were jotted notes quickly recording ideas that had emerged from a transcript reading, while others recorded themes in the transcripts, especially where it was hard to find the words for coding. Memos also arose from reading and discussions with people interested in the research topic, and acted as reminders to consider these concepts in later analysis. An example was an early memo on "Stopping and continuing drinking when pregnant":

Are quitting and continuing on one continuum or not? (ref Branco article) Are the influences on one continuum? Or do they change? Do women think entirely new considerations enter?? "Got married you know, stopped going out to the pubs as much and things, started hanging out with my husband instead and he's not a real big drinker, so I think who you are with is a really big component of that". (Opiri)

The idea of "influences being on different continua" in this memo became critical in triggering analysis that led to formulating the core category. Later memos recorded more conscious analysis, especially questions and doubts about my interpretation of the data. In the first half of the study, I kept lists of memos, following Charmaz's recommendation; later I replaced separate memos with a journal which recorded field notes and analytic memos in separate sections, along with codes and categories, and which could be carried for "constant comparison".

4.10 Developing the categories

Reviewing the first list of codes, it became clear that some codes easily formed clusters: for example, codes relating to various "settings" (such as home, pubs, sports clubs, kapa haka, and workplaces) were merged, out of which the connection to the more abstract category of *fitting in where you are* emerged. At this

point, I changed my coding method to follow Charmaz's (2006) recommendation (for which she credits Glaser, 1978) to use gerunds (the -ing ending, so "description" becomes "describing") as a way to focus on the *action* involved. Turning some codes into action statements proved highly effective in bringing out underlying processes and turning vague ideas into clear concepts so that, for example, "strength of the woman" (an *in vivo* code) became the much clearer *taking control*.

In developing categories, I looked for *patterns* in actions or concepts presented, rather than detailing the behaviour (Charmaz, 2006). Unlike many other grounded theory studies, my research questions were directed at getting Māori women's ideas of what they thought the patterns were, and even the first interviews produced conceptual abstractions as well as descriptions of behaviours and beliefs (by contrast, most other grounded theory studies ask participants to describe in detail things they have personally experienced, and can produce detailed sequences of what Glaser [1992] calls "incidents"). Categorising involved looking for high-level labels for clusters of concepts. Some codes clustered easily and higher-level labels emerged clearly from them, while others remained as outliers until final analysis.

Memoing identified categories about which more needed to be known. Some emerging categories were unexpected: for example, comparing data relating to the codes *pregnancy as a change point* and *beliefs about pregnancy* showed that only one interview had actually conceptualised pregnancy as a change point. Such counter-intuitive findings gave me confidence that coding was not being driven by researcher bias and expectations, but caused me to question my interpretation of the data. Theoretical sampling allowed data to be gathered on these specific concepts, which clarified the data so it could be abstracted into final categories.

4.10.1 Revising questions and sampling

As a result of identifying data gaps, and reviewing which lines of questioning had been most fruitful, I revised the central question of my research, so it changed

from *What are the factors influencing the decisions Māori women make about consuming alcohol during pregnancy?* to *What are the processes by which Māori women negotiate/ resolve the problem of consuming alcohol during pregnancy?* Theoretical sampling was continued to look for data on pertinent categories.

4.10.2 *Developing conceptual categories and their relationships*

Changing the central question of the study led to a step up in abstraction, as being able to see a social process at work made it possible to move towards the grounded theory model of concepts being abstract of place, time or people, not linked to one “incident” or phenomenon, and having some “enduring grab” (Glaser, 2002).

The next stage was to analyse the categories, breaking down the abstract ideas, comparing them, and establishing relationships. At this point Charmaz (2006) did not provide the detailed guidance I needed (a criticism made by Creswell [2007] and Eaves [2001]), so I consulted other texts. Initially, I developed a list of “code families”, drawing on Glaser (1978) and Starrin et al. (1997), but found this formalised framework closed off my creative thinking. Finally I developed a set of questions based on concepts from Charmaz (2005, 2006) but including some elements of Glaser’s (1978) coding families such as “degree” and “consequences”:

- What processes are the women describing here?
- What properties (e.g. time, intensity, significance) does the process have in the data?
- What is being taken into account (conditions)?
- How does the process work itself out?
- What do the women think the outcomes of actions are (consequences)?

I drew on Glaser and Strauss’s (1967) process of identifying the *properties* of categories. Borgatti (n.d.) describes properties as “adjectives and adverbs” which characterise categories. In line with her generalised description of category

analysis, Charmaz (2006) pays little attention to “properties” as an analytic tool, although it is clear from the examples presented in the text that she does use them. Analysing the categories was truly “constantly comparative”, with each concept emerging from one category suggesting ideas in another, making the process much more fluid and creative than texts had indicated. To explore the relationships *between* categories, I turned to diagramming, a tool I have used for many years in research and in analysing processes. Charmaz supports diagramming and presents examples from other grounded theory studies (2006, p. 119). The first diagrams helped link categories, using while later diagrams attempted to resolve the underlying social processes. Diagramming brought out hierarchical relationships between the categories, enabled me to find “higher-level” concepts, and helped elicit the core category.

Charmaz describes saturation as the point “When gathering fresh data no longer sparks new theoretical insights, nor reveals new properties of these core theoretical categories” (2006, p. 113). Data from later interviews helped identify comparisons, extend the scope of some categories and clarify concepts that had been vague. By the tenth interview, no new relevant codes were emerging, there was enough more than data to provide detailed analysis of the categories, and no new properties emerged (Charmaz, 2006). However, while I had reached the point Charmaz describes above, it would be difficult to be confident that my study fully met criteria for *theoretical* saturation.

4.10.3 Relationship between the literature and the data

In grounded theory, the literature review does not precede data collection, but goes along with it. The main reason for this is to encourage the researcher to start data collection with as few preconceived ideas as possible (Charmaz, 2005, 2006; Glaser & Strauss, 1967). Having had an interest in the research topic for almost a decade before starting data collection, I had already read a significant proportion of the literature base on alcohol-exposed pregnancy, and Māori women’s alcohol use. However, as can be seen in Chapters 2 and 3, while previous research was helpful in setting the context for the study, and establishing a rationale for the

research, it did not present explanatory models which might have influenced the process of my own research. As final categories emerged from analysis, I searched for material that might relate to or shed light on the category, taking an “agnostic” approach as suggested by Henwood & Pidgeon (1995). Once the core category and the shape of the theory had emerged, I reviewed the literature to see what could illuminate, either positively or negatively, the developing theory. How the theory may relate to the literature base is discussed at the end of Chapter 6.

4.11 Summary

The aim of this research study was to explore Māori women’s own perspectives on the decisions Māori women make about drinking. In selecting the methodology and developing the research project, I was aware of my positioning as a Māori woman researching with Māori women, but also as a public health researcher. Grounded theory, a qualitative research style, best met my criteria.

The research design followed grounded theory process. Data was gathered through face-to-face semi-structured interviews, which followed approved ethical methods. Coded data was analysed using constant comparative analysis to produce categories, high-level concepts which were then analysed and diagrammed to establish their relationships. Over the course of the research, the interview questions and sampling changed to meet the emerging categories.

Chapter 5

Developing the theory

Ki te whakawhāiti tō titiro, ka ata mārama atu koe: If you narrow your focus, things will become clearer. (Whakatauki)

5.1 Introduction

This chapter presents the six final categories that emerged from the data, and the core category. The categories are *learning the rules*; *making role transitions*; *fitting in where you are*; *getting the messages*; *releasing the pressure*; and *carrying on as normal*.

I present each category, then explain how it emerged from the data, and describe some of the characteristics or properties of the category. The discussion is illustrated with quotations from the women who took part in the research.

5.2 Final categories

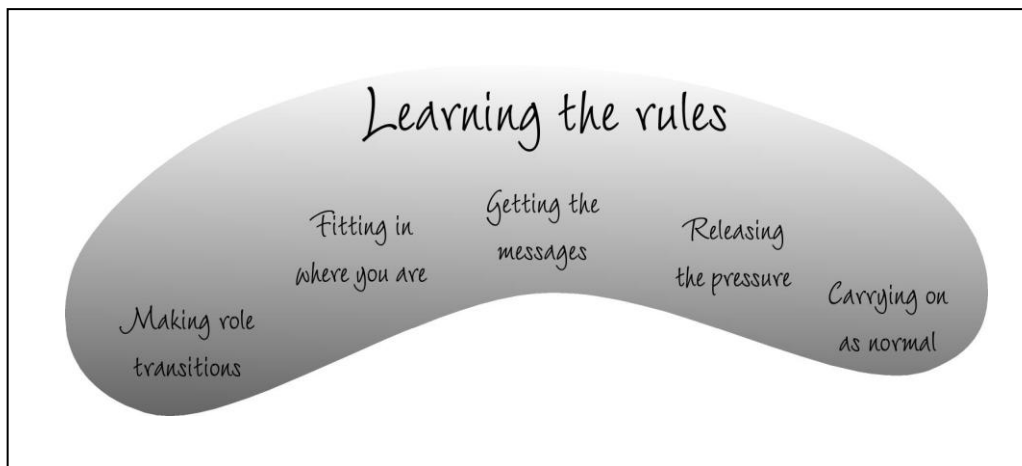


Figure 1: Final categories

The grounded theory is underpinned by a number of categories. With the exception of *learning the rules*, which underpins all other processes, the categories are not presented in a particular order because they are dynamic and interactive.

5.2.1 *Learning the rules*

The grounding category from which all other categories arose was *learning the rules*. Decisions about drinking alcohol when pregnant, and all the other categories involved in shaping those decisions, took place against a background of complex, unwritten but well understood rules. The fundamental nature of this category was reflected in the sequencing of many interviews, with women starting by talking about the rules, how they learned them and how the rules had affected their alcohol behaviour at different stages of their lives. While the rules were well understood, often in the interviews participants found themselves “discovering” or “uncovering” the rules through talking about them.

Learning the rules had sub-categories which included *modelling*, *learning to read the rules*, *learning the rules about gender*, as well as *defining drinking*. *Identity*, including Māori identity, was a property of learning the rules. The women responded to the rules by going along with them, or consciously *defying the rules* (discussed in Chapter 6).

As might be expected, the whānau was the primary setter of rules, and was often characterised using the term “normal”:

I think that you've got to do with what you've been brought up with. I think it's got to do with what's normal for you, so if it's normal for you and your family to sit there and drink all night, you sit there and drink all night. If it's not, you won't and that's about it. I think whatever's normal for you. (Te Kokota)

No, a lot of what Māori women do is based from how they've been brought up and what their family situation is and what is their normal

environment, and how they'd choose to ... and how they act within that.
(Opiri)

In my opinion Māori value family a lot more, and what their elders tell them is like their gospel I guess. I don't know, that's just my opinion, I don't know if that's accurate or not and what they see others doing is very important for them. That's how they learn a lot and the experiences in that environment. (Opiri)

The whānau set conditions about whether drinking alcohol was the norm; who was allowed to drink alcohol; what “drinking alcohol” meant; when alcohol was consumed; where it was consumed; how whānau members and others should behave when drinking; and the consequences of drinking alcohol. All these rules had value properties. Consuming alcohol was a *social* process, and was associated with *affiliation*, and *maintaining ties*.

In almost all cases the rules were not only unwritten, but were never formally articulated, so *learning to read the rules* was a key part of the process. Generally women learned to read rules from whānau *modelling*, as Te Kokota learned from her mother's actions:

... my mother didn't drink when she was pregnant with us as well ... but I only know that because I was talking once to her, we were at a party at the time, party at her sister's place just talking about when my auntie got rip roaring drunk at this party and [a sister] said do you want to go too, and she said no ... she was pregnant with [name] that's my younger sister, “I don't drink when I'm pregnant you know”, so that was that.

“Not drinking” behaviour such as this may stand out for women against a background where alcohol consumption is normative behaviour, and therefore be remembered clearly.

Comparing their whānau with others was a key way women learned the rules:

So we don't actually have parties to get drunk, we just don't do that. It's there but really it's not the focus, whereas I have seen other families where, that, you know, Christmas they go out and they buy you know, a bottle of, couple of bottles of spirits each and they're all put around the table and they will sit there, literally all day and night until it's gone, until you know, they're absolutely out of their heads and go to sleep and get up the next day and ... and I've seen that in other families, you know, that's the way they do it. (Te Kokota)

None of our [whānau] functions had alcohol involved in it ... I was never brought up around alcohol but I've seen the effects alcohol could do. (Waiti)

The concept of comparison was so clear in the data even at the beginning of analysis that my first code was “my whānau vs. others.”

While rules were generally not articulated, Whakaahu did describe a case where the consequences of behaviour were expressed through explicit teaching:

But also I was brought up, I wasn't brought up in a drinking environment. Dad never drank, very, very rarely, Mum hardly ever drank but when whānau came there was always booze and I didn't like it. And my father would always say to me, “Well you know, that's what happens when somebody gets drunk, you know, they fall in the drain or they're, you know” – ‘cos we had a drain out the front of the house and Dad was forever having to take somebody to the hospital or go pick somebody up. It was all those influences that came in as well. (Whakaahu).

In regard to the central question of this study *learning the rules about gender and alcohol* was a key sub-process. The rules for Māori women include rules set for them by their gender, as well as the rules set for them as Māori in a predominantly non-Māori society. Mainstream society's preconceptions about Māori women may

also help determine the rules. Again, in most cases rules for appropriate gender behaviour were set by modelling. Rules included *prioritising children*, and *keeping places*, such “women drinking in the kitchen.”

Women were expected to *prioritise children* at events involving drinking:

Yeah, they'd bring like a truck full, a truck full of bloody Lion Red, wow, you know and they'd set up a tent ... down the back of the [house] and Dad always made sure that it was *way* down the back of the section, the kids were in the house, you know, this is where the kids are. “You women, you come in here and feed the kids, make sure that the kids are alright, then you can get outside and drink, booze doesn't come into the house”, that was my father though. (Whakaahu)

One gender rule that Whakaahu had observed in her parent’s generation was who bought alcohol:

... and I've never seen it with aunties and that's because the men will go out and do that. They think it's their right to go and buy the booze, their right to drink and you know, okay depending on the man, it's alright for the wife to drink as well, but he could think it's not alright for the wife to drink it, it's just one of those things. (Whakaahu)

Keeping places was another common rule, one that (as noted in Chapter 2) is observed in many countries:

I kind of grew up with that message that, that you get together with your mates and you have a few drinks and the boys talk rubbish and, and sing a lot and the women are in the kitchen and cooking and drinking and looking after kids so it was kind of, it was very normal and it was happening all the time. (Puanga)

However, Māori whānau did not separate genders rigidly, compared to other societies. Whakaahu had observed different rules about alcohol, gender and culture while living for some time in Samoa.

You know, you go to a [Samoa] function, the women are always there and the men are always here, but Māori functions are very different, we're all together. It's a different thing. No, no, they all drank together. [*Was that something about Māori, that women just got in with the men?*] Yeah, and that was accepted. I mean totally, totally accepted, because if the women went somewhere else to drink the men would think there was something wrong.

One property of learning the rules was *identity*. Identifying yourself with your whānau's values had a quality that I described in an analytical memo as “tūrangawaewae”, the sense of a strong place to stand. It was often associated with pride, and could be heard in the tone of the women's talk. The women talked about their whānau in terms such as “it's what we do”, or comparatively by saying “we don't do that”.

I mean we do that, yeah we drink there but it's not, again it's not a party to have a drinking party for the sake of drinking. It's just part of that. So we don't actually have parties to get drunk, we just don't do that. It's [alcohol] there but really it's not the focus. (Te Kokota)

... even though we grew up in it, it wasn't, not every [night] and wasn't ...some people that I know they had a party every night sort of thing, well we, wasn't like that in *our* house. (Matariki)

Cultural identity was a closely linked concept to identity, but had a much greater quality of ambivalence. There was a strong awareness of “Māoriness” being related to distinctive rules and practices around alcohol, and to stereotypes about alcohol use. The women understood that being Māori was associated in mainstream New Zealand society with heavy drinking, drinking parties,

intoxication, and violence. There was ambivalence about how women responded to those stereotypes, and how much they perceived them as reflecting reality:

Culture. I guess it's how we define our culture. I guess we see New Zealand as having two cultures, a white and a brownie. Yeah, I think partly it comes down to, is it socio-economic status. Whether you're going *Once Were Warriors* style, get the beer out ... and drink from the bottle, as opposed to maybe a “white” style of opening a bottle of wine and drinking it over dinner – but that's sad if that's how it is, that's just stereotypical generalisations. (Opiri)

Matariki learned rules about alcohol in her childhood around World War II. Cultural rules around alcohol existed in the social context of Māori women being excluded from hotels, and Māori men being made unwelcome in hotels. The result was that alcohol consumption took place at home:

I go back as I say, right back to my childhood. We had drink, to me it seemed to be the ordinary thing that happened. Everybody, Māori, everybody, particularly Māori that I remember so much drank a lot. You know, and I used to think, well, that's the norm. Women drank, men drank ... I used to always wonder, why did they always have to drink? That's was the pattern you know, Wednesday pay day, Thursday, Friday, Saturday and it was drunk, there was always parties all the time, you know ... and of course we were part of that.

As well as whānau setting rules, rules were set by peer groups. Some of these elements are shared with the category *Fitting in where you are*, but there was a distinction between groups or settings that Māori women might move in or out of (such as workplaces), and groups that had a long temporal relationship, such as friends growing up together in small communities, mates from school, or friends made flatting or in training (such as nurse training).

Opiri's peer group of long-time friends had shaped her behaviour around alcohol:

We're all sort of at [the same stage], I mean even the travelling now, we've all gone through school together, we've all gone to universities and things, so perhaps being reasonably educated kids ... and so our choice has been – or our knowledge has been – not to drink. But saying that, we'll rark it up when we're having a good time and things, cause a bit of chaos.

Waiti described a common situation, learning rules from her peer group that contrasted with the whānau rules:

Before I was pregnant I was drinking every day and all the time, because that's what you did down in [her home town] especially in the crowd I ran with, which was really strange because I'd never been brought up around alcohol whatsoever.

This shared group experience over time also links to the following category, *Making role transitions*. Other places where the rules were learned included sports clubs, which were mentioned as having special importance for Māori, and by Matariki as a place for young people who lacked paternal role models to learn the rules. Tioreore also linked the sports culture to workplaces:

... and also I have been exposed to the culture of drinking, my father worked at the freezing works and he played rugby and played league for about 25 years and they had a heavy culture of drinking. (Tioreore)

School was a setting where women might *get the messages*, a category discussed later in this chapter, but was not seen as having any role in learning the rules.

5.2.1.1 *Learning the rules: defining “drinking”*

One set of unwritten rules that may be important in making decisions about “drinking alcohol when pregnant” is what is meant by “drinking.” This characteristic emerged as I reviewed transcripts and saw apparent contradictions in the texts. For example, one woman said early in the interview “My mother and

her sisters drank, but none of us do”, later saying “Not that we don't drink, we do but not like [the elders] did ...”, and later again adding:

“I mean I'm not saying we don't drink 'cos we do, and of course we get drunk and all the rest of it, but we don't actually ... we don't do it very often and when we do get drunk it's not overly drunk to the point of you don't know what you're doing, or you're paralytic ... it's more like we get tiddly and then you've had enough.”

The same concepts emerged across other interviews, with women saying things like “Dad never drank, very, very rarely,” “I don't drink” or “she never drank.” It became clear that “not drinking” was a signifier. “Not drinking” could mean drinking alcohol very rarely (for instance, a parent who only drank alcohol at Christmas); not getting drunk; or not drinking alcohol in risky ways. A good example of this was Opiri's description of her whānau's drinking pattern:

My, you know, Mum and Dad, which are my adoptive parents they, my Mum never drunk, Dad very rarely did and my birth father who I met, he's just an ordinary person, have a couple of beers sometimes ... in terms of that, I'd say non-drinkers rather than heavy drinkers if I was on a scale.
(Opiri)

Opiri's concept of a scale described well this common understanding that people do not fall into two camps, those who drink alcohol and those who ‘never’ drink alcohol. This finding may be important for the research question, and important in practice for health services. Women may give different meanings to concepts such as “giving up” alcohol during pregnancy, and therefore respond to questions about their alcohol in ways that are not deceptive or dishonest, but that reflect the definitions that they learned as part of the rules.

Banwell (1991) notes that in her study of New Zealand women and alcohol, women defined their level of alcohol consumption compared to other women – a “light drinker” is someone who drinks less alcohol than you, and a “heavy

drinker” someone who drinks more. This may also be a reflection of learned rules and definitions.

5.2.1.2 Learning the rules and drinking during pregnancy

Although it was clear from the data that *learning the rules* was perceived to shape Māori women’s alcohol consumption during pregnancy, that association was not made explicit in most of the interviews. Two examples of explicit reference formed an interesting comparison. Both were initially coded “generational change/what we did in the old days”, but reflected very different perspectives on the impacts those “old days” rules had.

I mean, there’s some things to do with alcohol and pregnancy and having babies that we’ve, that we’ve moved on from. I mean you know remember the old [days]? There was alcohol and the old um, you know Nan used to say, “Oh you know, put a nip of whiskey in your ... you know, have a nip of whiskey and then feed baby, cos’ that will calm baby down, or get rid of colic”, or you know, all of those old wives tales. All gone. You know. They’re all completely gone. You know. Or Nan would say it you know, and I think the 1968 ... Plunket Book used to [mention giving] a nip of something in it. So like a lot of that’s changed, which is good. (Whakaahu)

Tioreore described cultural identity as having very different effects on rules about alcohol and pregnancy:

But I think absolutely if you’ve got good grounding built up with the good morals and values and the principles and things like that, and I think it helps too if you’ve got kuia and kaumātua around, because they’re the ones that have got all that knowledge ... and I know that our ancestors, you go back far enough they didn’t drink, they never have drunk when they were pregnant, because they knew that having children was a tāonga, it was so precious, why would you want to damage your tāonga you know? And so I knew they would never do that.

5.2.3 Making role transitions

Making role transitions was a less central category than learning the rules, but emerged as a conceptualisation to describe a major influence on Māori women's alcohol use and behaviour as a whole, as well as on decisions about alcohol use in pregnancy. The main sub-categories of making role transitions were *stepping out*, and *going the next step*, with *becoming pregnant* a separate sub-category. The women expected these processes to be accompanied by changes to many behaviours, including alcohol use. Where the role transition was a *forced* one, the expected consequence was stress, which would *draw on resources*. *Making role transitions* linked to the category of *fitting in where you are*, but analysis showed it had some distinctive properties. The key property was *time*, but other properties were *freedom, value, readiness, naturalness* or *force*, and *tolerance*.

Stepping out transitions included leaving home, moving into education, or from education into the workforce, or making the transition from rural to urban settings. For Puanga these transitions happened together:

So ... then probably when I came to Wellington and got a job and got easy money, you know, it was like you earn lots of money and you just ... you know people make suggestions about let's go and do this, and I'd say "Yes, sweet, let's go", and it just seemed to be normal behaviour again that we would have a drink after work or we would do something on the weekend.

Going the next step transitions included forming long-term relationships or getting married; deciding to have children; moving up in your career, or moving location (such as deciding to return to one's rohe). Being in a long-term relationship was a role transition that was expected to reduce the amount of alcohol consumed, the pattern of consumption, and the type of alcohol consumed. Opiri summarised this process in her life:

Got married you know, stopped going out to the pubs as much and things, started hanging out with my husband instead and he's not a real big drinker, so I think who you are with is a really big component of that.

It also meant moving settings, mainly from public settings such as parties to home. Opiri's assessment of this transition was typical:

When I was a little bit younger it was out to night clubs, but now it's more getting together in a social environment that's not a pub or not a night club.

From this stage to parenthood was a “natural” although not inevitable transition. Some women made a strong connection between mothering and reducing alcohol consumption, such as Te Kokota:

Massive chunk of my twenties [having children] and you know, I didn't have a lot to do with [drinking alcohol] unless it was somewhere I was going anyway. I wasn't really seeking anything outside of my circle of things that I was doing at the time. I mean I wasn't actively, you know, saying “Ooh jeez, it's Friday, let's go out to party” ... I mean it was just the opposite, [her husband] was saying let's go out and I was going “No, I'm too tired”, you know.

Making the choice not to drink was easier to make when you had had the opportunity to go through earlier transitions. Te Kokota described her sisters' decisions not to drink when pregnant:

It [the decision] wasn't uninformed, that's what I'm saying, that it's not ... but I don't know where the information came from. Yeah, oh no, you know, it wasn't 'cos you decided yourselves because you're pregnant. I think the thing that stopped [her sisters] drinking was because they did it back when we were younger where they used to have parties, you know, sisters and that used to have parties at their [place], they didn't continue

with that, well they did it every now and again when they were older, but I think they got busy as well.

Having been able to make role transition through the “partying stage,” these women were ready to make what they saw as the next transition.

Obviously from the point of view of this research *becoming pregnant* was a key transition. While becoming pregnant was one transition by itself, it was also conceptualised as the result of a series of transitions. Early or unexpected pregnancy was challenging, as it led to a *forced* role transition rather than a natural one. This was conceptualised as a stressor drawing heavily on a woman’s resources, which might mean that women felt the need to *release the pressure*. Waiti was one of the women interviewed who had had to make that transition when she was not ready:

And my first instinct was to go out and have a drink, it was shit what am I going to do, I’m 16 and I’m pregnant, what am I going to do, how am I going to tell Mum and Dad?

Waiti talked about the many challenges of making that transition, including moving cities and being without her family, not having a home, and having her baby arrive ten weeks prematurely. Having had to make that role transition in a particularly hard way, Waiti was established in her mothering role when she had her second child:

And within a year after having [her daughter] I got pregnant with [her next child] and I never drunk, and I think one of the main reasons why I didn’t drink with [the next child] is that ... I’d also grown up and realised what I’d done. You know because you never know, did she [the first child] come because I drank, or did she come because I – you don’t know, but I was not going to go through that again. There was no way that I was going to go through that again. So I didn’t have anything, didn’t even have a sip, didn’t even consider drinking.

By contrast, other women were considering pregnancy, and reflected on their present situation.

[So if you were to make the decision to get pregnant, would you give up alcohol then or would you wait to give up until you were pregnant?] Yeah that's, I've asked myself that previously and I don't really know the answer. I imagine that the sooner you give up, I think, I'm not sure if I've read it anywhere that not drinking will help you conceive, I'm not sure if that's true or not. But I probably had in my head that I was going to drink until I found out I was pregnant. But I don't really know. I've not [yet] set myself a line, either when we're going have a baby or even that I was going to stop drinking. (Opiri)

As noted at the beginning of this section, a final property of this category was *tolerance*. Tolerance applied to alcohol use and alcohol-related behaviour (what was acceptable at one stage would not be at another), as well as to the perception that alcohol would affect women more as they aged. Puanga gave one example of this:

Over Christmas and New Year's, and I mean my immediate family, I mean they don't drink even when they're pregnant or when they're breastfeeding, or anything like that. I think that it's, I think that part of it's out of the desire to protect their babies ... but I also think that it's, there's a little bit of selfishness that goes on. It's like you can't, when you get older you can't handle it as much.

The category *making the transition* makes a strong contribution to the final theory of *Trading off*. A woman's position in the life course influences her perceptions of the *value* given to particular elements in the trade-off; one clear example is *fitting in where you are*, as a married or partnered woman would be expected to give greater priority to fitting in with her family/whānau. At the same time, where a woman is in the role transition process will affect (although not determine) what the

pregnancy means to her. This will in turn affect whether the pregnancy becomes so important in the trading off process that it outweighs other factors.

5.2.3 *Fitting in where you are*

This concept brought together a number of diverse codes, such as “acting like the boys”, settings such as “drinking in the workplace,” “aspirational drinking” (originating in the code “just a wine with dinner”), “being Māori is drinking,” and “feeling unconnected.” The concept of *fitting in* related to so many codes, and so many pieces of data, that for some time it was a possible core category. The final label given to this category, *fitting in where you are*, reflects how the women’s stories showed that moving from one setting to another carried radically different expectations of alcohol use.

... I think that if you find people of similar values or similar culture, similar ways of looking at things, then you'll probably feel more at home than just – you know, want to be with them more, which encourages drinking, if you're in that situation with a friend ... More what's familiar rather than anything else, that's what I think. (Te Kokota)

Sub-categories of fitting in were *belonging*, *avoiding conflict*, and *taking on protective colouration*. This category connected to the earlier *learning the rules*, as different environments had their own rules. Similarly, it connected to the category *rationalising*, as Māori women sometimes needed to develop rationalisation frameworks to fit in with norms and expectations about alcohol use that conflicted with the women’s own rules. Fitting in had a high emotional intensity, as seen in its extensive list of properties that includes *power and agency*; *balancing*; *affiliation*; *craving*; *identity*; *aspirations and status*; *unconnectedness*, and *protection*.

Fitting in with peer groups has been discussed in relation to learning the rules, but had its own characteristics in this category. Belonging and affiliation were important to young women. One of the consequences of early or unexpected pregnancy was that women felt they were no longer able to fit in with the alcohol

consuming culture of their peer group. Women who had been through this experience reflected on the emotional impacts it had, such as isolation, loss of social support, and sometimes loss of pregnancy support:

Because that's the hard thing, you might be the only pregnant person in your group. There might not be anyone else, especially when you're young. You know they all carry on with what they're doing, and you're just a pregnant blimp. (Waiti)

And that's one of the pressures I have found is 'cause I had this young partner who was eighteen himself, and he was rushing out to go drinking, I'm going "Well, hang on, what about me, I want to go drinking too, I'm stuck at home with the baby!" (Tiooreore)

Fitting in at the workplace had its own characteristics, relating to properties of power and agency, aspirations and status, and identity, including Māori identity.

And then there's like a whole bunch of people who just ... I think like me, Māori men and women who just got into the whole kind of corporate warrior thing, where you just work hard and play hard and party hard and have, you know, lots of drinks, and you know about everything and you know the right time, you know and that's just the way it is. You just, you just go right into that. (Puanga)

Following the dominant pattern of alcohol use was a marker of *status*, as well a marker of *belonging*, and was often seen as rigid. On the other hand, workplaces might provide support for not drinking when pregnant, especially when a number of people in that setting were at a similar stage of role transition. Opiri contrasted previous "high drinking" work cultures with her present workplace, which she thought would support her ability to make behavioural changes when she became pregnant:

I think now that, in a working environment such as this I'm – my colleagues are older people, they have kids who are my age, you know, or kids that are 20 or something and their values are obviously different as well, you know, they don't go out just to drink and get pissed any more ... And I think that rubs off, or I think that's very much an environment.

The other workplaces Opiri talked about had been full of young people, many unmarried, and going to the pub or club after work was normal. If she was still in that environment, she thought it would have been “much trickier” to manage her own alcohol and pregnancy choices:

I imagine it would be much more complicated when you're pregnant, which is real sad. You'd hope that your friends wouldn't do that, I'd expect they would be supportive, but they wouldn't understand, I don't think, if that was the choice I'd made.

In some settings, avoiding alcohol when you were pregnant fitted the range of norms, and was safe and comfortable. In others, it was a major deviation from norms. The setting which carried the most strength in this regard was sports, particularly the sports club. Rugby and rugby league clubs were mentioned by several of the women.

Rugby, yeah rugby and league ... 'cause those are very patriarchal type sports and that's where the culture of being tough, I'm the man and you're not a man if you don't drink, and “Oh, aren't you having a drink, gee you're boring” ... so much peer pressure there to be a man. And how are the men going to learn that, how are they going to support their partners, how are they going to be a good role model for their partners when they're trying to be a man? Because they have got to be a *man*, they've got to drink, you've got to drink to be a man in those clubs, and that is the culture ... and I mean it's at least 100 years and that is going to be something very hard to change. (Tioreore)

Opiri was typical of many of the women who had been active sports players. They described alcohol and sport as essentially New Zealand, and as deeply interrelated:

Sport, I guess it's one thing. It's play hard on the field and have fun off the field. Play hard, drink hard.

Not *fitting in* with the sports club environment happened when women were reluctant to go to the club with their partner, or when they went, but openly refrained from drinking alcohol. The consequences for women included open sanctions (negative comments), persistent attempts to get the women to drink, isolation and withdrawal, and stresses on relationships with partners.

One of the most complex forms of fitting in was “fitting in with being Māori”. As with *learning the rules*, there was ambivalence about it. Women in the study were involved in Māori groups and organisations ranging from kapa haka to waka ama, the Māori Women’s Welfare League, Māori land trusts and marae committees, and Māori professional support groups. I could not find any categories that fitted all the codes, although this might have been because more data was needed. However, it was clear from the data that as the women had experienced it, the stereotypical picture of Māori groups as alcohol-promoting settings did not apply. Te Kokota, for example, drew specific contrasts between different Māori cultural and sporting groups that she had been involved in, with some being “hard drinking” and others not. Waka ama was contrasted with other sports, being seen (even by women without involvement with it) as having an explicitly “health promoting” culture.

However, there was a strong theme about the importance to Māori of *affiliation*, and indications that while the “alcohol culture” differed *between* Māori groups, *inside* some groups there could be an unwritten connection between “Māoriness” and alcohol use, as expressed by Te Kokota:

... what I'm saying is that if you were an absolute teetotaler and you didn't join in then I would say to a certain extent you'd be definitely not as clicked in to the group as you would've been if you had've [drunk alcohol], that's what I'm saying and just taking that a step further to say that in some way that goes to how Māori you are because of that, how you click into a group.

Fitting in did not involve only settings, but things such as the type of drinking and the pattern of drinking. Drinking the type of alcohol that the rest of the group did was an easy way to be seen to be fitting in. I discuss how different types of alcohol served as markers and signifiers in more detail when reflecting on the theory at the end of Chapter 6.

As discussed earlier in this section, not drinking alcohol when pregnant, and therefore not fitting in, could have consequences which affected the resources women had to support themselves in pregnancy. How the women managed decisions, and how they accepted those consequences, relates to the *taking control of the role* category discussed in Chapter 6.

5.2.4 Getting the messages

As discussed in Chapter 4, I did not raise questions about the women's knowledge of FASD and the alcohol-pregnancy relationship in the interview. However, as I expected, many of the women raised the topic themselves, bringing together a small but interesting set of data which was unbiased by preconceptions arising from their possible interpretations of questions. Initially I saw this category as a sub-category of *learning the rules*, as it remains at a low level of abstraction.

Analysis showed that it had its own properties such as *consistency*, *trust*, and *relevance*. Processes included *modelling*, *assessing*, *rationalising* and *passing on*.

When women mentioned beliefs, understandings or actions about alcohol and pregnancy, I asked where they recalled getting those messages. Few of the women could recall the source, as typified by this reflection:

... my aunties ... I think there was a health initiative at that stage, can't remember what it was. No, I think there was a health initiative at that stage. I think there was something around alcohol, not in pregnancy though, it wasn't a pregnancy one but I think there was alcohol adverts in the early 80s. (Te Kokota)

Exceptions were when a specific woman or group of women had modelled “not drinking” behaviour, as with the two examples discussed in the *Learning the rules* category, and this experience:

We had, there were two women [in the kapa haka group] who had babies while we were at [teacher's] college and I can recall them actually not drinking. Yeah, can't remember, but there's enough of a trigger to think of those two girls now, and I think, yeah, they made a decision not to drink, but I don't know if it was because of pregnancy. (Matiti)

One woman who had her first child as a teenager had been given strong messages by her friends:

Then I would still keep going out with my friends and they would say to me “oh, don't drink” a lot of my friends would say “don't drink, you're pregnant”. And these were young women and young men and they would say “No, don't drink, you be the sober driver, but don't drink, you'll hurt your baby”. And lots of my friends said that, *lots* of them. (Waiti)

Trust was a criterion used to assess the weight given to the source of messages: the obvious example was the person who gave messages, whether kuia, parent, friend, or maternity caregiver. Health professionals, particularly doctors, were often described as having low trust:

... you know, so you can't use health professionals to sell a message about “Oh, and don't drink and don't smoke while you're pregnant”, quite frankly because nobody's going to listen to that. (Puanga)

The key criteria for *assessing* messages were their *consistency* with a woman's framework of rules, and *relevance* to her current role or life stage. As discussed earlier, the rules could include values (e.g. cultural or spiritual) and the meanings alcohol had for a woman. Women also interpreted the messages they received in the context of other factors such as their level of resources (discussed in the next chapter), their attitude to the pregnancy (discussed in the *carrying on as normal* category), and their framework for *rationalising*. One woman described a process of rationalising messages:

... I remember asking at Family Planning about, about alcohol and I know that – I think I got this message back that you know it's all right in the first 6 to 8 weeks, 'cos the embryo is still forming, so you know you think you can just push it and then go and have 6 to 8, maybe 12 [drinks]. You know, like your head does all sorts of dumb things when you're given information like that 'cos you think, great! But I don't think [the adviser] meant, you know, soaking your baby in a sea of alcohol for the first six to eight weeks, I think it was kind of like moderate, "normal drinking". So you kind of do, you know if you're predisposed, you know like taking the positive with everything, you can misconstrue all those sorts of messages anyway. (Puanga)

You know that the cigarette is going to harm you and your baby. But when it's alcohol, somehow you just don't get that. Like you don't see any sort of messaging around, you know, strangling your baby when you're drinking alcohol. You think, oh yeah, it might affect brain development or it might affect a bit of this or a bit of that. (Puanga)

Several of the women talked about the process of *passing on messages*, not just information but direct guidance. This was associated with *modelling*, and the property of *responsibility*.

And so definitely I would say education and I think talking to your children, talking to them at a young age ... I have found that I have really, I already took the steps based on some of the mistakes I made like the heavy drinking when I was carrying my daughter and I have already taken those steps to prevent that from happening with my daughter. She knows you know, she knows that it's not right to drink while you're pregnant and you're selfish to smoke, so I have already taken those with her to make sure that she doesn't ... She is 28 now, already she has done better than I have, that's how I feel. (Tioreore)

... this is how I, you know, reared my children in terms of what I wanted them to be you know, and it's, in our family they can do what they but there's a certain control mechanism I suppose was set in place. And because I suppose they didn't see me indulging in it [alcohol] and I don't want to say, "Hey, this was because of me" but I think the influence that you can have on your children you know, in terms of that. (Matariki)

While these concepts might be expected to emerge in a study dedicated to the topic of alcohol and pregnancy, with a sample of women who self-selected by having an interest in the topic, the *strength* of the sense of responsibility for children, whānau in general, or coming generations, was notable. It was accompanied by optimism about the possibility for change:

I think we've got a new generation of Māori now, and I think we're a little bit more open and they're more likely to talk about things like sex and contraceptive and alcohol use, not just when you're pregnant, any time. (Tioreore)

... and for young, for Māori women now, Māori women that I meet who are pregnant and I'm talking to, often does come up and they will say I'm not drinking or I've stopped drinking or I don't drink alcohol or it's been easy to give up alcohol or I know my baby is going to be better, is going to have a greater chance if I don't drink ... (Matiti)

Many of the women also offered specific suggestions for *passing on the messages* across to other Māori women. Those suggestions are discussed in Chapter Seven.

5.2.5 *Releasing the pressure*

This category resolved the large set of codes relating to stress, social deprivation, and also resolved data about the benefits and pleasurable aspects of alcohol consumption which had remained as outliers until late in the study. *Releasing the pressure* also contributes to the three categories discussed in the next chapter, *rationalising*, *drawing on resources*, and *taking control of the role*.

The women interviewed reflected on the positive roles that alcohol played in Māori women's lives. In earlier categories I discussed its role in *affiliation*, and as a marker of *fitting in where you are* in different social contexts. However *release* was a distinct category, with properties such as *time*, *space*, *energy*, *responsibility*, *escape* and *freedom*. Releasing tension related to the general contexts of Māori women's lives (work, managing relationships) as well as to tensions due to poverty, isolation and social deprivation. Whether the women had experienced deprivation or not, they recognised it as a factor for other Māori women, and the tone in which they talked about it was compassionate.

... I think some of those things happen today, that they've got so many bills so they don't know how they're gonna cope, and I'm talking about low income people. So they go and get drunk at lunch you know, or they get into this, whatever, you know, to forget, oh you know, you're in a world of your own but the next day you wake up, it's still there. (Matariki)

Having established a role in releasing tensions in ordinary lives, alcohol could “naturally” be seen as a way to release stresses associated with pregnancy, which, as discussed in earlier categories can include properties of *surprise/shock*, and links to *drawing on resources*:

... with a lot of pregnant mothers, most of them that are drinking you will find that they are in an unsavoury environment as well. And unless you can change that environment, no education is going to make any difference because they're getting these messages, but at the end of the day it's very hard for them to, it's very hard for them to change when the environment they are living in isn't going to change, and they haven't got the strength or the knowledge or the power or anything like that to be able to make the change, particularly if they are not in a good environment. (Tioreore)

Alcohol was a signifier of release, marking off space to get away from pressures. The word *freedom* recurred in the interviews, for example:

A lot of it's to do with freedom, a lot of it's to do with stress, it just alleviates the stress, it enhances the freedom, all that sort of thing, you know, for me anyway now, yeah. (Whakaahu)

Women distinguished between using alcohol as a way of marking “time out”, and being dependent on the chemical properties of alcohol itself. Alcohol played a more significant role when women did not have other ways to release tensions, such as time away from whānau responsibility. Alcohol was cheap, easy to access, and because of its normalisation, could be consumed without any of the concerns associated with using other drugs. The *releasing tension* properties of alcohol were something that Māori women valued in their own lives. They also understood why pregnant women might turn to alcohol as a release, and used *rationalising* in considering alcohol as a release.

5.2.6 *Carrying on as normal*

This category emerged from finding during comparative analysis of transcripts that women were not talking about pregnancy separately, but treating two questions as one. Analysis showed that this was not, as first thought, a result of not making the two questions clear in the interview, but that women *themselves* did

not make a distinction between what they believed influenced drinking when pregnant and what influenced women’s alcohol consumption generally. This contrasted with a common discourse on women and pregnancy in research and health promotion (for example, the Ministry of Health’s booklet *Your pregnancy/ Tō hapūtanga* [2002]) which contains an expectation that pregnancy, especially the first pregnancy, is a point of change (for example, quitting or cutting back smoking). At this point in the analysis I was fortunate to be able to attend the *Healing Our Spirit Worldwide* gathering in Edmonton, and was able to discuss some of my emerging categories with a number of experienced indigenous researchers and FASD prevention policymakers and workers, mainly Canadian First Nations women. They were engaged by the “pregnancy is normal” concept, and found it plausible as a possible explanation for alcohol behaviours they were observing, researching or trying to change. This indicated that the emerging category had what Glaser and Strauss (1967) call “fit” and “grab”, and was worth further investigation.

To resolve the data, I needed to take a theoretical sampling approach and search for data from different sources (Charmaz, 2006). Māori women with professional understanding of Māori women’s pregnancy processes were identified as a possible source of new data. Interviews and informal discussions illuminated the issue, and clarified the data so it could be abstracted into a category.

Carrying on as normal encompasses significant variation, and seems to form a continuum. At one end of the continuum is *denial*, where women consciously or otherwise deny the reality of pregnancy; further along is acknowledging the pregnancy but not feeling impelled to make changes in behaviour or the pattern of life; further is making changes within a stable context, and at the far end is making a *radical* life change.

Denial of pregnancy	Not feeling a need to change	Making changes	Changing my whole life
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Figure 2: Carrying on as normal category: the continuum

Denial tended to arise as a result of stress, and lack of pregnancy support. It was associated with two distinct situations: young woman with unplanned pregnancies, and older women with high role demands and stresses (managing work, childcare and other demands). As discussed earlier, making a *forced role transition* had properties such as *surprise/shock*, and involved stresses such as *isolation*:

[My friends] were all, I guess they didn't understand I guess they just didn't understand that it wasn't easy for me from being one of them to not being one of them. And it was easy for *them* to say "Oh, just don't drink". And I guess, but you know, I found it really difficult. (Waiti)

It also affected women's ability to access pregnancy support, discussed further in the next chapter. As the women in this study saw it, young men (whether Māori nor non-Māori) were often reluctant to make the role transition, and unlike the women could avoid change by carrying on as normal (going out clubbing, holding drinking parties at home), or by breaking the relationship. This property of power inequality also related to *commitment*. It had, as might be expected, a high emotional intensity:

It's hard because you know, when men expect them to go, when men expect women to go down to the pub every Friday night or every night and you know, women [are] pregnant, it's *incredibly* hard. (Whakaahu)

One woman recalled her own experience as a teenager to describe how denial might arise as a protective response:

... he convinced me that he'd be there and stay there and all the rest of it and then within four weeks he left. So you know, so I didn't really care that I was pregnant, I was kind of in denial that I was pregnant. Even though my belly was getting huge and I had seen her on a scan, I was very much in denial I was pregnant ... But I was like, well I don't want to miss out having fun, everyone else is having fun, I want to have fun and I can't go out and just not drink, it's so boring, I just sit there and be the fat one

in the room and everyone patting my stomach. I just didn't want to ... I would secretly drink when they weren't looking, I would drink their drinks and thinking that nothing would happen, but I think deep down hoping that something would happen because I didn't really want to be pregnant.

An early *in vivo* code, "pushing things away," has become a property of this category.

... like myself, when I was 18 and my partner was running out all the time drinking 2-3 times a week, well I want to go out and drink too, I don't want to be left behind – and that's what I was doing, I was rushing out with him with a big fat tummy, I didn't really even care, I didn't care about myself, didn't care about the baby, all I cared about was having a good time, I will worry about the pain and that later. (Tioreore)

... and I think some of those things happen today that they've got so many bills so they don't know how they're gonna cope and I'm talking about low income people. So they go and get drunk at lunch you know, or they get into this, whatever, you know, to forget, oh you know, you're in a world of your own, but the next day you wake up, it's still there. (Matariki)

As mentioned earlier, older women were pressured by multiple demands such as caring for elders and/or for children, while also maintaining a demanding job. Other stresses were being tired or ill, and lack of partner support, as Whakaahu describes:

... but it's that expectation of men, you know, from husbands or partners, whatever, to you know, come down to the pub. It doesn't matter how many months pregnant you are, doesn't matter how tired you are, you know, you're expected to go down and join in ... and that's pretty tough, it's a tough call.

These excerpts show the characteristics of this category, including those relating to *energy*, as well as to *control* and *agency/self-efficacy* (the belief that you can make a difference). These properties link *carrying on* strongly to the category of *drawing on resources*. In stressful or unsupported situations, alcohol contributed to *releasing the stress*, as discussed earlier:

I think most people I knew, I know and knew in pregnancy, knew that was a bad idea to drink during your pregnancy. In fact one of my good friends and I used to drink ... we used to have, when she was pregnant, we'd have like half orange juice and half wines so that nobody could tell. Cos' it looked like you were just drinking an orange juice. Yeah, so you know like, you know you find ways of hiding it so because you knew it wasn't, you know it's not a good idea. (Puanga)

Further along the continuum was *not feeling the need to make changes*. This sub-category related particularly to second and subsequent children, as pregnancy became more normalised, but was not inevitably linked to that situation.

When I was pregnant it wasn't even, 'cos life just carried on. I can't recall stopping and thinking I should or I shouldn't [drink alcohol]. I knew, no I just, life in that area just carried on as it had before. (Matiti)

The space between *not feeling the need* and *making some changes* was not large, and women may have moved back and forth along the continuum, trading off influences and pressures at a particular point in the pregnancy.

That didn't happen with my last son. My son ... I was probably drinking quite heavily for the first eight weeks of his, on conception for him, cos I didn't figure it out till quite late ... and, and I probably wouldn't have cared anyway then, but I think that one of the things that influenced me in not worrying about, even when I found out that I was pregnant, not worrying about was that um, it's a normal social behaviour ... and everybody does it. (Puanga)

In initial analysis and in later discussions, a possible explanation suggested for this “pregnancy is a normal process” concept was a connection to Māori women’s high fertility in much of the 20th century. For the older women, large whānau were the norm, and pregnancy was commonly seen or experienced, so pregnancy might be seen as a natural rather than special state. If this hypothesis is applicable, younger Māori women, coming from smaller families and with less experience of whānau or friend’s pregnancies, may have different perceptions. In this study I could not test this hypothesis, but given the “grab” that the concept has had with indigenous women in New Zealand and other countries, I believe it is worth further consideration.

Another possibility suggested late in analysis was that *carrying on* may also reflect working women’s wish or need to continue being seen as “normal” while working (not to be seen as “pregnant” with the potential for conscious or unconscious discrimination), or to reject stereotypes of the mother role. This could fit properties such as *control* and *power*.

At the end of the continuum, *changing your life* was associated with planning to get pregnant, *preparing* physically or psychologically to have children. For instance, women talked about losing weight before getting pregnant, or stopping smoking. Supporting the link to the property of *surprise/shock*, women made a strong link with being able to *control* fertility.

I guess one thing is just the control factor you know, what's happening, you know, you're able to take control of the situation, whereas that's if we make the decision but if I was to get pregnant tomorrow, that's going to be quite a shock. I'm not going to go hit the pub, but I wouldn't be as prepared, so I could do something anyway without even wanting to. Oh, eat cheese, go to a delicatessen and eat ham. Whatever it is that I'm not meant to do. Yeah I think so. I'm 29 now ... when I was 21, nah, probably not – but now I feel like I've got the self control and strength in myself

that I'd choose not to, wouldn't say I wouldn't be tempted and I don't know if a certain amount of alcohol is okay or not. (Opiri)

Carrying on as normal had a number of consequences. It could limit the amount of resources (energy) the woman needed to draw on, or could postpone the need to make a *role transition* until a woman had time and energy to consider her situation. As seen in the quote above, women in the 21st century face expectations and pressures about pregnancy that were not present for older Māori women, a factor that the older women often commented on. When carrying on involved *denial*, one consequence described was retrospective guilt – not just for the pregnant women, but also for their whānau and friends. Guilt might come when a baby arrived early or had health problems at birth, or later, looking back.

5.3 Emergence of a core category

The core category is described by Glaser (2002, p. 15) as the category that “organises all the other categories by resolving concerns”. It sits at the centre of the data, and relates to all the other categories and accounts for the variation within/between other categories (Glaser, 1978). The process of finding a category that transcended the other categories was difficult. There were a number of times where I reached the point described by Backman and Kyngäs (1999, p. 151), where grounded theory novices become “tired and disappointed” with the categories and their apparent inability to resolve the data. However, then the processes involved in managing all the influences on women’s alcohol consumption resolved into a social process which I have called *Trading off*.

5.4 Summary

Out of the analysis of the data, six final categories emerged: learning the rules; making role transitions; fitting in where you are; getting the messages; releasing

the pressure; and carrying on as normal. These categories, and their properties, tell the story about influences and pressures which the women in my study believed shaped Māori women trying to negotiate alcohol and pregnancy.

From these categories the final core category and the three key process categories emerged to form the theory, and are detailed in the next chapter.

Chapter 6:

Trading off:

A grounded theory on how Māori women negotiate drinking alcohol during pregnancy

6.1 Introduction

This chapter presents a grounded theory proposing that Māori women conceptualise the core social process in making decisions about drinking in pregnancy as one of *Trading off*. In trading off influences, Māori women use the processes of *drawing on resources*, *rationalising* and *taking control of the role*.

The chapter starts by explaining how the final theory was developed. The grounded theory is presented in the form of a narrative. I then discuss the key social processes used in *Trading off*, their properties and relationships, with a diagram showing how the final categories interact to produce the theory. I discuss the relationship of the theory suggested to literature that may be relevant. Finally, I offer some reflections on how this theory could be tested and further developed.

6.2 Developing the theory

The goal of a grounded theory study is to “generate a theory that accounts for a pattern of behaviour which is relevant for those involved” (Backman & Kyngäs, 1999, p. 151). Rice and Ezzy (2000, p. 11) describe a theory as “a set of propositions about the relationships between various concepts.”

The aim of this study, as it developed, was to discover a grounded theory that accounted for how Māori women negotiated decisions about drinking alcohol when pregnant. The theory should account for variability in Māori women's decisions about consuming alcohol when pregnant, and if possible explain the relationships between the processes that women used to manage the influences.

Analysing the categories presented in the previous chapter, it became clear that in shaping my initial questions I had made an assumption that deciding to drink alcohol when pregnant, or not to drink, would be a single decision; once made, it would need to be maintained and perhaps defended. Instead, what emerged from the data was a picture of women making continual choices, not on a “will I/won't I” basis, but making choices about alcohol amid many other choices. The shift came as I started to see my original research concepts as *processes* that took place over time, and therefore took on the characteristics of “events” or “incidents” as grounded theory requires. At this point I became confident that there was in fact a basic social process to be discovered in the data, which helped me disengage from the data and look down at the patterns.

For some time, *fitting in* seemed close as it resolved so many categories. However, it did not capture the *tensions* that the women interviewed described, the way in which they believed Māori women can and do stand up against pressures (pressures to drink alcohol and pressures not to drink), or the complexity of the environments within which Māori women are making these decisions.

Given Glaser's injunction (1978) not to settle for a category that leaves other codes or categories out, I looked for a higher concept. In doing so, I was trying to avoid some of what Wilson and Hutchinson (1996) call mistakes that novices make in using grounded theory, such as lacking flexibility, looking for “premature closure” rather than analysing the data fully, and not moving to conceptual and theoretical codes. Diagramming the influences/pressures brought out the metaphor of *balancing*, and re-reading interviews identified the way in which, implicitly rather than explicitly, women interviewed identified actions relating to balancing. However, *balancing*, by itself, did not capture what an active, dynamic

process was involved, and I returned to the questions suggested by Charmaz (2006): “So what is the problem that my participants see?” and “How do they believe women address/resolve the problem they face?” Questions such as these help the researcher find the *basic social process*, which Eaves, 2001 (p. 658) says is “a problem shared by participants in the study sample, but may not be articulated by them.”

I believe the data supports me in presenting the hypothesis that Māori women resolve the pressures and conflicts they go through when choosing whether or not to drink alcohol when pregnant by a process of *Trading off*. That process is not a single action, but the outcome of taking into account external influences, behaviours, values and meanings, and processing them.

This theory is intended as a substantive theory. It suggests a possible explanation for the behaviours of Māori women who drink during pregnancy and those who do not. It also offers a hypothesis that could be tested. While it is hard to find literature against which to discuss the theory (discussed further in the last section of this chapter) it is consistent with the models of alcohol use discussed in Chapter 2. However, I emphasise that the theory is an interpretation, and while it may reflect some of the realities of the women’s narratives, cannot capture all their perspectives (Charmaz, 2006).

6.3 Trading off: the story

The “codes” and “categories” must weave together conceptually to tell a story about human behaviour, rather than remaining suspended as a description of an event or feeling. (“Grounded theory and qualitative data analysis”, 1999, n.p.)

Trading off, as described by the women in this study, is a process that is continuous, fluid, challenging, and shaped by the interaction between a woman’s own

characteristics and the world around her. It involves a woman making decisions, sometimes conscious but often decisions of which she is only partly aware.

What a woman *takes into account* when *Trading off* is initially shaped by what she sees as the *rules* about alcohol, as well as her understanding and beliefs about pregnancy. Māori women *learn the rules* from their whānau and the communities they grow up in, as well as from peer groups and other social settings, such as sports teams. The rules include the significance of alcohol, when and where to drink it, appropriate drinking styles, and consequences of drinking alcohol. Learning the rules does not mean inevitably following the rules: women can choose consciously or unconsciously to *defy the rules*.

Linked to the rules are *getting messages* about pregnancy and alcohol. The extent to which a woman internalises or adopts messages will depend on the *trust* she has in the source of the messages, how much those messages are *consistent* with her rule framework, and how *relevant* they are to her reality.

As Māori women *make role transitions*, *stepping out* into work, study, and leaving home, how they understand or operate the rules may change. The desire to *fit in where you are* means that women may change their patterns of alcohol use. As they move through *role transitions* such as becoming partnered, they give different weight to *fitting in* to different settings, and take account of new factors.

Becoming pregnant is one of the biggest *role transitions*. It is also a process in which a woman is expected to make a transition, often leaving behind freedom and the potential to “rark it up” with friends or whānau, in favour of taking responsibility not only for herself but for others. *Carrying on as normal* is a strategy which may involve denial of the pregnancy at one extreme, and making life changes at the other. Making trade-offs about drinking or not drinking alcohol is only one of many forms of trading off that a pregnant Māori woman has to do to get through her day; she may have to take into account her relationship, her job, and whānau expectations (for example, looking after an elder). Women may use alcohol to *release the pressure*.

For a Māori woman, *fitting in where you are*, being part of something larger than yourself and being in a comfort zone, is important. If a pregnant woman decides to stop drinking alcohol, it can set her apart from her friends, whānau or her partner, if they continue to drink. Conversely, if the woman is spending time with others who are in similar situations, such as in a workplace where other people her age are having children or considering having children, becoming pregnant means *fitting in*, and makes it easier to negotiate her decisions.

In trading off, Māori women use three key processes: *drawing on their resources*, *rationalising* and *taking control of the role*. First, they have to *draw on resources*, including energy, time, external support, and internal confidence or strength. Resources can be internal (such as a woman's religious beliefs, or her understood rules about mothering and alcohol) or external (e.g. whānau support). To make trade-offs, Māori women also use the process of *rationalising*, developing a framework for their decision. The third process involved is *taking control of the role* – women may feel they have some control over their circumstances, or not. *Taking control* is a consequence of making *role transitions*, but comes into play when the woman become pregnant or decides to have children.

Trading off has a strong dimension of *time*: not only is it a continuing and conditional process, but over the course of a woman's pregnancy the combination of pressures and influences on her will change. Whatever decision a Māori woman makes about drinking alcohol is not necessarily final. New events during the pregnancy – such as sickness, loss of support, or changes in what the pregnancy means to her – may have to be taken into account. The processes of drawing on resources, rationalising, and taking control of the role, are used continuously. Throughout the pregnancy, the potential is there for behaviour change.

Although this study focused on the course of pregnancy, it is probable that after pregnancy trading off continues. Women in this study described the arrival of a baby – seeing the baby as a real person – as a precipitating factor for change.

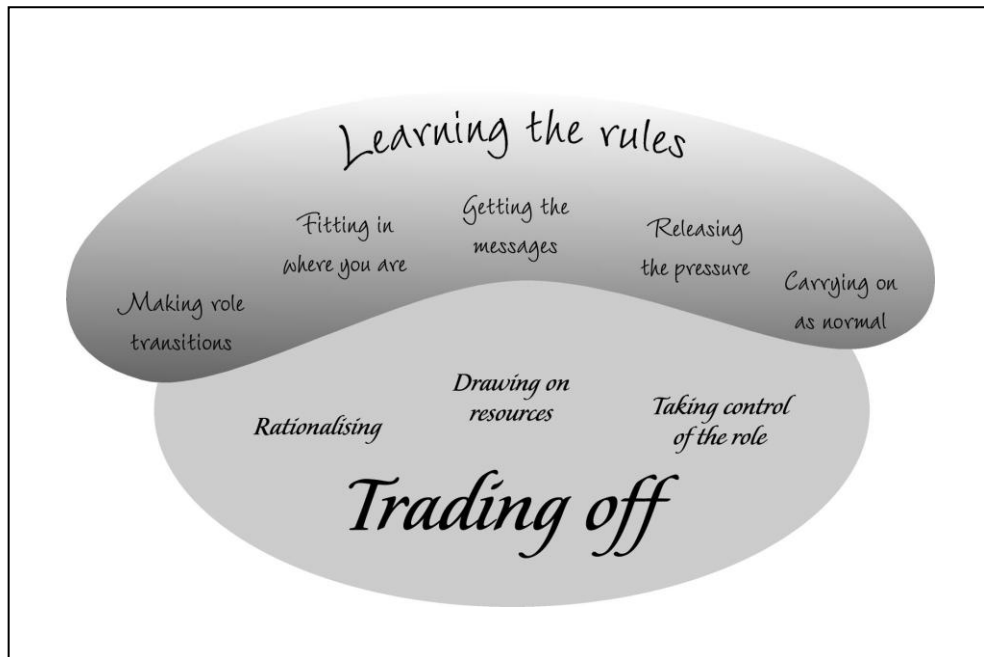


Figure 2: Trading off and its process categories: Relationships of the categories

6.4 Key process categories

Three categories emerged as the processes Māori women used in trading off. Together, they “tell the story” of the social process. These categories have been called *drawing on resources*, *rationalising*, and *taking control of the role*.

6.4.1 *Drawing on resources*

The data shows that pregnancy, whether planned for many years or coming unplanned and mistimed, brings new stresses to the lives of Māori women. To balance those stresses, women need to *draw on their resources* to manage all the factors they have to take into account.

This category resolved codes and categories around “getting support”, “support from partners”, “role models,” “finding energy” a dealing with deprivation;

“listening to my body,” and “getting and taking advice”. The concept of *drawing on resources* provided a higher level of abstraction and described a more basic process. This then suggested the idea of a *resource bank* on which women have to draw. In turn, through diagramming, this metaphor linked back to the concept of *balancing*, and elicited a new concept, *taking into account* to describe what originally had been called “factors” or “influences”.

Analysis of this category showed that resources could be seen as being one of two forms: external resources and internal resources.

6.4.1.1 External resources

In reply to the question “What sort of things do you think would influence you if you get pregnant?” Opiri said:

To me it comes back a lot to environment and by environment I mean the people that are supporting you and the people that are around you. Like, we'll probably have a baby in the next couple of years and bit scary for us though, and I could imagine all of my workmates being you know, totally supportive and helping me all the way. And same with my sister, she would be totally supportive. My mates, although I'd be the, if we did get pregnant soon I'd be the first one of my mates but I imagine that you know, they'd just be totally rapt, totally supportive as well. And I think that's probably a big help. I imagine if you didn't want a baby and just totally just didn't feel that making a decision to have a healthy baby is different. I've never really thought of that before.

This list summarised most of the external resources, in the most common order of priority: partners, whānau and friends. Other resources that appeared but had less support from the data included maternity caregivers/health professionals. Settings could also form part of this *resource bank*, such as supportive workplaces, and *health messages* might be added too. External resources could be drawn on in taking influences into account.

6.4.1.1.1 Partner support

Pilot interviews for this study (carried out as part of a research paper) identified the importance of partner support, and data from the main research supported this concept. This code appeared in all the texts analysed. To my initial surprise, it consistently had greater emphasis in texts than whānau support.

Partners, along with whānau and friends, either *reinforced* decisions or were seen as *undercutting* attempts by women to make their own decisions. Undercutting mainly appeared in the context of *reducing* alcohol consumption rather than undercutting women's continued alcohol use. Undercutting behaviour could be *open*, as described by several women, including Whakaahu:

He [sister's] husband wasn't [good]. He was one of these ones that would say well come down to the pub with me, you know, come on, let's go. He never supported her, you know, trying to you know, make her want to cut down especially when she was pregnant.

Or undercutting could be covert, such as by abandoning the woman. Both open and covert undercutting drew resources out of a woman's resource bank. Waiti talked about that situation in *carrying on as normal*, and Tioreore described it in the context of *modelling*:

And that's one of the pressures I have found is 'cause I had this young partner who was 18 himself and he was rushing out to go drinking, I am going well hang on what about me, I want to go drinking too, I am stuck at home with the baby. So he wasn't supporting me, had he been and had he been staying at home not drinking then quite possibly I would have been quite happy to sit at home and not drink. You know he couldn't because he was young himself and the peer pressure for him to go out and drink with his mates, especially being a guy, you know that's not cool.

Reinforcing could come in the form of *permission*, as when Whakaahu said that of her husband that "When I did get pregnant, when I was pregnant he didn't like

me to drink. I didn't drink anyway.” It could take the form of passive support such as not commenting on a woman’s alcohol use, active support such as positive comments, or *participation* in cutting back or giving up alcohol use, as seen in some of the examples in this category. “Good” partners had properties such as stability and the willingness to “share the burden” of preparing for parenthood, as well as reinforcing and participating:

... I wonder also how much is about if you have a partner at the time when you're pregnant. My sister's been with her partner a long time and they're, you know, they're stable amongst each other and he's into sport, he's very fit and active as opposed to someone who's on the DPB and smokes and stuff like that. I imagine it's sharing the love, not a burden but the whole process, would have to be a lot healthier than trying to do it on your own which must be very hard work, take amazing strength to do that in my opinion. (Opiri)

I think having a good partner can make a difference. Sometimes you're actually better off [without one] if your partner isn't a good partner, and what I call a good partner, a partner who will support you but will support you not to drink and possibly won't drink himself as well. (Tiooreore)

Another research participant, when asked how things would have been different if her husband had not been supportive, replied “I would've kicked him out.”

6.4.1.1.2 *Whānau resources*

Whānau were the second main category of external resources. Women described both the positive consequences of having that resource to draw on, and negative consequences when it was not available:

But I can tell you now that their partners, their [partners'] parents are quite old, when I say old they're in the 60-70 year old age bracket, so to me they're that group, they're full of knowledge and support and so the

support was there from like day one and has been there, and so I think that is actually helped them with not drinking. (Tōreore)

I think one of the reasons it probably did put me to drink more when I moved to [a city away from her whānau] was I had no one around. I think if I had been centred within my family like I was with [her next child], I wasn't centred in my family but I had learnt a pretty hard lesson about what I did to [her first child], I think I would never have touched a drop. (Waiti)

The whānau resource was generally conceptualised as supporting women in the direction of reducing or stopping alcohol use rather than in the direction of continuing use. Sisters were singled out as a critical form of pregnancy support. They could often be trusted to share things, such as the fact that a woman was drinking alcohol, which the woman might not feel able to share with parents. Women interviewed described feeling responsibility for their sisters. This sense of responsibility also extended to cousins; often women were very close to cousins or whāngai, and had formed part of their resource bank, or received resources from them. Tōreore said of her cousins that:

That generation they have actually, they're quite knowledgeable and they have actually spoken, they are not frightened to speak out against alcohol, and they have sort of laid that path so to speak, you know.

Although I did not explore this in the interviews, I have hypothesised that the strength of these relationships as resources, and the property of mutual responsibility in relation to this sub-category, may relate to the strength of the tuakana-teina relationship.

And you know now, if I found myself pregnant now, I mean I am older and what-not, but you know ... having that family around me I just know that there wouldn't be any worry whatsoever. (Waiti)

6.4.1.1.3 Health professionals and maternity caregivers

As discussed in the category “getting messages”, health professionals were not a major part of the resource bank. Some women experienced them as undercutting:

I mean you always get professionals who will take an easier way of treating their patients, like take a glass of brandy at night rather than saying well why are you so damn anxious, you know, what's behind that? Send you off to someone who can you know, give you a bit of counselling, la, la, la. No it's easier to say “Well, just have some brandy at night”, you know.
(Te Kokota)

Others dismissed the idea of asking health professionals for advice or support about alcohol and pregnancy, and did in an emphatic way. However, there was only a limited amount of data in this category, so further research might produce different perspectives.

Consequences of not receiving external resources to put in the resource bank included ceasing to drink alcohol; stopping attempts to reduce/stop alcohol consumption, and feeling unsupported and stressed by lack of support.

6.4.1.2 Internal resources

This sub-category connects closely to the concept of *taking control*, detailed later in this chapter. The resource bank concept helped identify key internal resource properties including *energy*, *time and space*, and *pregnancy significance*.

Energy emerged as an underlying property of internal resources. For some women, pregnancy might give them energy, especially if it had come after some time of waiting. For other women, it was a time of stress, and exhaustion, often related to managing multiple roles such as working and caring for children. If additional pregnancies drew heavily on energy, this might cause women to *carry on as normal* or to increase their alcohol consumption to *release the pressure*, as discussed in the previous chapter.

Equally, pregnancy-related illness or tiredness might perversely be a resource supporting giving up alcohol:

A lot of it had to do with I wasn't well. I mean I just wasn't well, well I was and I wasn't but I worked fulltime as well with all my babies you know ... I finished work two days before he was born . and the first two or three months you're not well ... when I was pregnant I didn't have the energy to go out with him anyway you know, to all the parties, to all the club things, to all the social events. I was quite happy to stay home ...
(Whakaahu)

I was uncertain about whether to assign pregnancy-related illness to the category of *internal resource*, since it takes a negative form and has a different quality to some other aspects of this category. But in the interview texts it was often associated with energy, and was often described using positive vocal tones rather than negative ones. This may relate back to Whakaahu's comment above that she was happy to be able to stay home. Sickness could also have the effect of forcing a behaviour change without having to make a decision.

Pregnancy significance was also an internal factor in the resource bank. In the previous chapter I described the *carrying on as normal* continuum, with "changing your life" at one end. When the pregnancy had a high significance, as in this case described by Whakaahu, it not only provided a *rationale* (to be discussed in the next category) but also gave the woman a resource with high emotional intensity, which could be *drawn on* to support life changes:

I think with my sister who cut back and I've said, she had a good husband and that they'd lost, she'd had an ectopic pregnancy. It was like 10 years before they had [their son] well he's 13 now, but before they had [him] they'd had an ectopic, she'd had an ectopic pregnancy which was very, very traumatic and he was, her husband was [overseas] at the time, you know ... and he couldn't be there with her. So when she did get pregnant again they did everything right. You know, they wanted to, she stopped

smoking, he stopped smoking. She cut back on drinking, he cut back on drinking, you know, doctors' appointments were bang on, hospitals they were both there, she rested, he rested you know, or he'd get up and cook dinner and all that sort of thing. He took good care of her and it's lovely and he still does that, he still looks after [her]. (Whakaahu)

Such intense cases could also support women *taking control of the role*. Having internal resources in her resource bank helped a woman pregnant for the first time *make the transition* to conceptualising herself as a mother. Consequences of not having internal resources were that women might make a decision by not making one, as with *carrying on as normal*, or might drink alcohol to *release the pressure*. This is one example of how the categories that form this theory are interactive rather than chronological.

6.4.2 Rationalising

There was a series of ways in which Māori women *rationalise* their alcohol consumption behaviour. The *rationalising* category resolved codes and categories including “reasons to drink”, “pushing things away,” “asking for and taking advice”. I emphasise that the term “rationalising” is *not* being used here as a value judgement, but to describe the process women used to develop a framework for thinking about alcohol in the context of their pregnancy, which supported their behaviours. Women *rationalised* around drinking or not drinking alcohol.

Rationalising is hard to pin down, as it is a continual process. Rationalising is always *dynamic* – different reasons enter in different settings, at different times of day. This is also connected to the woman having a *resource bank* on which she can draw to develop and maintain her rationale.

Rationalisation involves drawing on the *framework of rules* that the woman has learned, and using the rules, information, and resources available to her, to develop a rationale. A key process was *balancing* – balancing information from different sources; balancing one “health behaviour” against another (e.g. stop

drinking but keep smoking, or vice versa); or balancing the influences. *Looking for information* was another process consistently associated with this category, which linked this category to *getting the messages*, and as mentioned in the previous section information is also a resource. Opiri, who had not yet had children when she was interviewed, considered *looking for information* prospectively:

... So is your doctor somebody that you would go to find out?

No, probably not. I'd just get information, yeah and then think about it.

Where else would you get information?

And my friends, like my older generation friends that have had babies and their babies are my age now, I'd talk to them really. Oh, because my adoptive mother's died so that's why I can't talk to her about that, yeah, so yeah.

What would you ask them about?

Whatever their experience has been, and what they've found and my sister, because I've been asking her heaps of questions. She's, you know, she's been getting conflicted information as well and she wasn't sure and same with most things about having a baby I guess, it's not, there's not like a proper test booklet which you could refer to for things.

Women often wished they had had access to information before they were pregnant or when they were pregnant. They also wished that information had been given to them in ways they understood, or that related to the realities of their lives.

Sometimes rationalising might be a conscious process, but more often the process was shown in retrospect.

I think to justify that was that you were really low in terms of you know, backgrounds and poor families, had no money, things like that and we lived from day to day and we came from backgrounds of working in gardens, making money. (Matariki)

One woman interviewed, Puanga, had given particular thought to her processes of rationalising. Her reflections showed how closely rationalising interacted with the concept of trading off, and the concept of *balancing*:

Well I always thought to myself well if I give up smoking, but I'll still have a little drink, that will be all right. Um, things like Guinness is good for you, you know ... beer is good. As long as you take your folic acid, she'll be all right. You know there's all these little things that what you do is you think well if I stop smoking, then I can at least still have a couple of drinks ...

Balancing, like other processes involved with trading off, is continual and dynamic:

... even with myself I think I may have, I think on my first pregnancy maybe three glasses of wine in total, I think even in the second one I didn't even have that, and the third one I can't even remember but it would've been in the context of having food with wine, rather than you know, drinking. (Te Kokota)

Puanga also gave one example of rationalising in the context of social norms, referring to the fact that (as described in Chapter 2), alcohol is integrated into New Zealand society.

My [last] son ... I was probably drinking quite heavily for the first eight weeks of his, on conception for him, 'cos I didn't figure it out till quite late... and, and I probably wouldn't have cared anyway then, but I think that one of the things that influenced me in not worrying about, even when I found out that I was pregnant, not worrying about was that um, it's a normal social behaviour ... and everybody does it. (Puanga)

The women interviewed recognised that pregnancy can be an added stress, and that *releasing the pressure* was a common rationale. As mentioned in relation to that

category, releasing the pressure was often treated with understanding. Matariki said that with women drinking alcohol “It's usually it's about how they're gonna cope with their own lives”, and that those women rationalise by saying to themselves “I'll live to worry about it”, pushing worries into the future”.

6.4.3 *Taking control of the role*

The category *taking control* emerged from concepts that related to what the participants saw as the role of *individual* women; for instance, an early *in vivo* code was “strength of the woman”:

And whether or not it's a choice or inherent, I think partly may come down to the strength of the woman who's choosing what she's going to do. ... I like having the kids but my choice would be to not think of alcohol when I was pregnant, and I do drink alcohol now, not ... very much. What defines a woman's strength is her ability maybe to not do what everyone does, so not to, to make her own decisions on what's right and wrong ... and in my opinion drinking while being pregnant is wrong. I don't see it being good for the parent or for the baby too. (Opiri)

Taking control “of the role” was added as analysis showed this category having a very strong property of *role strength*. This concept described having confidence in roles. The words *control* and *choice* recurred through the data in this category, as in the excerpt above. These concepts appear to relate to ideas about *power* and *agency* (as discussed in Charmaz, 2006) as well as *self-determination*, which might also be appropriately described as *tino rangatiratanga*.

I also identified the health promotion concept of *self-efficacy* as a property. Self-efficacy is defined as a woman's belief in her ability to succeed in a particular situation, or to exercise control over events (Bandura, 1997). Initially, I considered self-efficacy as the overall description for this category, but it was a static label rather than a process, and was too narrow to capture properties such

as tino rangatiratanga.

The internal strength to *take control* of her role is particularly needed if a woman's decision to drink alcohol or not results in her not *fitting in*. Opiri contrasted different cases:

My sister ... just on her 21st she found out she was pregnant so she made the decision not to drink at her 21st, has been doing all the right things, you know. She is a very smart girl too and so I think it comes down to education, and it's not that she's done a degree, but just her knowledge of what it can do and how it may affect her ... she's got friends who are 15 having babies ... so I think she's definitely made a choice what to do and what not to do. I guess a person that has a baby when they're 15 might feel less empowered or less able to make a decision not to drink.

This excerpt also shows how the concept of taking control connects to other categories. They include the *learning the rules* process *doing alcohol differently*, and *making role transitions*, as much of the data related to codes such as “becoming an adult” or “taking responsibility”. Other conditions that related to taking control of the role were “taking responsibility”; and *role transition* conditions such as “being in a permanent relationship”.

Taking control is a consequence of making *role transitions*, but comes into play when the woman becomes pregnant or decides to have children. As the text above shows, *taking control* was also supported by having *resources* to draw on.

For one participant, taking control in her life was linked to involvement in feminist activity. Out of that emerged a sense of self-determination, which she described as “the ownership of our own ways”:

I still think it's the ownership of our own ways, that we have ownership, we have a greater, see I came through the feminist era of, well Germaine Greer and the federation, what's that called [*United Women's Conventions*].

Yeah, and I belonged to several groups that were feminist groups at the time and during the time that I was pregnant and so that, there were Māori women there, did they drink when they were pregnant? No, we didn't. (Matiti)

Matiti also linked that experience back to conceptualising herself as a “Māori woman”, relating to the concept of “being Māori” as one influence in *Trading off*.

Consciously *losing or letting go of control* is also a process that some Māori women act on, and relates to the conditions of this category, as well as to *releasing the pressure*.

The intensity with which women in this study referred to the need for women to take control and act with self-determination was surprising. While it came across in the interviews and can be heard on the tape, it may not be as clear in text form.

I think women need to be a lot stronger and need to be able to say no, I don't want to have a drink or need to say hey I can have a drink now, you know, can I have a drink, well I'm not asking you but I'm having a drink, all that sort of thing. (Whakaahu)

So what do you do, I would say that, hey you know, it's up to you, you have control of what happens in your life that will come through in your baby, okay? And one of the other things is about discipline. (Matariki)

6.5 Reflections on the theory

In this section I reflect on the interpretation presented in this chapter. I discuss some of the key elements of my interpretation, and compare and draw connections between them and the literature that may have some relevance. I outline some novel or suggestive issues that emerged from the interviews, discussing them in the context of existing research or knowledge, and suggesting further exploration. I also suggest some of the implications of this theory for

future research into alcohol and pregnancy among Māori. In line with the interactive nature of the theory, material in this section is interrelated so that discussion of key findings is linked to comparable literature, possible implications for practice, and research needs.

It should be noted that I have found very little theory that relates directly to my interpretation. Concepts like *Trading off* do not seem to have emerged from other research on alcohol use, whether in pregnancy or otherwise. The research discussed here is therefore of two kinds: theoretical research in different fields with some consistency to my theory, or which may offer some illumination of it; and public health research that either explicitly or implicitly raises concepts with some relationship to my interpretation. This lack of theory may be related to the very limited body of theory on population health (Dunn, 2006; Syme, 2008).

The clear exception to this rule is the body of cultural anthropology theory which I discussed in Chapter 2. The theories of alcohol use offered by researchers such as Douglas (1987), Park (1985, 1995), Heath (1995, 2000) and Wilson (2005) provide interesting reflections on the theory. These cultural anthropologists present different, though not conflicting, frameworks for analysing alcohol use as a complex, socially patterned behaviour. As these theories focus on cultural groups and societies rather than on individuals, they offer explanations for the *context* of women's understandings and behaviours rather than for individual behaviours. However, the themes discussed in Chapter 2 emerged strongly from my data analysis. The women interviewed in my study saw themselves as living in a "drinking society" where alcohol had meaning in their lives, served multiple roles, and often acted as a signifier rather than as "just a drink". Alcohol marked social boundaries, and the women described drinking occasions (including settings) where different rules applied. The concept that alcohol use was affected by multiple and overlapping identities also emerged strongly in my interpretation. My theory suggests that Māori women's choices and decisions about drinking when pregnant are influenced by those identities, as they are by the rules that apply in different places and at different times. One category in my research that has received surprisingly little emphasis in anthropological studies of gender and

alcohol use, with the exception of Douglas (1987), is *making role transitions*. While the anthropological models describe alcohol as marking age transitions (e.g. reaching adulthood) it would be interesting to see these models applied to other transitions such as marriage or career paths, for example.

My interpretation tentatively extends these theories into the area of women's alcohol behaviour in pregnancy. Perhaps the central implication of the basic social process concept of *Trading off* is its dynamic, interactive nature. This is illustrated by a comment from Tīoreore on what might make easier for some women to give up alcohol when pregnant:

I think first of all they're in, a lot of them are more educated, and so they are in a position to be able to take on board the messages. And I think also they are more likely to have support, good support, that support could be their parents, but it also could be their extended whānau, and quite often those women who are living, they're in stable environments ... they're more likely not to have the same level of peer pressure that I would have had, because they are more likely to be a bit older as well.
(Tīoreore)

In one sentence Tīoreore describes a complex interaction between whānau resources, whānau rules, economic and social support, access to messages, fitting in, and making role transitions. The women interviewed for this study understood negotiating decisions about alcohol and pregnancy as complex, and as involving both factors *internal* to the woman and factors in her *external* environment. Their understandings of the interaction between the internal and external were often well developed and sophisticated.

The *Trading off* process is also driven by the way a woman *interprets* her environment, and the meanings that she attributes to her experiences. In this sense this interpretation shows itself linked to the social interactionist perspectives of Blumer (1969) and others (Shibutani, 1970), discussed in Chapter 4. While the

women in this study might use different language to describe their understandings, their analysis would be similar to Blumer's argument that:

Human beings are neither creatures of impulse nor heedless victims of external stimulation; they are active organisms who guide and construct the line of action while simultaneously coming the terms with the demands of an ever-changing world as they interpret it. (Shibutani, 1970, p. vi)

One example of the way that the women in my study constructed their line of action can be seen in the category of *learning the rules*. While the rules were modelled for the women or articulated to them (as Whakaahu's father told her "Well you know, that's what happens when somebody gets drunk"), women reacted to the rules in active ways. One group of women went along with rules, while others (either openly or covertly) defied the rules. I originally perceived this as linked solely to deciding to drink alcohol in transgressive ways (before the appropriate age; with the wrong people; and most importantly drinking too much). An early example of defiant behaviour (linked to Māori identity) appeared in a kuia's description of her childhood:

[Māori] women certainly weren't allowed into the pub ... so you know, it's just like anything, it's only natural ... we're not allowed to have it, well we'll see how we are gonna have it, and we're gonna get it."

However, analysis showed that in fact, another form of defiance was reacting to the negative effects of alcohol on their whānau by avoiding alcohol:

When they grew up they never touched a smoke or the drink, that was the women. [*Why do you think that was?*] I think because they saw the effects that it had on and they didn't want that. I was like that you know, I can choose to drink or smoke if I want to. It's nothing to do with religion or anything, it's what I grew up in and I didn't like it and I didn't, and so you try and pass those sorts of things on to your children. (Matariki)

Matariki's talk here also has elements of *taking control*. Openly defying the rules was understandably an intense concept with high emotional content. It could go against the property of *identity*, and often involved breaking accepted gender roles or behaviour, so women who had done this presented their position strongly, as Matariki does here.

A related concept that underpinned several categories (*fitting in, drawing on resources, taking control of the role*) was the *consequences* for women who stop drinking alcohol or make significant reductions to their alcohol use when they become pregnant. In a drinking society such as New Zealand, any person who visibly does not drink alcohol is making a stand, and inviting comment (Douglas, 1987; Park, 1985). A typical case was recounted to me by a public health researcher who recalled that when she ordered a non-alcoholic drink in a bar, her friends immediately said loudly "Oh, you're pregnant!" For women who might not wish to disclose her pregnancy at an early stage, this could be a sanction in itself. Not drinking alcohol could be seen as a form of openly *defying the rules*, and the discussion around the category of *fitting in* and the consequences of not fitting in also suggests that not drinking alcohol could be perceived as a negative comment on people who were drinking.

This concept was recognised by Branco and Kaskutas (2001, p. 339) who said that "We heard in the focus groups that a woman's decision to abstain while pregnant may represent a lonely choice." They commented that "In health belief model terms, this negative reinforcement of abstinence represents a high cost to the woman trying to do the right thing for herself and her baby" (Branco & Kaskutas, p. 338), and suggest that "health campaigns perhaps should recognize this potential reality." Boyd & Marcellus (2007) and Poole (2003) also note the possibility of women being (or feeling) sanctioned, although the women in these studies were heavy drinkers or women with alcohol dependence. These researchers are all linked by having explicitly expressed feminist positions. The great majority of research on reducing risks for alcohol-exposed pregnancy omits to mention the concept of costs/sanctions. This may be because it has not been identified; because it has been discounted; or because of an assumption that

positive consequences for women (such as feeling happy about the health of her child, feeling of being in control, or praise from others) outweigh negative consequences.

So far, I have not found any qualitative research on the experiences of women who had made the decision not to drink when pregnant. Research with these women could throw light on such questions such as what happened to women who took an open stand against alcohol when they were pregnant; where did support (resources) come from; what support health professionals provided; did women feel they had been sanctioned for not drinking alcohol; and if they had, who by and in what setting; and how women might respond (both externally and internally) to public comments. Ideally, this research would be done with women who had recently had a baby, and who might be willing to reflect on their experience, and also to share suggestions which might benefit mothers in the future. A theory of what reinforced or undermined women's action to reduce their alcohol use might also have relevance to other areas of behaviour change.

The final category about which I had least data was *rationalising*. When looking for explanatory models that might illuminate my developing interpretation, I was interested in the body of thinking about "lay perspectives on health". Some writers on grounded theory have pointed out that grounded theory has some connection to "folk models of health" (Borgatti, n.d.), although its processes are designed to raise the concepts to higher levels of abstraction. Blaxter (1983, 1990) has been influential in theorising about how ordinary people's health beliefs may affect their actual health behaviours (Popay & Williams, 1993). Her research is based on her research into lay models of health behaviour and illness causation. The explanatory narratives of Blaxter's participants were at a different level to the interactive process that emerged from my research, being solely personal and focused on *causation*. Blaxter's linear model, in which *beliefs* ("what people know or think to be true") (Blaxter, 1990, p. 147) determine *attitudes*, which in turn influence *behaviour*, proved inadequate in explaining the interactive model that emerged from the narratives of my research participants. "Lay models research" (Blaxter, 1983; Popay & Williams, 1993) described rationalising taking place but

did not suggest *how* the rationalising process took place. This category remains one where more research is needed.

However, Branco and Kaskutas (2001) have researched alcohol use in pregnancy in the context of a health belief model used to provide a rationale for public health message campaigns on FASD prevention (Kaskutas, 1995). Their model captures a more complex mix of factors:

In the context of alcohol consumption during pregnancy, the model theorizes that changes in drinking behavior depend on a woman's perceived susceptibility to having a child with birth defects, her understanding of the risks associated with drinking during pregnancy, the value she places on abstinence, and the barriers or difficulties experienced in trying to reduce alcohol intake. (Branco & Kaskutas, 2001, p. 334)

The perspectives presented by Branco and Kaskutas (2001) and Kaskutas (2000) are consistent with my theory, although they address slightly different domains. One of the concepts that did not emerge from my data but is clearly important in their model is the importance of perceived risk. Risk perception has been the focus of much United States research (e.g. Stutts, Patterson & Hunnicutt, 1997; Testa & Reifman, 1995). However, it did not emerge from the data in my study at all. I was unable to locate the original sources of Branco and Kaskutas' health belief model, but it would be a useful follow-up to this research project, as it may provide some valuable comparisons.

Several of the concepts that emerged during the process of abstraction appear to have some connection with the theories of social psychologists such as Bandura (1987) and Harré (1993). In particular, Bandura's concept of *self-efficacy*, which he defines as referring to "beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments" (Bandura, 1997, p. 3) seems linked to the category I have called *taking control of the role*, to the extent that I described self-efficacy as a property of that category. Bandura's theoretical perspective on human agency may also have some relevance. However, not

having a background in psychology, I felt I did not have the skills to adequately analyse any connections.

In managing the process of *Trading off*, concepts such as *drawing on the resource bank* and *balancing* are consistent with the “Transtheoretical” or “stages of change” model of behaviour change developed by Prochaska, Norcross and DiClemente (1994). This model has been extremely influential in supporting people with addictions to plan for, implement, and maintain behaviour change. As its name suggests, the model draws on several theories of social and individual psychology. The Transtheoretical model has four main constructs which explaining health behaviour change: stage of change, processes of change, decisional balance (pros and cons) and self-efficacy or temptations (Prochaska, Norcross and DiClemente, 1994). While the model is strongly focused on individual agency, it does include some recognition of the impacts of changing social environments: Prochaska, Norcross and DiClemente cite smokefree areas as an example of how changing the external environment can give people new alternatives and add choices, which they label *social liberation*. The concept of the “decisional balance” has analogies to the balancing and trading off processes. A literature search located a long list of papers on using the Transtheoretical model to support pregnant smokers, but only one paper on support for alcohol reduction. Floyd et al. (2007) used the Transtheoretical model, along with motivational interviewing techniques, to support women considered “at-risk” (low SES, high rates of alcohol dependence).

However, one study produced a suggestive conclusion. Bane, Ruggiero, Dryfoos, & Rossi (1999) studied whether pregnancy might change women smokers’ “decisional balance”, a list of reasons for and against quitting. The research found that pregnancy changed some priorities, with “health” and “expected disapproval from others” gaining more importance as “cons”, while two new “pro” factors came in: “It’s too hard for me to quit while pregnant” and “Cigarettes help me relax and I couldn’t give that up while pregnant” (Bane et al., p. 797). These factors seem to relate to the concepts “carrying on as normal” and “releasing the pressure.” They also suggest that “smoking” compared to “quitting” is not a binary construct.

A theoretical model which shows some connection to the theory of *Trading off* is that of constrained choice in health-related behaviour. In *Gender and health: The effects of constrained choices and social policies* (2008) Bird and Rieker propose that constrained choice influences differences in health between women and men. Their model has three components: individual choice; human physiology (in this case, vulnerability related to factors such as stress, metabolism of alcohol, or genetic risk); and external constraints (e.g. family, work, community/social environments). The components are presented as an interacting diagram. This work is particularly interesting because of its focus on differential impacts of gender. Bird and Rieker's work has also received attention because it places emphasis on social inequalities. McCullough (2008, p. 968) describes it as undercutting health professionals' assumptions that "responsibility for a patient's current health status is reducible simply to that patient's choices, as if those choices were free of potential social constraints." The concept of constraint is central to my study (although it has been labelled "pressures" or "limitations"), as is the idea that women make choices within constraints. My interpretation, however, centres on meanings and understandings than guide behaviours, rather than factors such as genetic risk.

Over the time I have been working on this thesis, I found only one study that seemed directly related to my research questions, "Dialogic study of voices in talk about drinking and pregnancy" (Baxter, Hirokawa, Lowe, Nathan, & Pearce, 2004). In fact this study differed substantially from my research, in that it focused on the *talk about* alcohol and pregnancy rather than on looking at *meanings* and *constructions* which might explain behaviour, but it is still of some interest. Baxter et al.'s social communication research was done as a part of the development of a community-based media campaign against drinking during pregnancy. The researchers found "two competing discourses that organized these women's attitudes, beliefs, and behaviours surrounding drinking and pregnancy: the discourse of individualism and the discourse of responsible motherhood" (Baxter et al., 2004, p. 224). For these American women, their own drinking was no-one else's business, and they said they did not talk much about drinking and pregnancy

with others. They were most likely to have talked to mothers, sisters or aunts, or close female friends. Partners or husbands were seen as generally permissive but not actively supportive of the women's choices. In keeping with their reluctance to discuss the topic, these women would not talk directly to other pregnant women about their alcohol use. However, they would discuss those other women with their friends, and make strong moral judgements when doing so. This reflected strong beliefs about responsible motherhood, typified by a participant's comment that "If you're going to be a mother, you've got to put the baby first at all costs (Baxter et al., 2004, p. 239). Baxter et al. believed these two competing discourses interacted to reduce open talk about drinking and pregnancy. As my study had a different research question, the categories that emerged cannot be related to Baxter et al's paper. One theme that had some connection was the primary role of mothers and sisters as "trustworthy" people to discuss drinking and pregnancy with. A contrast that could be of interest to explore was that the U.S. women's position about other women's alcohol use was one of "moral judgement" (Baxter et al., 2004), while the position of the women in my study was one I summarised as "compassion".

The concepts of *resources* and *support* as a component of the *resource bank* are also central to *Trading off*. While this category was almost certainly saturated with "incidents" it proved one of the most difficult to resolve. There has been considerable research on how "social support" may influence patterns or types of alcohol use. However, the theories presented are not consistent, and on the surface seem contradictory. For example, Ormerod and Wiltshire (2008) present a theory of social networks influencing young people's alcohol use: "In many social and economic contexts, individuals are faced with a choice between two alternative actions, and their decision depends, at least in part, on the actions of other people", a situation that the authors label "binary decisions with externalities (Ormerod & Wiltshire, 2008, p. 2). They summarise evidence that social networks are important in determining people's behaviour on "matters of public health", and can act as a "tipping point" and present their research showing that "strong social networks" are a contributing factor in the increase in binge drinking among young people in the United Kingdom. This concept of the binary

decision, and the effects of social networks, appeared to have some applicability to my interpretation, and were supported by other studies. McCrady (2006) summarised a substantial United States research base showing that people who drink alcohol regularly or heavily belong to networks where others also do, although no explanations. Ockene et al. (2002) found that women who “spontaneously” stopped drinking alcohol when they found out they were pregnant were more likely to report that they had social support than those without support.

By contrast, McNamara, Orav, Wilkins-Haug, & Chang (2006) found social support had no impact on whether women drank alcohol when pregnant or not, and Mulia, Schmidt, Bond, Jacobs and Korcha (2008) found that women in poverty did not benefit from social support in reducing alcohol use. Mulia et al. hypothesised that:

Women in poverty are exposed to severe, chronic stressors within their communities and immediate social networks which increase vulnerability to psychological distress and problem drinking. The finding that social support does not buffer stress among these women may reflect their high level of exposure to stressors, as well as the hardships and scarce resources within their networks. (Mulia et al., 2008, p. 1283)

This contradiction, and the contradictions in my codes, was resolved by Stephens (1985, 1987) who reported findings of high-level analysis on how different forms and levels of support affected the probability of drinking alcohol or smoking when pregnant. Stephens found strong distinctions between what she termed *social support* and *pregnancy support* – support that was specific to pregnancy. This “pregnancy support” concept immediately identified itself as a label for this category, the only time when an external pre-existing concept was adopted, although the concept took on different meanings to those in Stephens’ research. Stephens found that women with “high social support” were more likely to drink before and during pregnancy; women with “high pregnancy support” drank less, less often, especially in the first four months. Stephens concluded that support

was not a single concept: social support might be “be more a measure of friendship ties which could encourage sociable drinking”; while pregnancy support “could “reflect health-oriented ties, and discourage alcohol consumption during pregnancy” (Stephens, 1985, p. 347). Stephens also found that losing pregnancy support from the father of the baby was an independent contributor to variance in alcohol consumption. This has strong consistency with the emphasis women gave to partner support, a category which had considerably more importance in the analysis than I had expected that the beginning of the interviews. I have described Stephens’ study in some detail not only because it helped to resolve the *drawing on resources* category, but because it was an example of genuinely perception-shifting research. Interestingly, although the research was done some years ago, and has been referenced in a number of other papers sourced for my study, it does not seem to have influenced much recent research, with many papers still treating “social support” as a unitary concept.

A theme that recurred throughout the study was the different significance of different types of alcohol, and in particular the privileged status of wine. While this concept was novel in the context of Māori women’s alcohol use, in the data from the women it was not presented in the context of alcohol and pregnancy so I excluded it from the final categories. However, it deserves some discussion, for two reasons: for practical reasons, as in other countries women have been found to perceive wine as “safer” for the fetus than other forms of alcohol; and because it exemplifies some of the complex meanings alcohol has for women, meanings that seem to continue to be important to women during pregnancy and beyond.

It was surprising to find that across age groups, locations and personal circumstances, Māori women in the study gave wine a distinct status. Wine acted as a marker of *role transition* and was also associated with *fitting in*, as Opiri describes:

... As I grew up and was out in social environments or working environments that required more than just being able to scull a jug [of beer] ... I've semi-acquired a taste for wine.

Wine was characterised by concepts of maturity and sophistication and acted as a status marker, similar to the discourse found by Lyons, Dalton and Hoy (2006) in alcohol advertising in New Zealand magazines targeted at young women.

“Women’s drinks” were consumed by “smart professional women” characterised as “glamorous” and “sparkling” (Lyons et al., p. 226). Lyons et al. note that this marketing approach to women is now worldwide. For women in my study, wine was also associated with “time out” shared exclusively with other women (such as friends, sisters, or members of Māori women’s groups). Linked to characteristics of wine as “special” and qualitatively different from other types of alcohol, was the concept of wine as not a “real drink”, typified by Te Kokota:

I think on my first pregnancy, maybe three glasses of wine in total ... but it would've been in the context of having food with wine rather than you know, drinking. (Te Kokota)

Women attributed values to other types of alcohol. Beer and alcopops were linked to “drinking to get drunk”, while sherry and unmixed spirits were linked to the “old days”, the generation of the women’s parents or grandparents. The privileged status of wine was well recognised in earlier research on New Zealand women and alcohol; for example Banwell describes women as “classifying wine as good alcohol and the rest as bad booze” (Banwell 1991, p. 202; also Park, 1985), but the *new* element here is the accepted presence of wine in Māori women’s lives.

Overseas research indicates that women create typologies (perhaps as part of a *rationalising* process) about the relative risks of different types of alcohol to the fetus. Comparing women’s understanding of alcohol risk before and after an FASD information campaign, Burgoyne, Willet and Armstrong (2006) found that a side effect of the campaign was a shift in beliefs about relative safety of different types of alcohol. While before the campaign women had considered beer and wine about equally harmful, after it, the proportion of women who ranked beer as safe had halved but the proportion who thought wine was safe had stayed almost the same. Branco and Kaskutas’ (2001) research (mentioned in Chapter 1) takes

its title from a research participant's comment that "If it burns going down" as spirits does, it must be harmful to the fetus, while wine was described as "more like a relaxing thing" (Branco & Kaskutas, 2001, p. 337). Hankin, McCaul and Heussner (2000) also refer to research that found women who drank wine believed that wine was safer than other forms of alcohol to drink during pregnancy.

This privileging of wine may impact on younger Māori women as they move through *role transitions*, if the point at which they may be considering parenthood coincides with the point at which they are drinking a substance they may consider "not booze". Given the popularity of wine among New Zealand women (discussed in Chapter 2), this concern may apply equally to all New Zealand women. Whether it does or not, a study focusing specifically on the meanings of wine to women and how those meanings might affect alcohol use in pregnancy would make a significant contribution to FASD prevention research.

A category discussed at some length in the main text was the concept of "carrying on as normal", in particular the emerging concept that pregnancy may not be a "separate state". The indications in this sub-category are novel and would need considerably more investigation to establish. However, the suggestion is plausible, and is consistent with New Zealand's pattern of unplanned pregnancies (Dickson et al., 2002). New Zealand's pattern is consistent with Einarson and Koren's (2006) statement that in most Western countries around 50% of pregnancies are unplanned. Einarson and Koren added to what was known about women preparing for pregnancy in Canada. Traditionally health providers had believed that women who were better educated made healthier lifestyle changes, but Einarson and Koren (2006, p. 4) found that regardless of education level women "agreed that making healthy lifestyle changes prior to becoming pregnant would improve the health of their baby". A third of women in this study had made lifestyle changes before their pregnancy, and around a third of that group (about 10% of all women in the study) had quit or cut down drinking. The only differential characteristic of women who planned pregnancy was age, with women in the 30-39 year age group more likely to plan; but it should be noted that the

study did not collect or analyse information on ethnicity. Again, there appears to be little theory about what might support women to plan or prepare for pregnancy, although it is possible that theories may be found in nursing and/or midwifery research.

From a Māori health perspective, this possibility may also warrant further investigation because it has had some “grab” with Māori women (including women working in maternity care), at the same that it indicated a qualitative discontinuity with “traditional” models of Māori pregnancy in which women were tapu during pregnancy and childbirth (Durie, 1998b). Pregnancy was associated with special food, exercises, and rituals including karakia (Ryan, 1995). In interviews for this study, several older Māori women recalled injunctions from kuia against drinking when pregnant. However, I have not found any research about the development of lay or “traditional” beliefs about alcohol and pregnancy against which to position this finding.

As my study was a Māori health research project, it is obviously important to ask how this interpretation may relate to theories of Māori health. The Whare Tapa Whā model as a theory that has had considerable currency in the Māori health sector. Whare Tapa Whā conceptualises Māori health through four dimensions: te taha tinana (the physical dimension); te taha hinengaro (mental wellbeing); te taha whānau (the extended family and community); and te taha wairua (spiritual focus) (Durie, 1998b). Other Māori models of health such as Pere’s Te Wheke model (“Te Wheke”. n.d.) emphasise different dimensions, but share the fundamental encompassing nature of Whare Tapa Whā. Durie (1998b, p. 71) describes Whare Tapa Whā as presenting a model of health as “an interrelated phenomenon rather than an interpersonal one”, adding that from a Māori perspective “healthy thinking is integrative not analytical” (Durie, 1998b, p. 71).

Considering the process of negotiating decisions about alcohol and pregnancy as a health concern, I believe that the narrative shared by the women in my study was very much an integrative one. They saw individual Māori woman as negotiating

decisions within a multi-dimensional environment, where internal and external influences interacted, and were mediated through a series of processes.

The Māori women interviewed conceptualised the processes associated with *Trading off* as associated with the whānau as a source of resources, and with effects on the hinengaro such as stress and feelings of isolation, as well as the aspects connected with the tinana. They not only described the whānau as essential in *learning the rules*, but conveyed some of the ways in which healthy (or less healthy) whānau modelled behaviour. The whānau's capacity "to belong, to care and to share" (Durie, 1998b, p. 69) underpinned not only the women's analysis, as shown in some of the categories (notably *fitting in where you are*), but also the compassionate way in which they talked about the pressures and constraints on pregnant women in contemporary Aotearoa New Zealand. In this theory, alcohol is not simply a drug or a commodity, but something that helps to connect Māori women to their whānau, and helps them *fit in* to their environment. These qualities make using alcohol something that cannot just be "quitted" without consideration or without cost.

Only the dimension of wairua did not emerge out of the interviews. This finding surprised me given that spiritual and religious support was present in the lives of many of the women interviewed. One possibility is that for the women their spiritual/religious beliefs were too personal to be shared; another is that they did not see concepts about wairua as related to the concern of alcohol and pregnancy.

My theory may also connect to Whare Tapa Whā in that it suggests a model that is not only integrative but inter-dependent. In my interpretation, problems or imbalances in one category (for example, a forced role transition due to unexpected pregnancy, or loss of pregnancy support from a partner) can contribute to problems in another (for example, losing a sense of *control* over one's situation and needing to *release the pressure*). This may simply reflect the unspoken understanding of the participants that health behaviours are integrative and inter-dependent, with their internal models being consistent with Whare Tapa Whā or similar models.

Further research into the theory of *Trading off* may elicit more understanding of how Māori concepts such as Whare Tapa Whā may (consciously or not) contribute to the process of *rationalising* women's decisions about drinking or not drinking during pregnancy. Research could also help identify more clearly the extent to which pregnant Māori women might need the *resources* of whānau, wairua, hinengaro and tinana, as well as how those aspects might be mobilised to support women. I would also be interested to know more about how Whare Tapa Whā (or other theories which may describe or explain Māori women's social and health behaviours) might support women to develop or maintain their sense of tino rangatiranga, a concept which I believe may describe Māori women's strength in *taking control* better than Pākehā concepts such as "personal agency."

Lastly, it is clear that given the importance of whānau in *setting the rules* and providing *resources* for pregnant Māori women, we need to know more, not only about what whānau *know* about alcohol and pregnancy, but about how they understand their role in supporting women through pregnancy.

While not presenting theories of Māori health, the analysis of Māori women and alcohol found in other qualitative research also formed a useful comparison. It was interesting to compare my interpretation with Brookings's (1996, 1999) research with young Māori women, as much of the "story" that my theory presents is also recognisable in Brookings's thematic analysis. In particular, Brookings's concept of *ground rules of drinking* which represent a whānau consensus, is very close to my category of *learning the rules*, although my concept differs from (and may have built on) Brookings's concept by identifying some of the variation within that perceived consensus, such as how the rules were learned, and my sub-category of *defying the rules* discussed in this chapter. Brookings' analysis that younger Māori women (her participants were all under 25 years) felt that they would go through a natural process of "growing up and mak[ing] something of themselves" (Brookings, 1999, p. 41) seems to describe the women recognising *making role transitions*. However, Brookings (1999, p. 75) attributes this process to the development of "self-belief and independence", rather than to a social transition process, as my study did. While my research topic had a different focus

than Brooking's, it is possible that my theory could extend or throw some light on her analysis by presenting a model suggesting how some of her themes might interact with my own.

Taiwhati's (1999) research showed neither consistency with my theory nor contradiction, although there were some common codes such as "acceptability" and "pushing things away". My research did address a different research domain from hers. Taiwhati's analysis that for the young women in her study, alcohol acted not only to *release pressure* but to allow them to "speak freely" did not emerge from my interviews, but is an interesting and provocative concept.

The question remains as to how applicable theories about women's use of alcohol are to women's alcohol use *in pregnancy*. In the absence of a model that might identify how different these categories are, I believe it is plausible to suggest that while the rules for alcohol use and behaviour are set before pregnancy, when pregnancy is recognised a new set of considerations intervenes and the boundaries around decisions (such as conditions, consequences of actions etc.) change. The study by Bane et al. (1999) discussed earlier suggests that this is a plausible explanation, and also suggests that the new considerations may not necessarily be incentives for change. While the characteristics and meanings of smoking are different from those of alcohol, Bane et al's idea is consistent with the interpretation presented in this chapter, with pregnancy seen as potentially having both positive and negative characteristics.

Because of the lack of theoretical studies that might be able to be adequately compared to the theory being presented here, it is difficult to draw any conclusions about how this theory fits into its discipline. However, it may be said that with some exceptions, the literature supports the concept that negotiating alcohol during pregnancy is a multi-dimensional process, rather than a binary one. The literature also indicates that sub-categories of the core category have some degree of "fit" with current knowledge. However, the theory of *Trading off* appears to extend current knowledge in some respects, not least in being characterised by conditionality, temporality and interactivity.

One of the most interesting reflections on the emerging theory came from Leonora Marcellus, who as mentioned in Chapter 1, has advocated for “using feminist ethics to inform practice with women who use substances” (Marcellus, 2007, p. 28). Marcellus’ theoretical approach focuses on concepts such as the “moral status of the fetus”, so while of significance in guiding FASD prevention and intervention, it does not relate to models of the women’s perspective. However, in summarising the theory of “pregnant embodiment” Marcellus (2007, p. 34) describes it as seeing pregnancy:

... as a process rather than an event, replacing the passive view of pregnancy with one that acknowledges the ongoing commitment a woman takes on throughout her pregnancy.

That could also describe my interpretation, in which Māori women’s experience is conceptualised as a process, and in which a central concern is how to negotiate that commitment.

6.6 Evaluating a grounded theory

Charmaz (2006) refers to Glaser as saying that grounded theory is designed to generate hypotheses, not test them. Grounded theory can be evaluated in a number of ways: parsimony (accounting for all the data in the simplest possible way); practical relevance; predictive value; and modifiability (Glaser, 1978). Glaser and Strauss (1967) proposed the criterion of “grab”: relevance of the theory to research participants and to the group the theory applies to. Some researchers have assessed this by systematically getting participants’ feedback on the emerging category and final core category. However, Glaser (2002, p. 5) notes that a grounded theory attempts to explain how the participants are “resolving their main concern, which they may not be aware of conceptually, if at all”. While I would have liked to have research participants’ reflection on my interpretation, I

take the point that my final theory is considerably abstracted from the original data.

Charmaz has extended this list of criteria. She suggests applying an overall criterion of “*interpretive sufficiency* [my emphasis], which takes into account cultural complexity and multiple interpretations of life” (Charmaz, 2005, p. 528).

Charmaz also offers a broader list of criteria including credibility (e.g. does the researcher present enough evidence to support their interpretation), originality (e.g. does the theory offer new insights or extend current concepts), resonance (e.g. do the categories portray “the fullness of the studied experience”) and usefulness (“does it offer interpretations people can use in everyday worlds? Can the analysis spark further research in substantive areas?”) (Charmaz, 2005, p. 528).

While this theory of *Trading off* may be a “first approximation” of a basic social process, it aims to meet criteria for a good grounded theory as presented above. I have attempted to keep it grounded in what the women interviewed said, and believe that it fits what they said. The theory seems to account for the data. I believe it also meets the criteria of being testable, and of offering a basis for possible action, and for further research into what can be done to support Māori women in this important health area. This theory also allows opportunities for further exploration and research. It provokes questions that may stimulate research – for example, in practical terms, what might make it easier for women to make choices to reduce or stop drinking alcohol? This theory is emergent, and may well be modified as further research explores how women manage the constraints, or as different processes emerge from other research projects. Further research may identify a different relationship between categories, organise the categories on a different way, or possibly identify a core social process at a higher level of conceptualisation and abstraction from the current process.

6.7 Summary

This chapter proposes a grounded theory of *Trading off* to account for how Māori women manage decisions about drinking alcohol when pregnant. This core social process is supported by the three key processes: *drawing on resources*, *rationalising*, and *taking control of the role*. The story of *Trading off* brings in the six categories presented in the previous chapter to produce a narrative that starts with *learning the rules* about alcohol, moves through how alcohol use changes through *making role transitions*, and connects the concepts of drinking alcohol as part of *fitting in where you are* with using alcohol *to release the pressure*, and *carrying on as normal*. The theory must be recognised as my interpretation, although I believe it is grounded in the data, accounts for the data, and offers a new, modifiable and potentially useful interpretation.

While the body of theory that can be compared to *Trading off* is limited, the interpretation is consistent with several models, including cultural anthropological theories of alcohol use; Branco and Kaskutas' health belief model; and the constrained choice model of gender health. Further research into the theory of *Trading off* may elicit more understanding of how Māori concepts, such as Whare Tapa Whā, may contribute to the process of *rationalising* women's decisions about drinking or not drinking during pregnancy. My interpretation differs from other theories in presenting its categories as dynamic and interactive, and in focusing on meanings and understandings rather than being a direct theory of behaviour.

Chapter 7

From theory to action

The philosophers have only interpreted the world, in various ways. The point, however, is to change it. (Karl Marx, *Theses on Feuerbach*, thesis 11)

7.1 Introduction

This chapter returns to the origins of my research, as described in Chapter 1. The aims of this research – to understand what influences Māori women’s alcohol use during pregnancy – are linked to my commitment to improve Māori women’s health. For this reason, I did not want to end just by summarising my findings, but to explicitly link them to suggestions for further action.

In the first section of this chapter I outline some of the general implications of this research for action. I follow this by suggesting some research needs, and possible elements of a national approach to reduce alcohol-exposed pregnancies among Māori, including some suggestions made by the women who took part in my study. The second section of the chapter reflects on what I have learned doing this research, as a researcher and personally, returning to the themes of Chapter 1.

7.2 General implications of my interpretation

Trading off is an individual process, but exists in a complex social context. The implication of this is that to reduce alcohol-exposed pregnancy among Māori, support will need to come from that social environment. The most effective way to support a Māori woman is unlikely to be a lecture, but might instead be to reduce her financial insecurity.

Māori women can “get” the messages about alcohol and pregnancy if they are clear, and if they are delivered in appropriate ways and places, and by people (or organisations) that Māori women trust. As well as getting clear and credible messages, Māori women need health professionals to be able to identify the factors that are influencing those women’s lives, and either provide appropriate support (for example, to improve their sense of self-efficacy) or link them to support, so that women understand how they can translate those messages into reality in their everyday lives.

Māori women need to have resources, both internal and external, on which to draw, so they have the energy to make changes in their lives. The people who support Māori women during pregnancy – not only professional maternity carers, but whānau, friends and workmates – need some understanding about what influences that woman. What are the rules about alcohol she learned as a child, but has probably never articulated? Where is she in her life? How does her workplace, her kapa haka group, or her netball team, affect what she takes into account in deciding whether to have a few glasses of chardonnay after an event, or celebrate a win at the pub? What is she trading off by way of stresses, hopes and expectations? What does she know about the effects of alcohol on her developing fetus, and how much does that matter to her compared to the other things going on in her life? What are the consequences for her if she decides to cut down or give up drinking alcohol: will she feel strong for having taken control of her life, or lonely and isolated drinking juice while those around her drink vodka cruisers? What gives her energy, and what drains that energy?

This list may be intimidating, but it reflects the importance of the people who surround a pregnant woman, as shown in the theory. Without knowing it, whānau and other people can contribute to a Māori woman’s resource bank, reinforce or undermine her sense of self-determination about refusing an offered drink, support her to make changes or make her feel there is no point.

This interpretation has suggested which factors are given most weight in *Trading off*. But different women will have different priorities, just as they face different

pressures. Finally, a critical implication of *Trading off* is that as a cyclical, fluid process, it should never be seen as too late to give support if women continue to drink hazardously during pregnancy: at any stage, the possibility for change exists, and as Chapter 3 shows, change at any point can reduce potential problems.

7.3 Reducing alcohol-exposed pregnancy in Māori women: what this research may contribute

It takes a community to support a woman in her efforts not to drink
(Canadian community FAS prevention campaign slogan)

This research is being completed as policy and research work is being done which may lead to a national action plan to reduce alcohol-exposed pregnancy. The findings of this research project have some implications for research, policy and service development.

7.3.1 Research implications

First, the research reviewed in this thesis supports the assertion that alcohol-exposed pregnancy is potentially a Māori health issue. The distinctive patterns of Māori women's alcohol consumption, combined with their fertility patterns (Ministry of Social Development, 2008) mean that they have a different picture of risk for alcohol-exposed pregnancy from other groups in the New Zealand population.

The findings of this research suggest a number of areas where further research is needed. New Zealand needs regular, systematic and comparable surveys which can identify *variations* in alcohol use *inside* the Māori population, particularly Māori women (Cunningham, 2008). Similarly, research is needed to identify whether not only whether women are drinking *any* alcohol when pregnant (Ministry of Health, 2007a), but how much alcohol and how often. This could be supplemented by

substantial qualitative research, as has happened in Canada (Dell & Roberts, 2005).

The lack of basic data discussed in Chapter 3 reconfirms the need for a New Zealand baseline prevalence study (which would include a substantial dataset on Māori). A first step might be a study modelled on that done in Italy by May et al. (1996) described in Chapter 3. This international collaborative research group could be invited to support or collaborate with a New Zealand project.

7.3.2 Research participants' suggestions for action

As discussed in the first chapter, early in developing this project I had put aside my initial research aim to find out from Māori women *their* ideas for the best strategies and messages to reduce alcohol-exposed pregnancy. However, the participants in this research offered many suggestions, based in their own experience, their observations of other women's experience, and their knowledge of Māori society and hauora Māori. Their ideas often paralleled or expanded on health promotion best practice, such as Rogers' diffusion of innovations (1995), and "narrowcasting", developing health information for highly specific segments of the public (Centers for Disease Control and Prevention, 2008), so I have supported their suggestions by reference to relevant literature where available.

Women in this project urged that midwives or other maternity carers be given *clear* messages about the effects of alcohol on fetal development that they can give to Māori women. They often expressed concern that they did not have a clear understanding of the effects of alcohol on the fetus. They also felt that messages about smoking and pregnancy were clearer than those around alcohol, and that women were getting much more exposure to messages about smoking than to ones about alcohol. Participants thought that fuzzy messages would not help women who might want to cut down or stop drinking alcohol, and could support women who might (unconsciously or consciously) be looking for ways to justify their drinking.

Some women suggested that maternity carers discuss alcohol (and probably other drugs) not just at the beginning of the pregnancy but throughout, as women's circumstances often changed over the course of the pregnancy. A key theme emerging from the research was that maternity carers should *ask questions* about a woman's alcohol consumption – not just what she is drinking at the moment, but how much she generally drinks, with whom and where.

Another theme was the need to help friends, whānau and partners understand their importance in that supporting role, and resource them with appropriate messages and support strategies. Baxter et al.'s research on communicating information to women about alcohol and pregnancy, discussed in Chapter 6, supports the importance of men as part of women's "primary group" (2004, p. 245).

In Chapter 5, the research identified the possibility that women who do not receive early pregnancy support will follow a "carrying on as normal" process. Conversely, pregnancy may be an opportunity for change. Several participants urged that work be done to reach women who are "at risk" when they are pregnant as early in pregnancy as possible, and to give them intensive support before the baby is born, not just afterwards. One idea proposed was to extend programmes such as Early Start which support at-risk mothers, from after birth to early in the pregnancy. Providing community case workers to do that support in the community could take some of the load from midwives. Another suggestion was to set up peer support groups for women at risk, as women in the same situation could understand the stresses other women faced and suggest ways to manage pressures (for example, pressures from others to continue drinking).

Proposals for getting message out included using Bebo, Facebook and other social networking sites to get health messages to Māori women. One participant pointed out that thousands of New Zealand women (not just young women) use them daily or more often, and information on these sites could have high credibility. This idea is in line with research on how to get effective health messages to Māori, which found that the more Māori saw the people putting out

health messages as like themselves, the more likely they were to consider and take on board messages (Ministry of Health, 1994). They also thought it was important to get information out in ways that were relevant to Māori women's realities. One idea was to show young women the real consequences by taking them to hospital neo-natal units to see babies who have been exposed to alcohol.

As mentioned in Chapter 6, women in this study felt a responsibility to give positive health messages and to reach out to younger Māori women, whether by supporting their own daughters or by working through hapū, iwi, or groups such as the Māori Women's Welfare League. Research on Māori mothering (Rimene, Hassan, & Broughton, 1998) found that many Māori women still value the role of kuia, and give the messages that come from them high credibility. Rawiri (2007) found that adolescent Māori mothers wanted such support, but did not want to ask, and often did not have grandmothers or other elders living close to them. The *Tipu Ora* programme in Rotorua has been very effective by drawing on kuia as a resource (Ratima, 1999), and similar models could be piloted.

7.3.3 Implications for action

The theory presented in this thesis suggests that Māori women's behaviours about alcohol and pregnancy are influenced by their whānau as well as by the social environment. Alcohol-exposed pregnancy needs to be tackled using proven population health approaches (Counsell et al., 2004; Riley et al., 2003).

Recognising that Māori women are diverse, health promotion strategies should follow good social marketing practice, segmenting Māori women according to characteristics (which could be derived from this research) such as age group, life stage or alcohol use pattern, and developing targeted programmes and information materials for them (Leigh, 1993; Rogers, 1995).

However, separate approaches will be needed to reach women identified as having alcohol problems, both because they do not respond to the kinds of messages and approaches that women in the general population do (Kaskutas, 2000; Kaskutas & Graves, 2001), and because they have special needs (for example, detoxification or

medication to help them reduce their alcohol use) that will need to be met by skilled intensive interventions (Hankin, McCaul, & Heussner, 2000; Poole, 2003).

In accordance with a population health approach, a national action plan should identify ways to change not just behaviour but *settings* (Ministry of Health, 2002). Chapter 5 indicates that this should include not just the settings where alcohol is consumed, but places where Māori women work, study, exercise and just hang out. These settings influence Māori women's alcohol use behaviours, and can support or undermine women's ability to make changes to their alcohol use when pregnant.

While alcohol-exposed pregnancy is an issue for Māori, the analysis in this thesis shows that it is not just “a Māori problem.” An effective start to preventing alcohol-exposed pregnancy in the Māori population would be to bring together Māori with expertise, including personal experience, to guide work on appropriate strategies. Ideally, strategies should be based on a Treaty of Waitangi framework. The Māori element of any New Zealand strategy should be, as Durie (1998a) recommends, constructed from a Māori base, not “simply added on to a sectoral focus” which is likely to result in “confusion, if not rejection” by Māori (Durie, 1998a., p. 52). Following models in Canada and the USA (May, 2006; Tait, 2003), strategies to reduce AEP among Māori should be developed by Māori. Where initiatives have been led by the indigenous peoples, with support from appropriate experts, FASD has been reduced by as much as 50% in these populations (May, 2006).

7.4 Research reflections

Reflecting on a long journey, I can see three kinds of learnings: developing my understanding and appreciation of the value of “theory” in public health; increasing my understanding of grounded theory and my practical skills in qualitative research, and learning about myself as a person.

As I was writing up my findings, I read some reflections by pioneering social epidemiologist S. Leonard Syme on his career. Talking of what he would have done differently, Syme (2005, p2) says that:

I decided that our social theory was not very useful in helping us think about health matters. I decided to no longer base my research on theory but to collect reasonable seeming data and do fishing expeditions. I taught several generations of students to forget the “theory thing” and just go for it. The result is that we now in social epidemiology have piles and piles of findings and no way to make sense of it or to think about what needs to be done next.

The process of generating theory has shown me that theories can have practical value, both for the researcher who has develop new ways to think about known data, and as a basis for deciding “what needs to be done next.” Generating theory was a challenging process for a researcher whose previous experience had been in the most pragmatic areas of “policy research”: evaluation, descriptive studies, evidence or literature reviews. Going out into the cloudy area of abstracting “categories” caused occasional panic attacks, but also the excitement of seeing concepts emerging from the data that I would never have expected, and that I could see actually being useful.

Having worked on several research projects, I saw myself as reasonably experienced. This research was far more challenging than I had expected, not least because being a solo researcher was much lonelier than working in a research team. I also learned much about balancing work, study and whānau commitments. Apart from time and energy, the largest challenge of the research was managing the data; like Syme, I was faced with a large amount of relevant data, although mine came from a very small sample. I gained a real appreciation of the value of the grounded theory approach, both for its ability to produce useful findings and for what it teaches the researcher about analysis. I also appreciated Corbin and Holt’s (2005, p. 51) description of grounded theory as “a lengthy and time-consuming process ... a researcher must be willing to live with

ambiguity until the analytic story begins to fall into place, which can be considerably late in the research process.” I endorse the suggestion that novice grounded theory researchers “set aside ‘doing it right’ anxiety, adhere to the principle of constant comparison, theoretical sampling and emergence and discover which approach helps them best to achieve the balance between interpretation and data that produce a grounded theory” (Heath and Cowley, p. 149).

Generating grounded theory is very dependent on the interviewing and coding skills of the researcher. While I am not sure if carrying out more interviews would have produced stronger or richer data, it might have allowed me to refine my interviewing process. Looking back over interview texts, I can see where I could have gained better data by exploring a concept further. From a grounded theory perspective, the data gaps I see now provide a reason to continue to modify and expand the interpretation. Practically, I also learned about the difficulty of recruiting participants directly from the community; time was needed to locate very busy women, to make contact, and to follow up the initial contact before their interest was lost.

As a solo researcher, I gained real value in talking to others about the emerging codes and categories. While opportunities for this were limited as a student, my work allowed me to build contacts with people who worked on alcohol issues in Māori, non-Māori and other communities. Particularly valuable were the comments and perspectives of the people I met at the Edmonton HOSW gathering. Through continued contact with some of them I was able to get some entirely fresh perspectives.

One key learning was that researching a topic about which I have been passionate about for more than a decade is that it makes it hard to set boundaries for the research or to switch off. Much of my analysis, particularly at the early stages of resolving codes into categories, would have benefited from more distance from the topic. Managing multiple roles was also challenging: expectations about rigorous research processes and ethical requirements did not always fit easily with

the expectations of others around me (for example, whānau members who couldn't see why they couldn't take part in the study). However, working on this research for almost five years has not taken away my commitment to this kaupapa.

This research also confirmed for me the assumption set out in the first chapter, that it is worth finding out from indigenous women themselves what they think. I was reminded of posters from the Māori feminist movement that used the whakatauki “Me aro ki te hā o Hine-Ahu-One” (pay attention to the voice of the Mother of us all), linking us back to our ancestral support. As mentioned in the acknowledgements, the deeper I got into the data, the richer appeared the gift that the research participants had given me.

7.5 Final reflections: the whale riders

In August 2006, I attended the Healing Our Spirit Worldwide Fifth Gathering in Edmonton, Canada. As well as attending workshops and papers on FASD prevention and on indigenous women's health, I delivered a presentation on the background, rationale and aims of this research project. For a final image that could remain on screen while I answered questions, I chose a still from the end of the movie *Whale Rider*. It shows the heroine Paikea on the waka just launched by her tribe, sitting alongside her grandfather who has become reconciled to the girl's role as a leader of her people. I selected it as an image with which some of those attending might be familiar, and which also showed a strong, determined young Māori woman.

One inspirational presentation I attended was by a group of tribal elders and social workers working with the Manitoba government's Child and Family Services Division. The project targeted First Nations women with alcohol use problems who already had a child with FAS or FASD, and aimed to help them reduce their alcohol use to prevent their future children being affected by FASD. A key element was a weekend “nurturing gathering” providing fun and relaxing

activities (traditional crafts, massage) for these women, and linking them to tribal elders and other support and counselling. I was listening in awe at the idea that government services might provide support for indigenous women with alcohol problems rather than blaming or ignoring them, when a presenter mentioned that one activity was a pyjama party at which a positive inspirational movie was shown – *Whale Rider*.

As I worked on this thesis that serendipitous experience has stayed in my mind. I have come to see Paikea's journey as a model for someone aiming to support Māori women's wellbeing and their right to self-determination. Paikea's story is one of a young Māori woman changing tribal tradition while staying true to it; not challenging the right of her elders to determine the lore, but making them see that tradition is broad enough to encompass her leadership. That final scene of the movie also shows both healing and growth in the image of the waka, as the people move forward in unity and strength through returning to their traditions, and as Paikea's father heals by returning to his tūrangawaewae and tikanga.

7.6 Summary

In this final chapter, I have completed the journey, returning to the policy and research issues that shaped the development of this research project. I have also summarised some of the implications of my research findings. They suggest possible research directions, and implications for the development of health promotion programmes for Māori women. The journey was also one of personal and professional development.

References

- Abel, E. L. (1995). An update on incidence of FAS: FAS is not an equal opportunity birth defect. *Neurotoxicology and Teratology*, 17(4), 437-443.
- Abel, E. L., & Hannigan, J. H. (1995). Maternal risk factors in fetal alcohol syndrome: Provocative and permissive influences. *Neurotoxicology and Teratology*; 17(4), 445-462.
- Ahlström, S. K., & Österberg, E. L. (2004/5). International perspective on adolescent and young adult drinking. *Alcohol Research and Health*, 28(3), 258-268.
- Allamani, A. (2008). Alcoholic beverages, gender and European cultures. *Substance Use and Misuse*, 43(8), 1088-1097. doi: 10.1080/10826080801913438
- Appleton, J. V. (1995). Analysing qualitative interview data: addressing issues of validity and reliability. *Journal of Advanced Nursing*, 22(5), 993-997.
- Backman, K., & Kyngäs, H. A. (1999). Challenges of the grounded theory approach to the novice researcher. *Nursing and Health Sciences*, 1(3), 147-151.
- Baer, J. S., Sampson, P. D., Barr, H. M., Connor, P. D., & Streissguth, A. P. (2003). A 21-year longitudinal analysis of the effects of prenatal alcohol exposure on young adult drinking. *Archives of General Psychiatry*, 60(4), 377-385.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W.H. Freeman.

- Bane, C. M., Ruggiero, L., Dryfoos, J. M., & Rossi, J. S. (1999). Development of a pregnancy-tailored decisional balance measure for smoking cessation. *Addictive Behaviors, 24*(6), 795-799.
- Banwell, C. (1991). I'm not a drinker, really: Women and alcohol. In J. Park (Ed.), *Ladies a plate: Change and continuity in the lives of New Zealand women* (pp. 173-205). Auckland: Auckland University Press.
- Baxter, J. (1998). Culture and women's mental health: International perspectives from Aotearoa New Zealand. In S. E. Romans (Ed.), *Folding back the shadows: A perspective on women's mental health* (pp. 63-86). Dunedin: University of Otago Press.
- Baxter, J., Kingi, T. K., Tapsell, R., & Durie, M. (2006). Māori. In M. A. Oakley Browne, J. E. Wells, & K. M. Scott (Eds.), *Te rau hinengaro: The New Zealand mental health survey* (pp. 140-178). Wellington: Ministry of Health.
- Baxter, L. A., Hirokawa, R., Lowe, J. B., Nathan, P., and Pearce, L. (2004). Dialogic voices in talk about drinking and pregnancy. *Journal of Applied Communication Research, 32*(3), 224-248.
- Best, E. (1922). *The astronomical knowledge of the Māori, genuine and empirical*. Wellington: Government Print. Accessed from <http://www.nzetc.org/tm/scholarly/tei-BesAstro.html>
- Bird, C., & Rieker, P. (2008). *Gender and health: The effects of constrained choices and social policies*. New York: Cambridge University Press.
- Black, E. (2001, September 18). Survey shows prospective mums confused by dangers of drinking. *New Zealand Herald*. Retrieved from http://www.nzherald.co.nz/section/1/story.cfm?c_id=1&objectid=217601
- Blaxter, M. (1990). *Health and lifestyles*. Routledge, London.

- Blaxter, M. (1983). The causes of disease: women talking. *Social Science and Medicine*, 17(2), 59-69.
- Bloomfield, K., Stockwell, T., Gmel, G., & Rehn, N. (2003). International comparisons of alcohol consumption. *Alcohol Research and Health*, 27(1), 95-109.
- Blumer, H. (1969). *Symbolic interactionism: Perspective and method*. Englewood Cliffs, NJ: Prentice Hall.
- Borgatti, S. (n.d.). Introduction to grounded theory. Retrieved from <http://www.analytictech.com/mb870/introtoGT.htm>
- Boyчук Duchscher, J. E., & Morgan, D. (2004). Grounded theory: Reflections on the emergence vs. forcing debate. *Journal of Advanced Nursing*, 48(6), 605-612.
- Boyd, S. C., & Marcellus, L. (Eds.). (2007). *With child: Substance use during pregnancy, a woman-centred approach*. Halifax: Fernwood Publishing.
- Bradstock, K., Forman, M. R., Binkin, N. J., Gentry, E. M., Hogelin, G. C., Williamson, D. F., et al. (1988). Alcohol use and health behavior lifestyles among U. S. women: The behavioral risk factor surveys. *Addictive Behaviors*, 13(1), 61-71.
- Bramley, D., Broad, J., Harris, R., Reid, P., & Jackson, R. (2003). Difference in patterns of alcohol consumption between Māori and non-Māori in Aotearoa (New Zealand). *New Zealand Medical Journal*, 116(1184). Retrieved from <http://www.nzma.org.nz/journal/116-1184/645/>
- Branco, E. I., & Kaskutas, L. A. (2001). "If it burns going down ...": How focus groups can shape fetal alcohol syndrome (FAS) prevention. *Substance Use and Misuse*, 36(3), 333-345.

- Briggs, G. G., Freeman, R. K., & Yaffe, S. J. (2005). *A reference guide to fetal and neonatal risk: Drugs in pregnancy and lactation* (7th ed.). Philadelphia: Lippincott Williams & Wilkins.
- Brooking, L. (1999). *Rangatahi wāhine Māori me te inu waipiro - Young Māori women and alcohol: A comparative study of rural and urban drinking habits. A thesis submitted in partial fulfillment of the degree of Master of Arts in (Applied) Social Science Research*. Wellington: Whare Wānanga o Wikitoria/Victoria University.
- Brooking, L. (1996). Rangatahi wāhine Māori me te waipiro: Implications for policy and practice. In *Māori student summer scholarships: compilation of reports* (pp. 7-23). Wellington: ALAC.
- Broom, D., & Stevens, A. (1990). Doubly deviant: Women using alcohol and other drugs. *International Journal on Drug Policy*, 2(1), 25-27. Retrieved from <http://www.drugtext.org/library/articles/912409.htm>
- Burd, L., Cotsonas-Hassler, T. M., Martsolf, J. T., & Kerbeshian, J. (2003). Recognition and management of fetal alcohol syndrome. *Neurotoxicology and Teratology*, 25(6), 681-688. doi:10.1016/j.ntt.2003.07.020
- Burd, L., Selfridge, R., Klug, M., & Bakko, S. (2004). Fetal alcohol syndrome in the United States correction system. *Addiction Biology*, 9(2), 169-176.
- Burgoyne, W., Willet, B., & Armstrong, J. (2006). Reaching women of childbearing age with information about alcohol and pregnancy through a multi-level health communication campaign. *Journal of FAS International*, 4, e17, 1-12. Retrieved from www.motherisk.org/JFAS_documents/JFAS_e17F_9_19_06_6008.pdf
- Carlson, R. G. (2006). Ethnography and applied substance misuse research: Anthropological and cross-cultural factors. In W. R. Miller & K. Carroll

(Eds.), *Rethinking substance abuse. What the science shows, and what we should do about it* (pp. 201-220). New York: Guilford Press.

Centers for Disease Control and Prevention. (2008, January 15). Increasing public awareness of the risks of alcohol use during pregnancy through targeted media campaigns. Retrieved from <http://www.cdc.gov/ncbddd/fas/Pubawareness.htm>

Chambers, C. D., & Jones, K. L. (2002). Is genotype important in predicting the fetal alcohol syndrome? *Journal of Pediatrics*, *141*, 751-752.

Charmaz, K. (2000). Grounded theory: Objectivist and constructionivist methods. In N. K. Denzin & Y. S. Lincoln (Eds.), *The handbook of qualitative research* (2nd ed.) (pp. 509-536). Thousand Oaks, CA: Sage Publications.

Charmaz, K. (2005). Grounded theory in the 21st century. Applications for advancing social justice studies. In N. K. Denzin & Y. S. Lincoln (Eds.), *The handbook of qualitative research* (3rd ed.) (pp. 507-535). Thousand Oaks, CA: Sage Publications.

Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. London: Sage Publications.

Chenitz, W. C., & Swanson, J. M. (1986). *From practice to grounded theory: Qualitative research in nursing*. Menlo Park, CA: Addison-Wesley.

Chiovitti, R. F., & Piran, N. (2003). Rigour and grounded theory research. *Journal of Advanced Nursing*, *44*(4), 427-435.

Chudley, A. E., Conry, J., Cook, J. L., Looock, C., Rosales, T., & LeBlanc, N. (2005). Fetal alcohol spectrum disorder: Canadian guidelines for diagnosis. *Canadian Medical Association Journal*, *172*(Suppl. 5), S1-S21.

- Coles, C. D. (2001). Fetal alcohol exposure and attention: Moving beyond ADHD. *Alcohol Research and Health*, 25(3), 199-203.
- Connor, J., Broad, J., Jackson, R. Vander Hoorn, S., & Rehm, J. (2005). *The burden of death, disease and disability due to alcohol in New Zealand. ALAC Occasional Publication No. 23*. Wellington: ALAC.
- Corbin, J., & Holt, N. L. (2005). Grounded theory. In B. Somekh & C. Lewin (Eds.), *Research methods in the social sciences* (pp. 49-55). Thousand Oaks, CA: Sage Publications.
- Counsell, A. M., Smale, P. N., & Geddis, D. C. (1994). Alcohol consumption by New Zealand women during pregnancy. *New Zealand Medical Journal*, 107(982), 278-281.
- Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches*. Thousand Oaks: Sage Publications.
- Cullen, H. (1984). Alcohol and the Māori people – a history. In D. Awatere, S. Casswell, H. Cullen, L. Gilmore, & D. Kūpenga (Eds.), *Alcohol and the Māori people* (pp. 1-22). Auckland: Alcohol Research Unit, University of Auckland.
- Cunningham, C. (2008). Diversity and equity in Māori. In K. Dew & A. Matheson (Eds.), *Understanding health inequalities in Aotearoa New Zealand* (pp. 55-66). Dunedin: Otago University Press.
- Curtis, J. (1994). *Alcohol and pregnancy* [brochure]. Wellington: ALAC.
- Dacey, B. (1997). *Te ao waipiro: Māori and alcohol in 1995*. Auckland: Whariki Research Group, University of Auckland.

- Davidson, C., & Tolich, M. (2003). Competing traditions. In C. Davidson & M. Tolich (Eds.), *Social science research in New Zealand: Many paths to understanding* (2nd ed.). Auckland: Longman.
- Denzin, N. K., & Lincoln, Y. S. (2000). Introduction: The discipline and practice of qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *The handbook of qualitative research* (2nd ed.) (pp. 1-28). Thousand Oaks, CA: Sage Publications.
- Denzin, N. K., & Lincoln, Y. S. (2005). Introduction: The discipline and practice of qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *The handbook of qualitative research* (3rd ed.) (pp. 1-35). Thousand Oaks, CA: Sage Publications.
- Dey, I. (1999). *Grounding grounded theory: Guidelines for qualitative inquiry*. San Diego: Academic Press.
- Dickson, N., Wilson, M., Herbison, P., & Paul, C. (2002). Unwanted pregnancies involving young women and men in a New Zealand birth cohort. *New Zealand Medical Journal*, 115(1151), 155-159. Retrieved from <http://www.nzma.org.nz/journal/115-1151/2229/content.pdf>
- Douglas, M. (1987). A distinctive anthropological perspective. In M. Douglas (Ed.), *Constructive drinking: Perspectives on drink from anthropology*. New York: Cambridge University Press.
- Dow, D. A. (1999). *Māori health and government policy, 1840-1940*. Wellington: Victoria University Press in association with the Historical Branch, Department of Internal Affairs.
- Dunn, J. R. (2006). Speaking theoretically about population health. *Journal of Epidemiology and Community Health*, 60, pp. 572-573. doi:10.1136/jech.2005.037549

- Durie, M. (1996). Characteristics of Māori health research. In *Hui whakapiripiri: A hui to discuss strategic direction for Māori health research* (pp. 2-4). Wellington: Te Rōpū Rangahau Hauora a Eru Pōmare, Wellington School of Medicine.
- Durie, M. (1998a). A Māori development model for addressing alcohol misuse. *Journal of the Alcoholic Beverage Medical Research Foundation*, 8(Suppl. 3), 51-60.
- Durie, M. (1998b). *Whaiora: Māori health development* (2nd ed.). Auckland: Oxford University Press.
- Durie, M. (2001). *Mauri ora: The dynamics of Māori health*. Auckland: Oxford University Press.
- Durie, M. (2002, August 29). The Triple P approach. An integrated approach to alcohol use. Paper presented at the Cutting Edge conference, Nelson.
- Eaves, Y. D. (2001). A synthesis technique for grounded theory data analysis. *Journal of Advanced Nursing*, 35(5), 654-663.
- Ebrahim, S. H., Diekman, R., Floyd, R. L., & Decoufle, P. (1999). Comparison of binge drinking among pregnant and nonpregnant women, United States, 1991-1995. *American Journal of Obstetrics and Gynecology*, 180(1), 1-7.
- Einarson, A., & Koren, G. (2006). A survey of women's attitudes concerning healthy lifestyle changes prior to pregnancy. *Journal of FAS International*, 4, e2. Retrieved from www.motherisk.org/JFAS_documents/JFAS_6001_e2.pdf
- Elliott, E.J, Payne, J., Haan, E., & Bower, C. (2006). Diagnosis of foetal alcohol syndrome and alcohol use in pregnancy: A survey of paediatricians' knowledge, attitudes and practice. *Journal of Paediatrics and Child Health*, 42, 698–703. doi:10.1111/j.1440-1754.2006.00954.x

- Emanuele, M. A., Wezeman, F., & Emanuele, N. V. (2002). Alcohol's effects on female reproductive function. *Alcohol Research and Health*, 26(2), 274-281. Retrieved from <http://pubs.niaaa.nih.gov/publications/arh26-4/274-281.htm>
- Ezzy, D. (2002). *Qualitative analysis: Practice and innovation*. Crow's Nest, NSW: Allen and Unwin.
- Floyd, R. L., Decoufle, P. R., & Hungerford, D. W. (1999). Alcohol use prior to pregnancy recognition. *American Journal of Preventive Medicine*, 17(2), 101-107.
- Floyd, R. L., Sobell, M., Velasquez, M., Ingersoll, K., Nettleman, M., Sobell, L., et al. (2007). Preventing alcohol-exposed pregnancies: A randomized controlled trial. *American Journal of Preventive Medicine*, 32(1), 1-10.
- Flynn, H. A., & Chermack, S. T. (2008). Prenatal alcohol use: The role of lifetime problems with alcohol, drugs, depression and violence. *Journal of Studies on Alcohol and Drugs*, 69, 500-509.
- Gefou-Madianou, D. (1992). Introduction: alcohol commensality, identity transformations and transcendence. In D. Gefou-Madianou (Ed.), *Alcohol, Gender, and Culture* (pp. 1-34). New York: Routledge.
- Gilmour, J. (2001, March 16). Grounded theory. Lecture presented at Department of Public Health, Wellington Medical School, University of Otago.
- Gladstone, J., Nulman, I., & Koren, G. (1996). Reproductive risks of binge drinking during pregnancy. *Reproductive Toxicology*, 10(1), 3-13. doi:10.1016/0890-6238(95)02024-1
- Glaser, B. G. (1978). *Theoretical sensitivity: Advances in the methodology of grounded theory*. Mill Valley, CA: Sociology Press.

- Glaser, B. G. (1992). *Basics of grounded theory analysis: Emergence vs. forcing*. Mill Valley, CA: Sociology Press.
- Glaser, B. G. (2001). *The grounded theory perspective: Conceptualization contrasted with description*. Mill Valley, CA: Sociology Press.
- Glaser, B. G. (2005). *The grounded theory perspective III: Theoretical coding*. Mill Valley, CA: Sociology Press.
- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago: Aldine.
- Golden, J. (2005). *Message in a bottle: The making of fetal alcohol syndrome*. Cambridge, MA: Harvard University Press.
- Goldschmidt, L., Richardson, G. A., Cornelius, M. D. & Day, N. L. (2004). Prenatal marijuana and alcohol exposure and academic achievement at age 10. *Neurotoxicology and Teratology*, 26(4), 521-532.
- Graves, K., & Kaskutas, L. A. (2002). Beverage choice among Native American and African American urban women. *Alcoholism: Clinical and Experimental Research*, 26(2), 218-222.
- Gray, A., & Norton, V. (1998). *Women and alcohol. Part 1: What's the problem? A report for the Alcohol Advisory Council of New Zealand*. Wellington: Alcohol Advisory Council of New Zealand.
- Green, J. H. (2007). Fetal alcohol spectrum disorders: Understanding the effects of prenatal alcohol exposure and supporting students. *Journal of School Health*, 77(3), 103-108.
- Grounded theory and qualitative data analysis. (1998). Retrieved from HRMAS: Health Research Methods Advisory Service: <http://www.fmhs.auckland>

.ac.nz/soph/centres/hrmas/_docs/Grounded_theory_and_qualitative_data_analysis.\pdf

Guba, E. G. & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *The handbook of qualitative research* (pp. 105-117). Thousand Oaks, CA: Sage Publications.

Hankin, J., McCaul, M. E., & Heussner, J. (2000). Pregnant, alcohol-abusing women. *Alcoholism: Clinical and Experimental Research*, 24(8), 1276-1286.

Harré, R. (1993). *Social being*. Oxford, UK: Blackwell.

Harrell, J. P., Hall, S., & Taliaferro, J. (2003). Physiological responses to racism and discrimination: An assessment of the evidence. *American Journal of Public Health*, 93(3), 243-248.

Harris, R., Tobias, M., Jeffreys, M., Waldegrave, M., Karlsen, S., & Nazroo, J. (2006). Racism and health: Of the relationship between experience of racial discrimination and health in New Zealand. *Social Science and Medicine*, 63(6), 1428-1441.

Heath, D. B. (1995). An introduction to alcohol and culture in international perspective. In D. B. Heath (Ed.), *International handbook on alcohol and culture*. (pp. 1-6). Westport: Greenwood Press.

Heath, D. B. (2000). *Drinking occasions: Comparative perspectives on alcohol and culture*. Philadelphia: Brunner Mazel.

Heath, H., & Cowley, S. (2004). Developing a grounded theory approach: A comparison of Glaser and Strauss. *International Journal of Nursing Studies*, 41(2), 141-150.

- Henwood, K., & Pidgeon, N. (1995, March). Grounded theory and psychological research. *The Psychologist*, 115-118.
- Holmila, M, & Raitasalo, K. (2005). Gender differences in drinking: Why do they still exist? *Addiction*, 100(12), 1763 -1769.
- Hongoeka declaration for Māori health researchers. (1996). In *Hui whakapiripiri: A hui to discuss strategic direction for Māori health research* (p. 7). Wellington: Te Rōpū Rangahau Hauora a Eru Pōmare, Wellington School of Medicine.
- Hoskins, C. T. K. (2000). In the interests of Māori women? Discourses of reclamation. In A. Jones, P. Herda, & T. M. Suaalii (Eds.), *Bitter sweet. Indigenous women in the Pacific* (pp. 33-48). Dunedin: University of Otago Press.
- Hruschka, D. J., & Hadley, C. (2008). A glossary of culture in epidemiology. *Journal of Epidemiology and Community Health*, 62(11), 947-951. doi:10.1136/jech.2008.076729
- Te bunga wāhine te waipiro*. (1988). National Council of Māori Nurses Inc. Waerea te ara ki te ora alcohol research project. Auckland: Department of Anthropology, University of Auckland.
- Hunt, G., & Barker, J. C. (2001). Socio-cultural anthropology and alcohol and drug research: Towards a unified theory. *Social Science and Medicine*, 53(2), 165-188.
- Hutt, M. (1999). *Te iwi Māori me te inu waipiro: He tubitubingā hūtori/Māori and alcohol: A history*. Wellington: Health Services Research Centre/ALAC.
- Jacobson, J. L., Jacobson, S. W., & Sokol, R. J. (1996). Increased vulnerability to alcohol-related birth defects in the offspring of mothers over 30. *Alcoholism: Clinical and Experimental Research*, 20(2), 359-363.

- Jacobson, S. W. (1997). Assessing the impact of maternal drinking during and after pregnancy. *Alcohol Health and Research World*, 21(3), 199-203.
Retrieved from <http://pubs.niaaa.nih.gov/publications/arh21-3/199.pdf>
- Jacobson, S., & Jacobson, J. L. (1994a). Drinking moderately and pregnancy: Effects on child development. *Alcohol Research and Health*, 23(1), 25-30.
- Jacobson, S., & Jacobson, J. L. (1994b). Prenatal alcohol exposure and neurobehavioral development: Where is the threshold? *Alcohol Health and Research World*, 18(1), 30-36.
- Jeffries, R. (2003). Healing our spirit worldwide: The fifth gathering 2006. *Pimatisiwin: A Journal of Indigenous and Aboriginal Community Health*, 1(2), 174-177.
- Johnson, C. H., Vicary, J. R., Heist, C. L., & Corneal, D. A. (2001). Moderate alcohol and tobacco use during pregnancy and child behavior outcomes. *Journal of Primary Prevention*, 21(3), 367-379.
- Jones, K. L., & Smith, D. W. (1973). Recognition of the fetal alcohol syndrome in early infancy. *The Lancet*, 2(7836), 999-1001.
- Kalafatelis, E. (2000). *Youth and Alcohol: Results for ethnicity*. Retrieved from <http://www.alac.org.nz/InpowerFiles/Publications/CategorisedDocument.Document1.1104.1f844cae-d823-470c-b73d-d45eb926bf0f.pdf>
- Kaskutas, L. A. (1995). Interpretations of risk: The use of scientific information in the development of the alcohol warning label policy. *International Journal of the Addictions*, 30, 1519-1548. doi: 10.3109/10826089509104416
- Kaskutas, L. A. (2000). Understanding drinking during pregnancy among urban American Indians and African Americans: Health messages, risk beliefs,

and how we measure consumption. *Alcoholism: Clinical and Experimental Research*, 24(8), 1241-1250.

Kaskutas, L. A., & Graves, K. (2001). Pre-pregnancy drinking: How drink size affects risk assessment. *Addiction*, 96(8), 1199-1209.

Keddy, B., Sims, S. L., & Noerager Stem, P. (1996). Grounded theory as feminist research methodology. *Journal of Advanced Nursing*, 23(3), 448-453.

Kerr-Corrêa, F., Igami, T. Z., Hiroce, V., & Tucci, A. M. (2006). Patterns of alcohol use between genders: A cross-cultural evaluation. *Journal of Affective Disorders*, 102(103), 265-275.

Kesmodel, U., Wisborg, K., Olsen, S.F., Henriksen, T.B., & Secher, N.J. (2002a). Moderate alcohol intake during pregnancy and the risk of stillbirth and death in the first year of life. *American Journal of Epidemiology*, 155(4), 305-312.

Kesmodel, U., Wisborg, K., Olsen, S.F., Henriksen, T.B., & Secher, N.J. (2002b). Moderate alcohol intake in pregnancy and the risk of spontaneous abortion. *Alcohol*, 37(1), 87-92.

Koren, G., Nulman, I., & Chudley, A. E. (2003). Fetal alcohol spectrum disorder. *Canadian Medical Association Journal*, 169(11), 1181-1185.

Kuntsche, S., Gmel, G., Knibbe, R. A., Kuendig, H., Bloomfield, K., Kramer, S., et al. (2006). Gender and cultural differences in the association between family roles, social stratification, and alcohol use: A European cross-cultural analysis. *Alcohol and Alcoholism*, 41(Suppl. 1), i37-i46. doi: 10.1093/alcalc/agl074

Kūpenga, D. (1984). Interviews with young Auckland Māoris. In D. Awatere, S. Casswell, H. Cullen, L. Gilmore, & D. Kūpenga (Eds.), *Alcohol and the*

Māori people (pp. 34-83). Auckland: Alcohol Research Unit, University of Auckland.

Kuper, A., Lingard, L., & Levinson, W. (2008). Critically appraising qualitative research. *British Medical Journal*, *337*, a1035. doi: 10.1136/bmj.a1035

Kypri, K. (2003). Māori/non-Māori alcohol consumption profiles: Implications for reducing health inequalities. *New Zealand Medical Journal*, *116*(1184). Retrieved from <http://www.nzma.org.nz/journal/116-1184/643/>

Leather, K., & Hall, R. (1994). *Tātai arorangi. Māori astronomy: Work of the gods*. Paraparaumu, NZ: Viking Sevenses New Zealand.

Leech, S. L., Richardson, G. A., Goldschmidt, L., & Day, N. L. (1999). Prenatal substance exposure: Effects on attention and impulsivity of 6-year-olds. *Neurotoxicology and Teratology*, *21*(2), 109-118.

Leigh, J. (1993). *Family Planning, health promotion and the mass media: the effectiveness of using mass media for the goals of behaviour change*. Wellington: Family Planning Association.

Lange, R. (1999). *May the people live: A history of Maōri health development 1900-1920*. Auckland: Auckland University Press.

Lerversha, A. M., & Marks, R. E. (1995a). Alcohol and pregnancy: Doctors' attitudes, knowledge and clinical practice. *New Zealand Medical Journal*, *108*(1010), 428-430.

Lerversha, A. M., & Marks, R. E. (1995b). The prevalence of fetal alcohol syndrome in New Zealand. *New Zealand Medical Journal*, *108*(1013), 502-505.

- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic Inquiry*. Beverly Hills: Sage Publications.
- Lyons, A. C. (2006). Going out and 'getting pissed': Young adults, drinking and gender identity. Paper based on a presentation at the International Society for Political Psychology annual conference, Barcelona, Spain, July 2006. Retrieved from http://masseynews.massey.ac.nz/2006/Massey_News/issue-16/stories/women-drinking.pdf
- Lyons, A. C., Dalton, S. I. & Hoy, A. (2006). "Hardcore drinking": Portrayals of alcohol consumption in young women's and men's magazines. *Journal of Health Psychology*, 11(2), 223-232.
- Macnamara, T. K., Orav, E. J., Wilkins-Haug, L., & Chang, G. (2006). Social support and pre-natal alcohol use. *Journal of Women's Health*, 15(1), 70-76.
- Maier, S. E., & West, J. R. (2001). Drinking patterns and alcohol-related birth defects. *Alcohol Research and Health*, 25(3), 168-174. Retrieved from <http://Pubs.niaaa.nih.gov/publications/arh25-3/168-174.htm>
- Mäkelä, P., Gmel, G., Grittner, U., Kuendig, H., Kuntsche, S., Bloomfield, K. et al. (2006). Drinking patterns and their gender differences in Europe. *Alcohol and Alcoholism*, 41(Suppl. 1), i8-i18. doi:10.1093/alcalc/agl071
- Mancall, P. C., Robertson, P., & Huriwai, T. (2000). Māori and alcohol: A reconsidered history. *Australian and New Zealand Journal of Psychiatry*, 34(1), 129-134.
- Marcellus, L. (2007). Using feminist ethics to inform practice with pregnant women who use substances. In S. C Boyd & L. Marcellus (Eds.), *With child: Substance use during pregnancy, a woman-centred approach*, (pp. 28-37). Halifax: Fernwood Publishing.

- Marks R. (1996). Fetal alcohol syndrome: A New Zealand perspective. *New Ethicals*, 33(11), 9-13.
- Marshall, M. (1979). Conclusions. In M. Marshall (Ed.), *Beliefs, behaviors, and alcohol beverages: A cross-cultural survey* (pp. 451-457). Ann Arbor: University of Michigan Press.
- May, P. A. (2006). Fetal alcohol syndrome among American Indians, Italians, and South Africans: Disparate risks, different prevalence, and prevention. Paper presented at the NIH Conference on Understanding and Reducing Disparities in Health: Behavioral and Social Sciences Research Contributions, October 23-24, 2006, Bethesda, Maryland. Retrieved from <http://obssr.od.nih.gov/healthdisparities/presentation.html>
- May, P. A., Fiorentino, D., Gossage, J. P., Kalberg, W. O., Hoyme, H. E., Robinson, L. K., et al. (2006). Epidemiology of FASD in a province in Italy: Prevalence and characteristics of children in a random sample of schools. *Alcoholism: Clinical and Experimental Research*, 30(9), 1562-1575.
- May, P. A., & Gossage, J. P. (2001). Estimating the prevalence of fetal alcohol syndrome: A summary. *Alcohol Research and Health*, 25(3), 159-167.
- May, P. A., Gossage, J. P., White-Country, M., Goodhart, K., Decoteau, S., Trujillo, P. M., et al. (2004). Alcohol consumption and other maternal risk factors for fetal alcohol syndrome among three distinct samples of women before, during, and after pregnancy: The risk is relative. *American Journal of Medical Genetics Part C: Seminars in Medical Genetics*, 127C(1), 10-20. doi: 10.1002/ajmg.c.30011
- May, P., Hymbaugh, K. J., Aase, J. M., & Samet, J. M. (1983). Epidemiology of fetal alcohol syndrome among American Indians of the Southwest. *Social Biology*, 30(4), 374-387.

- May, P. A., & Moran, J. R. (1995). Prevention of alcohol misuse: A review of health promotion efforts among American Indians. *American Journal of Health Promotion, 9*(4), 288-299.
- McCrary, B. S. (2006). Family and other close relationships. In W. R. Miller & K. Carroll (Eds.), *Rethinking substance abuse. What the science shows, and what we should do about it* (pp. 166-181). New York: Guilford Press.
- McCullough, L. B. (2008). Gender and health: The effects of constrained choices and social policies. [Book Review]. *Journal of the American Medical Association, 300*(8), 968.
- McKinlay, J., Plumridge, L., & Daley, V. (1999). Methodology for studying health and society. In P. Davis & K. Dew (Eds.), *Health and society in Aotearoa New Zealand* (pp. 35-49). Auckland: Oxford University Press.
- McLeod, D., Pullon, S., Cookson, T., & Cornford, E. (2002). Factors influencing alcohol consumption during pregnancy and after giving birth. *New Zealand Medical Journal, 115*(1157). Retrieved from <http://www.nzma.org.nz/journal/115-1157/29/>
- McMillen, P., Kalafatelis, E., & de Bonnaire, C. (2004). The way we drink: The current attitudes & behaviours of New Zealanders (aged 12 plus) towards drinking alcohol. A report for the Alcohol Advisory Council. Retrieved from <http://www.alac.org.nz/DBTextworks/PDF/WayWeDrinkFull.pdf>
- McNamara, T. K., Orav, J., Wilkins-Haug, L., & Chang, G. (2006). Social support and prenatal alcohol use. *Journal of Women's Health, 15*(1), 70-76.
- McPherson, M., Casswell, S., & Pledger, M. (2004). Gender convergence in alcohol consumption and related problems: Issues and outcomes from comparisons of New Zealand survey data. *Addiction, 99*(6), 738-748.

- Mikaere, A. (1994). Māori women: Caught in the contradictions of a colonised reality. *Waikato Law Review Taumauri*, 2. Retrieved from <http://www2.waikato.ac.nz/law/wlr/1994/article6-mikaere.html>
- Miller, M. W., & Spear, L. P. (2006). The alcoholism generator. *Alcoholism: Clinical and Experimental Research*, 30(9), 1466-1469.
- Mills, J., Bonner, A., & Francis, K. (2006). The development of constructivist grounded theory. *International Journal of Qualitative Methods*, 5 (1). Retrieved from http://www.ualberta.ca/~iiqm/backissues/5_1/PDF/MILLS.PDF
- Ministry of Health. (1994). *Kia whai te māramatanga : the effectiveness of health messages for Māori*. Wellington: Ministry of Health.
- Ministry of Health. (2002). *Your pregnancy/Tō hapūtanga* [Brochure]. Wellington: Ministry of Health.
- Ministry of Health. (2007a). *Alcohol use in New Zealand: Analysis of the 2004 New Zealand health behaviours survey – alcohol use*. Wellington: Ministry of Health.
- Ministry of Health. (2007b). *Drug use in New Zealand: Analysis of the 2003 New Zealand health behaviours survey – drug use*. Retrieved from [http://www.moh.govt.nz/moh.nsf/pagesmh/6662/\\$File/drug-use-in-new-zealand-analysis-2003-health-behaviours-survey.pdf](http://www.moh.govt.nz/moh.nsf/pagesmh/6662/$File/drug-use-in-new-zealand-analysis-2003-health-behaviours-survey.pdf)
- Ministry of Health. (2007c). *Food and nutrition guidelines for healthy pregnant and breastfeeding women: A background paper*. Retrieved from [http://www.moh.govt.nz/moh.nsf/0/30BE64E50CEFD8CECC257030001562C5/\\$File/food-nutrition-guidelines.pdf](http://www.moh.govt.nz/moh.nsf/0/30BE64E50CEFD8CECC257030001562C5/$File/food-nutrition-guidelines.pdf)
- Ministry of Health. (2007d). *The New Zealand tobacco use survey 2006*. Retrieved from <http://www.moh.govt.nz/moh.nsf/indexmh/nz-tobacco-use-survey-2006>

- Ministry of Social Development. (2008). *The social report. Te pūrongo oranga tangata*. Retrieved from <http://www.socialreport.msd.govt.nz/documents/social-report-2008.pdf>
- Ministry of Women's Affairs. (2008). *Indicators for change - tracking the progress of New Zealand women*. Retrieved from <http://www.mwa.govt.nz/news-and-pubs/publications/indicators-for-change.pdf>
- Morse, J. (2001). Situating grounded theory within qualitative inquiry. In R. Schreiber & P. N. Stern (Eds.), *Using grounded theory in nursing* (pp. 1-16). New York: Springer.
- Mulia, N., Schmidt, L., Bond, J., Jacobs, L., & Korcha, R. (2008). Stress, social support and problem drinking among women in poverty. *Addiction, 103*(8), 1283-1293.
- Murchie, E. (Ed.). (1984). *Rapuora: Health and Māori women*. Wellington: Māori Women's Welfare League.
- Naimi, T. S., Lipscomb, L. E., Brewer, R. D., & Gilbert, B. C. (2003). Binge drinking in the preconception period and the risk of unintended pregnancy: Implications for women and their children. *Pediatrics, 111*(5), 1136-1141.
- Nathanson, V., Jayasinghe, N., & Roycroft, G. (2007). Is it all right for women to drink small amounts of alcohol in pregnancy? No. *British Medical Journal, 335*(7625), 858.
- Neale, J., Allen, D., & Coombes, L. (2005). Qualitative research methods within the addictions. *Addiction, 100*(10), 1584-1593.
- O'Brien, P. (2007). Is it all right for women to drink small amounts of alcohol in pregnancy? Yes. *British Medical Journal, 335*(7625), 857.

- Ockene, J. K., Ma, Y., Zapka, J. G., Pbert, L. A., Goins, K. V., & Stoddard, A. M. (2002). Spontaneous cessation of smoking and alcohol use among low-income pregnant women. *American Journal of Preventive Medicine*, 23(3), 150-9.
- Okah, F. A., Cai, J., & Hoff, G. L. (2005). Term-gestation low birth weight and health-compromising behaviors during pregnancy. *Obstetrics and Gynecology*, 105(3), 543-550.
- O'Leary, C. M., Heuzenroeder, L., Elliott, E., & Bower, C. (2007). A review of policies on alcohol use during pregnancy and Australia and other countries, 2006. *Medical Journal of Australia*, 186(9), 466-471.
- Olney, J. (2004). Fetal alcohol syndrome at the cellular level. *Addiction Biology*, 9(2), 137-149.
- Opie, A. (1999). Unstructured interviewing. In C. Davidson & M. Tolich (Eds.), *Social science research in New Zealand: Many paths to understanding* (pp. 220-230). Auckland: Pearson Education.
- Ormerod, P., & Wiltshire, G. (2008). 'Binge' drinking in the UK: A social network phenomenon. *arxiv.org*. doi: <http://arxiv.org/abs/0806.3176v1>
- Parackal, S., Parackal, M., Ferguson, E., & Harraway, J. (2006). *Awareness of the effects of alcohol use during pregnancy among New Zealand women of childbearing age*. Report for the Alcohol Advisory Council and Ministry of Health. Wellington: ALAC.
- Parackal, S. M. (2003). *Assessment of risk of foetal alcohol syndrome and other alcohol related effects in New Zealand: A thesis presented in fulfilment of the requirements for the degree of Doctor of Philosophy in Nutritional Science at Massey University*. Palmerston North: Massey University.

- Park, J. (1995). New Zealand. In D. Heath (Ed.), *International handbook on alcohol and culture* (pp. 201-212). Westport: Greenwood Press.
- Park, J. (1985). *Towards an ethnography of alcohol in New Zealand: a review and annotated bibliography of local and overseas literature. A report to the Alcoholic Liquor Advisory Council*. Auckland: Department of Anthropology, University of Auckland.
- Patton, M. Q. (2002). *Qualitative evaluation and research methods* (3rd ed.). Beverly Hills: Sage Publications.
- Poole, N. (2003). *Mother and child reunion: Preventing fetal alcohol spectrum disorder by promoting women's health*. Retrieved from <http://www.cewh-cesf.ca/PDF/bccewh/FASbrief.pdf>
- Popay, J., & Williams, G. (1996). Public health research and lay knowledge. *Social Science and Medicine*, 42(5), 759-768.
- Pope, C., & Mays, N. (1995). Refreshing the parts other methods cannot reach: An introduction to qualitative methods in health and health services research. *British Medical Journal*, 311(6996), 42-45.
- Prochaska, J. O., Norcross, J. C., & DiClemente, C. V. (1994). *Changing for good*. New York: Avon Books.
- Project CHOICES Research Group. (2002). Alcohol-exposed pregnancy: Characteristics associated with risk. *American Journal of Preventive Medicine*, 23(3), 166-173.
- Ramsey, M. (2006, July 30). Criminals from the bottle. The effect of alcohol abuse by pregnant women is a growing source of criminality in B.C. *The Province* [Vancouver]. Retrieved August 22, 2006, from <http://www.canada.com/theprovince/news/unwind/story.html?id=e740096b-723e-40e3-9d55-a404171208ab>

- Ratima, M. (1999). *The Tipu Ora model: A Māori-centred approach to health promotion*. Te Pumanawa Hauora Report. Palmerston North, NZ: School of Māori Studies, Massey University.
- Rawiri, C. (2007). *Adolescent Māori mothers' experiences with social support during pregnancy, birth and motherhood and their participation in education. A thesis submitted in fulfilment of the requirements for the Degree of Master of Social Sciences in Psychology at the University of Waikato/Te Whare Wānanga o Waikato*. Retrieved from <http://adt.waikato.ac.nz/uploads/approved/adt-uow20071214.152734/public/02whole.pdf>
- Rice, P. L., & Ezzy, D. (2000). *Qualitative research methods: A health focus*. Melbourne: Oxford University Press.
- Riley, E. P., Guerri, C., Calhoun, F., Charness, M. E., Foroud, T. M., Li, T.-K., et al. (2003). Prenatal alcohol exposure: Advancing knowledge through international collaborations. *Alcoholism: Clinical and Experimental Research*, 27(1), 118-135.
- Rimene, C., Hassan, C., & Broughton, J. (1998). *Ūkaipō. The place of nurturing: Māori women and childbirth*. Dunedin: Te Rōpū Rangahau Hauora Māori o Ngāi Tahu, Department of Preventive and Social Medicine, University of Otago.
- Robson, B. (2008). What is driving the disparities? In K. Dew & A. Matheson (Eds.), *Understanding health inequalities in Aotearoa New Zealand* (pp. 19-31). Dunedin: Otago University Press.
- Rogan, C. (2007). *Fetal alcohol spectrum disorder in New Zealand: Activating the awareness and intervention continuum*. Retrieved from http://www.ahw.co.nz/alcohol_health_promotion.html

- Rogan C. (2001). *Preventing alcohol related birth defects in Aotearoa New Zealand - a health promotion report*. Auckland: Alcohol Healthwatch.
- Rogers, E. (1995). *Diffusion of innovations* (3rd ed.). New York: Free Press.
- Rose, G. (2007). Sick individuals and sick populations. In R. Bayer, L. O. Gostin, B. Jennings, & B. Steinbeck (Eds.), *Public health ethics: Theory, policy, and practice* (pp. 33-44). New York: Oxford University Press. (Reprinted from *International Journal of Epidemiology*, 14, pp.32-38, 1985).
- Rouleau, M., Levichek, Z., & Koren, G. (2003). Are mothers who drink heavily in pregnancy victims of FAS? *Journal of FAS International*, 1, e4. Retrieved from www.motherisk.org/JFAS_documents/Heavily_drinking_mothers_victims.pdf
- Royal, T. A. C. (1996). An inarticulate Māori man expresses some thoughts on traditional Māori womanhood and tries not to get into trouble in the process. A paper presented at a Department of Geography seminar, convened by Teina Boaza-Dean, Waikato University, August 13, 1996. Retrieved December 20, 2007, from <http://www.charles-royal.com/default.aspx?Page=121>
- Russell, E. (2005). *Alcohol and pregnancy - A mother's responsible disturbance*. Burleigh, QLD: Zeus Publications.
- Ryan, G. R. (1995). Client group, Māori women: Health issues, childbirthing, themes, mythical perception, traditional concepts, childbearing today. Wellington: Wellington Polytechnic.
- Saggers, S., & Gray, D. (1998). *Dealing with alcohol: Indigenous usage in Australia, New Zealand and Canada*. New York: Cambridge University Press.

- Salmon, J. (2007). *Fetal alcohol syndrome: New Zealand birth mothers' experiences*. Wellington: Dunmore Publishing.
- Sampson, P. D., Streissguth, A., Bookstein, F., Little, R. E., Clarren, S. K., Dehaene, P., et al. (1997). Incidence of fetal alcohol syndrome and prevalence of alcohol-related neurodevelopmental disorder. *Teratology*, *56*(5), 317-326.
- Savage, J., & Coursey, M. (2007, July 1). Women hit the bottle like men. *New Zealand Herald*. Retrieved from http://www.nzherald.co.nz/topic/story.cfm?c_id=687&objectid=10448849&pnum=0
- Shibutani, T. (Ed.). (1970). *Human nature and collective behavior: Papers in honor of Herbert Blumer*. Englewood-Cliffs, NJ: Prentice-Hall.
- Stade, B., Ungar, W. J., Stevens, B., Beyene, J., & Koren, G. (2006). The burden of prenatal exposure to alcohol: measurement of cost. *Journal of FAS International*, *4*, e5. Retrieved from http://www.motherisk.org/prof/updatesDetail.jsp?content_id=862
- Starrin, B., Dahlgren, L., Larsson, G., & Styrborn, S. (1997). *Along the path of discovery: Qualitative methods and grounded theory*. Stockholm: Studentlitteratur.
- Stephens, C. J. (1985). Perception of pregnancy and social support as predictors of alcohol consumption during pregnancy. *Alcoholism: Clinical and Experimental Research*, *9*(4), 344-348.
- Stephens, C. J. (1987). The effects of social support on alcohol consumption during pregnancy: Situational and ethnic/cultural considerations. *International Journal of the Addictions*, *22*(7), 609-619.
- Stirling, P. (2002, November 23). The other glass ceiling. *The Listener*, 16-22.

- Stratton, K., Howe, C., & Battaglia, F. (Eds.). (1996). *Fetal alcohol syndrome: Diagnosis, epidemiology, prevention, and treatment*. Washington, DC: National Academy Press.
- Strauss, A. (1987). *Qualitative analysis for social scientists*. New York: Cambridge University Press.
- Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Park: Sage Publications.
- Streissguth, A. P. (1997). *Fetal alcohol syndrome: A guide for families and communities*. Baltimore: Paul H. Brookes Publishing.
- Stuart, K., & Rogan, C. (2006). Fetal alcohol spectrum disorder: why it matters to AOD sector workers, and how you can make a difference. *Addiction Treatment Research News*, 10(1), 6-7.
- Stutts, M. A, Patterson, L. T., & Hunnicutt, G. G. (1997). Females' perception of risks associated with alcohol consumption during pregnancy. *American Journal of Health Behavior*, 21(2), 137-46.
- Syme, S. L. (2005). Historical perspective: The social determinants of disease – some roots of the movement. *Epidemiologic Perspectives and Innovations*, 2(2). doi:10.1186/1742-5573-2-2
- Symes, M. M. (2004). *The legacy of prenatal exposure to alcohol: Fetal alcohol spectrum disorder, the New Zealand situation. A thesis presented in partial fulfilment of the requirements for the degree of Doctor of Philosophy in Social Anthropology at Massey University, Albany, New Zealand*. Albany, NZ: Massey University.
- Tache, C. (2006, November 21). Health warning and alcohol labelling: The French perspective and action. Workshop presentation to the Eurocare Bridging

the Gap Conference: 2nd European Alcohol Policy conference, Helsinki.
Retrieved from http://btg.health.fi/?i=111894&s=5&v=1&name=WS_18_Tache_Cecile_ppt.pdf

Tait, C. L. (2003). *Fetal alcohol syndrome among Aboriginal people in Canada: Review and analysis of the intergenerational links to residential schools. Report for the Aboriginal Healing Foundation*. Ottawa: Aboriginal Healing Foundation.

Taiwhati, M. (1999). *"I drink to have fun": Māori women's expectation of disinhibition from alcohol*. Report completed during a term as Alcohol Advisory Council Māori Student Research Scholarship Recipient. Wellington: ALAC.

Testa, M., & Reifman, A. (1996). Individual differences in perceived riskiness of drinking in pregnancy: antecedents and consequences. *Journal of Studies on Alcohol*, 57(4), 360-367.

Te Wheke. Māori Health Models. (n.d.). Retrieved from [www.maorihealth.govt.nz/moh.nsf/pagesma/196/\\$File/maori_health_model_tewheke.pdf](http://www.maorihealth.govt.nz/moh.nsf/pagesma/196/$File/maori_health_model_tewheke.pdf)

Titiro Hāngai, Ka Mārama: Māori Women in Focus. (1999). Wellington: Ministry of Women's Affairs/Te Puni Kōkiri.

Ulin, P. R., Robinson, E. T., & Tolley, E. E. (2005). *Qualitative methods in public health: A field guide for applied research*. San Francisco: Jossey-Bass.

Van Bibber, M. (1997). *It takes a community: A resource manual for community-based prevention of fetal alcohol syndrome and fetal alcohol effects*. Ottawa: Minister of Public Works and Government Services Canada, and the Aboriginal Nurses Association of Canada.

Wallace, C., Burns, L., Gilmour, S., & Hutchinson, D. (2007). Substance use, psychological distress and violence among pregnant and breastfeeding

Australian women. *Australian and New Zealand Journal of Public Health*, 31(1), 51-56. doi:10.1111/j.1467-842X.2007.tb00889

Watson, P., & McDonald, B. (1999). *Nutrition during pregnancy: Report to the Ministry of Health*. Albany: Massey University.

Webb, M. B. (1994). Policing pregnancy: The case of fetal exposure to alcohol. *Social Policy Journal of New Zealand*, 3, 26-38.

Wells, J. E., Baxter, J., & Schaaf, D. (2007). *Substance use disorders in Te rau hinengaro: The New Zealand mental health survey*. Wellington: ALAC.

Willford, J. A., Leech, S. L., & Day, N. L. (2006). Moderate prenatal alcohol exposure and cognitive status of children at age 10. *Alcoholism: Clinical and Experimental Research*, 30(6), 1051-1059.

Wilsnack, R. W., Vogeltanz, N. D., Wilsnack, S. C., & Harris, T. R. (2000). Gender differences in alcohol consumption and adverse drinking consequences: cross-cultural patterns. *Addiction*, 95(2), 251-265.

Wilsnack, R. W., Wilsnack, S. C., & Obot, I. O. Why study gender, alcohol and culture? (2005). In I. O. Obot & R. Room (Eds.), *Alcohol, gender and drinking problems. Perspectives from low and middle income countries* (pp.1-21). Geneva: World Health Organization.

Wilson, D. L. (2004). *Ngā kairaranga oranga/The weavers of health and wellbeing: A grounded theory study. A thesis presented in partial fulfilment of the requirements for the degree of Doctor of Philosophy in Nursing at Massey University, New Zealand*. Palmerston North: Massey University.

Wilson, H. S., & Hutchinson, S. A. (1996). Methodologic mistakes in grounded theory. *Nursing Research*, 45(2), 122-124.

Wilson, T. M. (2005). Drinking cultures: sites and practices in the production and expression of identity. In T. M. Wilson (Ed.), *Drinking Cultures: Alcohol and Identity* (pp. 1-24). Oxford, New York: Berg.

World Health Organization Statistical Information System (WHOSIS). (2003). Per capita recorded alcohol consumption (litres of pure alcohol) among adults (>=15 years). Retrieved from <http://www.who.int/whosis/indicators/compendium/2008/3alu>

Wuest, J., Merritt-Gray, M., Berman, H., Ford-Gilboe, M. (2002). Illuminating social determinants of women's health using grounded theory. *Health Care for Women International*, 23, 794-808. doi: 10.1080/07399330290112326

Wyllie, A., & Casswell, S. (1989). *Drinking in New Zealand: A survey, 1988*. Auckland: Alcohol Research Unit, Department of Community Health, University of Auckland.

Appendix A: Information letter for potential participants

(Printed on Massey University letterhead)

Research project: Influences on Māori women making decisions about alcohol and pregnancy

INFORMATION

Tēnā rā koe,

You are invited to take part in a research study that aims to find out what Māori women think influences Māori women drinking or not drinking while they're pregnant.

This research is being done by Keriata Stuart as part of her Master of Public Health degree.

There's been concern recently in New Zealand about how alcohol may affect women who are pregnant, and the health of their babies. To help develop ways to deal with the issue in ways that empower Māori women, Keriata is interested in finding out from Māori women themselves think about what they think influences Māori women's drinking during pregnancy.

Keriata is looking to carry out interviews with a small number of Māori women from a range of backgrounds and experiences. There will be between eight and ten interviews, so the interviews can gather in-depth information.

You are invited to take part in an interview, to share your thoughts and knowledge about these matters. If you agree to participate, Keriata will meet with you at a time and place that suits you. The interview will take from one to two hours, depending on how much you feel you would like to share. If you agree, the interview will be audio-taped. You have the right to ask to have the tape turned off at any time during the interview, and to stop the interview at any point.

After the interview, the tape will be transcribed. Personal details, such as your name or names of your whānau, will be edited out of the transcript. Keriata will send you the transcript of your interview. You can make changes to it if you wish. The interview

tapes and transcripts will be kept in secure storage, and only Keriata and her supervisors (whose names are listed at the bottom of this sheet) will have access to them. After the research has finished, the tapes and transcripts are kept for five years and then destroyed.

The transcripts of the interviews will be analysed. Quotes from the interviews may be used in the thesis (research report) but in a way that doesn't identify you. At the end of the research, Keriata will send you a report on the results of the research, and she is also happy to talk more with you about the research. Each woman interviewed will receive a small koha to recognise their participation.

You are under no obligation to accept this invitation. If you decide to participate, you have the right:

- not to answer any particular question;
- ask any questions about the study at any time during participation; and
- give information on the understanding that your name will not be used.

You can ask questions about the research at any point, and contact details for Keriata and her supervisors are below.

Keriata Stuart
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ph (04) 938 0533 or (021) 416 030
keriata@clear.net.nz

Dr Lis Ellison-Loschman
Centre for Public Health Research,
Wellington
Massey University, Wellington
04 938 05332.x6010

Dr Maureen Holdaway
Massey University
Research Centre for Māori Health and
Development, Palmerston North
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This project has been reviewed and approved by the Massey University Human Ethics Committee, PN Application 05/180. If you have any concerns about the conduct of this research, please contact Professor Sylvia V Rumball, Chair, Massey University Campus Human Ethics Committee: Palmerston North, telephone 06 350 5249, email humanethicspn@massey.ac.nz.

Appendix B: Consent form for participants

(Printed on Massey University letterhead)

Influences on Māori women making decisions about alcohol and pregnancy

PARTICIPANT CONSENT FORM

This consent form will be held for a period of five (5) years.

I have read the information sheet on the project, and have had the details of the study explained to me. My questions have been answered to my satisfaction, and I understand that I may ask further questions at any time.

I agree/do not agree to the interview being audio taped.

I wish/do not wish to have my tapes returned to me.

I agree to participate in this study under the conditions set out in the information sheet.

Signature:

Date:

.....

.....

Full Name

.....

Appendix C: Tape consent form for participants

(Printed on Massey university letterhead)

Research project: Influences on Māori women making decisions about alcohol and pregnancy

Authority for the Release of Tape Transcripts

This form will be held for five (5) years

I confirm that I have had the opportunity to read and make changes to the transcript of the interview conducted with me.

I agree that the edited transcript, and some sections from the transcript, may be used by the researcher, Keriata Stuart, in reports and publications arising from the research.

Signature: **Date:**

Full Name - printed

Appendix D: Star names used as pseudonyms for participants

Matariki The Pleiades, marker of the Māori new year

Matariki's daughters

Tupuarangi Sky tohunga

Waiti Sweet water

Other female stars

Matiti A summer star

Te Kokota Preceder of dawn

Tioreore Magellanic cloud (sign of fine weather)

Puanga Rigel

Whakaahu Summer star

Opiri Winter star

(Best, 1922; Leather & Hall, 2004)