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Infant Feeding Practices of Grandparents

Rachel Mukwezwa Tapera

Abstract

What is it that determines the infant feeding practices of individuals, households and societies? Is it an individual’s preference and taste for food or is it the societal environment shaped by existing policies and structures? This study sought to explore the infant feeding practices of grandparents in New Zealand from the perspectives of Māori and Samoans.

Infant feeding practices are an essential component to ensuring optimal growth and development for children. Up to a certain age, children cannot make decisions about what they eat, and this role is the responsibility of their caregivers. The manner in which interactions with food occur and the feeding behaviours established in children as they grow are influenced by the people they spend a lot of time with. Due to the dynamics in demographics in New Zealand, increasing numbers of grandparents are taking up the role of caring for their grandchildren as primary or substantive caregivers. Grandparents are a vulnerable group due to their age and limited income sources and thus require support in various forms.

A qualitative study was carried out to explore the factors that act as facilitators as well as barriers to infant feeding practices. In addition, this study sought to understand the knowledge, attitudes and perceptions of grandparents that drive feeding practices. This study was consistent with the Kaupapa Māori research framework which ensured that it would make a positive difference in the feeding practices of grandparents and their families. The Williams’ adapted model for the basic causes of health was used to guide this research’s focus on structural elements.

Experiences shared and the lessons learnt from the semi structured interviews with grandparents who identified as Māori or Samoan caring for their grandchildren generated immense understanding of their practices. The themes constructed from this research are anticipated to provide useful insight into a grey area for the marginalised elderly as well as developing more focused approaches to optimise infant feeding practices in New Zealand.

Findings from this study suggest that the feeding practices of grandparents are driven by upstream structural elements. These structural elements have been shown to influence inequities between population groups.
Acknowledgements

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To Dad: your being a consistent example of being determined and working hard has enabled me to set and achieve substantial goals – I am much obliged.

To Mum, thank you for believing in me and teaching me that no mountain is too high if you trust in God and allow Him to lead the way.

To Garayi Lawrence: It is only by your encouragement and belief in me that I was able to undertake this huge challenge. I appreciate the great team we are. I appreciate everything you’ve done for me.
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Glossary of terms

Aotearoa  The Māori name for New Zealand, from Māori ao tea roa meaning Land of the Long White Cloud.

Aroha  Māori term for love, mutuality.

Awhi  To help or support.

Farrex  Commercially prepared baby food.

Hui  Māori term for meeting, gathering.

Kai  Māori term for food.

Kaitiaki  Guardian, caretaker, protector, trustee

Kamo kamo  Traditional Māori squash.

Karakia  Māori prayers and incantations used to invoke spiritual guidance and protection

Kaumātua kuia  Female elders in Māori society.

Kaupapa Māori  Conceptualisation of Māori knowledge. The systematic organisation of beliefs, experiences, understandings and interpretations of Māori people upon Māori people and Māori people upon their world.

Koha  Māori custom which can be translated as gift or present.

Kumara  Sweet potato.

Mana  Māori term for authority, honour.

Māori  The indigenous language and people of New Zealand.

Māori Women’s Welfare League  An organisation for Māori women that facilitates positive outcomes through enabling and empowering Māori women and whānau.

Marae  Meeting place for Māori, place of refuge, provides facilities for Māori to continue with their way of life.

Mokopuna  A grandchild, grandchildren.

Nana  A grandmother.

NZDep  The New Zealand Deprivation Index is a measure of the level of socioeconomic deprivation in small geographic areas of New Zealand.

Pacifica  The term used to describe Pacific Island migrants to New Zealand from Samoa, Tonga, the Cook Islands, Niue, Tokelau, Tuvalu and other smaller Pacific nations.

Pānui  Public notice, announcement, poster.

Plunket  An organisation that works together with families and communities by providing support services for the development, health and wellbeing of children under age 5 in New Zealand.
<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
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<tbody>
<tr>
<td>Principle of āta</td>
<td>A Kaupapa Māori principle, a transformative approach for growing respectful relationships between the researcher and participants.</td>
</tr>
<tr>
<td>Puha</td>
<td>Green vegetable native to New Zealand, also known as sow thistle.</td>
</tr>
<tr>
<td>Puku</td>
<td>Māori term for belly, stomach.</td>
</tr>
<tr>
<td>Rangatahi</td>
<td>Māori term for youth, young people.</td>
</tr>
<tr>
<td>Tamariki</td>
<td>Māori term for children.</td>
</tr>
<tr>
<td>Tāngata whenua</td>
<td>People of the land, the original inhabitants of New Zealand.</td>
</tr>
<tr>
<td>Taonga</td>
<td>A treasured, very valuable thing in Māori culture.</td>
</tr>
<tr>
<td>Taro</td>
<td>Root vegetable.</td>
</tr>
<tr>
<td>Tauiwi</td>
<td>Māori term for non-Māori; foreign race.</td>
</tr>
<tr>
<td>Te Kupenga Hauora</td>
<td>The Department of Māori Health at The University of Auckland.</td>
</tr>
<tr>
<td>Māori (TKHM)</td>
<td>The Department of Māori Health at The University of Auckland.</td>
</tr>
<tr>
<td>The Treaty of Waitangi</td>
<td>An agreement between the British Crown and Māori.</td>
</tr>
<tr>
<td>Tikanga Māori</td>
<td>Māori customs and tradition.</td>
</tr>
<tr>
<td>Tōmaiora Research Centre</td>
<td>Research arm of TKHM; undertakes research projects relevant to the health and wellbeing of tamariki (children), rangatahi (youth) and their whanau (family).</td>
</tr>
<tr>
<td>Whakatauki</td>
<td>Māori proverb.</td>
</tr>
<tr>
<td>Whānau</td>
<td>Māori term for family; an extended family or community of related families.</td>
</tr>
<tr>
<td>Whanaungatanga</td>
<td>Connectedness and engagement.</td>
</tr>
<tr>
<td>WINZ</td>
<td>Work and Income New Zealand, provides employment services and financial assistance throughout New Zealand.</td>
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</table>
Chapter 1. Introduction

This study seeks to demonstrate the importance of infant and young child feeding practices in health outcomes and emphasise that existing feeding practices are the result of complexities and discrepancies arising from structural societal elements. This chapter introduces the reader to the study, beginning with a brief overview of infant and young child feeding practices and the significance of grandparents in such practices, the aims and objectives as well as the methodological approach taken in this research. Chapter one concludes with an overview of the thesis structure.

1.1. Brief overview of the significance of feeding practices

Infant and young child nutrition is of critical importance and plays a key role in the public health arena. Feeding practices can ensure that an individual’s nutritional requirements are met as well as contributing to optimal health outcomes (Savage, Fisher & Birch, 2007; Scaglioni, Salvioni & Galimberti, 2008).

Adequate nutritional requirements for people can only be achieved if adequate food is made available. Access to adequate food is a basic human right, an entitlement for all individuals. However, if this right was being enjoyed by everyone, then the existing concerns over malnutrition, nutrient deficiency disorders, obesity and other diet related non-communicable diseases would be absent, which is clearly not the case.

Infants and young children are vulnerable in all respects, their feeding practices included, as they depend on their carers to handle their feeding matters. The manner in which carers relate to food plays a significant role in the children’s nutrition and health well-being as well as their relationship with food as they grow into adulthood (Kral & Raul, 2010). It is therefore important to include caregivers in nutrition related research.

1.2. The role of grandparents

The role of grandparents as carers for their grandchildren is increasing in New Zealand due to changes in demographics and household structures (Family Commission, 2005). The particular role that grandparents’ play in the feeding practices of their grandchildren is an area that is yet to be researched and documented in New Zealand.
This research seeks to explore the feeding practices of grandparents as well as seeking knowledge and deeper understanding of the barriers, facilitators, attitudes and beliefs that influence the way they feed their grandchildren. The knowledge gathered in this research may be useful in guiding policy or interventions aimed at improving infant and young child feeding practices in New Zealand. The perspectives of Māori and Samoan grandparents were considered in this research as the participants from this research were from these two ethnicities.

1.3. Research approach

This research sought to understand and interpret the grandparents’ knowledge, attitudes and beliefs and how these relate to their feeding practices. A qualitative approach was used in this research to enable an understanding of sensitive and complex human issues driving infant feeding practices rather than generalising the results (Marshall, 1996).

This research focused on deprived proportions of New Zealand and, employed a Kaupapa Māori research approach to avoid victim blaming or deficit theories for these marginalised populations (Reid & Robson, 2006). The Kaupapa Māori approach to research incorporates values of respecting the Māori worldview and knowledge sharing (Smith, 1999). The adapted Williams’ model (Mills, 2010) was incorporated in this research as a guide to focus on the basic causes and structural elements that determine feeding practices.

Seven interviews with Māori and Samoan grandparents provided data that was thematically analysed to enable a better understanding of their experiences with feeding practices.

1.4. Overview of thesis structure

This research has five chapters following this first chapter whose aim was to briefly introduce the purpose and structure of the thesis.

Chapter two provides background information for the reader, including the significance of feeding practices in infancy and childhood, the wider determinants of feeding practices as well as an argument as to why feeding practices require scrutiny.

Chapter three presents the specific aims and objectives of this research. It also gives the positionality of the researcher followed by the study design and methods used throughout the research process and ethical considerations.
The results from the interviews are presented in Chapter four. Analysis of the data found four key themes. Each section provides an overview of one theme and its categories as well as quotations from the data that support the given themes.

Chapter five addresses the research’s key findings in relation to broader literature. The strengths and limitations of the research process are presented in this chapter as well.

Chapter six concludes the thesis by presenting recommendations for future research and to enable healthy feeding practices for grandparents in the future.
Chapter 2. Background

2.1. Introduction

An overview of recent literature relating to infant\(^1\) and young child\(^2\) feeding practices is introduced to the reader here. The first section will define infant and young child feeding practices and review the global recommendations. A review of the significance of infant and young child feeding practices will follow highlighting the consequences of suboptimal feeding practices.

The various factors impacting infant and young child feeding practices are then reviewed with particular focus on the underlying structural determinants that drive inequities. The basic causes of health inequities and how these are responsible for determining numerous factors are appraised including the socioeconomic environments, social strata, employment and food security.

Cultural influences on infant and young child feeding practices and issues to do with food literacy will also be reviewed here before moving on to assess the effect of societal support structures and the role that family plays in feeding practices, particularly the grandparents.

This chapter ends with a justification of the importance of applying a Kaupapa Māori consistent approach to this research topic as a lead into Chapter three which presents the methods and methodologies.

2.2. Infant and young child nutrition

Infant and young child nutrition is defined as the intake of food by infants and young children in relation to their dietary needs (WHO, 2014). Though various factors influence infant and young child nutrition, infant and young child feeding practices, that is, how children are fed by their caregivers, play the most critical role, particularly breastfeeding and complementary feeding (World Health Organization, 2003).

In the early years of life, good nutrition is essential (Mhurchu et al., 2013). The World Health Organization (WHO) considers good nutrition as the cornerstone to good health, describing good nutrition as an adequate, well balanced diet combined with regular physical activity

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\(^1\) An infant is a very young human offspring from birth to 12 months (Ministry of Health, 2012).

\(^2\) A young child is a young human aged from 12 to 24 months (Ministry of Health, 2012).
The nutrition for infants and young children has varied over time (Nasreddine et al., 2012) and across nations (McLaren, 2007) due to changing technologies and lifestyles and the differential access to adequate nutritious food. However such changes have had both positive and negative effects. The latter includes poor nutrition outcomes in the form of malnutrition and obesity (WHO, 2013).

2.3. Why are infant and young child feeding practices important?

Infant and young child feeding practices are critical to ensuring good nutritional outcomes for our young. From as early as conception, human offspring depend entirely on their parents or caregivers for provision of nourishment (Ministry of Health, 2012). The process of obtaining appropriate nutrition to meet their growing needs is essential to ensure the best start to life. Research confirms that early nutrition has important short to long term consequences (Nasreddine et al., 2012; Yang & Huffman, 2013).

Feeding practices have received increasing attention in the past 30 years. In 1998 The World Health Organization, called “for a revitalisation of the global commitment to appropriate infant and young child nutrition, and in particular breastfeeding and complementary feeding” in order to improve the wellbeing of babies, infants and children around the world (World Health Organization, 2003; World Health Organization, 2000). Such global commitment included the development of best practice ‘guidelines’ with the World Health Organization and the United Nations Children’s Emergency Fund (UNICEF) recommending: early initiation of breastfeeding during the first hour; exclusive breastfeeding for the first six months of life and; the introduction of nutritionally adequate and safe complementary foods at six completed months together with continued breastfeeding up to two years of age or beyond (WHO, 2013).

Methods to support the practice of breastfeeding have been promoted vigorously internationally. In New Zealand, breast feeding practices are monitored by the Ministry of Health through the collection of data at various time-points (National Breastfeeding Advisory Committee of New Zealand, 2002; National Breastfeeding Advisory Committee of New Zealand, 2009). In addition, numerous health promotion activities have been implemented that aim to improve family support during (Essex, Smale, & Geddis, 1995) and information about (Ladas, 1972) breastfeeding including its benefits for baby, mother, family and community (Ip, Chung, Raman, Trikalinos, & Lau, 2009). In light of its significant role, poor
uptake and inequities by ethnicity, breastfeeding still requires necessary research to explore and implement strategies today.

However, less is known about the practice of complementary feeding. Optimal nutrition during the complementary feeding phase is of paramount importance as immense nutritional changes take place for the infant moving from an entirely milk diet to one consisting of a variety of foods (Flores Huerta, 2011; Ministry of Health, 2012). Worldwide, very few children receive nutritionally adequate and safe complementary foods, with most countries having only a third of breastfed infants aged 6 to 23 months meeting the criteria of dietary diversity and feeding frequency that are appropriate for their age (WHO, 2013). Therefore the gap in what is ‘recommended’ and what happens in practice requires further investigation.

Nutrition is also recognised as a vital component of comprehensive action to achieve health equity (Marmot, Friel, Bell, Houweling, & Taylor, 2008). The role of nutrition and health outcomes, including proposed pathways to health inequities, is considered further here.

Malnutrition\(^3\) is the largest single contributor to disease and poses the gravest single threat to global public health (WFP, 2013). However, research suggests that the effects of malnutrition on infants and young children be reversed (Grantham-McGregor, Powell, Walker, & Himes, 1991) through the adequate consumption of nutrients (Nordqvist, 2010) and addressing key structural determinants of local environments.

Proper nutrition of children is also an essential foundation for human development (Kumar, Goel, Mittal, & Misra, 2006), as general physical growth and motor development are delayed by poor nutrition (World Bank, 2011). Behavioural and cognitive development, and therefore educability, can be impeded, thereby undermining future potential employment opportunities and associated socioeconomic status (WFP, 2013; Ministry of Health, 2012). Inequities that result from compromised growth and development due to poor nutrition exist in New Zealand. The most affected are those peoples living with long-standing socioeconomic disadvantage (Derby, 2012) who then have limited access (due to financial, 

\(^3\) Malnutrition refers to both under nutrition (when individuals have a diet that does not provide them with adequate calories and protein for maintenance and growth or when they fail to fully utilise the food they eat due to illness) and over nutrition (when individuals consume too many calories) (WFP, 2013). In simple terms, malnutrition is the insufficient, excessive or imbalanced consumption of nutrients often leading to several different nutrition disorders, depending on which nutrients are lacking or are being consumed in excess (Nordqvist, 2010).
social, physical factors) to foods that enhance optimal nutrition. As a result, the chronic cycle continues with the disadvantaged populations continuing to be disadvantaged. Given the fact that significant inequities in socioeconomic status exist between Māori and Pacific people and non-Māori, non-Pacific people in New Zealand, it is important that research into infant and young child feeding practices have a Māori and Pacific focus.

Early feeding practices have also been linked to obesity. Considered the leading cause of preventable mortality and morbidity (WHO, 2013), obesity is now linked with the development of long term health conditions such as diabetes, heart disease and cancer (Yang & Huffman, 2013; WHO, 2000; Thompson, 2012). In New Zealand, childhood obesity was identified as a significant health problem (Carter & Swinburn, 2004) in the 2006/07 Health Survey (Ministry of Health, 2008). The 2002 National Children’s Nutrition Survey revealed that Māori and Pacific children were more likely to be overweight and obese when compared to New Zealand and Other children (Parnell et al., 2003).

Having highlighted the important role of complementary feeding for infant and young child nutrition and health, the role of caregiver’s is now discussed.

**2.4. Caregivers’ role in infant and young child feeding practice**

The economic, physical and social realities of day to day life will influence the realities of caring for children (Abel et al., 2001). Recognised social and environmental barriers to infant feeding include a lack of family and broad social support, insufficient prenatal education, lack of assistance and health practitioners’ communication (Ministry of Health, 2012). The World Health Organization requires that consistent, complete and objective information on optimal feeding practices, free of commercial influence, should be made available to mothers, families and caregivers. Inadequate and conflicting advice from professionals, and in some cases relatives, results in confused mothers with poor confidence on how best to provide for their infants nutritionally (Glover et al., 2007).

Caregivers should have unrestricted access to skilled and knowledgeable support to assist them in initiating and maintaining appropriate infant feeding practices. Health workers, community organisations offering mother to mother support or caregiver to caregiver support, even including fathers and other influential members of the families are an ideal support framework for infant and young child feeding (World Health Organization, 2003). Changing household level practices can be achieved by using appropriate behaviour change
communication principles; change agents specifically trained to address infant feeding issues; consistent messages; multiple channels to saturate population coverage and engage communities in a participatory manner, and encouraging ownership of such interventions (Ramji, 2009).

2.4.1 Family influence on infant and young child feeding practices

The influence of family on overall infant caring practices has a bearing on infant feeding with a wide range of practices and beliefs associated with infant feeding being influenced by family (individual parents, couples, extended family) and the tensions brought about by day to day realities (Abel et al., 2001). The demographics of family structure have been transforming over the recent years with the Families Commission (2005) reporting the increased diversity of New Zealand family structures with the majority of families not being represented by the traditional family structure that usually consisted of a married couple, with one income, a male breadwinner, a female housewife with two or so children. It is possible that the dynamics in family structures have had their influence on infant and young child feeding practices over the years.

From history in many societies, for instance African American and Māori, there has been an assumption of the grandparent stepping in to care for dependent children in cases when the parent was no longer available; either due to death, work commitments, divorce or abandonment, such that grandparent care giving is not rare and it is present across class, race and gender lines (Fuller-Thomson, Minkler, & Driver, 1997). This trend has not yet disappeared as more and more grandparents are caring for their grandchildren (Pinson-Millburn, Fabian, Schlossberg, & Pyle, 1996). The large number of grandparents caring for their grandchildren in the US was given as an example of the existence of strong intergenerational bonds and conceptualisations of solidarity between generations (Fuller-Thomson et al., 1997).

Following the New Zealand Childcare Survey 2009, there were variations in the types of early childhood education and care used by age and ethnicity of the children. The most common child care for children under two years was care by a grandparent (32.5%) with 18.2% of older school going children being also cared for by their grandparents (Ashley-Jones, 2010). These figures show the child caring role of grandparents is quite significant, making them key informers for their grandchildren and an understanding of their feeding practices should be sought.
More parents are less able to function in the face of increased social, emotional and economic pressures. However, it is argued by Pinson-Milburn et al., (1996) that grandparents when compared to parents, cope better with these stressors due to some sort of immunity, becoming more and more involved in caring for their grandchildren. The breakdown of marriages and parental partnerships is a common feature for children being cared for by grandparents (Ministry of Health, 2012). Literature shows that some grandparents took care of their grandchildren since birth with the principle reasons being drug or alcohol abuse, mental illness, abandonment, parental incapacity or incapability, death of parent (Worrall, 2009), children born out of wedlock, and unemployment (Pinson-Millburn et al., 1996).

Research by Worrall (2009) was done on grandparents and other kin caregivers across New Zealand and revealed that 33% of children have been under the care of grandparents for ten years or longer, 49% from 6-9 years, and 18% between 4 and 5 years. Over 4000 grandparents in New Zealand in the year 2001 had received legal guardianship of their grandchildren (Families Commission, 2005) making a substantial number of grandchildren experiencing feeding practices influenced by their grandparents.

Although there has been an increase in grandparents raising grandchildren in countries like the United States and New Zealand, most of these grandparents had incomes that fell below the poverty level (Solomon & Marx, 1995) when compared to their counterparts not involved in caring for grandchildren (Fuller-Thomson et al., 1997). The impact of grandparents’ low incomes on food access and feeding practices requires investigation. An important point to consider is that in addition to financial stress are the emotional and other related stresses (Solomon & Marx, 1995) that are likely to be experienced by individuals as they advance in age4.

2.4.2 Food security and feeding practices for a household

As links between income, socioeconomic status and access to adequate nutrition have been established (Pilgrim et al., 2012, Cook, et al., 2004, Ministry of Health, 2012, Utter et al., 2012), it is important to consider food security in feeding practices of infants and young children. (Utter et al., 2012). Common causes of food insecurity include unemployment low paying jobs, high housing costs, poverty or lack of income, substance abuse, high utility

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4 Most grandparents are old, some with medical conditions and generally at advanced ages. The elderly may also have needs that require someone to be caring for them, rather than them providing care for someone else.
costs, mental health problems, homelessness, reduced public benefits and high child care costs (Holben & ADA, 2006). In situations of insufficiency, families access the ready availability of cheap, energy dense and nutrient poor foods resulting in high intakes of sugars and fats at the expense of fruits, vegetables and dairy products (Cook et al., 2004; Kaiser & Townsend, 2005; Kirkpatrick & Tarasuk, 2007; Pilgrim et al., 2012; Whitaker, Phillips, & Orzol, 2006). This may also mean less frequent family meals, breakfast skipping and less healthy home food environments (Widome, Neumark-Sztainer, Hannan, Haines, & Story, 2009).

The New Zealand Children’s survey showed that New Zealand European and Other children were the most food secure followed by households with Māori and then Pacifica. Food secure households were most likely to have the least number of children (Parnell et al., 2003). Households with Pacifica children frequently reported eating less because of the lack of money or relying on others to provide them with food more followed by Māori and then New Zealand European and Other households.

Stress arises in households with food insecurity (Cook et al., 2004). Over 18% of New Zealand households expressed feeling stress because of not having enough money to buy food; households with Pacific children as well as households with five or more children is the majority (Parnell et al., 2003). This evidence indicates that infant and young child feeding practices are very dependent on issues to do with food security and food security to a large extent determined by the existing socioeconomic factors that are driven by the upstream structural elements.

2.5. Significance of the Kaupapa Māori Approach

A review of the literature has revealed inequities in feeding practices in infant and young children, their nutrition and health related outcomes and broader factors that impact on caregivers. The 1948 Universal Declaration of Human Rights (and other treaties and international conventions like the United Nations Declaration on the Rights on Indigenous Peoples and Treaty of Waitangi) recognise the right for all people to access adequate food and be free from hunger regardless of age, gender, ethnicity, nationality, religion or political opinion. “It is the right to feed oneself in dignity, within an environment conducive for one to produce one’s own food or to buy it” (United Nations Human Rights, 2010).
The Convention on the Rights of the Child protects a child’s right to food in relation to the rights to life, survival and development, health nutrition and an adequate standard of living. Infants and young children are the most vulnerable group when it comes to lack of food as they have more essential nutrients needs required to meet optimal physical and mental development and also because of their dependency on caregivers and family for provision of adequate food (United Nations Human Rights, 2010).

Being mindful of human rights and the right to food, infant and young child feeding practices of individuals can paint a picture that highlights how basic entitlements are being violated for populations internationally and in New Zealand. Therefore any investigation of infant and young child feeding practices must adopt a rights-based approach. Such an approach should not only demonstrate breaches in rights but also and advocate for a change that achieves equity.

The Kaupapa Māori theoretical framework is an indigenous rights-based approach developed in New Zealand that seeks to explore and understand Māori within a Māori worldview (Barnes, 2000) in ways that work best for Māori (Nepe, 1991). The approach was developed in response to negative consequences of Western research on Māori that resulted in disposessing and dehumanising Māori while privileging Western societal paradigms (Barnes, 2000; Bishop, 1999; Jones, Crengle, & McCreanor, 2006; Smith, 1999). Kaupapa Māori takes an equity perspective by critically evaluating contemporary power relations within the New Zealand society and demystifying the colonial discourse of victim blaming Māori and associated deficit blaming behavioural explanations (Bishop, 1999; Reid & Robson, 2006; Walker, Eketone, & Gibbs, 2006).

Pure Kaupapa Māori research was defined as Māori researchers doing Māori research for Māori (Bishop, 1999; Smith, 1992; Walker et al., 2006). Although, it is not clear whether Kaupapa Māori theory still holds when non-Māori researchers do Māori research for Māori, the primary requirement is for the research to be participatory and a negotiation process to occur controlled by Māori and the researcher acknowledging Māori philosophy and principles (Bishop, 1996; Bishop, 1999; Smith, 1999) and also that the research should contribute towards making a positive difference for Māori (Walker et al., 2006). Upholding the self determination of research participants, acknowledging Māori ownership of

5 Participatory mode of knowing comes with recognising a deeper, profound relationship with others, this form of knowing is essential for Māori and is known as whanaungatanga (connectedness and engagement) (Bishop, 1999)
knowledge and validity of the Māori worldview are fundamental requirements in Kaupapa Māori considering that Māori people govern the research process, their cultural aspirations and understandings are important (Bishop, 1996; Walker et al., 2006).

This research is guided by the Kaupapa Māori framework and seeks to explore understandings and experiences of Māori grandparents as far as feeding practices are concerned. It seeks to give a voice to marginalised proportions of the New Zealand population. Marginalised population groups in the context of vulnerable ethnicities (research focus on Māori and Pacific) as well as in the context of vulnerable age groups (research focus on the elderly, infants and young children). It is not a pure Kaupapa Māori approach but instead a Kaupapa Māori consistent approach because the researcher was non-Māori. However self-determination and inclusion of Māori conceptual, methodological, and interpretive processes (Walker et al., 2006) should be recognised and upheld throughout the Kaupapa Māori research process. Māori protocol, cultural values and systems require recognition and adherence as stipulated by Kaupapa Māori theory (these elements will be elaborated on more extensively in Chapter three).

2.6. The wider determinants of health and nutrition

The Kaupapa Māori framework is essential in allowing a culturally appropriate critique of power discourses within a rights-based perspective. However, to fully elucidate the complexities of political, social and economic factors that create inequities an approach that focuses on structural elements or the social determinants of health is needed (Williams, 2007). The adapted Williams’ model on the basic causes of health inequities (Mills, 2010) allows for such an exploration of the underlying causes of grandparents’ infant feeding practices in New Zealand (Refer to Figure 1).

![Figure 1 The basic and surface causes of health inequalities: A conceptual model](Adapted from Williams (1997); sourced from Mills (2010) page 54)
2.6.1 Basic causes of inequities in health

The basic causes of health inequities adapted from Williams (1997) by Mills (2010, page 54) illustrates how historical socio-political determinants are ultimately the causal factors of health outcomes. The economic, political and legal structures, the culture, biology and geographic origins of individuals influence their health outcomes through the embodiment process, or how the environment in which we lived literally gets under our skin (Krieger, 2005). For example, early life experiences and environmental exposures during early life development can influence the expression of genetic material resulting in various phenotypic characteristics that may have deleterious effects on health increasing susceptibility to non-communicable diseases including obesity and cardiovascular dysfunction (Gluckman et al., 2009; Lorenzen, Martino & Thum, 2012).

The combined effect of one’s surroundings, opportunities and conditions of life play a pivotal role in facilitating and or hindering infant feeding practices. Access to healthy food and good nutrition for infants and young children is influenced by the broader determinants of health or basic causes (Ministry of Health, 2012). Williams (1997) and others, suggest that the root of inequities in health outcomes lies in these basic causes (Marmot et al 2008; Mills, 2010). The complex interconnections between social structure, prevailing environmental contexts and related factors that determine the conditions of daily life (as dictated by the existing political, legal and economic structures) have an impact on the health and wellbeing of individuals (Williams, 2003).

Inequalities in the social, political and economic structural elements thorough the courses of history have led to various disparities including: age, gender, ethnicity and socioeconomic status in many countries over the world (Reid & Robson, 2006). In New Zealand, consistent health inequities are present between Māori and non-Māori population groups (Fawcett et al., 2006). These health inequities have been largely attributed to colonial processes in the past which have been constant through the course of history such that health inequities appear normal in the present day (Reid & Robson, 2006). Reid & Robson, (2006) suggest that the concept of racism was initiated during these colonial times, with Māori being considered less superior and this thought determined proportions of the population that are privileged and those that are deprived. The propagation of such ideologies through history has led to poor outcomes for Māori in health and other areas of life (including education, occupation and
employment) and Māori are blamed as having a problem despite the bias and prejudice in the underlying structural elements (Reid & Robson, 2006).

Social strata related to ethnicity and class often reflects human health (Thayer & Kuzawa, 2011). Inequities between Māori and non-Māori or non-Pacific peoples are apparent when one looks at the health outcomes between the different groups (Ministry of Health, 2012). For instance, the 2002 National Children’s Nutrition Survey found that New Zealand European and others children had the lowest prevalence of inadequate dietary intakes compared with Māori and Pacific children (Parnell et al., 2003). The health outcomes in New Zealand reflect ethnic and socioeconomic inequalities in the social determinants of health (Mills, 2010). Such differences stem from structural and environmental causes and not necessarily behavioural or cultural changes. Further investigation is suggested to explore and seek understanding into the feeding practices and food security of the different population groups in New Zealand.

Williams (1997), argues that research and interventions need to be targeted at the basic cause level. Socioeconomic inequalities are major drivers of health inequities these can determine where people live, whether they have employment, the sort of employment they have and their income level (Mills, 2011). If these forces are changed, health outcomes will also change (Williams, 1997). The nutrition practices of individuals and households are surface causes that are linked to health outcomes but altering them will not be consistent with desirable health outcomes. It is the fundamental ‘basic causes’ responsible for the occurrence of certain health outcomes that need to be targeted and addressed to make lasting, significant differences to health (Williams, 1997).

2.6.2 Socioeconomic environment and globalisation

Williams (1997) and others recognise the role of socioeconomic environments and globalisation in contributing to inequities. Socioeconomic environments relate to the basic causes by impacting on employment and subsequently feeding practices and health. The socioeconomic status or environment of any setting is related to health through various means, for instance, the built environment (Lake & Townshend, 2006). The built environment coupled with social interactions, food marketing and prices influence infant feeding practices (Maziak, Ward, & Stockton, 2008). The food environment is difficult to define and can include the accessibility and availability to food as well as food advertising and marketing (Lake & Townshend, 2006).
Food commercialism, technology, urban and socioeconomic development (Maziak et al., 2008) contribute to poor feeding environments, not just for infants and young children but for everyone. Giant marketing campaigns make it hard to keep convenient, cheap and ‘yummy’ foods away (Chopra & Darnton-Hill, 2004; Glanz et al., 2005; Maziak et al., 2008). For every US dollar spent by the World Health Organization to improve nutrition, US$500 is spent by food industry on promoting processed foods (Maziak et al., 2008). The insistent marketing coupled with the price, manipulation of taste, and variety are driving more people into the unhealthy food consumption frenzy (Chopra & Darnton-Hill, 2004). Mothers’ behaviour is influenced by media, advertising and other commercial pressures (Poskitt & Breda, 2012). Ideally to support healthier feeding practices; the healthy choices must be made the most available, feasible and affordable (Maziak et al., 2008).

The analyses of dietary trends in developed nations have shown how economic factors have a far broader influence on global eating habits than might be expected (Drewnowski & Popkin, 1997). Globalisation has led to economic growth (McLaren, 2007); changing incomes and lifestyles, modernisation as well as radically altering the nature of agro-food systems (Hawkes, 2006). The composition of the food itself (Maziak et al., 2008); the quantity, type, cost and desirability of foods available for consumption has been altered (Hawkes, 2006).

This “westernisation” of global feeding practices brought about by globalisation has been held responsible for the escalating rates of obesity and non-communicable diseases through increases in food imports, fast food and rising consumption of sugars and animal fats (Drewnowski & Popkin, 1997). The key processes related to globalisation and the nutrition transitions are bound to worsen dietary inequalities between the rich and the poor. These include production and trade of agricultural goods, foreign direct investment in food processing and retailing and global food advertising and promotion (Hawkes, 2006).

2.7. Gaps in knowledge

Having looked at the numerous reasons that have implications on feeding practices, a lot of gaps have been highlighted in this literature review with more questions being raised about the New Zealand context of feeding practices, particularly by grandparents.

Importantly, this research has argued research needs aligned to the Kaupapa Māori framework while focusing attention on the upstream structural elements that shape people’s everyday lives, including their feeding practices. Although policy and data may be available,
a clear picture of the New Zealand scenario of infant and young child feeding practices is absent. The voice of grandparents as subset of the population dedicated to caring for their grandchildren is inaudible.

This research proposes to use the Kaupapa Māori framework to provide a voice to grandparents by exploring their experiences with infant and young child feeding. Attention should be focused on Māori and Pacifica people living in deprived residential areas and the adapted Williams’ model (Mills, 2010) will be used for data analysis.

A detailed description of the methods and procedures undertaken in this research is provided in Chapter three.

2.8. Conclusion

This review of literature has argued that feeding practices emerge only as a surface cause for health outcomes in a population: the actual determinants lie upstream. Whilst strategies, policies and guidelines have looked at the infant feeding practices of parents the experience of grandparents in urban New Zealand has not received attention, which is crucial given the increased role grandparents play in child rearing.

These factors have prompted this research and the aim is to generate an understanding of feeding practices; the barriers, facilitators, knowledge, attitudes and perceptions particularly in the context of Māori (guided by the Kaupapa Māori framework) and hopefully the findings can be framed in ways that are useful for policy makers, researchers and communities.

As much as these strategies provide a vision for optimal infant and young child feeding practices, there are numerous challenges to attaining this goal. To ensure every child receives adequate nutrition to support optimal growth, development and well-being, an understanding of these challenges is required.
Chapter 3. Methods

This section will give in detail the methodological steps and procedures that were used in this study. This chapter begins by highlighting the aims and objectives of this research. The following subsections cover the positionality of the researcher, the study design and rationale, the research site, consultation processes, a description of the study participants sample (including recruitment), data collection, data analysis, dissemination of findings and ethical considerations.

3.1. Aims and objectives

The primary goal of this study is to assess the current infant and young child feeding practices of grandparents in Auckland, in order to explore and establish the factors that facilitate or hinder optimal infant feeding practices.

The objectives of this study are:

- To explore the infant and young child feeding practices of grandparents.
- To identify the key factors that facilitate ideal infant and young child feeding practices.
- To understand the barriers encountered by grandparents in their infant and young child feeding practices.
- To establish grandparents’ knowledge of healthy infant and young child feeding practices.

This research aims to explore current infant feeding practices by grandparents, with the expectation that the findings will be useful in informing policies that support appropriate infant feeding practices and ultimately, may contribute to improved health outcomes for Māori.

3.2. Positionality

As a researcher’s positionality influences their entire research process, it is important to make evident that the researcher's personal interests and mindfulness about self are made candid throughout the research process (Chiseri-Strater, 1996; Marshall & Rossman, 2010). Positionality allows the researcher to reflect on one’s position in the various contexts and biases of their viewpoint (England, 1994), including the researcher’s standpoint in relation to
the participants (based on variables such as race, gender, age and social status) (Merriam et al., 2001).

This section on positionality is given in the first person as it describes the researcher’s personal context, thereafter third person will be used for the rest of the thesis.

I am a Nutritionist by profession with interests in infant and young child feeding, an area I have dedicated eight years of previous work too. I am also a mother to two bubbly sons, another driver for my strong interest in infant and young child nutrition.

This research is consistent with the Kaupapa Māori Research approach that was highlighted in Chapter two. This research approach was developed by Māori and is used to research Māori by Māori (Barnes, 2000; Bishop, 1999). In this particular instance, the methodology was used by a non-Māori researcher for Māori.

In the New Zealand context, I am referred to as Tauiwi (non-Māori), as I am an African, originally from Zimbabwe. Zimbabwe is a country in the southern part of Africa with a similar colonial history to New Zealand, where indigenous people had first-hand experience of colonisation and disempowerment (Zimbabwe Government, 2014); with colonisers presuming to set themselves up as authorities on indigenous people’s culture while giving an explanation of their lives and experiences that are alien to indigenous people’s understanding. The prehistoric and contemporary effect of the socio-political and socioeconomic context of my home country has contributed to the numerous health challenges it is facing (WHO, 2013), including the huge HIV/AIDS disease burden and challenges in attaining optimal infant nutrition (Cosminsky, Mhloyi, & Ewbank, 1993; Meldrum, 2008; Young et al., 2011). Therefore, I believe that utilising a Kaupapa Māori consistent approach in this study will be of great benefit to participants in New Zealand, and also an approach I can further develop in my home country to suit the local setting and contribute to the growth of research.

Māori have particular concern over Tauiwi researchers who lack acknowledgement of culture and cultural differences as key components in successful research practice and understandings (Bishop, 1998). This is one reason why the Kaupapa Māori research approach was developed by Māori and is used to research Māori by Māori (Barnes, 2000; Bishop, 1999). With these concerns in mind, I utilised a Kaupapa Māori consistent approach (where my research aligns with the key principles of Kaupapa Māori theory), rather than a pure Kaupapa Māori research approach (which is by Māori for Māori). Barnes (2000) said that
although there may be a debate as to whether a researcher has to be Māori for a study to be undertaken within a pure Kaupapa Māori approach, the condition that needs to be accepted is that of Māori control with information and knowledge being shared through a negotiation process. Being Tauiwi, I accepted this condition and a process of negotiation drove the research, with control not being solely held by me as the researcher (Barnes, 2000).

To maintain the integrity of this approach, I had two Māori researchers from the Tōmaiorea Research Centre, Te Kupenga Hauora Māori, University of Auckland, who played a critical role in mentoring and guiding my study to ensure consistency with the Kaupapa Māori approach. I was also under the advice and guidance of a kaumātua kuia of the Tōmaiorea Research Centre. She oversaw the tikanga Māori (appropriate cultural processes) of the research process, including hui (meetings) with stakeholders and participants. Within Kaupapa Māori research practice, research can only proceed when kaumātua provide guidance, and there is aroha (mutuality) between the participants (Bishop, 1998).

At all the interviews, I offered karakia (prayers) and provided koha (gifts) and kai (food), as recommended for Kaupapa Māori research within parameters and understandings of Māori people (Bishop, 1998). At all times, I strived to be respectful to the participants in order for doors and windows of knowledge and information to be opened and shared with me (Barnes, 2000). Additionally, I employed the principle of āta (careful, cautious engagement) in building relationships and engaging with the marae, the community organisations and participants.

In order to avoid additional problems that could arise from being a non-Maori researcher in terms of not recognising the power and mana (authority, honour) of tāngata whenua (people of the land) (Barnes, 2000), I deferred to my Māori supervisors, kaumātua, and participants for their expertise in Kaupapa Māori processes and approaches. I have the understanding that Kaupapa Māori research locates power within Māori cultural practices and the research community to determine acceptable research processes (Bishop, 1998). I was also guided by The Treaty of Waitangi, the founding document of New Zealand, which provided a basis of partnership and upholding Māori rights (Health Research Council of New Zealand, 2010).

This research is consistent with the Kaupapa Māori research approach and its principles. The principles of self-determination, cultural aspiration, reciprocal learning, developing respectful relationships, the value of family structure and carrying out research that meets the vision and
aspirations of Māori communities (Durie, 2001; Smith, 1992) were upheld throughout this research.

The research was based at the Tōmaiora Research Centre, Te Kupenga Hauora Māori, at the University of Auckland. It was guided and overseen by two Māori supervisors to ensure and maintain consistency with Kaupapa Māori. The study adopted a rights-based, structural framework which avoids victim blaming and cultural deficit explanations. The researcher was required to show substantial understanding of Māori culture and beliefs while working with Māori communities, especially considering that the researcher was non-Māori.

3.3. Study design and rationale

The research question seeks to explore the infant feeding practices of grandparents and as such determined the choice of having the research qualitative (Marshall & Rossman, 2010; Marshall, 1996). The aim was to understand complex human issues driving infant feeding practices rather than generalising the results. Enlightenment and insight into these complex psychosocial issues that are sensitive and emotionally deep can be availed by a qualitative research design (Marshall, 1996). In qualitative research the imperceptible and real information on the life experiences of participants can be provided (DiCicco-Bloom & Crabtree, 2006) and, in this case, it is experiences to do with the infant feeding practices of grandparents.

3.4. Target participant group

The participants had to be grandparents who had provided at least five meals per week over the previous three months to their grandchildren under the age of 24 months. The researcher assumed that provision of at least five meals per week was sufficient to establish the behaviours and routines associated with infant and young child feeding. The way people eat over a period of time becomes a habit, with an effect on how much, when, what and why we eat (Dugdale, Vorvick, & Zieve, 2012). The study excluded grandparents who lived outside the research site, a suburb of Auckland. This was a measure of trying to ensure homogeneity\(^6\) of the sample of participants that if they live in the same suburb they are likely to be exposed to similar milieus.

\(^6\) Due to the ecological fallacy, we cannot ensure total homogeneity, however it was a measure towards trying to capture a similar sample.
3.5. Research site

The research focused on low income households within an Auckland suburb that is defined as ‘deprived’ through the census unit measure of NZDep. New Zealand has a measure of deprivation (NZDep) that uses area census units to determine mesh-area levels of deprivation through various variables that include unemployment, household income, sole parenting, educational qualifications, home ownership, home living space, receiving means tested benefits and car and telephone access (White, 2008). According to this measure, the suburb selected had the highest level of deprivation at the time the research was undertaken. The suburb is also an ethnically diverse community thus allowing the possibility to explore differences in infant and young child feeding practices by ethnicity, customary norms7, and understanding.

3.6. Consultation

Consultations were held with a kaumātua of the Tōmaiora Research Centre, the Lifestyle Co-ordinator of a local marae, and the facilitator of a local community organisation. The Lifestyle Co-ordinator of the marae provided counsel and direction on the most appropriate ways to carry out the study and advice on community engagement, cultural safety, recruiting participants, data collection methods and dissemination of results.

The kaumātua’s role was to guide tikanga Māori aspects (appropriate cultural processes) of the research process to ensure that all cultural protocols (like karakia, koha and kai) were observed.

3.7. Sampling and participant recruitment

Eligible participants from community groups and organisations within the research suburb were recruited through the local marae. The marae and local organisations contacted eligible participants, provided them with information about the study and asked them if they would be interested in participating. The contact details of all consenting prospective participants were then passed on to the researcher. The researcher then made contact with the prospective participants over the phone, providing all the detailed information about the research and clarifying any queries the participants raised. Once the participants gave their commitment to

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7 Customary norms are the defining aspect of cultural identity. These are social or environmental conditions or facilities that are approved, acknowledged and encouraged by a society to which individuals belong (Townsend, 1979).
participate, interview appointments were set. The study aimed to recruit between eight to twelve participants but ended up having only seven participants due to the challenges faced recruiting eligible participants, and the unavailability of most people due to the summer holidays when the data collection phase was undertaken.

3.8. Data collection

The researcher conducted all the interviews over a three month period (from 04/12/2013 to 18/02/2014). The interviews were no longer than an hour long and were held at the participants’ homes.

The beginning of each interview was a very important phase that needed to be handled tactfully. This was the rapport building phase which included the arrival process, greetings and introductions, getting to know each other, settling down and breaking the ice (Woods, 2011). The researcher was prompt to develop a positive relationship in the interviews. This was an essential component of the interview since rapport involves trust and respect for the participant and the information shared. Building a rapport established a safe and comfortable environment for the participants to open up and share personal experiences and attitudes honestly (DiCicco-Bloom & Crabtree, 2006).

The purpose and expectations of the research, assurances of confidentiality and descriptions of all that would be involved with their participation in the interview were highlighted to the participants using the information sheet (Refer to Appendix three). Thereafter they would either accept or decline inclusion in the study. Written informed consent was sought from each participant before commencing the interviews (Refer to Appendix four). All interviews were audio recorded using a Sony ICD-PX720 voice recorder.

The interviews were semi-structured. These interviews allow an open and flexible two way communication that permits new ideas to come up during the dialogue (DiCicco-Bloom & Crabtree, 2006). Semi structured interviews were the sole data source for this research. Talking face to face or questioning people is a way that enables the collection of a great amount of relevant information pertaining to people’s experiences (Woods, 2011).

The interviews were planned in advance with pre-set questions (DiCicco-Bloom & Crabtree, 2006; Padgett, 2011). The interview questions were piloted in a mock interview with a close associate to assess their comprehensibility and effectiveness. A semi structured interview
guide was then developed for this research (Refer to Appendix five). The questions were open ended, neutral, simple and clear to the participant. At the outset of the semi structured interviews, open ended questions were used to define the subject to be discussed while allowing the respondent to understand the idea in more detail (Britten, 1995). The interviews were loosely structured with the order of questions and probing varied depending on the flow of the dialogue.

3.9. Data analysis

A general inductive approach was used to analyse the qualitative data. This approach is suited to producing a set of categories or themes that derive from analysis of the interview data and are relevant to the research objectives (Thomas, 2006). Thomas (2006) suggests that it is an uncomplicated approach that is relevant in generating reliable and valid findings, as it permits research outcomes to appear from noteworthy themes found in the raw data. Thematic analysis uses semi structured interview material (Woods, 2011). The data analysis process included identifying, coding and categorising patterns or themes found in data. The initial data analysis took place at the same time as the data collection. This resulted in the moulding of new questions and removal of unnecessary questions as the researcher learnt more about the subject (DiCicco-Bloom & Crabtree, 2006). The processes carried out in data analysis included data transcription, data cleaning, establishing data categories and assessing reliability and validity. These are discussed in detail in the section below.

3.9.1 Data transcription

Data transcription is a kind of data transformation that can enhance or strip a research subject to how cautiously and vigilantly it is carried out (MacLean, Meyer, & Estable, 2004). All the data was transcribed by the researcher as this allowed the researcher to fill in unclear passages, gain an initial interpretation of the data, while simultaneously attaining an opinion on the interviewing technique used. This could have not been the same had an outside transcriptionist been contracted (Padgett, 2011). The one hour interviews took up to six or seven hours of transcribing, rendering the process extremely mechanical and time consuming (Britten, 1995). The transcribed data was kept on a password protected computer. Names or any information that could possibly link the participants to the data was disguised in all transcripts, audio files and field notes (Padgett, 2011). A back up was made on a Universal
Serial Bus (USB) device of all the audiotapes and transcripts. The backup was securely stored according to University of Auckland requirements.

3.9.2 Data cleaning

All the interview transcripts were edited in order to make the interviews more clearly defined. Thomas (2006) highlights the importance of having the raw data files in a common format taking into consideration the font size, margins and highlighting the dialogue or comments made during the interview.

3.9.3 Establishing data categories

The audiotapes were listened to while reading transcriptions to confirm accurate interpretation of the interviews. The raw text was read repeatedly until the researcher was well acquainted with it. A variety of themes and possible categories were discovered through the several readings and comprehension of the raw data. The various explanations derived from the raw data were useful in giving the results that were informed by the researcher’s assumptions and understandings during data collection and data analysis (Thomas, 2006).

Coding of the raw data was done after the rigorous and repetitive readings of the transcript. In order to ensure that the coding process was robust, coding themes were triangulated in a process involving the researcher and both supervisors. The researcher coded all the transcripts initially. Thereafter, the researcher’s two academic supervisors also coded the interviews and similar themes were identified. This was used as a way of validating and assessing the reliability of the researcher’s data analysis and to ensure that a Kaupapa Māori approach was included within the analysis phase of the research.

The coding process led to allocating the data into themed categories. These thematic categories were useful as units for wider conceptualisation (Padgett, 2011). The thematic codes were labelled using concise but explanatory labels such as codes related to the child’s behaviour or codes related to food access and availability. Padgett (2011) suggested that some of the codes can be dropped if their content was too insignificant or they were combined with other codes.

Categories were established that included the key themes found during coding. The more common categories were derived from the research objectives and the less common ones were derived from the data (Thomas, 2006). The categories were grouped with the less
significant ones being dropped or merged into categories with similar meaning, for instance categories for grandparents’ perceptions and grandparents’ knowledge were merged to become grandparents’ understanding of optimum feeding practices. Thomas (2006) suggests that between three and eight summary categories are sufficient to capture important aspects from the raw data and the research objectives. Having more than eight categories may require combining or dropping the excess, since having numerous important themes may be a pointer to unfinished analysis. Initially six themes with numerous subthemes were found; however after reviewing the themes again, only four main themes remained. The remaining main themes were grandparents’ understanding of optimum feeding practices; economic and material factors affecting practices; influence of past experiences and customary norms on feeding practices and social support and societal pressures affecting feeding practices.

3.9.4 Assessing reliability and validity of data

Trustworthiness and reliability of data are essential components of any research. These were assessed at different levels in the research process. As well as employing a triangulated method of coding data, participants were given an opportunity to adjust the researcher’s interpretations of their interview dialogue at the end of each interview; none of the participants made any changes. Concepts emerging from the interviews were put forward in succeeding interviews to help develop validation of the emerging concepts.

All the participants were offered the opportunity to review and edit their interview transcripts; however none of the participants made changes to their transcripts. The participants were given up to three weeks to make alterations to their transcripts.

3.10. Dissemination of findings

Dissemination of findings is an important aspect of the Kaupapa Māori Research approach that values reciprocal learning. The findings of the research were disseminated back to the community through executive summary sheets that were made available to all interested participants. Summary information sheets were disseminated to community members through the local marae and community organisations. A Tōmaiora seminar was also held at the University of Auckland, Tamaki Campus, to share the findings.
3.11. Ethical considerations

The University of Auckland Human Participant Ethics Committee granted an ethics approval for this study (reference number 010774), to ensure that the study followed international and national ethical research standards. The study posed no risk of physical harm, exploitation or other potentially adverse effects on the participants and was thus classified as low risk. Confidentiality, anonymity and rights of the participants were key ethical considerations that were clearly communicated to participants verbally and in writing before the interviews commenced using the participant information sheet and the consent form, (Refer to Appendices three and four).

Confidentiality of participants was maintained throughout the study. Information that could potentially identify participants was removed or changed from written and electronic documents. An informed consent form was also signed by each participant. The participant information sheet and the consent form clearly highlighted how the right of participants to anonymity was to be undertaken in the research (Refer to Appendices three and four). In the event that a participant chose to withdraw from the interview, or chose not to answer any question, or not to be audio recorded, their choice was respected. The participant’s right to withdrawal from the interview was clearly stated in the participant information sheet and the consent form (Refer to Appendices three and four). None of the participants chose to withdraw from the interview neither did they choose not to be audio recorded.

The use of community organisations with an established rapport with community members to recruit participants may have had the potential to lead to a subtle form of coercion for the participants to take part in the research. To counter this potential power imbalance it was clearly stated on participant information sheets and the consent forms that the choice to participate or not in the research would have no impact on relationships between community members and their organisations. The community organisations were also asked to emphasise this point when recruiting participants.

In the event that any practices that could potentially harm children were identified during the interviews, or if poor nutrition practices were identified that could have posed risks to children’s health (or to the health of other household members), then the researcher was to
immediately alert Plunket\textsuperscript{8} or other relevant health care providers who have a relationship with the participants. No incidental findings occurred through the research process.

3.12. Conclusion

This chapter has presented the positionality of the researcher. The detail of all the steps carried out by the researcher from planning the groundwork (study design and rationale, consultation, research site, sampling, recruitment of participants) to data collection and analysis, dissemination of findings and ethical considerations were described. Chapter four will present the findings from the interview process of this research.

\textsuperscript{8} Plunket is an organisation that works together with families and communities by providing support services for the development, health and wellbeing of children under age 5 in New Zealand.
Chapter 4. Results

The results chapter presents the themes that emerged from the data analysis of the research interviews. The first part of this chapter will briefly describe the participants and present the predominant themes that emerged from the data. Thereafter, a narrative of the predominant themes will be given in detail.

Introducing the participants

The data was collected from seven participants (Refer to Table 1 below). All the participants were women aged 50 years old or more and resided within the selected suburb of Auckland, New Zealand. They were recruited through community organisations within the selected suburb. The interviews were carried out during the period from December 2013 to February 2014.

Table 1 The demographics of the research participants

<table>
<thead>
<tr>
<th>Participant</th>
<th>Ethnicity</th>
<th>Occupation</th>
<th>Marital status</th>
<th>Household size</th>
<th>Number of grandchildren looked after (during time of study)</th>
<th>Caregiver type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Māori</td>
<td>Retired</td>
<td>Single</td>
<td>5</td>
<td>4</td>
<td>Primary</td>
</tr>
<tr>
<td>2</td>
<td>Māori</td>
<td>Retired</td>
<td>Widow</td>
<td>5</td>
<td>4</td>
<td>Primary</td>
</tr>
<tr>
<td>3</td>
<td>Māori</td>
<td>Retired</td>
<td>Widow</td>
<td>4</td>
<td>1</td>
<td>Primary</td>
</tr>
<tr>
<td>4</td>
<td>Māori</td>
<td>Retired, seeking employment</td>
<td>Single</td>
<td>2</td>
<td>7</td>
<td>Substantive</td>
</tr>
<tr>
<td>5</td>
<td>Māori</td>
<td>Retired</td>
<td>Married</td>
<td>2</td>
<td>6</td>
<td>Substantive</td>
</tr>
<tr>
<td>6</td>
<td>Samoan</td>
<td>Retired</td>
<td>Married</td>
<td>9</td>
<td>1</td>
<td>Substantive</td>
</tr>
<tr>
<td>7</td>
<td>Samoan</td>
<td>Retired, seeking employment</td>
<td>Single</td>
<td>2</td>
<td>6</td>
<td>Primary and substantive</td>
</tr>
</tbody>
</table>

Introducing the predominant themes

The infant feeding practices of grandparents are influenced by numerous factors that emerged as strong themes throughout the interviews. Four predominant themes were identified from the data analysis. These were;

3.1  Grandparents’ understanding of optimum feeding practices.

3.2  Economic and material factors affecting feeding practices.
3.3 Influence of past experiences and customary norms on feeding practices.

3.4 Social support and societal pressures affecting feeding practices.

Under each of the four themes are overlapping yet thematically distinct sub themes. A narrative of these themes will be presented in detail in the following sections.

4.1. Grandparents’ understanding of optimum feeding practices

The participants had variable understandings of various issues related to infant and young child feeding. Their current feeding practices were driven by the knowledge and perceptions of what they considered optimum feeding practices. The subthemes that emerged under this theme of understanding optimum feeding practices were;

3.1.1 Understanding the role of food in the wellbeing of a person.

3.1.2 Current knowledge and information on feeding practices.

3.1.3 Understanding of their grandchild/grandchildren.

A detailed narrative of these subthemes will be presented below.

4.1.1 Understanding the role of food in the wellbeing of a person

All the participants concurred that food was important in maintaining the wellbeing of a person. They highlighted the need for food to be healthy and they also talked about unhealthy feeding practices. In the process of making meals available for their grandchildren, the participants made every effort to prepare meals as healthy as possible.

“I try to make his [grandchild] lunch as healthy as possible.” (Participant three)

Healthy food choices were defined in individual terms with most of the participants mentioning that these are foods that have no fat, less or no added sugar or salt, and include vegetables, fruit, salads, water, and food that is homemade. One participant went on to say that all food is healthy depending on how one prepares and serves it.

“Well, let’s see, well you gotta like this salads, when it comes to healthy foods. The first thing that comes to my mind is salads, like lettuce, tomato, onions, even that kind of thing. That is to me that is aah, that’s a salad and you can’t get it anymore healthy than that surely, uum yeah.” (Participant two)
“Healthy, is to home cooking, because you know what you are doing in the kitchen with your food. All the foods that other people are having, aaah nah. I don’t use a lot of creams. You know coconut cream, I don’t use a lot of that, I wasn’t brought up on that so (pause) and I think they are very, very rich and I didn’t approve that for my own children. They can have it out there but not here. I sort of just have plain. All the, all the foods but depends on what you put on it and how you dress it.” (Participant four)

“My choice of healthy food is by pass all this fast food, the bakeries, aaaaahm, rubbish, my kids the bakery and that what do they call rubbish food, ‘hey Nana, are we allowed to have rubbish food?’” (Participant one)

The participants defined unhealthy food in their own contexts by giving examples of food they considered to be less healthy. Fizzy drinks, sweets, fast foods, fatty or greasy foods, rich and creamy foods were mentioned as unhealthy food options. All the participants agreed that fast food was unhealthy, especially if eaten often.

“Aaah, fish and chips, that’s junk food, uuum, in moderation it’s fine you know, like once, like I said when it comes to me, it’s our treat, once a week. But I wouldn’t do that more than twice ‘cause that then to me, that’s not a good move. It’s just not a good move.” (Participant two)

“uuum, well they [grandchildren] love Kentucky Fried Chicken and McDonalds but don’t mean to say I am gonna feed them, you know what I mean…” (Participant two)

Most participants regulated the amount of junk food consumed by their grandchildren. They also did not allow their grandchildren to consume fast foods all the time. Their attitude towards fast food is brought by the fear of consuming unhygienic foods, their personal experiences of purchasing unsatisfactory meals from fast food outlets, their upbringing and their preference for wanting to provide satiating food for their grandchildren as well as their own upbringing.

“I am scared of uuum, I am scared I might get sick.” (Participant four)

“[what I am scared of] Is that have they [food handlers in food outlets] washed their hands? Are their utensils clean? That. And I have had experience where it all looks lovely when you get it here [home] it’s very dry, your chicken, and some of it is tasteless.” (Participant four)

“It [fast food] doesn’t last long. By the time you walk home and they are back they are hungry.” (Participant four)
“I don't like it [fast food] at all because I don't teach my (pause) try to avoid my children, my grandchildren from having cause I was never brought up on greasy food anyhow, I was brought up on boiled food.” (Participant three)

Some of the participants stated that healthy food choices are more expensive to buy when compared to less healthy food choices. Despite this, one of the participants went on to say that the price will not deter her from getting what she considers ‘good for her health’.

“... a lot of families can't afford it [food] honestly, especially when it comes to the healthy food, they can’t afford it. They rather go to aaah, go to McDonald’s, go to get fish and chips, it’s cheaper, it is I tell you. It’s cheaper if you go there rather than this healthy food aaah....” (Participant two)

“Some of those veggies that I buy are a bit expensive but I never mind that ‘cause that's for my health.” (Participant three)

The role of food in maintaining the wellbeing of a person was well understood by the participants with most of them showing eagerness to know what was in the food to ensure they were giving healthy food to their grandchildren. Some of the participants even pointed out specific nutrients they require and the food ingredients from which the nutrients are derived. For instance, one participant mentioned the importance of iron while others cited the importance of specific foods for certain medical conditions, for example, preterm babies and children with food allergies. The participants also highlighted their preference for certain foods over others because of the health benefits they can derive from such foods.

“I have puha [indigenous vegetable for Māori] or watercress which I find has the iron. And the puha, it always has iron that’s the best greens.” (Participant three)

“Aaah, uuuuuuum, aaah, no, only unless they [the grandchildren] for instance, if they are allergic, if they are allergic to food, well then that's different, that's different again cause then you can’t just feed them what they want. Aaah one has to stick to a to a aaah, to a diet so to speak. Aaah, one has to be fussy and yes that I do know about that aaah, but I don’t think it’s a problem, it shouldn’t be, it shouldn’t be a problem.” (Participant two)

“I would rather have more vegetables than more meat you know, and that's a good healthy way for them to eat as well ... No, it’s better for their [grandchildren] health, you know, I
encourage my kids to eat more vegetables because it’s good to keep them healthy and yeah, strong and healthy you know.” (Participant seven)

Breastfeeding emerged as a common practice mentioned by all the participants to be the healthiest food source for young children. Breastfeeding was said to be affordable, irreplaceable and that every mother should breastfeed her baby.

“Well, I always believe that aah, it’s [breast milk] the number one when it comes to a baby, actually, aah, all mothers should, I feel, breastfeed their baby aah ... yes I don’t think it could get anymore healthier than mother's milk so to speak.” (Participant two)

“I think you can’t beat the best of a mother's milk and I reckon it’s a good start off for the children, a baby it’s a start off for them that I think it’s excellent.” (Participant three)

“Yes, yes. I rather they breastfeed. Easy as, and save the money, you know. It costs a lot of money to, feed the kids but breastfeeding is much healthier.” (Participant seven)

The participants also expressed concern over the use of chemicals in food. One participant felt that the chemicals used in food may have harsh effects on the body. The fear of potential harm made one of the participants’ food choices difficult.

“But today you see, food today is grown and they [food producers, farmers] add a lot of that, what do you call it, pesticide I think, now that’s no good but that’s how food is grown today. They use that to (pause) aah what the hell they call that? (Pause), they put aaaaah, well what do they call it, well I will use the word pesticide but that’s just using the word mildly, but they do that today. And at animal farm they jab the animals [with] chemicals, that's the word I was looking for and that’s a no no. Really that’s a no no but it’s accepted ... as far as I am concerned it contaminates the food. They [food producers and media] say ooh no it makes the food nice you know, they [consumers] don’t get enough, it doesn’t rot, bla bla bla to me that's ...aah to me this chemical its aah it’s no good it makes the human body sick.” (Participant two)

“Sometimes I won’t even buy it [food suspected to have chemicals]. Like those tomatoes over there, those are alright I find that if you eat, I find that when I go out to buy food, fruit even meat it pays to ask, ‘where is it, where is this food, what country it comes from?’ . Like I said it’s the chemical buzz. And of course even New Zealand's no different. I read in the papers about the animal farms, what the aah, the farms do, I go back to this chemicals yaknow, what
farmers are doing there yaknow just seems wrong to me cause at the end of the day they only think about profit.” (Participant two)

4.1.2 Current knowledge and information on feeding practices

The current knowledge and information on feeding practices emerged strongly amongst all the participants as a common theme affecting feeding practices amongst young children. The sources of knowledge however varied, with some starting from as far back as the participants’ childhood. Participants gained knowledge informally through acquaintances, observation and from the experience of raising their own children and grandchildren. They also gained knowledge through formal learning and courses.

“Yes, yes, uum, while when I came here [to New Zealand] I didn’t know how to cook but I learnt how to cook watching TV and I go to courses and my aunty teach me how to cook, yeah.” (Participant seven)

The participants held varying degrees of information and knowledge on issues related to food and feeding such as what was in the food, and what they would be eating or feeding their grandchildren. The participants were well informed about the cost of food, where to source certain foods, seasonal availability of some foods and about how certain medical conditions required specific foods.

Most of the participants had a positive health seeking behaviour as they desired what was best to maintain optimal health for their grandchildren. They all cited seeking expert information when they required it. The trusted sources of advice and information for most of the participants were from health experts like: Plunket, dieticians, general practitioners, school teachers, television media, ‘people in general’ and pamphlets. The grandparents were open to learning new ideas and skills.

“Well I think the best one [source of nutrition advice] is the one with the information like the health people not just anybody. I don’t believe in anybody, I think I want to go to the top. I don’t want to start at the bottom, go to the top.” (Participant three)

“Well yeah they [the teachers] do make healthy choices for our little tamarikis [children] and that’s called [name deleted] preschool. They have really healthy food for the children. The children have got anything sweets and they put them out from their lunch bag for them to take home after school. They don’t eat it at school, they eat it at home. And that’s where I
have seen my eyes have opened to that school when I saw that, ‘cause other schools I’ve been to well, children bring all sorts pies, they have got chips, they got all these goodies that they shouldn’t be having.’” (Participant three)

One of the participants mentioned that she had noticed how her grandchildren’s food preferences have been changing possibly because of the information the grandchildren received from school.

“I can give them [the grandchildren] a drink, a fizzy drink or I used to but now I have noticed that they have gone off this fizzy drink. I give them a glass of fizzy drink they will drink about half of it and they leave the rest and I am even surprised at this. But if I have to give them water, they drink all the water. So, healthy food it seems that’s what’s on the menu today...” (Participant four)

Although some of the participants mentioned the presence of reputable information on healthy eating in the community, most of them agreed that more information would be desirable to support families with appropriate feeding practices. One of the participants felt that information was critical and its dissemination should be directed to the illiterate and those who require it the most as it would be more helpful for them.

“...aaah, I suppose aaah, we could always do with more information, know, there is nothing wrong with more information aaahm, yes, yeah suppose more information about healthy food would be great.” (Participant two)

“I am hoping that it [the information] will go and help those who really, really need it, need to read it. But there are some out there of course who can't read but if we can have, have it so that its working with maybe Plunket there will be a good outlet for them to have that out in the community so that grandparents and future grandparents are aware of the need for them to make sure that they are instilling all feeding, aaah, the right food can I say that, right foodstuff.” (Participant five)

The participants highlighted that they shared their knowledge and practices of cooking, food preparation, gardening, breastfeeding and child nurturing with their families and grandchildren through practical experience and informal participatory learning.

“Because they [health professionals] tell a young mother what is being fed on a paper. Those young people already know what is, what they are eating, they already know that. What they
wanna know is how, not tell them what to do but how and be with them, be with the mothers and give them a hands on job, hands on, what you call it when you have aaah, what you call it...” (Participant four)

Instilling appropriate feeding behaviour in their families was a common notion raised by the participants. They all agreed that one needs to looks after one’s body well to be healthy and that that responsibility should be passed down to the future generations through instilling appropriate feeding practices in their grandchildren. The grandparents highlighted the need for all the grandparents in society to be role models for instilling appropriate feeding practices for their families and communities.

“... so that grandparents and future grandparents are aware of the need for them to make sure that they are instilling all feeding, aaah, the right food can I say that, right foodstuff.” (Participant five)

The participants shared with their grandchildren basic nutrition information on the importance of the foods that they ate. Most of the participants found this important as it helped the children understand why they eat some of the foods they do.

“I just tell them [grandchildren], ‘it’s good for you’, I say, ‘this is really good, good kai [food] for you,’ and umm the bean sprouts, when they see the bean sprouts, they know that's it, that's healthy for them, but the kids from school, they will have those in their lunches and they pick them out, so my mokos [grandchildren] will eat them [bean sprouts] and they [other school children] sit there and go, ‘uuuuuuurh do you like that?’ and they go, ‘yeah, it’s good for your bones and its good for your blood.’”.(Participant one)

Some of the participants cited information sharing extending beyond their households as they also share advice, experiences and information with other fellow grandparents on how to make the best out of feeding their grandchildren.

“That's what I say to my friends too that have their babies, ‘just do this to it,’ I said, ‘and you'll be surprised.’ Because they couldn't get over how my mokos [grandchildren], the other day I had a friend here the other day and my mokos were just eating cucumber, tomato and grated cheese, and she goes, ‘Don’t they have meat?’ I says ‘nah’, I said ‘they will eat this before they have meat’, she’s ‘how do you disguise veggies?’.... just boil it, drain it and then make your white sauce, and just pour it over my, my kids that's how they eat their veggies.
Now they can eat the veggies without the white sauce because they like the veggies.”
(Participant one)

Despite being family icons, role models and mentors, most of the participants said that they followed the advice or instructions about feeding the children that they got from the children’s parents.

“I abide by what my daughter tells me on what he [grandchild] can eat and can’t.”
(Participant three)

One of the participants also mentioned that sometimes grandparents need to listen for advice and knowledge from their families and communities.

“Because sometimes as grandparents we tend to think we know it all, gotta be a good way to put it.” (Participant two)

Most of the participants said breastfeeding was a healthy and beneficial infant feeding practice. The participants mentioned some of the barriers to breastfeeding that included problems with breastfeeding initiation, failure to breastfeed due to medical reasons, failure to breastfeed due to a mother’s work commitments and nursing mothers who smoke. Some of the participants thought these barriers could be overcome by making more information available to the community. For instance, according to some of the participants, breastfeeding information should be made more accessible in the community. Participants mentioned that the Plunket service was considered as a useful source of information and support service for mothers and babies. However, one participant expressed concern that the time allocated for home visits by Plunket nurses was not enough, especially for mothers in the rural areas.

“Well, I have just heard a bit about breastfeeding, I think there should be more, more put out, to me I think you can’t beat the best of a mother’s milk.” (Participant three)

“Well, fortunately, New Zealand is very lucky having the Plunket service. As soon as a moko arrives, the Plunket nurse arrives with all this information and even gives the types of food that should be given to the child. And still with encouraging mothers you know with the breastfeeding. So we really have good services out there and information too as well.”
(Participant five)

“I do know there are Plunket services out in rural areas too as well but the areas that these poor women have to cover to ensure that they look at the child. But I don’t suppose your ten
or half an hour visit of a Plunket nurse, do they understand the living environment of the family or the group that is in those houses.” (Participant five)

Most of the participants cited that the influence on infant feeding practices that families have is very important and that the family should receive information to support their practices.

“Maybe the information should not only go to the nursing mothers, it should go to the extended family, to the female you know, female sections of the families.” (Participant five)

All the participants also had gardening knowledge. One participant mentioned having basic knowledge of horticulture and was aware of the importance of spraying of fruit trees in order to control pests and harvest good fruit.

“...got an apple tree, no a pear tree, and a peaches tree. But aaah, most of my pears and my peach tree they you know, they are not very nice because I think they need to be sprayed.” (Participant seven)

Most of the participants had an appreciation of basic finance and budgeting skills to help their home economics. One grandparent bought more vegetables than meat using the same amount of money while others took advantage of cheaper food bargains.

“When I go shopping I start, I go to look for cheaper stuff you know. With $40 I can buy a lot of you know, you can get a 99 cents cabbage and a $5 meat packet, you know.” (Participant seven)

4.1.3 Grandparents’ understanding of their grandchildren

To enable optimum feeding practices, all the participants cited the importance of knowing and being aware of the different stages of child growth and development. The participants spoke about different foods being suitable for children at different ages.

“Aaaaaaaam, my first choices is to introduce him [grandchild] to his veggies and then slowly still stick to the baby things aaaaaaam, I won't put him on like the cereals we have until he is nearly what....until he's over one. I just find that sometimes it can be a bit hard on their pukus [stomach]. See we just go with what I think is suitable for him which like is this Farrex [commercial baby food], aaaaam he’s been on the Watties [commercial baby food producer] baby food this week. “(Participant one)
Other factors about the child that needed appreciation to ensure appropriate feeding included medical conditions. Most of the participants found that knowing the individual grandchildren’s preferred foods was helpful for them when they were preparing meals or when they were procuring food for their households.

“So you know what you got to give them [the grandchildren], give him his best ones. It’s still veggies but it’s not mixed with all the celery and these peppers and all that you see....parsnips. (Participant three)

4.2. Economic and material factors affecting feeding practices

Numerous economic and material factors affecting feeding emerged repeatedly in all the interviews. These included unemployment, rising food prices and the poor socioeconomic environments. The participants cited these factors as key concerns, with all of them stating how these factors were impeding their efforts to obtain appropriate feeding for their families. Although they do overlap, the two sub-themes under the economic and material factors affecting feeding practices were:

3.2.1 Financial struggles and unemployment

3.2.2 Food prices

A detailed narrative of these sub themes will be presented below.

4.2.1 Financial struggles and unemployment

Most of the participants highlighted that the possibility of having sufficient finances to procure adequate food for their grandchildren would make a huge difference in the way they provide food for them. Financial struggles were stated as a barrier to appropriate feeding practices as the families had limited money to purchase food ingredients. They also mentioned the need to live within their means and doing what they could to survive on whatever resources they had.

“... uuum, because now I am on the benefit I you know, I watch my pennies, know how I spend my money because I want to [have] the food to last until the next you know, pay day, you know.” (Participant seven)
Some of the participants were struggling to secure employment to enable them to work and provide more for their grandchildren but despite all the participants mentioning financial struggles, most highlighted the importance of living within their means and trying their best to provide for their grandchildren.

“I have just come to the conclusion that this is your life, get on with it.” (Participant four)

“It is hard but you have to know, to do what you can to survive you know these days it’s not like before. When we just saw that things are very dire, hardly any work, I have been trying to get [a] job but I can’t find any job.” (Participant seven)

Some of the participants mentioned their intention to get employment to support their families but spoke about jobs not being forthcoming. Issues of unemployment were raised by some of the participants as a causal factor for their financial constraints.

“The other thing being financial struggles. But I don't see it as a struggle because it’s out there people are talking about bla bla bla bla. It may be so but there's nothing we can do about it. So for me I would like to have a little bit more because I worked and so it was hard for me when I stopped working. All the things weren't there anymore and we used to fill up all these cupboards, but I don't need all these cupboards now. I had to train myself again to have just the little that I have, and it’s very hard, but what I had I will still share with the kids.” (Participant four)

One participant went on to highlight how she could make a living by creating employment for herself and other grandmothers while mentoring and helping young mothers with nurturing their babies.

“Yeah, I think it might have to have a grandmother group, it doesn’t matter you don’t have to be their grandmother or to be the grandmother of her to go into a marae or to some little place for the day and help them [young mothers], give them a break. Maybe we need a place in the marae they can go next door and have a sleep, while these old people like myself and another couple of others watch these babies and give these women a rest. I could get a job that way, us grandmothers can get a job while we are nursing them at the marae or they are sleeping inside the marae.” (Participant four)

Some participants perceived the limited money in their household was attributed to their retirement situation. The participants said that the welfare benefit or financial support they
received was inadequate to meet the food needs of their households, especially in situations where the grandchildren did not receive any childcare benefit or financial support.

“And that's my problem if I did not have any [money] and go for more WINZ will tell you, ‘it wasn't meant for you and your grandchildren.’ And I go like, ‘uuuuuum.’ They don't say anything next time.” (Participant four)

“Most of the ones [other grandparents] I have seen, they are getting money for them [their grandchildren] because the children have been given to them through courts (pause) and it's easier for them they get more money or something like that and that support. But we are not under anything, me and my grandchildren are not under anything so we are not given that support like the whatever out there is happening.” (Participant four)

One participant mentioned that some grandparents she knows received adequate amounts of benefit to support them and their grandchildren, however, due to poor handling of funds they ended up not being able to provide adequate and nourishing food for their grandchildren. She went on to suggest the need for assistance with budgeting and financial matters for some grandparents to help them acquire adequate, nourishing foods for their families while using the resources that they have.

“... For me I just have one [grandchild] but I don't get unsupported child benefit. I just get about $80 a week for her, but they [other grandparents] get about a $160 nearly $180 a week so between the two kids. I survive with $40 or $50 per week but when I hear these people, they say they struggle with $500 per week (laughing), ...So I think they are doing something wrong with their money you know, they not using the money for the right purpose, they get the money for, you know. Because when I think about them and myself that I am only getting a little bit of money and I can you know, and I thought I survive with my $40 or $50 per week but how can they say, that's after I pay all my bills.” (Participant seven)

Infant feeding practices were highlighted to be affected by employment commitments of families and caregivers. For instance, some of the mothers had an obligation to work, and due to this employment commitment they would not breastfeed their children, or they might but only for a short timeframe.

“... but they [the mothers] only breastfeed for little, yeah... For a month or so... Because they work.” (Participant seven)
4.2.2 Food prices

The cost of food was another major theme identified in this research that most of the participants were concerned about. They hoped for the government to intervene and take a more dedicated stance in protecting its citizens by regulating food prices.

“The government could do a hell of a lot better aaah, you know, instead of putting all the prices up, which they do aaah, seems our system is all about making money and not really not looking after the people aaah so the government could, should, I should say should do something about the prices.” (Participant two)

“Well, I wish the food are cheaper in the shop, (laughing), you know, the food is cheaper at the shop you know, because, you know you go today and the food is like 10cents cheaper and they you go the next week and it’s about 20cents more than what you paid the last time you paid. Yeah and you know.” (Participant seven)

The vicious cycle of financial struggles was said to be driven by unemployment, rising food prices and the fixed financial support received by the participants from government. These financial constraints were cited by the participants as causing a lot of community sadness and having a bearing impact on infant feeding practices.

“Back to the jobs again. We are angry at the government. Everybody wants to kill John Key but that's only a figure of speech I think. And, okay, I think we are all in the same boat where we, I suppose our finances concerned. Food is gone up in the last how many years and we haven’t even had a raise of three cents or anything. They [the government] give us another five bucks it would make a big difference. We haven't had any, so that is how sad, long faces, many of us here. Look down the street, you ask them a question they all got the same story.” (Participant four)

The participants felt the obligation to always be able to provide adequately for their families. Most of the participants were upset when they were unable to provide food for their grandchildren.

“Because I always have, you know, my family comes first. But when I have a spare money, I always buy something, when I see something very cheap, I just buy them and put them in the freezer because my kids always come running, ‘oh mum have you got any meat’ or (laughing)

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9 The New Zealand Prime Minister at the time of this research.
you know and I will be very happy to say, ‘oh yes, I got some.’ But if I don’t have something, I feel very sad. You know like I can't look after them.” (Participant seven)

One grandparent highlighted her protective role by not informing her grandchildren that her household was running out of food. She did not want to burden her grandchildren with the thoughts of not having food.

“But I try my very best to because three times a week or maybe two, twice a week or three times my three other grandchildren lives down the road because the school is down this way and their house is down the other way. They come here and stay here for two days or three days and then I said, ‘okay, you have to go home now because I am running out of food.’ I don't tell them I haven't got any food, I don't like telling them that, I just say, ‘oh well, after school you guys go home, because I am doing something’ or you know ...”(Participant seven)

All the participants highlighted that food was very expensive, especially the healthy food options. The expensive nature of healthy foods pushed some families to consume fast foods which were described as cheaper.

“Well because of the cost of food today, specially here in New Zealand, it's unreal, it's unreal, aaah ... it's just (pause) a lot of families can't afford it honestly, especially when it comes to the healthy food, they can’t afford it. They rather go to aaah, go to McDonald’s, go to get fish and chips, it’s cheaper, it is I tell you. It’s cheaper if you go there rather than this healthy food aaah, I should put it very expensive, New Zealand it is.” (Participant two)

Although some participants found it hard to get food with the little money that they had, most grandparents strived to prepare as healthy meals as possible for their grandchildren with whatever food they had available in their households.

“Some [other grandparents] I have met that find it pretty hard to get food for their kids and that and yeah they, they will say to me ‘well what do you feed the kids?', and I go, 'oooh, anything.'” (Participant one)

“You know some days we might not have much here in the house but I can make a meal out of whatever I have got in my cupboards and in my fridge and they [grandchildren] will sit and just eat it.” (Participant one)
The size of a household or the number of grandchildren being looked after by a grandparent was highlighted to be an important factor that determined the feeding practices of a given household. It determined the money needed to purchase food, as well as the type and amount of food to be procured for the household.

“It’s alright if you only got one child, but when I got four of them then it’s best to give them what they like.” (Participant two)

All the participants mainly sourced their food from supermarkets or retail outlets. The supermarket was a trusted source of food by all the participants. Most grandparents valued the freshness of food and also seemed to prefer natural or non-processed vegetables compared to frozen ready to use vegetables.

“But at least when you purchase from there [the supermarket] it will be two, enough for the day, enough for tomorrow, then we gonna go and get some more you know. What I consider fresh, fresh from the supermarket to the house.” (Participant five)

Home cooking was highlighted by all the participants to be the most affordable and healthier way of providing meals for their families. The convenience of food preparation made most participants choose precooked foods when they were purchasing food for their households. Precooked foods made food preparation faster and cheaper for the participants.

“Yeah, and just reheat it [precooked food] and heat it and it’s quicker. You know and it doesn’t take that much power to cook. And with a lot of kids; uuum yeah it’s much easier and quicker that way. I know sometimes, I got a lot of grandchildren that come here during the week but you know they are very easy to feed because they are all grown up now, yeah. Just (pause) with a packet of pasta or just make a sauce and yeah feed about four or five of them, (laughing).” (Participant seven)

Most of the participants mentioned getting some vegetables from their gardens at times. The convenience of having a vegetable garden to support their food source was mentioned by all the participants as they cited the cost effectiveness of self-producing vegetables. Some of the participants agreed that vegetable gardens were particularly beneficial for larger households with financial constraints.
“Well, you know some of our community, they have got gardens you know, they [welfare or community organisations] should help give them out to big families and you know families like they don’t have much money.” (Participant seven)

Although most grandparents highlighted the importance and benefits of having a vegetable garden at their homes, most did not have adequate space to have the gardens they desired. This was also true for domestic livestock such as chickens.

“Well for me, one is the space of where you are living dictates the size of your garden, and whether you can’t rear according to Auckland city council policies. You can’t rear your stock in your back garden or your front garden or wherever because your acreage is too small. Your plots are too small, so you can’t rear chicks or pigs or lamb or whatever and yes I think this is why I think the supermarket plays the role of supplier.” (Participant five)

4.3. Influence of past experiences and customary norms on feeding practices

Customary norms are social statutes that direct the mores (way of life) of groups and societies and the occurrence of social norms is not deliberate but they emanate from the interactions of individuals (Bicchieri and Muldoon, 2011). Experiences, knowledge and the way of life from the past are held by the elderly and they have the capacity to pass these through generations. Durie (2001) highlights that in Māori society, the elderly carry the status, tradition and integrity of their people. The influence of past experience and customary norms on infant feeding practices emerged strongly among all the participants.

The participants were found to play an important role in instilling appropriate manners and feeding behaviour as well as and passing down family heritage and practices that they also learnt from their elders as they were growing up. Breastfeeding was one practice the participants carried on from their observations growing up, to nurturing their own children and grandchildren. Grandparents have always stood as role models for their families and with their families looking up to them as a trusted information source for their families.

“... It’s just that I sort of followed how I was brought up. I sort of tried to instil that to my children and that’s how I want my children ...” (Participant three)

The participants’ upbringing had an influence on their feeding practices for their families. Their upbringing had a bearing on the participants’ personal food preferences and perceptions
attached to food. This had an impact on the way they fed and obtained food for their grandchildren.

“I don't like it [fast food] at all because I don’t teach my, try to avoid my children, my grandchildren from having. Cause I was never brought up on greasy food anyhow, I was brought up on boiled food.” (Participant three)

“Yeah, I don’t like him [grandchild] having takeaways, cause it's too fatty and they are always fatty foods that you buy. It’s either fish and chips or go to the Asian shops and their food is too greasy. I just don't believe in greasy food.” (Participant three)

The pride of the participants in their customary norms and practices was very strong with most of the participants having a preference for traditional food, and some of them used traditional recipes, remedies and delicacies for their grandchildren.

“Now I’m one that believed in natural foods from the garden. My favourite and I am not too sure whether the whole of New Zealand are aware that in the gardens, usually a weed called sow thistle, to Māori it’s a delicacy, and it’s called puha, p-u-h-a, puha. “(Participant five)

One grandparent explained the need to record her feeding practices for referral in the future. She had forgotten most of the recipes she was taught growing up and suggested recording her current practices as a solution.

“Because I had forgotten how to do it [recipe]. Today I would like myself to have some of that but I have forgotten.” (Participant four)

“You ask the mums now today to keep a record from this time to when they get older and yeah, when you come along or somebody else come along, they have got it all down on paper. I wish that, you know, I kept the evaluation on everything.” (Participant four)

As a way of instilling knowledge and passing down practices to the next generations, the participants cited their role of offering advice on feeding practices and they had a strong influence on the actual foods consumed by their families.

“His mum, she will ask me, 'what shall I give him mum', oh nana ok ... 'well 'you can try this and you can try that' but she will always take on board what I say. She will give it a go and then she will say 'Nana you were right he loves it.’” (Participant one)
The participants talked about involving their grandchildren in activities like cooking and gardening as a way to impart skills. It was a form of participatory learning where the participants expected the grandchildren to grasp some practical concepts of food preparation, recipes, gardening skills, traditional foods, traditional remedies and delicacies.

“I got the kids in the kitchen with me all the time when I am cooking and they will say, ‘Nana what are you building?’ and I go, ‘this is our kai [food] for tea’, so they will pull the chairs over there and they just stand around me and watch me preparing. And then I will say to them, ‘this is how you do it, you don’t fry it, you pan fry it dry, or aahh if you wanna boil just quickly steam it.’” (Participant one)

“...and by having my veggie garden up there, at the back, that’s what encourages the kids too, coz they seed it with me, they water my garden and now go, ‘oh Nana I can’t wait for the beans, oh Nana look at all the lettuce, beetroot, everything.’” (Participant one)

The essence of family love and connectedness was important for all the participants. Most of the participants took the participatory learning time as family time. One participant highlighted that gardening brought her family together.

“Yes, yes. I like you know, my children to play in the mud, in the dirt sometimes you now, I like them to come and dig in the garden sometimes, it’s nice to see them you know enjoying themselves, digging you know like family stuff like that, doing something together.” (Participant seven)

Because of the value Māori and Samoan societies put on their elders, the participants’ children and grandchildren were loyal and respectful towards them, honouring and taking heed of the advice they gave. However, some of the participants had conflicts with their children over the feeding practices for their grandchildren. Most of the participants felt disrespected and disobeyed when their advice was dismissed. As custodians of their families, the participants highlighted the need to be respected and honoured.

“I am looking at a different channel where their parents are a bit too lenient and I m a little bit hard on them and go, ‘oi! ’ you know and we end up having an argument and say uuum, my daughter might say, ‘ when you are here you don't have anything to do with my children's part of disciplining them.’ And I find that quite hard but if they are here that's when I can but there's gonna be a rip somewhere along in their life.” (Participant four)
“I think they [the parents] need to, well as me as a parent I don’t think I would be a good choice to be talking to them because as it goes for me I feel it goes in one ear and out the other.” (Participant three)

All the participants valued their grandchildren as the future and wanted to provide the best for them. The grandchildren were a gateway for carrying past knowledge, experience and customary norms through to successive generations.

“Because if we talk about, ‘what’s the most important thing in this world, its people, people, people,’ but to me its grandchildren, grandchildren, grandchildren. Have you had that saying, Māori saying, ‘He aha te mea nui o te ao? He tāngata! He tāngata! He tāngata!’

What is the most important thing in this world,’ even though they say, ‘it’s people, people, people,’ but to me its grandchildren, grandchildren, grandchildren because they are the leaders of the world or leaders of tomorrow, yes.” (Participant five)

4.4. Social support and societal pressures affecting feeding practices

This theme encompasses participants’ perceptions that a society that is supportive of appropriate feeding practices is more likely to have individuals and families who strive to make the best out of their feeding practices The support from the government and community organisations was perceived as helpful for the participants to encourage their families and communities to practice appropriate feeding. Most participants stated that support from all directions, including financial and emotional support was necessary to ensure appropriate feeding practices. Breastfeeding was given as an example of a feeding practice that was greatly affected by social support and societal pressure. The two sub themes that emerged under this theme were:

4.4.1 The effects of family support on feeding practices

4.4.2 The societal pressures affecting feeding practices

4.4.1 The effects of family on feeding practices

Participants mentioned family support as an important factor to encourage mothers to breastfeed. One of the participants related her personal breastfeeding experience and the

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10 Māori proverb (whakatauki): ‘He aha te mea nui o te ao? He tāngata! He tāngata! He tāngata!’ [English translation: ‘What is the most important thing in the world? It is people! It is people! It is people!’]
support she received from her family in the past while the other related personal experience of how she supported her own daughters to breastfeed.

“In that time yes, but they [mothers] always had to have the support of members of the family, especially the parents of the mothers.” (Participant four)

“Well I always insisted that the mothers breastfeed them because I think it’s very important but aaah, no matter how much they struggled to try and access you know milk from the breast, from their mum's breast. I think it’s to encourage the breastfeeding aaah process I think it’s very important of nurturing of the baby, babies.” (Participant five)

The caring role of the participants emerged quite clearly and this was found to strengthen the sense of family and connectedness. Most of the participants mentioned the inherent maternal instinct that drove the responsibility to look after their grandchildren. Their self-described maternal instincts also made them protective over their grandchildren influencing the food that they provided for them.

“To me it's just natural to just feed your children food. (Pause) I'll just keep feeding the kids healthy, healthy things.” (Participant one)

Establishing and maintaining a viable breastfeeding practice within the communities was one thing most of the participants hoped for. They insisted that more information not only be given to mothers with young children, but to the members of their families as well.

“Surely that would have come from their [young mothers] extended family should be helping them all. If I say that I am a caring grandmother, I can't speak for the other grandparents. They, maybe the information should not only go to the nursing mothers, it should go to the extended family, to the female you know, female sections of the families. (Participant five)

Unsupportive family structures and community environments that hindered breastfeeding included some mothers receiving misinformation about breastfeeding, drug use and domestic strife.

“Because they [young mothers] are too upset and when you are upset, feeding the baby on the breast and you are upset, the baby gonna get it too. And the milk gonna not flow too good.” (Participant four)
4.4.2 The societal pressures affecting feeding practices

Societal pressures affecting feeding practices are factors within a society that may positively or negatively impact feeding practices. Social perception is the viewpoint held by society that is dependent on individuals’ appearance, verbal and non-verbal communication (Pearson Education, 2010). Perceptions of appropriate feeding practices; healthy food choices and ideal healthy body types that are held by society were highlighted by some participants. The participants also described how such social perceptions put pressure on individuals and families, and may act as a barrier to appropriate feeding.

“My mokos [grandchildren] are skinny and people say to me, ‘teo mokos are skinny, don’t you feed them?’” (Participant one)

“Aaah, me, I will go, ‘oh rubbish, nah you shouldn’t eat that, nah you it's rubbish,’ so they do, they look at it and they think its rubbish.” (Participant one)

Perceptions of New Zealanders relating to acceptable and unacceptable feeding practices hampered some feeding practices with one participant mentioning that breastfeeding in public was quite a challenge.

“Well here in New Zealand, I know we have a problem with this, especially when mothers go out and they breastfeed their babies in public. There’s a lot of people that moan and groan about this.” (Participant two)

“In public, breastfeeding in public, that’s what they were moaning about, they were saying that, ‘if you wanna breastfeed your child go behind closed doors,’ that’s what was being said.” (Participant two)

Societal support of appropriate feeding practices came from various sources: health experts, TV, pamphlets and schools. Most of the participants mentioned how some schools were enforcing healthy food and healthy eating practices to their students through their curriculum. Some of the participants mentioned noticing positive changes in their grandchildren’s food preferences and eating habits.

“... Grandchildren are into that cause at school that’s all they talk about is healthy food aaah, (pause), healthy food, it seems that’s what’s on the menu today and at school they reinforce this, this healthy food thing. And I think because of that, because of what they do at school aaah, my grandchildren they only wanna eat healthy food. ‘Oh, healthy food,’ every
five minutes it’s, ‘healthy food, healthy food,’ oh well you know that’s fine with me... at the end of the day, aaah, the children talk about it and that’s good when you hear them talk about food. “You know the way they’ll have been taught, I must admit I am surprised... one of my granddaughters, she just goes crazy for raw cucumber.... and I think ooh well know, something that, well, resources at school have taught her.” (Participant two)

Societal perceptions of drug use and breastfeeding were mentioned as a barrier to breastfeeding by one of the participants.

“...everybody will say you can't do that [breast feed while taking drugs], its peer pressure or pressure from adults and they are saying don't do that if you are breastfeeding. Your child, because the child will get it if he hasn't already got it if you have been doing it if you were pregnant.” (Participant four)

The built or physical environment plays a key role of the feeding practices of a society. One of the participants was concerned about the number of fast food outlets at the participant’s local shopping centre. It was not seen as a desirable feature for her as it was ‘not a good impression of the town.’

“...like [mentioned suburb name], now I know what the town is like, but every other shop there's a fish takeaway shop. Every other shop there's always takeaways and it's full of takeaways. Well that’s not giving a good impression on the town itself for a start as far as I am concerned. They say, ‘it’s healthy kai,’ it’s not! Its fatty foods because they cook in all those fish and chips and they sell many of it down there, it’s terrible. For myself that is an eye opening at [mentioned suburb name] shopping centre, there's too many takeaways, too many and there's nothing, nothing healthy about the food, healthy about it.” (Participant three)

The participants highlighted the need for support from local health groups and the government as useful for enhancing appropriate feeding practices. Some of the participants expressed their reservations for failing to be involved with community groups to support families with their feeding practices. Some of the reasons given by the participants for not availing themselves to support families in their communities were lack of motivation and bitterness.

“Well, uuuh (sighing) love all I hear, and if I ever hear about them the Maori Women's Welfare League, it’s usually about you know, they are selecting a new president and it’s an annual thing, an annual gathering. You don't hear anything else that's happening with them.
And as someone was saying when I was busy moaning about it, they say, ‘well, why don’t you do something about it?’ Well I, I am one of those unless I can see a group that’s been active then I’ll think oh that sounds, maybe I should be active too as well. But if I find the group is inactive, no way I am gonna waste my time trying to be active with them. (Participant five)

“Like today, I could have been help to somebody out there. But because I am negative, I feel negative because there's not enough support out there uuuum, and I am not getting any so why should I give anything back?” (Participant four)

4.5. Conclusion

This chapter presented findings from qualitative interviews. The findings were organised according to the main coding themes. The data collected from the interviews described the participants’ knowledge, perceptions and factors that acted as facilitators or barriers to their feeding practices. The following chapter will critically discuss these findings in relation to current literature and will then provide some comprehensive recommendations based on the research.
Chapter 5. Discussion

This chapter will discuss the findings from the interviews. The purpose of this study was to explore the factors that influence the infant feeding practices of grandparents. More specifically, the project sought to identify facilitators for ideal practices, to understand the barriers encountered and to establish grandparents’ knowledge of healthy infant feeding practices.

The findings suggest that the grandparents possessed immense understanding of feeding practices of their grandchildren. Furthermore, the diverse understanding and appreciation of the role of food in the wellbeing of a person came through from the interviews. Economic and material factors emerged as strong themes from the data with financial struggles, unemployment and food prices posing as barriers to desired feeding practices of grandparents. The role of grandparents’ past experiences (their upbringing and observation) and own ‘customary norms’ on feeding practices were also expressed repeatedly throughout the study. Finally, the social context in which the grandparents lived was a significant theme, with the effects of family support and societal pressure playing a crucial role.

As much as an individual’s behaviours (in this instance feeding behaviours) are said to influence their health outcomes (Popay, Williams, Thomas, & Gatrell, 1998), individuals do not have control over the ‘invisible forces’ that drive the current conditions defining their lives. Educational level, employment status, income and cultural differences are individual factors that have been repeatedly named as the causes of poor feeding practices and diet related outcomes (Cummins & Macintyre, 2006; Hill & Peters, 1998; Macintyre, 2007). However, there are complex, more profound environmental and contextual mechanisms leading to health outcomes. Williams (1997) referred to these ‘invisible forces’ as the basic causes of the variations in health and defined them as “the factors responsible for generating a particular outcome; changes in these forces create change in the outcome” (page 327).

The feeding practices of grandparents appear to align closely with the basic causes outlined in the adapted Williams’ model. Specifically, economic and legal structures (policies that impact on caregivers, child care, food prices, financial benefit, and rights for the elderly), colonial processes and societal attitudes (with respect to ageism, racism and sexism) additionally contributed to the current social status and feeding practices of grandparents and
ultimately the health status of their grandchildren. These are discussed in more detail in this chapter.

5.1. Financial constraints and unemployment

Grandparents from this study have described the impact of financial constraints on the way they fed their grandchildren. All grandparents were retired and were on some form of financial benefit from the government but this benefit was said to be inadequate to meet their needs in terms of basic living requirements, such as being able to provide three meals a day for themselves and their grandchildren.

Evidence from the United States suggests that finances are problematic for most grandparents caring for their grandchildren with many living in or near poverty themselves (Solomon & Marx, 1995). Māori and Samoan grandparents appeared to have a further burden with other research showing that low income older Māori, when compared with other New Zealanders in the same age group, have less opportunity to complement their income as most are retired and rely on government financial benefits (Waldon, 2004). This is consistent with the findings from this study with all the participants being either retired or receiving a benefit.

Also, although it is well known that a disproportionate distribution of deprivation by ethnicities exists in New Zealand, with Māori being more deprived than non-Māori (Robson & Harris, 2007), it is important to highlight this fact again here. Figure 2 shows deprivation by deciles, on a scale of one to ten (with one being least deprived and ten being most deprived) and suggests that Māori are more likely to reside in highly deprived areas compared to non-Māori. Sadly, the deprivation-by-ethnicity trends in New Zealand are relatively constant. The New Zealand Deprivation Index from the 2013 census suggests that in the 20 years since the Index was first produced that the Māori deprivation picture has not changed with more Māori and Pacifica people still living in socially deprived areas (Atkinson, Salmond, & Crampton, 2014).
This is considered here in the context of grandparents feeding practices with Māori and Pacifica children because the resources available to a household determine their standard of living. Household expenditure on food is affected by income constraints (Blaylock et al., 1999) with adults with relatively lower incomes found to be more food insecure (Bowman, 2007), directly affecting the feeding practices of that household. Furthermore, households have varied sizes and composition and in order to produce the same living standards, different incomes are required (Fawcett et al., 2006). Interviewees in this research not only described their diverse ‘households’ and the limited money streams, but how this impacted on food security within those households, and ultimately their feeding practices.

In addition to financial hardship however, the participants also described the impact of unemployment on their lives. People out of employment often face financial hardships that will lead to other social problems that may include family stress and conflict (Broman, Hamilton, & Hoffman, 1997). People’s quality of life and health are compromised when unemployment is prolonged (Liem & Rayman, 1982), with the individual, family and society bearing the cost (Atkinson, Liem, & Liem, 1986; Hakim, 1982).

Unemployment was cited as a concern by grandparents in this study. The grandparents believed that securing jobs would supplement their incomes and help alleviate their financial problems. However, unemployment is high in New Zealand (MacKenzie, 2014; Nickell,
Nunziata, & Ochel, 2005) and for the jobs available the majority are low paying (Broman et al., 1997). Figure 3 below shows the Māori unemployment rate in comparison to the total unemployment rates for the period 2008 to 2013 (Ministry of Business, Innovation and Employment, 2013, page 2).

![Figure 3 Māori unemployment rates in comparison to total unemployment rates, 2008 - 2013](image)

Given the significant inequalities in employment that exist between Māori and Non-Māori, ‘employment’ in New Zealand is an area that requires more academic scrutiny. Māori are more likely to work in the lower occupational gradients of labour with unsafe and insecure jobs, which offer insubstantial incomes (Smith, Dorling, Gordon, & Shaw, 1999). Smith et al. (1999) indicate that such a situation may result in someone being forced out of employment and onto a sickness benefit, or taking early retirement due to disability, returning them to a scenario of constrained finances.

Unemployment was common among the grandparents interviewed in this research who cited various factors including their age, gender and ethnicity. Looking at age, most developed countries, New Zealand included, have an ageing population (Handy & Davy, 2007), and consequently a growing proportion of older people in the workforce, with some seeking to rejoin the workforce again after retirement. Despite this trend, the literature shows a growing concern of ageism in New Zealand where individuals face prejudice and discrimination based
on their actual or perceived chronological age when seeking employment (Glover & Branine, 2001). Ageism is becoming more recognised as a workplace and social issue despite its prohibition by both human rights legislation and employment law (Handy & Davy, 2007). Handy (2007) also suggests that ageism is gendered, with more women experiencing age-related discrimination at younger ages than men.

Williams (1997) and (Mills, 2010), argue that legislative and policy structures are drivers of ageism and unemployment. The attitudes of society that interfere with effective policy making have led to the institutionalisation of ageism. These attitudes have led aging to be a social problem rather than just a natural process (Butler, 1980). The failure by older citizens to secure employment, particularly if they are grandparents with grandchildren to look after, means their financial status is more compromised, worsening their poverty. They are forced to rely entirely on government financial benefits to make ends meet. Participants in this study stated that the financial benefit received was inadequate to provide for their basic living requirements. The economic policies guiding financial benefits from government dictate the amount of benefit to be given out. It is important to take into consideration the varied nature of household types (by composition and size) when allocating financial benefits if a similar living standard is expected across populations (Chapple, 2000). Chapple (2000) went on to suggest that the financial status of Māori may be improved in this manner considering that they are disproportionately more amongst the disadvantaged proportions of the population (Chapple, 2000).

Another underlying factor that could be contributing to the participants’ employment and financial status is sexism. Sexism or prejudice against women on the employment scene prevents women from entering some jobs that were traditionally dominated by men (Fuchs, 1971; McPherson, 2009; Ministry of Business, Innovation & Employment, 2014). Women face a lot of challenges when seeking employment as shown by the low proportion of women in the workforce when compared to the total workforce participation (Department of Labour, 2012). The participation of women is restrained to certain jobs at the bottom or middle of an organisation and a gendered pay gap is evident between men and women (Ministry of Business, Innovation & Employment, 2014).

The relationship between ethnicity and socioeconomic position is very strong in New Zealand and the interactions are complex (Fawcett et al., 2006). Unemployment worsens inequities affecting both health and non-health related behaviours and outcomes. The socioeconomic
position of individuals may be alleviated by securing employment. However, for Māori, employment continues to be an issue due to racist attitudes and discriminatory practices (Harris et al., 2006; Larson, Gillies, Howard, & Coffin, 2007). This is thought to have followed the processes of colonisation in New Zealand history that brought a lot of negative social consequences, including the disruption of the Māori way of life, and established racism in the society (Derby, 2012). Derby (2012), suggests that inequities in employment that exist in the present day were initiated when young Māori were forced to move to urban areas in search of employment after World War Two.

Māori unemployment has been attributed to racism, with the mere fact that being Māori increasing the likelihood of facing discrimination when searching for a job, and the pay one received for that job (Robson & Harris, 2007). The fact that grandparents have acknowledged their ethnicity as a factor in seeking employment is critical. However, racism pervades all aspects of one’s life and is now recognised as a significant determinant or ‘basic cause’ of health and health care outcomes, of educational attainment, of housing and of social status (Harris et al., 2006; Larson et al., 2007; Nazroo, 2003; Williams, 1997).

This study has found that grandparents are facing varied financial challenges that affect their feeding practices. Unemployment and inadequate financial benefits from the government are signs of deprivation that indicate deeper structural inconsistencies. As much as securing employment may alleviate the financial status of grandparents willing to work, just getting a job is a hurdle with discrimination in the form of ageism, sexism, and racism to contend with. This complex web of financial struggles (including low income status and the discrimination in the work arena) has affected the feeding practices of grandparents in this study. In order to effectively deal with this complex web, upstream drivers of structural inequities that constrain the current social disadvantage should be addressed.

5.2. Food prices as a barrier to feeding practices

All the grandparents interviewed in this study raised concerns over the high food prices they encountered while purchasing food for their households. Evidence has shown that when compared to other developed countries, New Zealand food prices are very expensive (Edmunds, 2012).

Cost is a major barrier for healthy eating for low socioeconomic households striving to balance a restricted income, thereby influencing food purchases (Dobson, Beardsworth, Keil,
& Walker, 1994; Drewnowski, 2003; Inglis et al., 2009). Money is often set aside for rent and bills but the food expenditure is the most flexible item on the budget affecting food procured by a household after each budget cycle (Dowler, 1997). Healthier food options like fruits and vegetables are often overlooked (Giskes, Turrell, Patterson, & Newman, 2002) as these have been found to be more expensive than the less healthy foods (Andrieu, Darmon, & Drewnowski, 2006; Jetter & Cassady, 2006; Mooney, 1990) and are consumed more by the affluent proportions of the population (Drewnowski, 2012). The high cost of fresh vegetables was a barrier to healthy eating (Kicklighter et al., 2007; Drewnowski & Darmon, 2005). In comparison to other developed countries, the food in New Zealand is very expensive, be it healthy or unhealthy food choices (Edmunds, 2012).

Inglis et al (2009) highlighted that if the cost of food is the main predictor of healthy feeding practices, then low income households would have improved dietary practices if they had a greater food budget. Strategies that have been identified as ways to decrease the socioeconomic inequality in eating practices include an awareness of diet and disease relationships, (Wiig Dammann & Smith, 2009), low cost healthy food options (Inglis et al., 2009) and household budgeting skills (Cassady, Jetter, & Culp, 2007). However, whilst these approaches are useful, findings from this study would argue that a critique of underlying economic structures and policies is required. The ultimate buying power that participants had to purchase food was also dictated by almost similar structures. The socioeconomic status (based on income) of grandparents affected their food choices given the limited finances they had. In this regard, improving healthy feeding practices should take economic inequalities into account (Drewnowski, 2012). Policies to do with subsidising food prices may benefit Māori and other low income groups in New Zealand. This study has found that knowledge and awareness of healthy food was not as much a challenge for the grandparents interviewed. Their need was found to be financial access to healthy food.

5.3. The effect of the built environment on feeding practices

5.3.1 Housing, deprivation and feeding practices

All the grandparents interviewed in this research were from a high deprivation residential zone and repeatedly spoke about housing having an impact on feeding practices. This study used the New Zealand Deprivation Index (NZDep) for 2006 to identify a low socioeconomic
status residential zone\textsuperscript{11}. Common features for low socioeconomic neighbourhoods include: low residential property values, high residential density, high traffic volumes, a high density of fast food services and, at times, poor access to parks and recreational sites, poor schools and minority ethnicities (Drewnowski, 2012).

Housing is a key determinant of health (Marmot et al., 2008) with low quality, insecure and unsafe dwelling conditions negatively affecting the health of households (National Health Committee, 1998). Poor housing is an indication of deprivation with evidence from the USA suggesting that property value of where one lives and the type of neighbourhood they reside in shows the financial status of an individual (Drewnowski et al., 2013). The type of housing and residential zone that individuals reside in, just like feeding practices, may not be conscious individual choices, but rather, the choices are driven by the realities of the economic, physical and social circumstances surrounding them (Abel et al., 2001).

In New Zealand, unequal access to good quality housing between Māori and non-Māori is notable (Robson & Harris, 2007). Māori and Pacifica populations are more likely to reside in the most deprived deciles (Maré, Mawson, & Timmi, 2009) with poor housing often associated with an inadequacy of food and clothing for the members of the given household (Wood, 2003). The feeding practices of individuals in poor housing are compromised with studies suggesting that having a lower income was associated with poorer dietary quality (Darmon et al., 2003; Darmon et al., 2002). Due to limited finances, families have no choice but to stay in poor houses that have cheaper rental prices, but are deficient in some essential domains like warmth, safety, security and being crowded. The inadequacy of appropriate housing has forced some individuals into severe housing deprivation, or homelessness (Amore, Viggers, Baker & Howden-Chapman, 2013). In this study, some of the children did not have stable places to stay in, instead they were continuously moving between residences, a situation that compromises not just their feeding practices but other aspects of their lives, health and wellbeing.

Using the NZDep Index, all the grandparents who took part in this study were experiencing deprivation in one or more aspects of their lives. All the participants were aged over 50 and

\textsuperscript{11} Note was taken however that, the NZDep index may not fully capture all dimensions of socioeconomic status (Nazroo, 2003) and that the index is based on average socioeconomic circumstances of a given population group rather than an individual’s socioeconomic status (Salmond et al., 2007).
unemployed; most of them were sole household heads, with more than three people living in their households and their ethnicity was either Māori or Samoan. According to the New Zealand Social Report (2010), these conditions defined them as low income (Ministry of Social Development, 2010) and this study has found that feeding practices are affected to some extent by housing, and that both the type of housing and feeding practices are indicators of deprivation.

5.3.2 The built environment as a barrier to feeding practices

Literature has shown that most of the low income residential zones in developed countries have a high density of fast food outlets (Moore & Diez Roux, 2006; Morland, Wing, Diez Roux, & Poole, 2002; Shaffer, 2002) in contrast to more affluent neighbourhoods that have access to better restaurants and fresher perishable produce (Drewnowski, 2012). These food environments, often called obesogenic environments, provide less healthy food options that are considered culprits for the current obesity epidemic in the United States and many other industrialised countries (French, Story, & Jeffery, 2001).

Populations with limited finances, who reside in high deprivation zones that are flooded with food outlets that sell less healthy food, are driven to purchase the most affordable, less healthy, substitutes available (Smith & Brunner, 1997). In this study, concern was raised over the amount of ‘fish and chip’ shops at the local shopping centre. As much as the grandparents were aware of the side effects of consuming less healthy foods, sometimes they were left with no choice, depending on the finances available to them.

The presence of a supermarket offering healthy food options within the local vicinity of a low income neighbourhood may improve feeding practices, however the impact exerted by the affordability of healthier food options (determined by income and food prices) may be greater in influencing feeding practices (Drewnowski, 2013).

The adapted Williams’ model (Mills, 2010), suggests that colonial and racial processes in the historical context of New Zealand, as well as economic processes, influence the lives of populations creating inequities and disadvantaged groups in society (Nazroo, 2003). The social and economic inequities affect most aspects of life and wellbeing, with this study suggesting that an individual’s immediate built environment impinges on their feeding practices and that critiques of urban planning and local authorities’ policies that govern

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12 The women were either widowed or divorced.
location of supermarkets and food outlets in the low and high deprivation residential zones may be required. A holistic approach that takes into consideration the various circumstances that impact on feeding practices (in this instance, housing and the food environment) and overall wellbeing of populations are required to ensure appropriate feeding practices by individuals, families and communities.

5.4. Culture, customary norms and feeding practices

Culture and tradition emerged as strong drivers of feeding practices in this study. The grandparents’ feeding practices were prompted by their past experiences and social and customary norms13. However, the contexts of political and social environments through the course of history influenced the dynamic nature of the feeding practices for most cultures and their attitudes towards food.

The attitudes of individuals and societies towards food influences various aspects concerning feeding practices, including the concept of meals and the number of meals consumed per day, issues around food procurement and food preparation (Asp, 1999). The food choices individuals make are influenced by their food preferences from social experiences as well as adhering to culturally appropriate feeding practices (Savage, Fisher, & Birch, 2007).

In various cultures with different cultural understandings, child caring and feeding practices are usually the role of women in most societies (Renzaho, 2004). In this study, all the grandparents interviewed played an active role in child caring and they were all women. This fulfils the traditional expectation of most societies for women to stay at home preparing meals for the household and having the responsibility of making dietary choices (Inglis, Ball & Crawford, 2005). However, due to the processes of modernisation, the roles of women have modified with some women engaging in paid work to support the economic status of their households, but they still have the responsibility for food provision for their household (Lester, 1994).

The cultural influences on food preferences were evident in this study with most of the participants interviewed having an inclination towards traditional cultural foods, for example: taro, kumara, kamo kamo, Māori potato and indigenous delicacies like puha. The arrival of

13 Customary norms are the defining aspect of cultural identity. These are social or environmental conditions or facilities that are approved, acknowledged and encouraged by a society to which individuals belong (Townsend, 1979).
settlers and immigrants in New Zealand influenced the dynamics of culture and feeding practices amongst Māori (Wilson, 2013), however, this study found an inclination towards traditional food preferences and recipes by the grandparents due to familiarity and trust in such foods. Inglis, Ball & Crawford (2005) suggest that women of low socioeconomic status have stronger beliefs in tradition and that they value familiar dietary practices on which they were brought up as children. This hypothesis requires further investigation given that this study has also found a correlation between low socioeconomic grandparents having a preference for traditional foods.

The adapted Williams’ model (Mills, 2010) suggests that policies and structures existing at any given point in time influence the culture of individuals. Changes in policy structures means dynamics in culture, thus, although feeding practices have altered through the course of history (with some gains and losses), the value of ensuring optimal food intake to meet the health and growth needs of children has not changed (Savage et al., 2007).

5.5. The essence of family and in feeding practices

The value of family was reiterated by all participants in this study. As the elder members of their families, the grandparents felt it was their responsibility to provide for all the members of their families, even adults. Māori value the elderly as kaitiaki (guardians), as they offer varied roles that include guardianship, being caretakers, protectors or trustees offering awhi (help or support) for their families (Waldon, 2004). This is also why grandparents remain active caregivers for their grandchildren. Family is essential and is recognised as the foundation of Māori society, and also plays a key role in the individual and collective wellbeing of Māori (King & Turia, 2002). The core of Kaupapa Māori is placed on family and the extended family structure (Smith, 1992).

Being either primary or substantive caregivers, the grandparents provided an immediate family for their grandchildren, playing an important role in eating behaviours and attitudes (Birch & Davison, 2001; Hendrie, Sohonpal, Lange, & Golley, 2013; Scaglioni, Salvioni, & Galimberti, 2008). Their influence is strongest in early childhood (Birch & Fisher, 1998; Koivisto Hursti, 1999; Wardle, Carnell, & Cooke, 2005). The primary context that a person develops is in a family, and practices like child feeding play an essential role in the early intergenerational transmission of eating attitudes, values and beliefs (Kral & Rauh, 2010; Ritchie, 2007). Evidently, grandparents play a crucial role in forming the family dietary
environment, as seen in this study, confirming the symbolic roles that grandparents hold within their families, providing roots and acting as watchdogs (Hagestad, 1985; Kicklighter et al., 2007). Māori society holds older Māori in high esteem who are often considered as kaumātua. Kaumātua are relied on for traditional Māori resources and they play an important part of preserving Māori taonga (treasure) and passing on knowledge to future generations (Waldon, 2004). Grandparents’ culture bounds past experience, their views and ideals of healthy child nutrition coupled by their fostering duty to provide adequate food for that child (Jingxiong et al., 2007) are key drivers of their infant feeding practices. These practices are passed down through family generations.

The influences of families and communities are identified as key levers for high quality outcomes for children’s achievements in social and academic areas (Biddulph, Biddulph, Biddulph, & Counts, 2003) and health outcomes. Solomon and Marx (1995) documented the positive influences of grandparents in other areas of their grandchildren’s’ lives such as psychological wellbeing and social adaptability (Solomon & Marx, 1995). Further evidence suggests that grandparents were concerned about their own health and the future health of their grandchildren such that they found motivation to practice healthy eating and provided nutritious meals (Kicklighter et al., 2007). There is potential for grandparents to have a positive impact on their grandchildren’s feeding practices as well. Support for healthy eating from the whole family is desirable to attain optimal feeding practices (Williams, Thornton & Crawford, 2012).

Referring back to Williams’ adapted model (Mills, 2010), economic and legal structures should take into cognisance the family set up for Māori. Research indicates racial discrepancies in grandparenting roles with children in Māori families being brought up through the active involvement of their grandparents and other family members when compared to New Zealand European families (Ministry of Social Development, 2010). This research argues that there is a need for policy structures to be developed that take the plight of grandparents into consideration. Policies guiding economic structures can alleviate inequities by recognising the differences between ethnicities and complexities involved in the social and cultural context. More policies that seek to empower Māori families and communities to reduce health inequities and attain improved health and wellbeing such as whānau ora, which was proposed in He Korowai Oranga (The Māori Health Strategy) (King & Turia, 2002), should be emphasised, being mindful of the importance of working together with and involving Māori communities in developing appropriate strategies while protecting
Māori values and cultural concepts. This study argues that the existence of such structures will be useful in supporting good health practices, including feeding practices.

5.6. The influence of grandparents’ understanding on feeding practices

The grandparents interviewed in this study were household heads playing multifaceted roles of parenting, role modelling, food purchasing and preparing meals. Their understanding and knowledge forms a dynamic cluster of feeding practices that mould lifelong habits for their grandchildren and families.

Feeding practices were an accumulation of exposures not just familial and inter-generational, but also social and environmental (Green et al., 2003; Parmenter, Waller, & Wardle, 2000; Steptoe & Wardle, 1999). Literature suggests that attitudes and motivation are proximal determinants of feeding practices that are driven by one’s upbringing and knowledge (Wardle & Steptoe, 2003), beliefs and perceptions (Beydoun & Wang, 2008). In turn, this thought appears to align closely with the findings of this study, as all the grandparents interviewed kept referring to their observations and experiences growing up as drivers for the way they fed their grandchildren. These included the types of foods eaten, methods of food preparation and recipes, gardening and child rearing activities.

Evidence has shown nutrition knowledge influences feeding practices (Barreiro-Hurlé, Gracia, & de-Magistris, 2010; De Vriendt, Matthys, Verbeke, Pynaert, & De Henauw, 2009; Patterson, Kristal, Lynch, & White, 1995; Wardle, Parmenter, & Waller, 2000) strengthening the perception of healthiness and willingness to consume healthy foods (Ares, Giménez, & Gámbaro, 2008). Despite grandparents possessing some level of nutrition knowledge, evidence shows that this knowledge did not generally translate into the actual child feeding practices (Jingxiong et al., 2007). However, household circumstances, for instance, low income and food insecurity (Wiig Dammann & Smith, 2009), as well the external food environment dictated feeding practices.

Knowledge is an important predictor of nutrition information comprehension (Miller, Gibson, & Applegate, 2010) as well as one of the social causes of differences in health between population groups (Link & Phelan, 1996). Link and Phelan (1996) suggest that knowledge empowers individuals to make appropriate food choices, thus stepping towards reducing social inequality. The disproportionate availability of nutritional information (with more privileged groups having more access) has been shown to worsen dietary inequalities.
between population groups (Parmenter et al., 2000). Population groups with the lowest levels of knowledge have been found to include those residing in high deprivation areas, the unemployed and having low educational attainment (Hendrie, Coveney & Cox, 2008). Referring back to Williams’ adapted model, differentials in information dissemination and dietary inequalities between population groups denote differences in social status and can be dealt with if the basic causes from which they are derived are addressed.

5.7. Feeding practices in the context of human rights

Human rights are inherent to all human beings and the right to food is a basic right (United Nations Human Rights, 2014). The right to food implies that adequate food is available to meet the dietary needs of individuals, protecting them from food deprivation that would lead to hunger and food insecurity. As much as access to sufficient food is a basic human right, this study suggests that this right is being violated for many Māori and Samoan individuals in New Zealand. The findings from this study indicate that most of the grandparents suffered some form of food insecurity for various reasons that included financial hardship and the cost of food. Though beyond the scope of this thesis, other basic human rights, for instance, the right to a standard of living adequate for good health were also found to be infringed. Some proportions of the population in New Zealand, particularly Māori, are deprived of adequate housing while others in the same population are privileged (Reid & Robson, 2006).

These disparities that contravene the basic rights of individuals are the result of political, legal and economic structures that predetermine and dictate the environments that individuals are subjected to, as suggested by the adapted Williams’ model (Mills, 2010). With this understanding in mind, this study argues that the presumed right to adequate food is being infringed upon for most of the grandparents in this research, and thus poses as a barrier to optimal feeding practices; in this case it is the feeding practices by grandparents. The breach of basic human rights can only be addressed if the basic causes are dealt with and inequities are eradicated.

5.8. Kaupapa Māori approaches to health

The concept of Kaupapa Māori approaches to health seeks to critique and positively transform oppressive structures, while at the same time allowing validation of knowledge that is located and specific to Māori (Eketone, 2008). This philosophy aims to support and encourage relevant services that are culturally appropriate for Māori.
According to Durie (2001), the principles guiding Kaupapa Māori approaches are those that include the use of Māori cultural values, respect for Māori customs, allow participation by family, and have findings that are relevant to Māori. This study was able to adhere to most of these principles and the findings have the potential to open doors that can support feeding practices by Māori, especially in the context of their elderly population caring for young dependents.

Evidence suggests that pure Kaupapa Māori approaches work best if implemented ‘by Māori, for Māori’ (Barnes, 2000; Bishop, 1999; Durie, 2001). This study was consistent with the Kaupapa Māori approach to research and was carried out by non-Māori for Māori. The researcher was able to understand and accept that the research process was a knowledge sharing experience through negotiation. The control of the research by Māori was upheld throughout the process. Māori perceptions and expectations were gained in this research and the findings have the potential to make a positive difference in the current feeding practices by grandparents. This study argues that the successful and beneficial implementation of Kaupapa Māori approaches do not necessarily require the researcher to be Māori. Non-Māori researchers who acknowledge and endorse Māori culture and cultural differences while having the ability to desist from the victim blaming discourses can make successful research practice that benefits Māori, that is meaningful for Māori and that upholds the Māori worldview.

5.9. Study strengths and limitations

The research process had both positives and negatives which will be discussed in this section.

This study explored an area that had not been researched before in New Zealand. The findings set to open doors for further research and investigation in the future on the infant feeding practices in New Zealand, the welfare of the elderly, the availability and accessibility of food, as well as rights based approaches to reduce inequities between population groups.

The effectiveness of applying the adapted Williams’ model (Mills, 2010), as a strengths based structural framework under the Kaupapa Māori approach to research, was demonstrated in this research. This study has shown that the feeding practices of grandparents were mere surface causes of deeper structural elements that dictated the social status of participants.
Exploring an untouched area of research in New Zealand, while engaging with a marginalised population, is a major strength for this study as it has provided Māori and Samoan grandparents with a voice. Therefore the research was able to identify gaps and challenges in this area, as well as highlight disparities that are responsible for existing feeding practices.

The sample size for the study was smaller than planned. A sample of eight to twelve participants was sought but only seven were recruited. Issues with recruitment included the selection criteria and timeframe for sampling. The sample was made up of grandmothers only, meaning that if there were any grandfathers caring for their grandchildren, their experiences were missed by this research. The sample was composed of Māori and Samoan individuals, assumed to be of low socioeconomic status (due to the suburb they reside in). A comparison of feeding practices may have had been possible if the sample had included participants from more ethnic groups and different socioeconomic levels.

The interview guide was limited and other important aspects about nutrition (for instance nutrition and disease links) not being obtained. However, the focus of this study was on the participants’ feeding practices and their knowledge and narratives collected led to rich qualitative data that was able to inform the drivers, barriers and perceptions associated with the grandparents’ feeding practices. Although information to ascertain levels of nutrition knowledge were not obtained nor were there opportunities to validate the participants’ stories, in depth interviewing methods were used to validate the participants’ responses. A follow up study may be required to investigate the relationship between feeding practices and the nutritional status of the grandchildren under the care of their grandparents.

Feeding practices are a somewhat sensitive topic; therefore participants may have given socially desirable responses. Practices that are viewed by society as improper are often not reported by individuals (Coffey & Atkinson, 1996). However, the fact that similar stories were collected from different participants, residing in different households, would suggest the authenticity of their responses. Furthermore, in order to address this thought of credible responses, this study took a non-judgemental approach, consistent with the Kaupapa Māori approach to which this study is aligned.

The coding process of data analysis brought some problems with the initial codes being too generalised. The coding was redone a few times until the refined codes were derived. It was difficult to keep preconceptions about the research from interfering with the coding process. These assumptions originated from the researcher’s own perspective on race, class, age and
gender (Charmaz, 2006). The researcher, as an African nutritionist entering research in the Western context, was presented with numerous preconceptions and hurdles. The researcher had to familiarise herself with, and understand, the practices and protocols of a new culture in order to align with the Kaupapa Māori framework that guided this research. However, although aligning with the framework was a challenge for the researcher, this limitation was overcome by the researcher having kaumātua and Māori supervisors who advised on protocol and Māori culture. The coding was also triangulated between the two Māori supervisors and the researcher creating a robust and culturally appropriate method of analysis and interpretation.

The language barrier was a challenge for the researcher. In order to overcome this, the research sample was limited to English speaking participants. Being a researcher of foreign nationality amongst a Māori and Samoan sample may have had its effects on the research though these effects cannot be confirmed. Efforts to overcome this limitation included abiding by and respecting the participants’ cultural protocols (offering karakia, koha and kai) during the research process. The researcher received mentoring on Māori culture and language from the kaumātua and the research supervisors. However, culture advice and mentoring was limited for Samoan participants.

5.10. Summary

This chapter lays out a complex and multi-faceted series of the grandparents’ experiences with feeding practices and attempts to offer insight into the existing gaps and challenges. Literature supported explanations of the grandparents’ knowledge, attitudes and perceptions within broader socio-political context. This discussion sought to express how current feeding practices are not solely the responsibility of individuals but that existing political, legal and economic policies and structures greatly influence the conditions individuals are exposed to.

This presentation of the analysis of findings should be prefaced with caution since the study sample was small (only seven participants). Secondly, the study was carried out in only one residential zone. Thirdly, only Māori and Samoan grandparents took part in the study. Due to these reasons, it is important to understand that this discussion has been derived from the attributes of the small sample of participants. Though the views of the small sample may not necessarily represent the whole population, they are meant to suggest for consideration possible explanations for the infant feeding practices of grandparents.
The study was able to demonstrate the effectiveness of applying a strengths-based structural framework under a Kaupapa Māori framework to health research. Recommendations informed from this research will be presented in the following chapter six.
Chapter 6. Recommendations and conclusion

Nutrition is a determinant of health as well as a basic human right. Feeding practices are critical for infants and young children in order to achieve optimal growth and development; prevent the development of long term health conditions; and ensure that they have the best start to life. The purpose of this study was to explore the factors that influence the infant feeding practices of grandparents. More specifically, the project sought to identify facilitators for ideal practices, to understand the barriers encountered and to establish grandparents’ knowledge of healthy infant feeding practices. The findings relate specifically to the grandparents interviewed and should not be generalised to other grandparents who are non-Māori, non-Samoan or living in less deprived neighbourhoods.

This final chapter will present the implications and outputs from the research, recommendations emerging from this study as well as a concluding note.

6.1. Implications and outputs

Key gaps have been addressed by this project, thereby contributing to the evidence base of feeding practices by grandparents living in New Zealand.

Firstly, the qualitative approach within a Kaupapa Māori framework has allowed a richer and deeper understanding of the experience, the facilitators, and the barriers of feeding grandchildren for Māori and Samoan grandparents. The study identified new concepts that impact not only on the way grandparents provide food to infants and young children, but ultimately on nutrition and health outcomes for their grandchildren.

A second gap was addressed by focusing on grandparents’ perceptions. The research has uncovered stories and counter-stories of their experiences of living in hardship and trying to do the best that they can for their grandchildren. Not only providing new and stimulating information, this thesis has made a stand to deconstruct the victim blaming that often pervades discourse on nutrition and health outcomes of Māori and Pacifica children living in poverty. The gaze was shifted from the children and their families to focus instead on societal, structural and service factors.

Finally the thesis could serve as an exemplar to other international students wishing to undertake Kaupapa Māori research in Aotearoa. The steps taken during the thesis to learn about Kaupapa Māori research, to engage with kaumātua and the local marae throughout the
study, and to disseminate the findings in ways that are useful to Māori have been clearly articulated here. It is hoped that others may find this information useful in their own learning journey.

There have been two significant outputs from the thesis at the time of submission. The thesis was presented at the Tōmaiora Seminar, School of Population Health, University of Auckland’s Tamaki Campus in June 2014. Attendees included public health physicians, academics, the people with whom consultation occurred and the supervisors. The pānui or notice for that presentation was then picked up by Radio Waatea and an interview with Dale Husband on their ‘Māori Health’ section occurred ten days later.

6.2. Recommendations

Infants and young children rely on their caregivers for provision of food and, in the context of grandparents looking after their grandchildren; this research has found numerous factors affecting feeding practices that range from grandparents’ personal experiences, knowledge, perceptions and preferences to financial issues and food prices to societal pressures. Some recommendations emerging from this study will be presented here.

Public policy

Public policy initiatives seeking to improve feeding practices should take into consideration the existing economic inequities as well as their roots that are found in the structural elements. The barriers to feeding practices emerging from this research are as a result of structural elements. Interventions to support feeding practices on a population level should consider these elements.

Public policy initiatives need to focus on making the inexpensive healthy food options accessible and affordable for low income households. Subsidising prices of healthier food options or removing GST (goods and services tax) from fruits and vegetables may be appropriate strategies as they have been shown to be effective in a similar neighbourhood to that of these participants (Inglis et al, 2009).

The role of grandparents or Māori and Pacific elderly should be taken into consideration when developing policies and strategies that seek to empower Māori and Pacific families and communities to reduce health inequities and attain improved health and well-being. More strategies similar to He Korowai Oranga (King & Turia, 2002) should be emphasised.
Stricter implementation of basic human rights policies may be useful in addressing structural elements that drive discrimination on the basis of age, sex or race within social and employment contexts.

Research

Future research may need to explore further financial benefit policies for the elderly (particularly those caring for young dependants).

The increasing number of children being raised by grandparents raises a need for future research to examine the impact of this family structure on the health and welfare of children.

Information

Although this study did not assess the technical nutrition knowledge and information held by the grandparents, it was found in this study that nutrition information makes a difference on feeding practices. Knowledge is an important predictor of nutrition information comprehension (Miller, Gibson, & Applegate, 2010) as well as one of the social causes of differences in health between population groups (Link & Phelan, 1996). (Link & Phelan, 1996) suggest that knowledge empowers individuals to make appropriate food choices, thus stepping towards reducing social inequality. Further research is needed to explore current nutrition education related programmes and determine the needs for vulnerable members of the population. Strategies that include diet and disease awareness as well as affordable, low cost food options may need to be explored.

Information and support should be multifaceted, bringing together various subjects of information to support the grandparents. For instance having financial budgeting support coupled with healthy meal planning using low cost food options or having gardening support together with basic nutrition and meal planning support.

Culturally specific

Further work to explore the benefits and feasibility of growing food locally through backyard and community gardens for low income populations would be useful.

Future Kaupapa Māori consistent research by non-Māori should be encouraged to provide a voice for Māori and in the process facilitating positive transformation of oppressive structures. Non-Māori can also borrow with pride the concept of Kaupapa Māori for
6.3. Conclusion

The purpose of this study was to explore the infant and young child feeding practices of grandparents with the aim being to uncover and describe the factors that determine these practices. This section is the concluding note of the study, presenting some final thoughts concerning this study.

The feeding practices of grandparents align closely with the basic causes outlined in the adapted Williams’ model (Mills, 2010), particularly the economic, legal and political structures that contributed to contemporary social status of individuals, affecting various aspects of their health and wellbeing; lifestyle, housing, education and essential practices like the feeding of infants and young children. These structural elements determine the socioeconomic status of individuals as well as the inequities experienced between population groups in New Zealand with some population groups being deprived while others are privileged. The disproportionate allocation of resources within the population dictate an individual’s day to day life with, for instance, feeding practices and food choices being driven by the realities of economic, political, physical and social circumstances rather than being conscious individual choices.

This study has shown that feeding practices are hampered by financial challenges. Unemployment and low household incomes are key signs of deprivation and these have consistently been attributed to as barriers to feeding practices in this study.

The cost of food was found to be a huge hurdle in the path of feeding practices in this study. Healthy food options like fruits, vegetables and fresh meats were said to be exorbitantly priced such that grandparents ended up overlooking these and opting to buy less healthy food options that were more affordable to feed their grandchildren.

Coupled with the financial struggles faced, the high cost of food made feeding practices even more difficult. This study has found that the cost of food and the actual amount of finances available in a household are key predictors of feeding practices. Financial deprivation was
found in this research to affect feeding practices negatively and in most of the cases deprivation in housing was also found.

It was evident in this study that culture, tradition and past experiences of grandparents were strong drivers of feeding practices. The context of political, social and economic factors through the course of history was found to have influenced feeding practices as well. The grandparents had an inclination towards traditional cultural foods, delicacies and recipes. It is evident from this study that the grandparents’ experiences and observations during their earlier years were key drivers in the way they fed their grandchildren. Referring to the Williams’ model, Mills (2010) suggests that policies and structures existing at any point in time determine the environments to which individuals are exposed to thereby having an influence on people’s culture and way of life, including feeding practices as well.

The essence of family and the value placed on Māori and Samoan elderly as guardians or protectors of their families was found in this study. Grandparents passed down knowledge, skills, attitudes, values and beliefs on caring and feeding practices through generations forming the family dietary environment, confirming the symbolic role that grandparents have within their families.

The right to food is inherent to all human beings; however, this study concludes that most of the grandparents involved in this study had this presumed right to basic food infringed. They experienced food insecurity due to various reasons that include financial hardships, high cost of food and unemployment. This infringement was found to have serious implications on the feeding practices of grandparents. The political, legal and economic structures that predetermine the environments to which individuals are exposed to require focused attention in order to avoid meddling with and infringing on basic human rights.

Using a Kaupapa Māori consistent approach in this study created an avenue that allowed the feeding practices of grandparents to be explored. The study sought to positively criticise and make way to transform oppressive structures while validating Māori knowledge in a culturally appropriate manner (Eketone, 2008). This study was carried out for Māori by a non-Māori who upheld the principles of the Kaupapa Māori approach to research, and understood the value and significance of Māori culture, values and beliefs. It is evident from this study that one does not necessarily have to be Māori to successfully carry out a Kaupapa Māori consistent study. The key requirement however is for non-Māori researchers to uphold,
endorse and acknowledge Māori culture and values and accept that the research is a negotiation process whose key goal is to benefit Māori and uphold the Māori worldview.

The results of this relatively small study have been able to accomplish its purpose of exploring the feeding practices of grandparents and can be found useful and be utilised by future studies. Since this study explored an area that had not been researched before in New Zealand, there is still much room for similar Kaupapa Māori consistent studies that focus on the welfare of the infants, young children and the elderly, the availability and accessibility of food, as well as rights based approaches to reduce inequities between population groups to be carried on a larger scale.

The contemporary feeding practices of grandparents were found by this study to be the result of an accumulation of exposures to social, political and economic environments, not just familial and intergenerational factors.
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Appendices

Appendix One: Ethics Approval

Office of the Vice-Chancellor
Research Integrity Unit

UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE

25-Nov-2013

MEMORANDUM TO:
Dr Anneka Anderson
Te Kupenga Hauora Maori

Re: Application for Ethics Approval (Our Ref. 010774)

The Committee considered your application for ethics approval for your project entitled Infant feeding practices of grandparents.

Ethics approval was given for a period of three years.

The expiry date for this approval is 22-Nov-2016.

If the project changes significantly, you are required to submit a new application to UAHPEC for further consideration.

In order that an up-to-date record can be maintained, you are requested to notify UAHPEC once your project is completed.

The Chair and the members of UAHPEC would be happy to discuss general matters relating to ethics approvals if you wish to do so. Contact should be made through the UAHPEC Ethics Administrators at humanethics@auckland.ac.nz in the first instance.

All communication with the UAHPEC regarding this application should include this reference number: 010774.

(This is a computer generated letter. No signature required.)

UAHPEC Administrators
University of Auckland Human Participants Ethics Committee

cc. Head of Department / School, Te Kupenga Hauora Maori
Dr Natire Harwood
Mrs Rachel Tapera
Appendix Two: Letter of Community Support

RUAPOTAKA MARAE SOCIETY INC.  
106 Line Road, Glen Innes  
P O Box 18-347, Glen Innes  
Tel: (09) 570-5340   Fax: (09) 570-6430  
Email: ruapotaka.marae@xtn.co.nz

24 October 2013

Dear Rachel, Annika and Matire

Re: Consultation for the research project - Infant Feeding Practices of Grandparents

Many thanks for meeting with Karen Nathan at Ruapotaka on Monday 21st of October as part of your community consultation for the above named project.

Ruapotaka Marae is a pan-tribal urban marae located in Glen Innes. Our mission statement is to influence positively the relationships of all people within the Glen Innes and surrounding communities through the practice of whanaungatanga and wairua. Given that your project is based in Glen Innes, it is apt that you have consulted with us.

Karen has asked me to provide a letter of support for your project on behalf of Ruapotaka Marae, Glen Innes. I can confirm that:

1. Karen provided advice on community engagement including the names of other potential organisations that you should meet with; and that a one page introduction sheet be developed to leave with potential participants. I understand you have completed these actions.
2. Karen also offered to assist you in recruiting 8 – 10 participants. A process for contacting potential participants was confirmed by you and Karen.
3. The issue of koha was discussed and endorsed at the meeting
4. Karen gave permission for interviews to be held at the marae, if the need arises. Karen also talked about safety issues such as avoiding interviews after hours or unsafe places and suggested that she attend the interviews when Rachel requested, as a safety precaution.
5. You discussed the timing of the research including commencing recruitment of participants after ethical approval; and interviews that are scheduled to take place December to January.
6. Ruapotaka Marae sees the importance of information dissemination after the study. We wish to hold a dissemination meeting at the marae to which the community will be invited in June 2014; and will attend the Tomaiora presentation about the study at the University of Auckland in June 2014.

Therefore, on behalf of Ruapotaka, I am pleased to confirm our support for the research.

Ngi nihi

Georgie Thompson  
Marae Kūihi

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PARTICIPANT INFORMATION SHEET

Research Title: The infant feeding practices of grandparents

Researcher: Rachel Tapera (BScDN, PGDipPH), currently studying full time towards a Master of Public Health degree with the University of Auckland, Faculty of Medical and Health Sciences.

Supervisors: Dr Anneka Anderson and Dr Matire Harwood, Te Kupenga Hauora Māori, Faculty of Medical and Health Sciences.

Research description
Thank you very much for taking the time to read this information sheet. Gaps have been identified in terms of research that has been done on the infant and young child feeding practices in New Zealand. This research focuses on the feeding practices of infants and young children by their grandparents. Feeding practices for young children have been found to have profound effects on their physical, mental and overall health outcomes as they grow into adulthood.

This study (based in Te Kupenga Hauora Māori at the University of Auckland) aims to explore the current infant and young child feeding practices of grandparents. I will do this by undertaking hour long individual interviews with consenting grandparents. The findings from this study may help us to advocate for policies to support optimal feeding practices for infants and young children in New Zealand.

Invitation
I would like to extend an invitation to you to participate in this research project. You have been invited to participate in this research because you are: a grandparent who is the primary carer or substantive carer of your grandchild/children; you have provided at least five meals per week to your grandchild/children under your care in the last three months; you reside in the Glenn Innes region of Auckland; and you are comfortable being interviewed in English.

Research procedures
The research period will be between October 2013 and January 2014. Participation to be interviewed in this study is voluntary (your choice). If you agree to take part in this study but later wish to withdraw at any stage of the study, please feel free to do so. You have the right not to answer specific interview questions, to have the audio recording of the interview stopped at any time, and to withdraw your participation or interview data.
Research data will be collected through a one hour individual interviews which will be digitally audio-recorded, with your consent. Interviewing will be conducted by myself at your home, or at the University of Auckland Tamaki Campus in Glen Innes, or at an alternative venue of your choice. The only anticipated cost for participating is your time. There will be no cash payment for your participation in this study. However, as koha/appreciation for your participation, you will receive a $20 grocery or petrol voucher.

You will be offered the opportunity to review and edit your interview transcript scripts (the typed notes). You will be given up to three weeks to make changes to your transcripts.

**Right to withdraw from participation**
The interview process is not expected to cause any discomfort as participants decide the extent of experience and information they are comfortable to share. Rather, the interview process is intended to be an empowering opportunity to share experiences and issues related to infant and young child feeding. If at any time during the interview you do feel uncomfortable or distressed, notify the researcher immediately, in order for steps to be taken to remove the discomfort. You may choose to move to another question, pause recording, take a break from the interview or end the interview. You are able to withdraw your data up until a month after the interview.

**Anonymity and Confidentiality**
All the personal information provided in this interview is confidential. No information that can identify participants will be used in any reports on this study. Only the interviewer will know who the participants are and this information will be kept physically separate from the data collected. The interviewer will transcribe the recording of the interview. If need arises, an outside transcription agency will transcribe the data following a confidentiality agreement. The de-named interview transcripts may be viewed by the research supervisors, Dr Anneka Anderson and Dr Matire Harwood, during the data analysis phase of the research. Computer files will be password protected. All audio recordings will be locked in a filing cabinet at the School of Population Health, and these will be accessible only to members of the research team for a period of six years after the study ends. All data will be destroyed thereafter.

**Research findings**
The research findings will be incorporated into the final thesis document. You can choose to receive executive summary sheets if you are interested.

**Ethical Approval**
This study has received ethical approval from the University of Auckland Human Participants Ethics Committee (UAHPEC).

**Participant Concerns**
For any queries or concerns please contact:
Researcher: Rachel Tapera (BScDN, PGDipPH)
Tel: 0221 063 198
Email: rtap016@aucklanduni.ac.nz

Supervisor: Dr Anneka Anderson
Tel: 09 373 7599 ext. 83373
Email: a.anderson@auckland.ac.nz
Appendix Four: Consent Form

CONSENT FORM
THIS FORM WILL BE HELD FOR A PERIOD OF 6 YEARS

Research Title: The infant feeding practices of grandparents

Researcher: Rachel Tapera

- I have read the Participant Information Sheet, and have understood the nature of the research. I have had the opportunity to ask questions and have them answered to my satisfaction.
- I understand that participation in this research is voluntary (my choice). I understand that I am free to withdraw participation at any time without explanation and that I may withdraw any data traceable to me up until a month after the interview.
- I understand that all the personal information collected in this interview will be confidential. I understand that none of the personal information that can identify me will be used in any reports on this study.
- I agree/disagree for this interview to be audio recorded. (Please circle your response)
- I wish/do not wish to receive a summary of research findings. (Please circle your response)
  [If you wish to receive a summary of research findings please include your email/address here ______________________________]

Name: _____________________ Signature: _____________________
Date: __/__/20__

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE ON 22 NOV 2013 FOR 3 YEARS. REFERENCE NUMBER 010774
Appendix Five: Interview Guide

Research Title: The infant feeding practices of grandparents

Researcher: Rachel Tapera

Introductions, obtaining rapport

- Provide participant with Participant Information Sheet (PIS).
- Offer any explanations needed and answer any questions regarding the PIS.
- Obtain written consent for being involved in interview.
- Obtain consent for audio-taping.

Interview

Firstly, I’d like to thank you for agreeing to participate in this research by taking part in an interview. The interview consists of broad questions about your infant and young child feeding practices for your grandchild/children more specifically those less than 24 months of age. You have are eligible to take part in this interview because you are a grandparent who has provided at least 5 meals per week in the last 3 months to your grandchild/children. Please answer questions with any relevant information you are comfortable sharing. It is also your right to ask for the digital recorder or interview to be paused or stopped at any time. If you are ready we will begin……..

Broad context

- Can you tell me a bit about yourself and your household set up?
- How many grandchildren do you look after and have provided at least 5 meals per week in the last three months? How old are they?
- Are you the primary or substantive caregiver?
[Discuss their current context as grandparents looking after grandchildren]

Description of the current infant and young child feeding practices

- Can you describe for me a typical day to day pattern/schedule for your grandchild/ children less than 24 months of age?
[Prompt: How many meals per day? Who decides what food the child eats? Source of meals clarified – home cooked (from raw ingredients/purchase pre-cooked meals); take away, friends/neighbours]

Description of possible barriers and facilitators

- Can you tell me what influences your choices when considering feeding for your grandchild/children less than 24 months of age? (prompt with access and availability of food and what influences these- transport, pension….)
- Do you face any challenges when making feeding choices for your grandchild/children less than 24 months of age?
- How do you think these challenges can be overcome?
Establish knowledge on healthy infant and young child feeding practices

- Do you feel confident in your feeding decisions/practices?
  - Why do you feel this way?
  - What do you feel should be done to make the best of your feeding decisions?
- Can you tell me a little bit about healthy food choices? [Prompt for their own definition/understanding and what has influenced these - e.g. media, family…]
  - Do you feel you have adequate resources to support your healthy food choices?
    - If they say no, prompt for what they feel should be done to make more resources available to them
  - How do you think these resources can be made available for your grandchild/children less than 24 months of age?

Conclusion of interview

- Are there any other aspects of your grandchild/children less than 24 months of age’s feeding we have not discussed which you feel is important?
- What would you like to see come out of this research?
  [Ensure process is drawn to a close appropriately, participant is asked if they may add anything else. The participant is thanked, voucher offered and farewell conducted.]

Closing statement

I would like to thank you once again for participating in this interview and for sharing your experiences with me. I hope you found your participation in this interview to be a positive experience. I appreciate the opportunity you allowed me to speak with you about your infant and young child feeding practices. I would like to give you this $20 voucher as koha to thank you for your time and willingness to share your personal experiences relating to infant and young child feeding. Would you like to receive an anonymous summary of the research findings? [Collect relevant details]

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