‘Ou te le fefe – Interpreting statistical data through a cultural lens: Does information about Pacific peoples ‘objective well-being’ and ‘subjective well-being’ illuminate existing perspectives on what it is like to be a Pacific Islander in Aotearoa-New Zealand?

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# TABLE OF CONTENTS

## Contents

TABLE OF CONTENTS ................................................................................. i  
LIST OF FIGURES ..................................................................................... iv  
LIST OF MAPS ......................................................................................... vii  
LIST OF TABLES ....................................................................................... vii  
ATTESTATION OF AUTHORSHIP ............................................................. viii  
ACKNOWLEDGEMENTS ......................................................................... ix  
ABSTRACT ..................................................................................................... xi  
PREFACE ...................................................................................................... xii

## CHAPTER 1: INTRODUCTION ................................................................. 1

- A Samoan interpretation ............................................................................. 1  
- A Samoan family story ............................................................................ 2  
- Researcher’s Statistics Journey ............................................................... 9  
- A Pacific Cultural Lens ......................................................................... 11  
- Outline of thesis ..................................................................................... 13

## CHAPTER 2: LITERATURE REVIEW .................................................. 16

- Community development ........................................................................ 16  
- Ethnicity (concept) [What are the implications to specific communities?] .... 18  
- What is social well-being and does it mean the same for all groups/societies? ...... 20  
- Social Well-being measured through social indicators .............................. 24  
  - Origins of social indicators .................................................................... 24  
  - Issues with and using social indicators ................................................. 25  
- Subjective (SWB) and Objective (OWB) Wellbeing .................................. 29  
- Aotearoa-New Zealand context ............................................................. 30  
  - Origins of social indicators in Aotearoa-New Zealand: key role of  
    ‘institutionalisation’ ............................................................................. 30  
  - Monitoring the changing social conditions of New Zealanders............... 31  
  - Big Cities Quality of Life Project ......................................................... 32  
  - Family and Whanau Wellbeing Project .............................................. 33  
  - New Zealand Social Reports .................................................................. 34  
  - Other social indicator projects in Aotearoa-New Zealand ..................... 37  
- Global GSS ............................................................................................ 40
How well or not so well are pacific peoples doing in areas of life domains?........127
Conclusion .................................................................................................................. 129
REFERENCES ............................................................................................................. 132
GLOSSARY: MĀORI ................................................................................................. 140
GLOSSARY: SAMOAN ............................................................................................... 140
LIST OF FIGURES

Figure 1: Community-Church relationship and structure ........................................... 7
Figure 2: Fale ................................................................................................................... 12
Figure 3: New Zealand General Social Survey 2008 Chart........................................... 44
Figure 4: Example two-way cross tabulation SPSS output............................................ 53
Figure 5: Summary of 51 two-way SPSS outputs selected for this study ...................... 55
Figure 6: Example 3-way cross tabulation SPSS output .............................................. 57
Figure 7: Summary of 14 3-way SPSS outputs selected for this study ......................... 59
Figure 8: Pacific Peoples ethnic group, rotated variance ............................................. 61
Figure 9: Non-Pacific Peoples ethnic groups, rotated variance .................................... 61
Figure 10: Pacific Peoples ethnic group, rotated matrix .............................................. 63
Figure 11: Non-Pacific Peoples ethnic groups, rotated matrix ..................................... 64
Figure 12: Regions ......................................................................................................... 68
Figure 13: Urban Areas ................................................................................................. 68
Figure 14: CORDV9- Age ......................................................................................... 69
Figure 15: CORPQ11 were you born in New Zealand? ............................................... 69
Figure 16: CORPQ12 What country were you born in? Recoded to regions ............... 70
Figure 17: CORPQ13 What year did you first arrive in New Zealand to live? ............ 70
Figure 18: CORDV7 Length of stay in New Zealand .................................................... 71
Figure 19: OLSQ01 How do you feel about your life as a whole right now? ............... 72
Figure 20: OLSQ01 How do you feel about your life as a whole right now? BY Family type by child dependency status BY ethnic group Pacific and Non-Pacific ......... 73
Figure 21: Number of people who raised respondent who were born in New Zealand .. 75
Figure 22: CULQ07 As far as you know, how many of those people were born in New Zealand? .......................................................................................................................... 75
Figure 23: CULQ09 Was that (other) person born in New Zealand? ............................ 76
Figure 24: CULDV2 Number of generations in New Zealand .................................... 76
Figure 25: CULDV3 Birthplace of parents .................................................................. 77
Figure 26: CULQ01 Do you feel that you belong to New Zealand? ............................... 77
Figure 27: CULQ02 Would you say you feel that very strongly, strongly or not very strongly? ......................................................................................................................... 78
Figure 28: CULQ03 Do you feel that you belong to any other country? ...................... 78
Figure 29: CULQ04 Here in New Zealand, how easy or difficult is it for you to express your own identity? ........................................................................................................... 79
Figure 30: CULQ04 Here in New Zealand, how easy or difficult is it for you to express your own identity? BY Family type by child dependency status BY ethnic group Pacific and Non-Pacific..................................................................................................................79

Figure 31: CULQ04 Here in New Zealand, how easy or difficult is it for you to express your own identity? BY Family type by child dependency status BY ethnic group Pacific and Non-Pacific..................................................................................................................80

Figure 32: CULQ04 Here in New Zealand, how easy or difficult is it for you to express your own identity? BY Family type by child dependency status BY ethnic group Pacific and Non-Pacific..................................................................................................................80

Figure 33: CULQ05 Person finds it difficult to express their identity in New Zealand .81

Figure 34: ELSDV1 Economic standard of living.........................................................................................82

Figure 35: ELSIDV1 Economic living standard derived variable 2008 & 2010...........83

Figure 36: ELSQ06 Generally, how you rate your standard of living? ........................................83

Figure 37: ELSQ07 Generally, how satisfied are you with your current standard of living? .................................................................................................................................84

Figure 38: ELSQ07 Generally, how satisfied are you with your current standard of living? BY Age BY ethnic group Pacific and Non-Pacific.................................................................85

Figure 39: ELSQ07 Generally, how satisfied are you with your current standard of living? BY Family type by child dependency status BY ethnic group Pacific and Non-Pacific 85

Figure 40: ELSQ07 Generally, how satisfied are you with your current standard of living? BY Were you born in New Zealand? BY ethnic group Pacific and Non-Pacific...........86

Figure 41: ELSQ08 Would you say that you have not enough money, just enough money, enough money, or more than enough money? ..............................................................86

Figure 42: CORDV8 Sources of personal income.....................................................................................87

Figure 43: CORDV12 Amount of personal income ......................................................................................88

Figure 44: NZDep New Zealand Deprivation Index 2006 (based on 2006 Census) .....88

Figure 45: NZDep New Zealand Deprivation Index 2006 (based on 2006 Census) 2008 & 2010...........................................................................................................................................89

Figure 46: KASQ01 How do you feel about your knowledge, skills and abilities? ........90

Figure 47: KASQ03 Are you currently doing any study or training?..................................................91

Figure 48: CORDV15 Highest qualifications – Level 1 certificate .........................................................91

Figure 49: CORDV15 Highest qualification – Doctorate degree ............................................................92

Figure 50: CORPQ16 What is your highest completed secondary school qualification? ...............................92
Figure 51: CORPQ21 In what year did you complete this qualification? – Highest completed qualification apart from secondary school qualification ........................................93
Figure 52: HOUDV2 Household crowding .................................................................95
Figure 53: HOUDV2 Household crowding 2008 & 2010 ...........................................95
Figure 54: CORDV6 Household size ........................................................................96
Figure 55: HOUDV3 Major problems with house or neighbourhood ......................96
Figure 56: HOUQ01 How do you feel about where you are currently living? ..........97
Figure 57: PHYQ01 How many of the facilities (such as shops, schools, post shops, libraries, medical services) that you want to go to can you easily get to? ..........98
Figure 58: PHYQ05 Overall, how do you feel about the quality of council services such as water supply, drainage, rubbish collection and roads in your town, city or rural area? ......................................................................................................................98
Figure 59: PHYQ03 How do you feel about your access to public transport in your town, city or rural area? BY Age BY ethnic group Pacific and Non-Pacific .................99
Figure 60: PHYQ12 How do you feel about the state of the lakes, rivers, harbours, oceans and coastlines that you've been to? By Are you male or female? BY ethnic group Pacific and Non-Pacific ..................................................................................................................100
Figure 61: PHYQ12 How do you feel about the state of the lakes, rivers, harbours, oceans and coastlines that you've been to? BY Were you born in New Zealand? BY ethnic group Pacific and Non-Pacific ......................................................................................................................100
Figure 62: PHYQ12 How do you feel about the state of the lakes, rivers, harbours, oceans and coastlines that you've been to? BY Age BY ethnic group Pacific and Non-Pacific ......................................................................................................................100
Figure 63: PHYQ12 How do you feel about the state of the lakes, rivers, harbours, oceans and coastlines that you've been to? BY Family type by child dependency status BY ethnic group Pacific and Non-Pacific ......................................................................................................................100
Figure 64: SAFQ01A How safe do you feel at work? .................................................101
Figure 65: WORQ02 If you had the opportunity would you choose to:....................102
Figure 66: WORQ09 How do you feel about your employment arrangement? ........103
Figure 67: LEIQ01 In the last four weeks, do you feel that you had too much free time, the right amount of time or not enough free time? BY Age BY ethnic group Pacific and Non-Pacific ......................................................................................................................104
Figure 68: LEIQ01 In the last four weeks, do you feel that you had too much free time, the right amount of time or not enough free time? BY Family type by child dependency status BY ethnic group Pacific and Non-Pacific ......................................................................................................................105
Figure 69: HUMQ05 In the last 12 months, have you been treated unfairly or had something nasty done to you because of the group you belong to or seem to belong to?

Figure 70: SOCDV6 Availability of help in time of need ........................................108
Figure 71: SOCDV6 Availability of help in time of need ........................................108
Figure 72: SAFQ01D How do you feel walking alone during the day in your neighbourhood?
..........................................................................................................................109
Figure 73: SAFQ01E How do you feel walking alone at night in your neighbourhood?
BY Age BY ethnic group Pacific and Non-Pacific.......................................................110
Figure 74: SAFQ01E How do you feel walking alone at night in your neighbourhood?
BY Age BY ethnic group Pacific and Non-Pacific.......................................................110
Figure 75: SAFQ01E How do you feel walking alone at night in your neighbourhood?
BY Gender BY ethnic group Pacific and Non-Pacific.................................................111
Figure 76: SAFQ01E How do you feel walking alone at night in your neighbourhood?
BY Female BY ethnic group Pacific and Non-Pacific...............................................111
Figure 77: SAFDV1 Most adverse impact of safety and security incidents derived variable
..........................................................................................................................112
Figure 78: Factor Structure for Non-Pacific peoples ethnic group.........................115
Figure 79: Factor structure for Pacific peoples ethnic group.................................116
Figure 80: Summary of variables describing Pacific peoples......................................118
Figure 81: Summary of variables measuring well-being of Pacific peoples compared to other ethnic groups.................................................................120
Figure 82: summary of variables measuring well-being within Pacific peoples .......123
Figure 83: Summary of variables measuring well-being in different life domains......127

LIST OF MAPS

Map 1: Migration of Māori from the Pacific to Aotearoa ........................................1
Map 2: Map of Samoa ...............................................................................................3

LIST OF TABLES

Table 1: Imputations ...............................................................................................49
ATTESTATION OF AUTHORSHIP

I hereby declare that this submission is my own and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), no material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or any other institution of higher learning.

Signed………………………………………………

Date………………………………………………....
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ABSTRACT

For Pacific peoples, Aotearoa-New Zealand has always been a land of opportunity as it is for everyone who arrives (or had arrived) on these shores. All have come with their hopes, their dreams and their visions of a better life for themselves and their children. This thesis critically examines the data from the first ever Aotearoa-New Zealand General Social Survey (GSS) 2008 to answer the question, ‘Does information about Pasifika objective well-being (OWB) and subjective well-being (SWB) illuminate existing perspectives on what it’s like to be a Pasifika in Aotearoa-New Zealand?’

While this research is primarily a quantitative analysis of secondary data, the analysis is framed within a cultural paradigm that is, a cultural lens, thus presenting a Pacific interpretation of the data about social well-being and giving expression to the impact on Pacific people whose voices remain largely silent. Three research questions are investigated; How well and not so well are Pacific peoples doing when compared to other communities and the total population?; How well or not so well are pacific peoples doing amongst their own community? How well or not so well are pacific peoples doing in different areas of life domains?

Three methods of analysis were conducted; two-way cross-tabulations using ethnicity and selected NZGSS: 2008 variables; three-way cross-tabulations using ethnicity, selected NZGSS: 2008 variables and 4 social variables- age, place of birth, family type and sex; and lastly a factor analysis investigating interrelationships among selected NZGSS: 2008 variables. Statistical tests of significance accompanied by an effect-size statistic were conducted; p-value p= 0.05 or (5%) and effect size or strength of association is equal to or greater than ETA = 0.1. An initial 171 contingency tables with accompanying statistical tests were produced. A final 65 contingency tables were further examined. The factor structure for Pacific peoples found eight dimensions in the component space accounting for 62.49% of the rotated variance.

The findings provide a strong argument for those involved in developing statistical measures that measure the social well-being of Pacific peoples to develop new frameworks which reach out and capture the voices of Pacific peoples living in Aotearoa-New Zealand.
PREFACE

The term Aotearoa-New Zealand is used throughout this thesis. It gives recognition to the promise of partnership between Māori and Pākehā created when Te Tiriti o Waitangi (The Treaty of Waitangi) was signed in 1840 and the relationship with tauiwi (foreigners) including Pacific people who need to understand the significance of Te Tiriti o Waitangi and the relationship with Māori as tangata whenua (indigenous people of the land) as well as the cultural relationship of old in terms of the first migration of Pacific people to Aotearoa-New Zealand 1200 years ago and is characterised by the cultural concept of tuakana–teina.

A glossary of Samoan terms has been included at the end of the thesis. Similarly a glossary of Māori terms is also provided at the end of the thesis.

All Samoan words have been italicised throughout the thesis for ease of identification.

For the purpose of this thesis, the terms, Pacific, Pasifika, Pacific peoples, Pacific Islanders and Pacific communities have been used interchangeably.

Some words have been abbreviated in the thesis. For example objective well-being becomes OWB & subjective well-being becomes SWB.
CHAPTER 1: INTRODUCTION

This chapter provides a critical commentary about the waves of migration of Pacific people to Aotearoa-New Zealand. Just like *ie toga* or fine mats and *maea*, traditionally made rope; woven into this commentary is a Samoan family story and a cultural framework which together, provide a window and a culturally specific lens through which the data specific to the Pasifika communities will be interpreted.

A Samoan interpretation

There have been waves of migration from the Pacific to Aotearoa-New Zealand starting with the migration of a people now known as Māori, who travelled from Eastern Polynesia and settled, making these islands their new home (Pool, 1991; Barclay-Kerr, 2012).

Map 1: Migration of Māori from the Pacific to Aotearoa

A second migration occurred one hundred and fifty years ago and involved European missionaries, settlers, teachers, sailors and whalers. Some returned to their home islands; others stayed and made Aotearoa-New Zealand their home. Eighty years ago another group consisting of Pacific spouses of palagi civil servants and their families, some who had fought alongside the Aotearoa-New Zealand
armed forces in World War II, came to Aotearoa-New Zealand and settled. The last significant wave of Pacific people migrating to Aotearoa-New Zealand occurred fifty years ago (MacPherson, Spoonley & Anae 2001). This last group of people arrived in large numbers between 1950 and 1980 primarily from the Pacific islands of Samoa, Cook Islands, Tonga, Niue and Tokelau. They were attracted by the plethora of job opportunities in the manufacturing and service sectors. It is these Pacific families that have a rich history of stories about the reasons for their migration to Aotearoa-New Zealand. Common themes include improving the social & economic well-being of their families.

Pacific families believed, perhaps erroneously, that Aotearoa-New Zealand was the land of milk and honey (Brown, 2010). Aotearoa-New Zealand offered the potential for employment and job security with a regular household income. The migration settlement and growth patterns of Pacific families are described as being similar to the movements of ‘birds of passage’ moving from economically disadvantaged regions into the work forces of developed countries around the world (Pearson, 1990). The researcher’s family is no exception.

**A Samoan family story**

The researcher recalls some time ago asking his mother, Lealasalanoa Kalala Patolo (nee Tuamasaga) why she came to Aotearoa-New Zealand. In typical fa’aSamoan (Samoan customs and traditions) style she replied with a grand statement “Ia ole ‘auga tonu lena o lo’u olaga lena e te fai mai” literally meaning “Well that’s the root of my life you are asking”. She then proceeded to scold her adult son for not asking this question earlier in her life; all the while the son politely remained quiet. She reached back in her memory bank some 40 to 50 years when she began her journey venturing beyond the shores of her birth place in Western Samoa, as it was known in the 1960s. In her native language, she began her story.

She started with her parents and life growing up in Samoa. It is important to note that when speaking with older Samoan people it is very common in Samoan custom to answer a direct question with a very long story even though the asker would like the answer to be direct. The son just sat and politely listened.
In 1933 the researcher’s paternal grandparents travelled to Safune, Savai‘i to help his grandmother’s parents. After a period of time, the grandfather returned to Faleapuna on Upolu leaving his pregnant wife in Safune with his ‘aiga (family).

Map 2: Map of Samoa

(Source: http://www.nationsonline.org/maps/samoa-administrative-map.jpg)

The researcher’s grandmother and her parents worked on a plantation in Safune, Savai‘i. Whilst at the plantation, the researchers’ grandmother became sick and was anxious to return home as she was weary and thirsty. At the time she was pregnant with the researcher’s father. On their way home, they came across a stretch of water named ‘Uia’. ‘Uia’ was considered to be sacred/taboo known as “Sa le uia” and as the name indicates, it was not meant to be crossed or water taken from it. However, due to the circumstances, the researchers’ great-grandparents retrieved water from ‘Uia’ for the grandmother to quench her thirst. They then continued their journey home.

That night the researcher’s father was born. His great grandparents decided to name the researcher’s father “Sa le uia”. The researcher’s grandfather, who had returned to Faleapuna on Upolu, was not present at his son’s birth. The researcher’s father was the only one of his siblings to be born outside of Faleapuna. It appears though
that his given name was not his known name, which was Lino. Lino was his baptismal name, which was transferred to his birth certificate and thus became his legal name. The researcher’s grandparents also decided that his father’s first born son would also be named “Sa le uia”. This is not an unusual practice in Samoan society. So when the researcher was born, the name Sa le uia, shortened to Uia, was given to him, but the legal name as written on his birth certificate, is Ioane after his godparent. So the researcher grew up where he was known in different contexts by different names. For example, he was known within close family and community circles such as the Kingsland Catholic Church, and amongst local Samoans as Uia. However, throughout his education from the 1970s at kindergarten, primary school and high school, he was known as John which is the English translation of Ioane.

This part of the story is important as it locates the family within Samoa and reflects the notion that many of these early migrant Pacific families had their ‘bodies in one place but their heads and hearts in another’ and that the disjunction between location and orientation was reduced by the fact that this experience was a widely shared one amongst the Pacific migrant community who through the church, language and music, found ways to be together (MacPherson et al, 2001).

Feeling that the conversation was at risk of being side tracked, the son/researcher subtly interrupted and asked “... Mum where did you meet Dad?” Suddenly she returned to the conversation at hand. “Well son I arrived in 1962 [when I was 19] and your Dad in 1963”.

At a young age the researchers’ mother Lealasalanoa, decided that she wanted to explore the land called Aotearoa-New Zealand and to find a way to send money home to her family. She was not only looking for an adventure in a foreign land; she wanted to give back to her family for the love they had showered upon her throughout her life. At home in the village of Lauli’i, Upolu, Samoa, she was very spoilt and did not do the normal chores other girls her age would do. She was pampered by her parents probably because she was the youngest of five female siblings. She wanted to come to Aotearoa-New Zealand initially to see if she liked it.
She reacquainted herself with the researcher’s father, Uia Sr., in Aotearoa-New Zealand several years after she first met him in Samoa. They knew each other from their school days. She attended a Catholic school in Moamoa and the researcher’s father attended a theological school in Maligi. The researcher’s father was much older than his mother and back in the early late 1950s, which was frowned upon by her parents and family. It was further complicated by the fact that her eldest brother did not approve of their relationship. The brothers’ relationship to the sister is known as *feagaiga* is a significant cultural concept in fa’aSamoa society. To the brother, the sister is sacred, often referred to as ‘*le Va tuagane ma tuafafine’*. It is the responsibility of the brother to protect the sister/s and do so at any cost.

The researchers’ mother, *Lealasalanoa*, very quickly learnt that getting started in Aotearoa-New Zealand was difficult; that being economically stable was crucial to surviving in this new land. Back in her homeland, Samoa, people could survive on the natural resources they produced and maintained. For example, shelter was not a major issue as living in extended families, shelter was always available. In Aotearoa-New Zealand you needed money for rent; a home that did not actually belong to you and even more money to purchase a home. In addition, the house needed to be furnished requiring even more money to buy things like beds, lounge suites, etc. and money was required to pay for electricity. The researcher’s mother soon began to think that perhaps Aotearoa-New Zealand was not what she had expected especially as the cost of living in New Zealand was so much greater than back in her village of Lauli’i.

The notion of coming to Aotearoa-New Zealand to make money to send back to the homeland was much more difficult than first anticipated. Finding security for herself and her brother became her first priority. The issue of interacting with the local people also presented challenges. The language, for a start, became a barrier as it was different from the language spoken in Samoa. The researcher’s mother’s brother had the most difficulty because he could not speak English, so communicating with others outside of the family became an arduous task.
Finding a well-paid job became crucial to help sustain a life in Aotearoa-New Zealand and having some left over to send back home. This became more difficult because of the limited education she had, so well-paying jobs were out of her reach. Heavy labour intensive jobs were the only option for her at the time as they paid
relatively well. But the work was heavy going and the only thing that helped her through was determination “ou te le fefe” literally meaning “I’m not afraid”. She was not afraid to look for work, nor afraid of hard work. Throughout her adult life, she worked in factories, restaurants and hospitals. In those early days she was determined to earn money to send back home to her father. This was another commonality amongst these Pacific migrants. As MacPherson et al (2001) state;

Many of the Pacific migrant families who had been born and brought up in the were islands, and who anticipated returning eventually to their Island ‘homes’, saw themselves as sojourners who were’ serving’ non-migrant family and villages. Their remittance earnings made various family, church and village projects possible (p 12).

The researcher’s mother married Uia Patolo Senior in 1966. Uia Snr.’s voice is not prominent in this narrative because in 1986 he died of an asthma attack after working many years in a timber processing factory located in heart of Auckland city, leaving behind Lealasalanoa and their young family. She worked hard and saved enough money to return to Samoa in 1967 with her brother to buy a car for her father and build a house for him in Samoa. But she also channelled her energy into putting down roots in Aotearoa-New Zealand. She and her husband bought a house in Kingsland for nine hundred pounds, not simply as a refuge for her children, but also for other family migrants to stay as part of their journey of resettlement in Aotearoa-New Zealand. They also threw themselves into community service serving in activities such as championing the Samoan community involvement in the Catholic Church in Kingsland. This commitment to the community did not go unnoticed by church officials. At one point, after Losa was born (the eldest child of Lealasalanoa and Uia Snr Patolo), the then Monsignor Pio and Father Sililo (both highly ranked Church officials in Samoa) asked Uia Snr to return to Samoa to become a Catechist, a type of lay preacher. Lealasalanoa argued against this on the basis that there would be no one from the family to continue what they had established for Samoan migrants, and so they remained in Aotearoa-New Zealand.

The Kingsland Catholic community was the hub or central point of community activities and engagement for the researcher and his family. The researcher recollects a hierarchical structure of various entities existing within the Kingsland Catholic community and an interesting relationship with the Grey Lynn Catholic
community both sharing the local church- St Joseph’s Parish on Auckland’s great south road, Grey Lynn (refer to diagram below). It is common that the same members are registered in each of the entities. The financial commitments are sometimes overbearing for example, if there is a funeral then it was common that the same family contributed four times, Ekalesia (Governance), Aufaipese (Choir), A’oga (Sunday School) and Autalavou (Youth Group). The main body Ekalesia generally deal with governance and religious related issues closely related to the Aufaipese, the choir. The Sunday School could be described as the language nest for the community. Classes are held before mass on Sundays and these are taught primarily in the Samoan language with a curriculum based around Catholicism as a faith. An example of this is reciting the books of the Bible; something every child was expected to do. The first Sunday School class in the mid-'80s was held at the researcher’s family home. It is now based out of St Joseph’s Primary School in Grey Lynn next to the church. The Autalavou was traditionally used for nurturing cultural practices such as song and dance. It was also used for social sporting occasions such as kilikiti (Samoan cricket). This dynamic infrastructure connecting community to the church and church to the community like a human bridge is captured by Figure 1 below:

Figure 1: Community-Church relationship and structure

So several years down the track, this sustained service to the Samoan migrant community culminated in an approach from Lealasalanoa’s people to return to Samoa to take on various matai (a titled head of a Samoan extended family) titles. Lealasalanoa’s thoughts on this are reflected in the statement;

...ia o a’u ia ‘ou te le popole pe maua mai se mea.. a fia mau’a sia mea aoga mo a’u .. o lo’u a mafaufulau I mea fo’i ia oute tautala atu ai ... is not to do mo a’u.. po’o le a le mea mamafa e o’o mai mo a’u ... oute mafaufulau e a alofa mo outou o la’u fanau ma kou oalaga...
A literal translation is,

…I don’t think or expect things in return for what I do.. if it comes then it comes… what is most important is the love and well-being for you and your siblings your children and the extended family…

One of Lealasalanoa’s regrets is that her life with Uia Snr was too short. She enjoyed twenty years with him defying her family’s wishes for her to marry the son of a Tongan nobleman of high ranking. One of the greatest rewards for Lealasalanoa is the educational achievement of her children. For example, the researcher received the highest marks for University Entrance at St Peters in his sixth form year group in 1986. This had a bittersweet effect for Lealasalanoa, as while she and Uia Snr were proud of their son, they were sad at the same time, as they knew they could not afford to pay for their son to attend university.

Uia Snr died in 1986 in the researcher’s final year at secondary school. It was at this point that Lealasalanoa decided “ia ole mafuga lega.. ia oti loa lou tama ia o ‘u taumafai malosi a lea e tausı outou.. leaga ou te iloa le mativa ma le leai o se mea…” meaning, “so when your dad died I made it my mission to get you and your siblings educated by any means possible even though I knew we were poor…”.

Lealasalanoa held down several jobs to educate her children.

‘Ia tele o taimi ga e ’ua iloa oute maua avanoa i tai St Peters.. ia ga ’ou faigaluega i Felela i St Peter ae ma te nonofo ma dad, 64’ ga ’ou alu kuka i St Peter.. Ia tele a gai mea sa faigaluega ai faaapega foi mea ga i ai i Malisi i le mea lea sa tou a’o oga muamua iai ... sa ’ou faigaluega ia Sister Julianna e laikiki ai kou pili ma kou uniform.’

A literal translation is,

There were many times and opportunities where I worked to help pay school fees. For example, I worked for the Brothers at St Peter’s College; in 1964 I was a cook for the Brothers and I had numerous other minor jobs.. the same with Marist Primary School for Sister Julianna…I did many jobs to reduce the costs of your fees and uniforms.

Lealasalanoa and Uia Snr had six children (three girls and three boys) all born in Aotearoa-New Zealand. They were all raised in the Catholic faith and identify as being ethnically and culturally Samoan. All children were raised in fa’aSamoa as
Uia Snr was respected by the community for his knowledge of *fa’aSamoa* and was often described as an intelligent and humble man reflected by his appointment as the first administrator of the Samoan Catholic church in Kingsland. The position was voluntary and carried the title *Pelesetene*, English translation President. The role of Pelesetene is similar to other not for profit organisations requiring lots of time and exceptional leadership. Furthermore, the children were raised in a bilingual environment with exposure to the Samoan language in the home, at church, at community meetings and gatherings, and through family and friends.

Fifty years later, four of the six children have families of their own; three of the six (all three girls) now reside in Sydney, Australia; one has returned to Samoa and two remain in Auckland. Thus, it could be said that another migration has occurred in more contemporary times; that of a Niu-Sila (New Zealand) born generation returning to Samoa and a migration from Aotearoa-New Zealand to other lands such as Australia motivated by improving the social and economic well-being of their families and thus expanding the Pacific diaspora. Within this family story is an occupational career story.

**Researcher’s Statistics Journey**

In 1987 the researcher began his ‘statistics journey’ as a temporary survey officer with the then New Zealand Department of Statistics dealing primarily with business and agriculture surveys. After some time in Samoa he returned to Aotearoa-New Zealand and re-joined the now called Statistics New Zealand in 1995 as a Senior Survey Statistician project managing small sub-annual surveys and responsible for the development and maintaining of professional relationships with key business and industry respondents. In 1999 in the lead up to the 2001 Census of Population and Dwellings, he was appointed Pacific Liaison Coordinator and then led to Pacific Manager until he left Statistics New Zealand in 2004. This new position had a wide brief specifically looking at official statistics on Pacific peoples living in Aotearoa New Zealand working alongside the Māori Statistics Unit. This is where the researcher was exposed to, and learnt his trade in social statistics from survey design beginning with the planning and undertaking a statistical survey and its subsequent analysis. This meant the researcher had a greater understanding of collecting information from a population using well-defined concepts, methods and
procedures, and the compilation of such information into a useful summary form. In addition to grasping the technical particulars of statistical procedures, the Pacific Manager was tasked with communicating the language of statistics to the untrained or lay person. To do this the Pacific Manager had to engage, educate and empower Pacific communities on the use of statistics. This process was not as arduous because the Pacific Manager came from those very communities.

This personal narrative of Lealasalanoa and her family is not an isolated incident. MacPherson et al. (2001) claim that as Pacific migrants settled, married and had children, the situation changed. Pacific migrants began to form more permanent communities in Aotearoa-New Zealand in that they established churches, educational, sporting and professional bodies reflecting their commitment to settlement in Aotearoa-New Zealand while simultaneously creating a new home for their children and grandchildren. Just as their ancestors before them, as new opportunities arose, Pacific people began to seek out further opportunities resulting in the growth of diasporic Pacific communities globally. Supported by the rapid growth in telecommunications and technologies, this continual migration process has created transnational island societies which include people who have never been out of the islands and others who have never been in them. This is a far cry from the early wave of Pacific migrants and suggests a range of identities has emerged across the Pacific diaspora depending on the context of the relevant migration wave.

MacPherson, Spoonley and Anae (2001) suggest that Pacific cultural identity;

. . . no longer rests on a more or less homogenous set of shared social experiences in a single location . . . that it is about the diverse identities that result from the various experiences of being a Pacific person in the many places in which Pacific people are found (p 13).

Pacific cultural identity cannot be separated from ethnicity which is defined by Statistics New Zealand (2009) as the ethnic group or groups that people identify with or feel they belong to. Thus, ethnicity is self-reported and people can belong to more than one ethnic group. Ethnicity is a measure of cultural affiliation, as opposed to race, ancestry, nationality, or citizenship. Research undertaken by the Ministry of Pacific Island Affairs with Statistics New Zealand (2011) shows that over time, there has been a decrease in the proportion of Pacific people identifying solely with a single Pacific ethnicity. For example, in 1991 80% of Pacific people
identified as Pacific only. By 2006, this figure had fallen to 70%. The reality for many Pacific people is that they have multiple ethnicities and multiple identities.

**A Pacific Cultural Lens**

Although the writer’s experience is with the Samoan culture and society this reflects in a broad way the same sorts of values and experiences that are also shared with other closely-related Polynesian cultures and societies.

Of significance is that the data about Pacific social well-being can only ever be fully comprehended, in terms of its impact on Pacific people if it is analysed through an appropriate cultural lens, taking into consideration Pacific theories of cultural identity which differ from theories based on the ethnicity paradigm (Linnekin & Poyer, 1996). As Linnekin & Poyer (1996) state;

> At the root of the contrast are epistemological differences about what constitutes a person, and a distinctive theory on ontogeny. Western paradigms of group identity rely both on a biological theory of inheritance and on a psychological model of a discrete, bounded individual…Personal identity in Pacific Islands societies is constructed of different cultural materials. An understanding of community identity must take into account cultural philosophies of personhood (p. 7).

It is argued that Indigenous theories of identity in the Pacific and amongst or between Pacific people are variable, locally and regionally (Linnekin & Poyer, 1996). Yet in relation to personal and local group identity, certain assumptions are shared throughout Oceania including that people can voluntarily shift their social identities; that a person can maintain more than one identity simultaneously and that behavioural attributes are not only significant markers but are also effective determinants of identity (Linnekin & Poyer, 1996)

Tui Atua Tupua Tamasese Ta’isi, the current Head of State of Samoa and a highly respected and influential Pacific scholar and repository of Samoan knowledge, has written extensively about ‘things Samoan’ or what he refers to as ‘the Samoan Indigenous Reference’ (SIR) which he defines as,

> In my Samoan (indigenous) reference, we, as Samoans, Pacific or Māori peoples, are not individuals; we are an integral parts of the cosmos. We share a divinity with our ancestors—the land, the seas and the skies. We are not individuals because we share a tofī (inheritance) with our
families, our villages and our nations. We belong to our villages and our villages belong to us. We belong to our nation and nations belong to us (Tui Atua, 2008, p. 212)

Penehuro Fatu Lefale (2008) accepts Tui Atua’s SIR in the Samoan context as a ‘dialogue of values’; a framework or cultural lens from which to understand the principles of *faaSamoa* based on five core principles including *tofa saili* or search for wisdom, *va tapuia* or sacred relations, Tagaloalelagi or the source of life, *tofa mamao* or search for deeper meanings and *faautaga loloto* or provision of sound based policy advice. The *faaSamoa* is its foundation with the people and their institutions being its key beneficiaries but also its protector. Lefale illustrates the Samoan indigenous reference in the following model of the *fale* (dwelling).

**Figure 2: Fale**

(Lefale, 2008, p 360)

Lefale employed the *fale* as he saw it as an appropriate metaphor as it is central to the *faaSamoa*. He states, “to an outsider, the *fale*’s simplistic structure is just that – a simple round structure that lacks all the modern (western) computer designed structures. But to a Samoan, the *fale* is a very special, highly valued and complex system of systems, each system (represented by *pou tu*, the main posts) having a unique function to ensure the overall system (*fale*) is stable (Lefale, 2008, p 360). Furthermore, the *fale* in pre-European time, was provided with a ‘*Taigaafi*’ which is a fireplace made by mixing earth and lime with water and lining a depression in the floor of the house. A smouldering fire continually burned and served as a constant source from which traditional lamps and fires were lit. The ‘*Taigaafi*’ in the model symbolises *faaSamoa*, that is, a place to serve as a source of Samoan indigenous knowledge systems. For the climatologist Lefale, insights into the
indigenous knowledge systems enhance his scientific explorations of Samoan understandings of climate change.

Tui Atua’s use of the Samoan Indigenous Reference captures the Pacific cultural lens as it applies to Samoans. Given that the researcher is Samoan, it is an appropriate model from which to analyse the data and provide some generic assumptions across Pasifika communities about the data and the emergent trends. In other words, this model will frame the analysis providing a window from which to interpret the data. The cultural understandings will not only highlight deficiencies and the statistical measurements that are employed, but also add cultural depth and relevance to the explanations of well-being for Pacific peoples.

**Outline of thesis**

**Introduction**

The introduction provides literature through Lealasalanoa’s narrative to help describe the findings from this study. Lealasalanoa’s narrative provides a window and a culturally specific lens from which the data specific to the Pasifika communities will be interpreted.

**Literature Review**

The results of the literature review are detailed in Chapter Two. The literature review is structured into seven sections: 1) an outline of Pacific diaspora, community development; 2) the concept of ethnicity- what are the implications for specific communities; 3) What is social well-being and does it mean the same for all groups/societies?; 4) Social well-being measured through social indicators; 5) concepts of Subjective (SWB) and Objective (OWB) Wellbeing; 6) social indicators in Aotearoa-New Zealand context; and 7) a review of the role and relevance of General Social Surveys in social monitoring. This study is located against this set of literature. The literature draws on global and local pieces of work and contributes to an alternative cultural framework for understanding statistics that is generally not well understood by the communities they are measuring.
Method

Chapter three discusses the research methods used in this study. Central to this study is the ‘New Zealand General Social Survey (NZGSS) 2008. The New Zealand General Social Survey: 2008 is a survey of well-being. The NZGSS is a multidimensional, biennial survey that provides data not available from other sources on social and economic outcomes of New Zealanders aged 15 years and over. This chapter is divided into two sections: first section describes the research methods for the New Zealand General Social Survey: 2008. This section outlines the rationale in developing this survey, the instrument used and the sampling method employed. The subsequent section outlines why the New Zealand General Social Survey 2008 data was selected to answer this research question does information about Pacific peoples’ ‘objective well-being’ and ‘subjective well-being’ illuminate existing perspectives on what it is like to be a Pacific Islander in Aotearoa-New Zealand? An explanation is provided of the selected variables and data analysis procedures. Given the time and constraints in completing this thesis only a selection of 2010 GSS indicators are used in the findings and analysis of the data. At the time of completing this thesis the 2012 GSS is currently in the field.

Findings

Chapter four provides a critical commentary about the results obtained from the New Zealand General Social Survey: 2008. The findings of this study are organised into 12 sections; selected core person measures, overall life satisfaction, culture and Identity, economic standard of living and the New Zealand deprivation index, knowledge and skills, housing, physical environment, paid work, leisure and recreation, human rights, social connectedness, and safety and security. Each of these selections approximates a ‘life domain’ and follows the Statistics New Zealand practice. To conclude, the chapter findings from the factor analysis is presented. The factor analysis shows the reduced factor structure of two groups; Pacific peoples and non-Pacific peoples. Of significance is the extraction and presentation of data specific to Pacific peoples of Aotearoa-New Zealand from an alternative framework based on Lealasalanoa’s world view of social well-being.
Discussion and Conclusion

The final chapter (five) reviews the intention of this study. This chapter employs the cultural framework referred to in chapter one, to analyse the data specific to the Pacific communities, to address the three key questions relevant to this research regarding social well-being of Pacific peoples and their communities in Aotearoa-New Zealand, how well (not so well) are Pacific peoples doing compared with other communities and the total population; how well (not so well) are Pacific peoples doing when compared amongst their own communities; and how well (not so well) are Pacific peoples doing in areas of life domains.
CHAPTER 2: LITERATURE REVIEW

This chapter provides definitions of key terms and concepts and the context of their use for the purposes of this research through a critique of the relevant literature. These collectively provide a framework from which to understand the data used in this study analysed from the New Zealand General Social Survey: 2008.

Measuring Progress of Societies, [...] has become fundamental for development and policy-making in general. Improving the quality of our lives should be the ultimate target of public policies. But public policies can only deliver best fruit if they are based on reliable tools to measure the improvement they seek to produce in our lives.

(Angel Gurría, OECD Secretary-General, 24 May 2011, OECD Forum 2011, Paris)

Community development

A modern cohesive society is one of the cornerstones of an inclusive, innovative Aotearoa-New Zealand. To create a more cohesive society, we need strong communities with the social and economic infrastructure to enable people to develop their own capabilities, to overcome disadvantages, to cope with change and to grasp opportunities to advance themselves and society (The Department of Internal Affairs, 2002).

The basic role of Government is to achieve social and economic development while ensuring a protected environment and institutional stability. Achieving this provides a context in which people can flourish, improve levels of productive employment, reduce social problems and enjoy the natural environment. Governments can help individuals, families and communities be more self-reliant and promote greater self-determination as a means to economic and social development. Government can also help people and communities break cycles of disadvantage, and overcome barriers to achieving their own outcomes (The Department of Internal Affairs, 2002).

Government influences the individual investment choices and development of communities through its policies, legislation, fiscal measures and programmes. In doing this, government must consider how the outcomes it identifies as generally beneficial correspond with the outcomes desired by particular communities and individuals. It has to monitor the potential negative effects of its own policies, and
be aware of how these and other interventions impact on activities outside the political sphere.

It is important, therefore, to understand the linkages between individual and family wellbeing and community wellbeing, and to develop criteria for judging when and how government should intervene to help people maximise opportunities in striving to achieve wellbeing.

Communities, including Pacific peoples, are drawn together around common histories and interests, and the wish to improve circumstances so that their members have a chance for a better life. To attain that better life, they or their representative bodies also have to maintain their resources, promote development, enhance community capabilities, and make complex choices. The process of enabling diverse groups to share concerns, plan for the future, capitalise on opportunities and strive toward wellbeing is called community development. Development is defined as any process that enhances the wellbeing of individuals, families, communities and their environment (Robinson, 1997).

To achieve the best results of community development requires the involvement of the most successful in the community as well as the most disadvantaged, so that the solutions are appropriate and benefits are shared. Effective participation provides stakeholders with a chance to influence the process of development and share in the decisions about how resources will be allocated to achieve agreed ends. Strong communities have the ability to manage their own affairs and take control of their own destinies, and to contribute effectively in working with other communities where there is a wider shared interest.

Individuals and families cannot meet all their needs and achieve the level of wellbeing they strive for on their own. Their acquisition of capacities, identification of opportunities and investment choices depend on wider society, institutions and local communities. Without these, they are increasingly dependent on the state to intervene and assist them. The 1988 Royal Commission on Social Policy observed that development and the attainment of wellbeing involves all aspects of family and community life including economic, cultural and environmental processes. An integrated, sustainable development perspective is implicit in a broad understanding
of social and economic development, and community development (McGregor, 2007).

It is fair to say that in Aotearoa-New Zealand the Government (central and local) has a significant role to play, inter alia in the development of migrant communities. For example, its policies influence and are influenced by individuals and groups from these migrant communities. Policies by government enable communities to flourish and contribute to society through participation and working as partners to build a cohesive place to live. Therefore measuring and monitoring the economic and social wellbeing of these communities becomes a critical tool for the communities themselves and government to sustain a cohesive society. Ethnicity then becomes a key determinant for discussing these migrant communities in an Aotearoa-New Zealand context.

**Ethnicity (concept) [What are the implications to specific communities?]**

Durie (2005) distinguishes race from ethnicity;
... race has connotations of biological variation and genetic determinism, ethnicity emphasises social and cultural distinctiveness and places greater importance on world views, lifestyles and societal interaction. (p 2).

Durie suggests that race and ethnicity could fuse to what he terms as indigeneity, where people have long-standing bond to land and the natural environment. In addition, indigeneity has the characteristics of time, culture, an indigenous system of knowledge, environmental sustainability, and a native language. Durie concludes that race and ethnicity are visible characteristics of Aotearoa-New Zealand society, and unless policies reflect that reality, diversity will be masked, best outcomes will be compromised, and assimilation will be fostered – as it was in the 19th century.

Ethnicity has been measured in the New Zealand Census of Population and Dwellings in some form since the middle of the 19th century. There have been changes in the way it is defined and measured – until 1986 for example, the question was based on a ‘race’ concept and people of ‘mixed race’ were required to report their ‘proportion of blood’. So a member of the indigenous Māori population was
classified as ‘Māori’ if they reported half or more Māori blood, earlier ‘half-caste’ has been used. Following a 1983 Statistics New Zealand research report (Brown, 1983), the race-based measure in the 1986 Census was replaced by one reflecting a ‘cultural affiliation’ concept. The 1986 question, while retaining the ‘Ethnic Origin’ title of the two previous censuses, instead asked respondents to ‘tick the box or boxes which apply to you’. This move reflected: changing public and user attitudes to the race-based measure, demographic change (including trends of ethnic intermarriage in Aotearoa-New Zealand society), and an acknowledgment that respondents found it increasingly difficult to answer the question objectively, and were instead effectively self-identifying. The change was reinforced by two subsequent review reports (Statistics New Zealand 1988; 2004). The 1988 report established the self-identification standard, and the 2004 report, among other things, clarified the conceptual basis of the ‘ethnicity’ measure and established new standards for classifying multiple responses.

Sawicka et al. (2003) found in their study of young New Zealanders of Indian, Pākehā, Māori and Greek ancestry that cultural identity depended on the situations they were in; that there were differences between what some saw as an ethnic label rather than a living culture; and that for young Māori there was variation in terms of alignment with “traditional” markers of Māori identity. These changes in defining ethnicity fit with a strong global move to individualistic human-rights ideology that includes the right of people to self-define their ethnicity, including being able to claim more than one (Niezen, 2004). These changes recognise that ethnicity is socially constructed, situational, unstable, and changes over time and place. For example, Callister (2004) traces the official statistical changes in definitions of ethnicity in Aotearoa-New Zealand, noting the sociological construction of ethnic classification slowly changing from an externally defined “race” to a self-defined “ethnicity”. This view is in stark contract from Durie’s account of what he terms as indigeneity of ethnicity. Keddel’s (2006) study of Samoan–Pākehā people found that their expressions of cultural identity ranged from solely Pākehā to solely Samoan, and that these expressions changed depending on age and situation. Keddel (2007) posits that the evolution of cultural identities in Aotearoa-New Zealand is influenced by on-going globalisation and migration, resulting for many in the expression of new cultural forms.
Research conducted by UMR Research Ltd found that participants had varying understandings of the meaning of ethnicity, endorsing Statistics New Zealand’s move to review the concept of ethnicity. The research found that the term ‘Pacific Islander’ was most often defined as a person of Pacific Island ancestry; had geographic origins i.e. from specific Pacific Islands such as Samoa, Fiji and Tonga; referred to physical characteristics such as skin; referred to values, food, culture, tradition and religion; and recognition that the term covered a range of distinct ethnicities (UMR Research Limited, 2009). For some ethnic group definitions such as Pacific Islanders, participants were likely to gravitate towards a definition that was based on what were perceived to be more concrete markers of ethnicity such as ancestry and race.

From this literature it is apparent that over a period of time race and/or ethnicity is in a constant flux. If the basic premise of community identification using concepts such as race and/or ethnicity is unstable then measuring well-being with these markers becomes somewhat cumbersome and problematic when applied to communities that are being measured.

**What is social well-being and does it mean the same for all groups/societies?**

There is much debate in the literature over whether wellbeing is a concept restricted to the individual. McGregor (2007) argues this is a misleading distinction because wellbeing is inherently about the social being: “it is the social human being who exists in society with others and who is both shaped by and shapes the society in which they live” (p.3). It follows that wellbeing is implicitly linked to the notion of a ‘good society’ because the wellbeing of individuals depends on society being structured to enable it. Similarly, there are a range of social collectivities that constrain or enable individual efforts to secure wellbeing. The ‘Wellbeing in Developing Countries Research’ definition recognises the importance of social organisation and culture in generating and transmitting ‘meaning’ through which our relationships are both conducted and constrained (McGregor, 2006). One needs to consider this argument (individual vs. collective) in the context of social integration as well. Does social integration pertain exclusively to collectivities? Or can it also be applied to the individual? As much as social integration is important
for promoting values and relations of individuals and collective communities, so too is the need for social cohesion that bring and hold people together in society.

Spoonley, Peace, Butcher and O’Neill (2005) write about the importance of relationships between host country and immigrants from the Aotearoa-New Zealand experience. The authors view effective and appropriate settlement strategies as a requirement to achieve a cohesive society. The authors propose that governments need policies that enable new settlers to develop a sense of belonging in their chosen place of residence and to fully contribute to the society of the new country. Of equal importance are strategies that instil confidence for New Zealanders that have already made their lives in Aotearoa-New Zealand and the particular institutions and organisations which nurture them. Social cohesion provides an approach to conceptualising and measuring the outcomes of immigration for both those immigrating and the host communities. Significant to developing effective and appropriate policies is the involvement of key organisations and communities, both immigrant and host, in the formation of these policies. So what then is social well-being?

In New Zealand the Ministry of Social Development refer to a statement of the Royal Commission on Social Policy (1988) to describe what wellbeing encapsulates;

[New Zealanders] have said that they need a sound base of material support including housing, health, education and worthwhile work. A good society is one which allows people to be heard, to have a say in their future, and choices in life...[they] value an atmosphere of community responsibility and an environment of security. For them, social wellbeing includes that sense of belonging that affirms their dignity and identity and allows them to function in their everyday roles (p472).

The Organisation for Economic Co-operation and Development (OECD) provides an explanation of social wellbeing as;

Our understanding of well-being or human welfare is pervaded by values that will vary between individuals and social groups. There are also technical difficulties in measuring the dimensions of well-being. Subjective aspects of well-being, such as reported levels of life satisfaction and personal wellbeing, are difficult to measure or relate to underlying explanatory factors. In defining social needs, some
judgement is necessary as to how to value the needs of different groups in civil society. For example, a certain degree of income inequality may be desirable for ensuring incentives for work and may also reflect the preferences of individuals for a particular lifestyle, place of living, occupation and balance between leisure and work or between voluntary caring and paid employment (OECD, 2001, p11).

This can be interpreted as a state of affairs where the basic needs of the populace are met. This is a society where income levels are high enough to cover basic wants, where there is no poverty, where unemployment is insignificant, where there is easy access to social, medical, and educational services, and where everyone is treated with dignity and consideration.

In a recent publication produced by the United Nations it is written that there is no single agreed to definition or understanding of social integration, social inclusion, social exclusion, social cohesion and social participation but the publication provides interpretation of these key terminologies (United Nations Department of Economic and Social Affairs, 2007, p3).

**Social Integration**
Social integration is understood as a dynamic and principled process of promoting the values, relations and institutions that enable all people to participate in social, economic, cultural and political life on the basis of equality of rights, equity and dignity. It is the process in which societies engage in order to foster societies that are stable, safe and just – societies that are based on the promotion and protection of all human rights, as well as respect for and value of dignity of each individual, diversity, pluralism, tolerance, non-discrimination, non-violence, equality of opportunity, solidarity, security, and participation of all people, including disadvantaged and vulnerable groups and persons.

**Social Inclusion**
Social inclusion is understood as a process by which efforts are made to ensure equal opportunities for all, regardless of their background, so that they can achieve their full potential in life. It is a multi-dimensional process aimed at creating conditions which enable full and active participation of every member of the society in all aspects of life, including civic, social, economic, and political activities, as well as participation in decision making processes. Social inclusion is also understood as the process by which societies combat poverty and social exclusion.

**Social Exclusion**
Social exclusion is understood as the condition (barriers and process) that impede social inclusion. Social exclusion is a process through which individuals or groups are wholly or partially excluded from fully participating in all aspects of life of the society, in which they live, on the grounds of their social identities, such as age, gender, race, ethnicity, culture or language, and/or physical, economic, social
disadvantages. Social exclusion may mean the lack of voice, lack of recognition, or lack of capacity for active participation. It may also mean exclusion from decent work, assets, land, opportunities, access to social services and/or political representation.

**Social Participation**
Social participation is understood as the act of engaging in society's activities. It refers to the possibility to influence decisions and have access to decision-making processes. Social participation creates mutual trust among individuals, which forms the basis for shared responsibilities towards the community and society.

**Social Cohesion**
Social cohesion refers to the elements that bring and hold people together in society. In a socially cohesive society all individuals and groups have a sense of belonging, participation, inclusion, recognition and legitimacy. Social cohesive societies are not necessarily demographically homogenous. Rather, by respecting diversity, they harness the potential residing in their societal diversity (in terms of ideas, opinions, skills, etc.). Therefore, they are less prone to slip into destructive patterns of tension and conflict when different interests collide (p 3).

Social cohesion is a key dimension used in Statistics New Zealand’s sustainable development framework (Statistics New Zealand, 2008). Sustainable development by Statistics New Zealand’s definition is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It means ensuring the well-being in environmental responsibility, well-being in economic and social well-being. Social cohesion in this context refers to how well people can meet their needs in society and maintains levels of unity and harmony within society. Social cohesion has implications for the ability of a society to work together to achieve long-term goals and respond to changing conditions. Culture, which is often described as the fourth pillar of sustainability, is included as an element of social cohesion in this framework. For an individual, the sense of belonging to a culture and/or sub-culture may enhance well-being, while for a society it is the strength of the connections across distinct sub-populations or groups that impacts on social cohesion. Principles that underline social cohesion within this framework are: living conditions; equality of opportunities, access to resources; knowledge and skills; governance; international assistance; culture and identity; and social connectedness. We have explored the concepts of social integration and social cohesion as it relates to individuals and collective communities. In an Aotearoa-New Zealand context, social cohesion is often used as a framework for measuring and monitoring social indicators of social wellbeing.
Social Well-being measured through social indicators.

Origins of social indicators

The term social indicators was born and given its initial meaning in an attempt, undertaken in the early 1960s by the American Academy of Arts and Sciences for the National Aeronautics and Space Administration, to detect and anticipate the nature and magnitude of the second-order consequences of the space program for American society (Land, 1983). Since then, social indicators became an important element in national and international efforts to assess important aspects of the social domain in order to inform the public and policy makers. Since their inception, social indicators have evolved and changed in many ways reflecting changes in conceptual frameworks, methodology, and statistical tools (Land, Lamb & Mustillo, 2001). The first significant publication bearing the name social indicators was published in the volume (Bauer, 1966), bearing the name Social Indicators and deploying the following definition;

… social indicators – statistics, statistical series, and all other forms of evidence -- that that enable us to assess where we stand and are going with respect to our values and goals… (p 1).

In 1969 the need for social indicators also was emphasized by the publication ‘Toward a Social Report’ (TSR). It was seen as a perfect counterpart to the annual economic reports, addressing major issues in important areas of social concern (health and illness; social mobility; the physical environment; income and poverty; public order and safety; learning, science, and art; and participation and alienation). The TSR put forward the following influential definition;

A social indicator… may be defined to be a statistic of direct normative interest which facilitates concise, comprehensive and balanced judgments about the condition of major aspects of a society (USDHEW 1969, p 97).

The TSR firmly established the link of social indicators to the idea of systematic reporting on social issues for the purpose of public enlightenment about how people are doing with respect to certain social conditions. New Zealand’s Ministry of Social Development’s Social Reports adopt this notion in its model of monitoring social wellbeing. Set around ten discrete components of wellbeing, which the Ministry call ‘desired social outcomes’ each containing a set of objective social
indicators. A more detailed explanation of the Ministry’s Social report follows later in my review. Although seen as an important tool in measuring national and international aspects of social life, social indicators are hindered with problems.

### Issues with and using social indicators

Moore, Brown and Scarupa (2003) suggest that social indicators are more helpful when used appropriately. They propose three areas of concern. Firstly, that social indicators need to be measured for the appropriate population. The primary purpose of the General Social Survey (GSS) is to provide information on the social well-being of New Zealanders (Statistics New Zealand, 2005). Can then the GSS measure accurately sub-populations such as Pacific peoples? Secondly, social indicators need to be measured at the appropriate geographic level. The GSS is a national survey. Can the sub-sample of just under 400 Pacific peoples truly measure Pacific peoples living in Auckland as well as Pacific peoples in Christchurch? Thirdly, social indicators need to be well conceptualized. That is, social indicators need to accurately reflect the concept that they are intended to capture. There is a raft of literature on cultural diversity and its impact on society. Pacific peoples differ from people from Asia and Europe. Even within these sub-populations diversity exists for example generational, socio-economic statuses, citizen and migrant groups. Indicator measures need to reflect these different conceptualizations. In addition the appropriateness and conceptualization concerns of social indicators as discussed by Moore, Brown and Scarupa there are also issues of engagement of indigenous researchers using science based research methods. Walter (2005) cites three major reasons for limited engagement of Indigenous researchers with quantitative methods of research as it pertains to Australia; the perceived link between quantitative research and science-based positivist research models (which are seen as ‘bad’); the limited Indigenous presence in quantitative research and finally the paucity of relevant Indigenous data. Walter further proposes three major reasons why quantitative research methods and analytical tools might play a more important role in Indigenous research practice; the power of data; reframing the discourse; and transforming the practices of research.

Walter’s concerns have partly been addressed by a recent well-being pilot study conducted in Vanuatu, Vanuatu National Statistics Office & Malvatumauri National Council of Chiefs, 2012). The pilot study, Alternative indicators of well-
being for Melanesia, is a study on well-being which measures happiness and considers variables that reflect Melanesian values such as access to local and natural resources, indigenous cultural practices, and community vitality. The study advocates an alternative to purely economic based (Gross Domestic Product GDP) measures of well-being. The study declared Vanuatu to be the happiest country in the world although this is despite being classified by the United Nations as one of the world’s most impoverished countries and is labelled by the United Nations as “economically handicapped” (Vanuatu National Statistics Office & Malvatumauri National Council of Chiefs, 2012, p. 2). A literature review by Prout (2011) claimed that conventional indicators use unhelpful assumptions and inadequate socio-economic and demographic data for indigenous peoples of Australia. Prout (2011) suggests that the reason for this is because conventional indicators are usually conducted without the knowledge or input of the Indigenous populations they report on, and further claim that the wellbeing indicators are economically driven.

The Vanuatu study also in part responds to Bulmer’s concerns of appropriately conceptualising indicator measures. For example in 2008, leaders of Trade and Economic Officials Meeting (TEOM) for Melanesian Spearhead Group (MSG) endorsed the recommendation from the study to measure the substantial non-cash values that contribute to their people’s quality of life (Vanuatu National Statistics Office & Malvatumauri National Council of Chiefs, 2012, p. 1). Bulmer (1990) identified three primary theoretical and methodological difficulties at the heart of the development of social indicators. The first, Bulmer argues that there is a lack of a theoretical basis which meant that indicators constructed often had no clear conceptual justification. The second issue lay in the lack of a common system of measurement, for unlike economic indicators many of which used money as its system of measurement, the social indicators arena lacked such a measure due to the complexity and variety of subject areas being measured. The final area of difficulty lay in the question of values that is the difficulty in achieving agreement on what constitutes good and bad indicators, and therefore the provision of rationales for the direction of indicator measurements (Bulmer, 1990).

In more recent times Daniel, Cargo, Marks, Paquet, Simmons and Williams (2009) found in their work an imbalance between cultural and scientific utility existed in terms of health and social indicator monitoring with some indigenous communities.
The study developed a tool to assess the scientific utility and cultural appropriateness of community-level indicators for application with Indigenous populations. Stakeholder involvement and feedback was sought from indigenous groups in Canada, Aotearoa-New Zealand, and Australia. The authors’ state:

This tool is unique in providing a guided process that balances scientific and cultural concerns whereby health researchers, community members, and public health funding agencies can identify the most relevant indicators to evaluate the effectiveness of Indigenous community-based prevention efforts, and health and social policy (p251).

The tool used by Daniel et al (2009) does have its limitations. The tool was designed as part of an international collaborative health research programme which means the generalisability of the instrument to other populations, or for use in other types of projects, is unknown. Daniel et al suggest future studies may wish to examine how the psychometric properties reported here might vary according to the characteristics of raters (p.250). In another effort to characterise social well-being indicators, Gale and Crothers’s (2011) descriptive account of the 2008 New Zealand General Social Survey used a multiple discriminant analysis to summarise a range of data comparing various objective social characteristics and various subjective wellbeing (SWB) indicators between non-Māori and Māori. Fifteen objective social characteristics were measured, of those that were statistically significant 9 had a standardised canonical discriminant function coefficient of over +/- 0.100 (potential maximum of 1). For the indicators 8 of 30 indicators were over +/- 0.100,

1. would you say you feel comfortable expressing cultural identity- 0.367;
2. economic living standard derived variable- 0.470;
3. generally, how satisfied are you with your current standard of living- 0.156;
4. do you smoke cigarettes regularly, that is, one or more a day- 0.446;
5. NZ Dep Index- -0.460;
6. how do you feel about the state of lakes, rivers, harbours, oceans, and coastlines that you’ve been to- -0.188;
7. how do you feel about the state of native bush, forests, nature reserves, and open green places that you’ve been to- -0.161;
8. and how safe do you feel walking alone at night in your neighbourhood- 0.282.
Another example of sub-population monitoring is reported in the Tebtebba Foundation resource book, “Indicators relevant for Indigenous peoples, 2008” (Tebtebba Foundation, 2008) It argues that developing indicators relevant to indigenous peoples means developing ways to express their situation and concerns in numerical terms. This may be through the creation of new indicators, requiring new forms of data collection, or simply by the disaggregation of data to ensure that indigenous peoples’ situation is made clear. At the most basic level, simply disaggregating some of the data already collected on a national basis, can help with detection of discrimination, inequality and exclusion. It also allows direct comparisons to be made between indigenous peoples and other social groups. But whichever approach is taken, it is crucial that indigenous peoples participate in defining the issues to be addressed and the indicators used, and those indigenous peoples’ own concepts of well-being are taken into account. Kanawa (2006) also supports the notion of indigenous involvement in indicator development. In his presentation to at the Ottawa conference on Aboriginal Policy Research conference, he highlights the importance of quality research and the development of indicators of wellbeing that are appropriate for the respective indigenous societies. He stresses that indigenous people are proactive leaders and participants in positive developmental change which is driven by their own aspirations and imperatives.

Indigenous people need to take the lead in developing and implementing comprehensive strategies of positive developmental change that are based on their own aspirations and imperatives (p. 2).

Another example of the possibilities of collecting sub-population social statistics using social indicators is Ben-Arieh, Gal, Nepomnyaschy and Garfinkel’s (2007) study conducted in Te Aviv, which used social indicators as a means to examine differences in living conditions and family and children outcomes on a local level. It compared child and family outcomes in New York (NYC) and Tel Aviv (TLV). The study also demonstrated the relevance of social indicators at the local level, not only for measuring outcomes among specific populations, but also in regard to their possible implications for social policies, a most timely task in an era of social services devolution.

This section has highlighted a number of indigenous studies that have identified a variety of issues with the use of social indicator monitoring for sub-populations. Central to these issues is the appropriateness of the social indicators for the
communities they are measuring. The literature points to lack of engagement of the
communities themselves in terms of the development of social indicators and also
the lack of engagement and relatively small group of indigenous researchers
involved with scientific research methods. A good example of how these issues can
be addressed and worked through is the pilot study, *Alternative indicators of well-
being for Melanesia*, (Vanuatu National Statistics Office & Malватумauri National
Council of Chiefs, 2012)

**Subjective (SWB) and Objective (OWB) Wellbeing**

In the social sciences, the term “normative” has broadly the same meaning to its
usage in philosophy, but may also relate, in a sociological context, to the role of
cultural 'norms'; the shared values or institutions which structural functionalists
regard as constitutive of the social structure and social cohesion (Diener, 1994).
These values and units of socialization thus act to encourage or enforce social
activity and outcomes that ought to occur, while discouraging or preventing social
activity that ought not to occur. That is, they promote social activity that is socially
valued. While there are always anomalies in social activity such as “crime” and
“anti-social” behaviour, the normative effects of popularly-endorsed beliefs such as
“family values” or “common sense” push most social activity towards a generally
homogeneous set. From such reasoning, however, functionalism shares an affinity
with ideological conservatism. Disadvantaged communities share these social
values and social activities. Whether or not a statement is normative is logically
independent of whether it is verified, verifiable, or popularly held (Diener, 1994).
Normative statements and norms, as well as their meanings, are an integral part of
human life. They are fundamental for prioritizing goals and organizing and
planning thought, belief, emotion and action and are the basis of much ethical and
political discourse.

Among academics and practitioners there is a lack consensus on well-being. Diener
(1994) describes subjective well-being as consisting of people’s own assessment of
their lives, past and present, either cognitive (e.g. satisfaction) or affective (e.g.
feelings of joy, pleasure, happiness) reflecting the influence of early Greek and 19th
century utilitarian philosophy. Objective indicators (e.g. income) are generally,
albeit weakly, associated with self-ratings of well-being and related indicators,
including overall happiness, life satisfaction and quality of life (Bowling, 2010).
Land’s (2004) essay poses the question of whether the current sphere of knowledge can take social well-being monitoring further by applying a more evidence-based approach to the construction of well-being and indicator domains. Land (2004) further suggests this can be done as it relates to child and youth well-being. Land demonstrates this by citing literature and chart trends to produce a number of findings concerning child well-being index (CWI) in the United States since the mid-1970s. Land also suggests that over the past 30+ years social indicators and quality of life concepts have led to two major schools of thought; objective social indicators and subjective social indicators (subjective well-being, happiness and satisfaction). Objective social indicators is a school of thought can be from Bauer (1996) who emphasised developing statistics that reflect important social conditions and monitoring trends over time. It relies on ‘expert’ consultation for the formation of social indictors. Subjective social indicators is the school of thought that that can be traced to the book *Quality of American life: Perceptions, evaluations, and satisfactions* (Campbell, Converse & Rodgers, 1976). Its origins are based on the use of key social science research techniques, including in-depth interviews, focus groups discussions.

**Aotearoa-New Zealand context**

*Origins of social indicators in Aotearoa-New Zealand: key role of ‘institutionalisation’*

In a paper for the 16th International Conference of the Sociological Association, Crothers (2006) suggests inter alia that institutionalising social indicators has in recent times been very useful because of the collaborative work between the various sectors of Aotearoa-New Zealand society in producing meaningful indicator/monitoring systems. Its success has been driven mainly by Ministry of Social Development and Statistics New Zealand. By institutionalising it inevitably has its flaws namely the ‘misuse’ by governments using it for political gain. Crothers suggests some vehicles to alleviate this tension such as drawing on the independence of the Government Statistician guaranteeing statutory independence of such social monitoring systems or by constituting an independent advisory board. Crothers goes further to suggest that Governments of the right wing persuasion are highly unlikely to embrace social responsibilities than left-wing governments.
Four significant social indicator and social reporting projects in Aotearoa-New Zealand were launched beginning in the late 1990s inter alia as a consequence of the then newly-elected Labour government that had a “...preference for evidence based policy which indicated that enhanced monitoring of social outcomes was needed...” (Cotterell & Crothers, 2007, p.6). These projects were; a paper shaped by Crothers, 2000, “Monitoring the changing social conditions of New Zealanders”; the annual “Social Reports” produced by the Ministry of Social Development since 2001; the biennial regionally based “Big Cities Quality of Life Project” which began in 1999; and the Family and Whanau Wellbeing Project (FWWP). A review of each of these follows in the next section.

**Monitoring the changing social conditions of New Zealanders**

Crothers (2000) sets to advance “an agenda for developing a systematic, comprehensive and coherent set of annual social indicators using available statistics” (p 102). Crothers (2000) constructed a set of 65 indicators, based around existing data available on an annual basis, which allows for regular monitoring of any change. Indicators were chosen on the basis of their potential for being disaggregated into population sub-groups of policy interest. To enhance the theorisation of the model, Crothers (2000) mapped the potential relationships between the domains, noting the potential for “reciprocating influences, joint effects and, of course, feedback loops” (p 109). Crothers (2000) also correlated data in the “indicators time series against year, political party in power, economic growth and CPI change” (p 111).

Crothers’ (2000) study makes a significant contribution to the development of the social indicator field in Aotearoa-New Zealand for four reasons. First, he examines the conceptual issues involved, thus setting up a strong base for his work. Second, he investigates the potential relationships between the domains of interest which underpin his framework. Third, he attempts to measure the strength of the relationship between each of the indicators and selected key variables. Finally, he uses data that allows (in most cases) changes over a time period of approximately 20 years to be examined. The limitations of the study as noted by the author is its lack of indicators in some areas of concern, such as cultural outcomes and political
conditions, and the presence of too many indicators in other areas, such as economic conditions.

**Big Cities Quality of Life Project**

The Big Cities Quality of Life Project (Quality of Life Project, 2007) is a combination of a collection of existing data e.g. government agencies, councils and the Quality of Life Survey, a survey of resident perceptions of wellbeing conducted biennially. Six of Aotearoa-New Zealand’s largest cities began the project. For a time, it captured 12 cities plus a MSD-funded extension to the rest of Aotearoa-New Zealand, but the MSD funding has since been discontinued and only captures six council areas. The project was a response to the growing pressures on these urban communities, and to concerns about the impacts of urbanisation and its effects (Quality of Life Project, 2007). The Big Cities Quality of Life Project uses a mix of subjective i.e. Quality of Life Survey and objective indicators e.g. from the New Zealand Census of Populations and Dwellings to paint a comprehensive picture of the state of each of the cities.

Limitations of the project can appear to be overbearing. For example the selection of indicators is compromised due to unavailability of data for specific geographical regions including issues of agencies having different regional boundaries. Timeliness of data is also a concern due to the considerable reliance on the five-yearly New Zealand Census of populations and Dwellings. The analysis and examination of differences across cities can be problematic because of the large number of indicators. Despite these limitations a major strength of the project is that in recent times it used a primarily subjective survey of residents to obtain data which was not available elsewhere.

Earlier indicator work in NZ foundered on a plethora of difficulties. The raft of social indicators and social reporting initiatives, currently underway in Aotearoa-New Zealand, suggests that the future of such projects is assured. However, these projects face the issues of data availability, data quality and the uncertainty of long term funding. Several developments are helping to reduce these risks and to consolidate the resources needed for continued work. In particular, the analytical capability of social indicator work has been enhanced. This allows the social indicators not only to measure change but also ascertain in great detail where it is occurring, and from this foundation, to point to the drivers of the change. In turn,
such more closely calibrated indicators should allow the development of policy and programmes to overcome the discovered deprivations. (Cotterell & Crothers, 2007).

**Family and Whanau Wellbeing Project**

FWWP was a 5-year research programme supported by the Social Science funding pool of the Foundation for Research, Science and Technology (FRST). The principal goal of this programme was to develop ways to examine and monitor the social and economic determinants of family and whānau wellbeing, and to show how these changed over the 1981–2006 period. The report was made possible by the enormous effort over many years of the Centre of Methods and Policy Application in the Social Sciences (COMPASS), and its earlier designation as the Social Statistics Research Group (SSRG), The University of Auckland. Some issues with FWWP are similar to issues of indicators measuring sub-populations, for example, the ethnic group Pacific Islanders. Advantages are that the FWWP used Census data allowing for assessment of societal patterns over a long segment of time. FWWP focuses on members of certain sub-populations i.e. family and household level rather than individual. Use of Census data allows for objective living conditions, which in turn intrinsically relates to people’s command over resources, which in turn affects their quality of life (Cotterell & Crothers, 2007). Limitations are that the use of Census data for FWWP based on weak assumptions such as relationships of family/households; lack of data availability such as housing installation not being asked every census; lack of detailed interpretation of data such as income data, that is collected in bands rather than discrete amounts; Statistics New Zealand’s definition of family such as within households rather than multiple households (Cotterell & Crothers, 2007). This notion of family becomes problematic when dealing with cultures that practice extended family principles and recognise aunts, grandparents etc. as essential to family living and wellbeing, for example, communities such as Māori and Pacific peoples.

Data from the FWWP has been used to analyse changes in wellbeing for Pacific peoples over the period 1981-2006 (Cotterell, von Randow & McTaggart, 2009). Paramount to the research report is the issue of how to ascribe ethnicity to a household. This involved two stages - the development of a method for ascribing a “general” Pacific ethnicity to a household, and then ascribing a particular/specific Pacific ethnicity to a particular household.
The issue of how to identify family and, by association, household ethnicity has provoked considerable discussion among academics and analysts in Aotearoa-New Zealand (for example, see Callister, 2004). Can a Pacific family be “categorised” as one where one of the adults identifies as Pacific, or only where both adults identify as Pacific; or is it one where a majority of the family members identify as Pacific, or one where any one member of the family identifies as Pacific? Data on ethnicity are collected as attributes of an individual, and therefore ascribing an ethnicity to a family is theoretically problematic. In addition, the increasing levels of ethnic intermarriage and increasing numbers of people with multiple ethnic identities make it difficult for researchers to use and analyse ethnicity data (Cotterell et al, 2009).

The method employed to define a Pacific household in FWWP is that at least one of the adults living within the household identifies as Pacific. The issue of what constitutes a “Pacific” household is similarly far from clear cut. In defining whether a household was of Samoan, Cook Island, Tongan or Niuean ethnicity, FWWP employed a similar method to that for defining a Pacific household. That is, at least one of the adults identifies as Tongan, and so on for the Samoan, Cook Island and Niuean households. The approach does mean that there is overlap among the categories through intermarriage. For instance a household with one Samoan adult and one Tongan adult will be represented in both ethnic sub-groups. Further analysis found that the extent of this overlap was found to be very small (Cotterell et al, 2009).

**New Zealand Social Reports**

The social report provides a picture of progress towards better social outcomes for New Zealanders. It uses a set of statistical indicators to monitor trends across key dimensions of people’s lives at national, regional and territorial authority levels. The first edition of the Social Report was published in 2001.

The report enables an examination of how people are faring in Aotearoa-New Zealand, how this has changed over time, and how it varies for different groups in the population. It helps identify adverse trends in social outcomes at an early stage. While the report cannot always illuminate what is driving these trends, it can point
to the need for further research to understand what is happening and what actions need to be taken to address them. The trends identified in the social report are influenced by many factors. The economy, government policy, international factors, demographic change and the decisions and choices of individuals, families, communities and businesses all affect social indicators. The cross-cutting nature of many social issues means the social report is not a tool for evaluating the effectiveness of specific government policies.

Domains and social indicators
The New Zealand Ministry of Social Development defines ‘outcome domains’ or ‘desired social outcomes’ “those aspects of life that society collectively agrees are important for a person’s happiness, quality of life and welfare” (Koopman-Boyden et al, 2007, p6). In the 2010 Social Report there are 10 such domains. All ten domains are captured in the 2008 General Social Survey (GSS), with civil and political rights captured by the GSS with the domain name of human rights. Some findings from the 2008 GSS are included in the analysis of the 2010 social report; household composition, civil and political rights, social connectedness, and life satisfaction domains. The ten domains of Wellbeing are: health; knowledge and skills; paid work; economic standard of living; civil and political rights; cultural identity; leisure and recreation; physical environment; safety; and social connectedness. Each of these domains is measured by several social indicators, making 43 indicators currently being reported on. The Ministry also describes the key characteristics of ‘indicators’ in much detail;

Social indicators are statistical measures that can be repeated over time to illustrate changes in the quality of life or social wellbeing. Some indicators measure change in the outcome of interest directly (eg median hourly earnings in the Paid Work domain). Others are known to be good predictors of later outcomes (eg cigarette smoking, in the Health domain, is a predictor of later health problems) (Ministry of Social Development, 2010, p. 5)

In the ‘2010 Social Report’ there are 43 wellbeing indicators. The ‘2010 Social Report’ included indicator measures from the 2008 General Social Survey; voter turnout, contact with family and friends, voluntary work, and overall life satisfaction. It is also difficult to ascertain if certain indicators appear in both the ‘2010 Social Report’ and the ‘2008 GSS’ this is because they are different in collection types. What this means is the ‘2010 Social Report’ is a collection of
secondary data i.e. surveys or reports already gathered. The ‘2008 GSS’ is the primary collector of data from its survey. For example, the health domain includes an indicator about smoking. The sources for the ‘2010 Social Report’ is primarily ascertained from Ministry of Health (2009) ‘Tobacco Trends’ survey and Statistics New Zealand’s (2010) ‘Alcohol and Tobacco Available for Consumption’ survey. On the other hand, the ‘2008 GSS’ specifically collects data on cigarette smoking behaviour i.e. Have you ever been a regular smoker of one or more cigarettes a day? Another difference is the ‘2010 Social Report’ interprets its secondary data sources; the ‘2008 GSS’ describes the findings from its data.

The social report indicators are a mixture of objective measures (e.g. obesity, assault mortality) and subjective measures that reflect how people feel about a situation (e.g. satisfaction with contact with family and friends, overall life satisfaction). For example objective indicator measures for the social connectedness domain measures: telephone and internet access in the home; regularity of contact with family/friends; trust in others; proportion of the population experiencing loneliness; and contact between young people and their parents.

The report uses the most recent data available. A number of indicators rely on data from the five-yearly population census, either directly (e.g. household crowding) or indirectly (e.g. life expectancy for the Māori population). New social surveys have added to the enhancement of the report. The latest being the New Zealand General Social Survey (NZGSS) the survey investigated in this thesis. Before the NZGSS, Big Cities QOL life survey and also Ministry of Social Development’s surveys were used to fill some gaps in the Social reports.

Of the 43 indicators, 31 indicators in the ‘2010 Social Report’ allow for a Pacific peoples break-down but very few give an in-depth discussion on Pacific people’s well-being. For most indicators in the 2010 report, Pacific peoples have improved since mid-1990. While these improvements in the Pacific peoples population have been greater than those for the total Aotearoa-New Zealand population, Pacific peoples outcomes overall are poor compared to other communities or populations. For example Pacific peoples compared poorly to other communities in 14 indicators, for example; Pacific peoples are more likely to be over-represented in potentially hazardous drinking; they are more likely to be classified as obese.
especially Pacific children under the age of 15; Pacific adults have the lowest literacy skills in English and the lowest in adult educational attainment; Pacific peoples have historically been over-represented in unemployment statistics, (and in 2008, they were the highest unemployed of all ethnic groups); Pacific peoples live in overcrowded housing and self-perceive as being marginalised because of their race. 21 of the indicators either do not mention any Pacific people’s commentary, or they have a cursory mention. On the positive side, 8 indicators showed Pacific peoples in a better light. For example, in first language retention and voluntary work, Pacific peoples are the highest represented group. Pacific peoples are also represented favourably in cultural and art activities and in Māori language speakers. Rapid growth has been seen in participation in tertiary education, school leavers with higher qualifications and participation in early childhood education, so the future looks more prosperous for the Pacific community.

**Other social indicator projects in Aotearoa-New Zealand**

In 2006, the Ministry of Social Development initiated the project ‘The Northcote Child and Youth Development Project’ a collaboration to support children and young people in the Northcote community. The project’s aim is to improve social, economic, environmental and cultural outcomes for children and young people by improving services and support in the local area. Statistical profiles were collated for the area that included an ‘Indicator List’ of records where local statistical information can be sourced and is useful for community planning and reports. The Indicator List enabled communities to collect and compile good quality information about their community. The original ‘domains’ for the list were; people, Māori measures of wellbeing, knowledge and skills, economic standard of living, economic development, housing, health, leisure and recreation, safety, social connectedness, and civil and political rights. Indicators/measures are similar to those used in the MSD Social Report and other social indicator programmes. For example, the social connectedness domain collects data on diversity within the community; traffic and transport such as number of motor vehicles households have as well as unpaid or voluntary work. The Indicator List is regularly updated to include more or better information. In the main, existing data is used and no new information is collected specifically for the area. Commentary on health outcomes is usually based on the consideration of health rates. This involves knowledge of the frequency of events within a certain
population at a particular time or over a specified period of time. For example, lung cancer mortality among Māori women in 1996 would be expressed as the number of Māori women dying of lung cancer in that year (the numerator) derived from the health and vitals datasets, as a proportion of the number of Māori women in the population in 1996 (the denominator) derived from the New Zealand census. This underscores the importance of understanding the derivation of the various data, how they are collected, and the quality of data and the impact of any changes to these over time (Te Ropu Rangahau Hauora a Eru Pomare, 2000).

Statistics New Zealand sets out a generic guideline for developing, selecting and defining indicators (Statistics New Zealand, n.d.). The guidelines are a starting point for those involved in development, interpretation and dissemination. In selecting an indicator, the guideline sets out 12 criteria that an indicator should meet: be valid and meaningful; be sensitive and specific to the underlying phenomenon; be grounded in research; be statistically sound; be intelligible and easily interpreted; relate where appropriate to other indicators; allow international comparison; ability to be disaggregated, consistent over time; linked to policy or emerging issues; and compel interest and excite. It is also noted that the need to balance each criteria would be different depending on the indicator under development. The guideline suggests a definition of an indicator:

An indicator is a summary measure related to a key issue or phenomenon that can be used to show positive or negative change. The evaluative nature of an indicator distinguishes it from the descriptive nature of statistics. Indicators are measurable aspects of a project/environment/society that can be used to monitor its progress and direction. A key function of an indicator is to reduce the volume of information to which decision makers must attend (Statistics New Zealand, n.d., p 8).

Te Puni Kōkiri (Ministry of Māori Development) describes a similar process for developing quality of life (QOL) indicators for Māori. Te Puni Kōkiri (2007) expresses an indicator as “… a quantitative or qualitative measure or combination of quantitative and/or qualitative measures that provide insight into a process, a project, or a product, to enable assessment and improvement…” (p13). The Te Puni Kōkiri (TPK) report goes further to say that indicator/s are used to provide evidence for a concept or theory. It is possible that the indicator may need to be modified to answer the original research question. According to TPK the indicator development process begins with a theory or concept which is then researched then measures are
applied. TPK’s (2007) interpretation of measures is “…a result of the activity involved in determining dimension, i.e., size, etc. through measuring. Measures should be objective, timely, simple, accurate, useful, and cost-effective…” (p.13).

From these measures indicators are produced. TPK describes three main purposes for (QOL) indicators, firstly for performance measurement in Te Puni Kōkiri’s statement of intent (SoI). TPK’s statement of intent sets out the activities the organisation is planning to engage in to achieve its strategic outcome of realising Māori potential. The second main purpose is developing an evidence base for TPK’s policy development. The final main purpose is reporting the impact of TPK’s investment decisions and service delivery on Māori QOL. For TPK, indicators provide evidence of whether the purchase of inputs can be attributed to outputs and whether those outputs can be related to outcomes.

Included in this report are findings from a report prepared by Durie et al. (2002) for Te Puni Kōkiri. The report interviewed 25 key persons on Māori outcomes and indicators. It revealed that Māori outcomes had similarities with non-Māori outcomes such as a good job, access to education, to be healthy, or to own their own home. However, it also revealed that Māori had outcomes that were beyond the scope of indicators generally collected by mainstream measures on well-being. These outcomes were centred on Māori’s uniqueness, aspirations specific to their culture and values. Eight such outcomes areas were identified: Māori well-being - well-being that is not solely based on social and economic factors, but is also inclusive of culture and spirituality dimensions; whānau well-being - where whānau (family) is as important as individual well-being where Māori values, customs and language is an indicator of positive well-being; where there is evidence of cultural development; where Te Reo Māori is a fundamental requirement of well-being growth; where asset or infrastructure growth enhances positive growth for Māori; tino rangatiratanga is expressed through Māori autonomy, self-determination and self-governance is positively adhered too; kotahitanga or collectivity within Māoridom strengthens Māori communities; and finally good positive settlements of the Treaty of Waitangi grievances, where all Māori are able to move on from a grievance mode to a development mode, where resources gained from the completion of settlements are used for future-related activities. It is not unreasonable that the first four outcomes can be translated or transferred to represent Pacific peoples’ aspirations and uniqueness. These notions of culture,
spirituality, whānau, collectiveness, customs, language and cultural practices also resonate with Pacific peoples.

In addition to the work by Te Puni Kokiri and works commissioned by Te Puni Kokiri is the *Best outcomes for Māori: Te Hoe Nuku Roa longitudinal study*. The study was first started in 1994. This study of Māori households is run by the Research Centre for Māori Health & Development and Te Putahi-a-Toi, the School of Māori Studies at Massey University (Forster, 2003). The aim of the study is to produce an empirical base that will help to provide information for Māori and other planners, and to facilitate the development of policies and programmes appropriate to Māori in cultural, social and economic terms. To this extent the rules, practices and principles of the study are based on the continual involvement of key interest groups and Māori institutions across all phases of the research, as researchers, in the project design (advisory team), data gathering (community interviewers), and dissemination (accessibility of research information and findings for all Māori and non-Māori) (Forster, 2003, p. 50). Having “whānau” Māori-centred research approach enables Māori communities to more effectively participate thereby contributing and realising their aspirations as Māori people alongside other communities in Aotearoa-New Zealand. Furthermore the McKenzie and Carter (2010) review of a number of longitudinal studies concluded that *The Best Outcomes for Māori: Te Hoe Nuku Roa Study* remains the only current longitudinal study in Aotearoa-New Zealand that is both Māori centred and capable of measuring change in self-defined whānau over time.

This section has highlighted the importance of community engagement specifically Māori at all stages of social indicators development, implementation and dissemination. The significant benefits are that the measuring and monitoring of economic and social wellbeing of these communities becomes a critical tool for the communities themselves and government to sustain a cohesive society.

**Global GSS**

This thesis undertook an investigation into the global occurrences of the GSS to help build a context for the current research. It showed that the first GSS study was conducted in 1972 in the United States of America. It also found that GSS is not
commonly practiced by most countries around the globe. The GSS basically monitors social change and the growing complexity of social societies.

There are four major international contributors to social monitoring in terms of social indicator development based on GSS or similar surveys – United States of America, Germany, Great Britain and Canada. Eight years after the United States conducted their first GSS, Germany in 1980, Great Britain 1983 and Canada 1985 conducted their inaugural GSS programs. Funders of the various GSS programs are a mixture of private sector investors and government agencies; none are fully controlled by central government. This can be problematic because private investment into such national surveys can be seen as being overly biased. For example, findings from surveys may not ‘correctly’ represent the communities they are studying, leading to policies that are not appropriate for those communities. India, Canada, Australia and Aotearoa-New Zealand have similar statistical office structure in that “Statisticians” are appointed by central government. Aotearoa-New Zealand’s Government Statistician is unique in that through the Statistics Act 1975 gives the appointee independence from central government, meaning it can operate and conducts its affairs with limited government influence, for example, release dates of major statistics such as GDP is at the discretion of the Government Statistician.

The United States, Germany, Great Britain and Australia similar to Aotearoa-New Zealand use the face-to-face method for administering the survey. Canada use a computer assisted telephone interview method. Survey samples range from 3,000 in Great Britain to 25,000 in Canada. The sample size for the Canadian GSS is significantly larger than any other GSS of similar studies because it may produce estimates for small population groups such as minorities, elderly and peoples with disabilities. United States, Great Britain and Canada GUSS surveys are conducted annually with Australia conducting theirs every four years. Germany, like Aotearoa-New Zealand, holds theirs bi-annually. It is interesting to note, that the two most populated countries in the world People’s Republic of China and India do not conduct general social surveys, they reply heavily on their Census surveys.
Summary

The beginning of this chapter continued from the introduction chapter by putting a Government perspective of community development and gave legitimacy to the Samoan narrative articulated in chapter one. A key factor of this thesis is the concept of ethnicity and literature on this topic was explored. This was followed with international literature on issues relating to social wellbeing, its various definitions, its origins, its usage and also major contemporary thinking around subjective (SWB) and objective (OWB) wellbeing. The Aotearoa-New Zealand context in terms of social well-being is explored in detail, from its origins and how it is measured in Aotearoa-New Zealand to relevant major works (projects and reports) such as; Big Cities quality of Life, Family; Family Whanau Wellbeing Project; and Aotearoa-New Zealand Social Reports. The chapter concludes with a global investigation into occurrences of the General Social Surveys.

It is apparent from the literature that new ways of measuring social wellbeing especially for sub-groups need to be explored. It seems that there are tensions between the conventional statistical measures of well-being, which for the most part, have focussed on social or economic variables, the interplay of which leads to increase or decrease in wellbeing; and the more holistic experiential characterisations of participants. The latter are much harder to measure statistically, yet as evidenced by the Vanuatu National Statistics Office & Malvatuma'uri National Council of Chiefs (2012) and the Best Outcomes for Maori study (Te Puni Kokiri, 2007), there are approaches that attempt to reconcile those tensions. A strong argument can be made for those involved in developing statistical measures for the social well-being of Pacific peoples, to develop new frameworks which reach out and capture the voices of Pacific peoples living in Aotearoa-New Zealand.
CHAPTER 3: METHOD

This chapter outlines the research method employed in this study. The research data used in this study is gathered from the New Zealand General Social Survey: 2008. This chapter is divided into two sections: first section describes the research methods for the New Zealand General Social Survey: 2008. This section outlines the rationale in developing this survey, the instrument used and the sampling method employed.

The subsequent section outlines why the New Zealand General Social Survey 2008 data was selected to answer this research question. An explanation is provided of the selected variables and data analysis procedures.

**New Zealand General Social Survey (NZGSS)**

The information for this sub-section (NZGSS) is primarily from the Statistics New Zealand (SNZ) website and related publications. SNZ often publishes technical reports on the surveys they conduct and some they co-produce. The researcher has, where appropriate, paraphrased to mitigate the jargon and technical language used by Statistics New Zealand. In saying this, care has been taken not to weaken to the quality of this sub-section.

The NZGSS is a survey of well-being. The NZGSS is a multidimensional, biennial survey that provides data not available from other sources on social and economic outcomes of New Zealanders aged 15 years and over. The survey provides the ability to look at information on different outcomes for the same person at a specific time. The survey also gives new information about how people think they are faring, which complements other objective information about their situation, such as employment status, income, and material standard of living (Figure 3).
Figure 3: New Zealand General Social Survey 2008 Chart

General Social Survey
Field Test Content

Population
- Age
- Sex
- Social Mental Status
- Ethnicity
- Country of Birth/Year of Arrival
- Relationship in household
- Marital Status
- Dependent children
- Region
- Family type

Self-reported measures of life satisfaction

Health
- Self-assessed general health status
- Self-assessed mental health status
- Self-assessed physical health status
- Gastro-oesophageal reflux disease

Safety and Security
- Personal income - Sources of personal income
- Household income
- Economic Living Standard Index Short Form
- Perceptions of safety and security

Economic Standard of Living
- Participation in employment
- Main occupation
- Hours worked
- Number of jobs
- Satisfaction
- Time spent at work
- Type of job
- Participation in household

Paid work
- Satisfaction with housing
- Problems with housing
- Number of rooms
- Tenure of household

Housing
- Satisfaction with amount of leisure time
- Barriers to leisure

Leisure and Recreation
- National identity, sense of belonging
- Perception of ability to develop, express and maintain culture
- Generation of New Zealander

Physical Environment
- Satisfaction with built environment
- Satisfaction with natural environment
- Behaviour relating to sustainability
- Preparedness for natural disasters

Culture and Identity
- Contact with family & friends
- Barriers to social contact
- Formal voluntary work
- Informal volunteering outside home
- Feelings of isolation
- Support across households
- Inequality of help in times of need
- Active participation in groups

Social Connectedness

Human Rights
- Discrimination
- Tolerance of difference
- Voting participation

Number of topics considered:
- Preliminary: 4,800 documents proposed 72 topics
- Additions: proposed further 1,250 topics
- 35 new topics from stakeholders were approved for further consideration
- Agreed to topics signed off for inclusion (and some revised variables)
- 11 topics to be considered for future iterations

(Source: Statistics New Zealand http://www.stats.govt.nz/)
The data collected in the NZGSS is similar to GSS data collected in other Organisation for Economic Co-operation and Development (OECD) countries. Where international comparisons are made, data from the NZGSS is broadly comparable with data from other countries although some questions, scales, or survey populations may vary between countries.

The NZGSS is repeated every two years, which provides a base for measuring changes in outcomes over time and across population groups (using both subjective and objective measures). It also allows for timely analysis of the impacts of events on social and economic outcomes (for example, preparedness for natural disasters). The NZGSS: 2008 was in the field from April 2008 to March 2009 a second iteration of the survey in the field from April 2010 to March 2011 and the third survey in the field from April 2012 to March 2013.

Data collection and instrument
The data collection period took place over a twelve-month period and was run from April 2008 to March 2009. The NZGSS: 2008 personal questionnaire was answered by 8,721 individuals. Individuals were selected from dwellings that were selected at random using a multistage sample design. The target response rate for the NZGSS: 2008 was 80 percent. The achieved response rate was 83 percent. The response rate was calculated by dividing the weighted percentage of eligible individuals who responded by the estimated total number of eligible individuals.

Interviews were conducted using a computer assisted data collection (CADAC) method called computer-assisted personal interviews (CAPI). Interviews on average lasted 45 minutes. Computer assisted data collection (CADAC) is a central part of the current revolution in measurement of public opinion (Saris, 1991). Three main arguments are considered when using CADAC as a tool for data collection: increased speed, reduction in costs or improvement in data quality. For social scientist data quality is very important and the central issue for data collection. An example of dealing with data quality in CAPI is the ability of the interviewer to immediately make corrections. This means that missing or errors in data are detected instantly avoiding returning to the respondent for additional information (Saris, 1991).
Survey content
The NZGSS is made up of two questionnaires: a personal questionnaire and a household questionnaire. One individual in the household aged 15 years or over answers the personal questionnaire. That individual is randomly selected from within the eligible members of the household (a computer-generated random selection). The personal questionnaire consists of these components referred to above as domains: core personal demographic information, paid work, economic standard of living, health, knowledge and skills, physical environment, safety and security, support across households, culture and identity, housing, leisure and recreation, social connectedness, human rights, and overall life satisfaction. Questions in the economic standard of living module were only asked of those respondents aged 18 years and over. One individual in the household completes the household questionnaire, which collects information about all the residents in the household, for example family relationships and household income. This individual is usually the person who completed the personal questionnaire.

Specific questions/items for both questionnaires are not discussed in any detail because we do not have access to computerised questionnaire. However a sample paper format of the electronic questionnaire is used as a guide. Note: The NZGSS was collected using an electronic questionnaire which cannot be replicated in paper format.

Sampling method employed
The target population for the NZGSS is the usually resident population aged 15 years and over in private dwellings in the North Island, South Island, or Waiheke Island of Aotearoa-New Zealand. This population is based on annual resident population estimates for Aotearoa-New Zealand.

The target population includes; Aotearoa-New Zealand usual residents temporarily overseas, Aotearoa-New Zealand usual residents temporarily staying elsewhere in Aotearoa-New Zealand (including other permanent and temporary private dwellings, institutions, and non-private dwellings; and people who have no fixed abode, but were found in private dwellings on the household enumeration date), people in the Aotearoa-New Zealand armed forces if they reside in a private dwelling, and young adults at boarding schools (young adults who fall into this
category are not surveyed in the personal questionnaire, but are included as members of the household in the household questionnaire).

The target population excludes; overseas visitors and international students who expect to be resident in Aotearoa-New Zealand for less than 12 months, people living in non-private dwellings (such as hotels, motels, boarding houses, hostels, and homes for the elderly), patients in hospitals, or residents of psychiatric and penal institutions, people living on offshore islands (excluding Waiheke Island), members of the non-New Zealand armed forces and their dependents, non-New Zealand diplomats or diplomatic staff members and their dependents, Aotearoa-New Zealand usual residents temporarily overseas who don't return within the survey period, Aotearoa-New Zealand usual residents temporarily staying elsewhere in Aotearoa-New Zealand (including other permanent and temporary private dwellings, institutions, and non-private dwellings; and people who have no fixed abode, but stay at private dwellings) who do not return within the survey period, and Aotearoa-New Zealand usual residents who live in remote areas that are costly or difficult to access.

Statistical weights
The survey has two sets of weights attached, one for the household, and one for the person. The weights are used for answering different types of questions. The household weight is used when describing the attributes of a household, for example how many households have dependent children who live outside that household. The person weight is used when describing the attributes of a person, for example how many people are ‘very satisfied’ with their life satisfaction.

Each of these weights is calculated over three stages. An initial selection weight is selected, then it is adjusted for non-response, and then for calibration. The population totals for the NZGSS are annual resident population estimates. However, in this analysis the data are reweighted to reflect the survey sample size of 8,721.

Reliability of survey estimates
Two types of error are possible in estimates based on a sample survey: sampling error and non-sampling error. Sampling error can be measured and quantifies the
variability that occurs by chance because a sample rather than an entire population is surveyed. Non-sampling errors are all errors that are not sampling errors. These errors are not quantifiable and include unintentional mistakes by respondents, variation in the respondent's and interviewer's interpretation of the questions asked, and errors in the recording and coding of data. Statistics NZ endeavours to minimise the impact of these errors through the application of best survey practices and monitoring of known indicators, for example non-response.

Sampling errors have been estimated using a jack-knife method, which is based on the variation between estimates, and based on taking 100 mutually exclusive subsamples from the whole sample. Sampling errors are quoted at the 95 percent confidence level. For example, if the estimated total number of people is 1,575,200 and the estimate are subject to a sampling error of plus or minus 35,500 or 2.3 percent (measured at the 95 percent confidence level), that shows that there is a 95 percent chance that the true total number of people lies between 1,539,700 and 1,610,700.

Smaller estimates, such as the total number of people unemployed (11,400), are subject to larger relative sampling errors than larger estimates. This estimate is subject to a sampling error of plus or minus 3,200 or 27.9 percent (measured at the 95 percent confidence level).

Analysis of the Asian and Pacific groupings indicated that the samples were representative of the population. However, conclusions about these and other groups with small population size can potentially be vulnerable to unmeasured differences between the survey participants and the population.

Imputation for item non-response
Occasionally, some question responses are not recorded and in these instances, imputation is sometimes used to ‘fill’ the gaps. Imputation is very selectively done to maintain the quality of the data, as this allows more questionnaire responses to be included in the final dataset. Imputation was not done for all questions, but only for some of the demographic variables: age, personal income, and labour force status questions. Very little imputation was required for the NZGSS (see the table below for a breakdown of the number of imputations).
Imputation was done using donor imputation, a hot-deck imputation method, which replaces missing values by data values from another record (a donor). This donor will be identified by matching the records on other (complete) matching variables and will be the one that most closely matches the record with missing values.

<table>
<thead>
<tr>
<th>Type of imputation</th>
<th>Number of imputed records</th>
<th>Percentage of imputation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>17</td>
<td>0.20</td>
</tr>
<tr>
<td>Income</td>
<td>306</td>
<td>3.51</td>
</tr>
<tr>
<td>Labour force status</td>
<td>38</td>
<td>0.44</td>
</tr>
</tbody>
</table>


Edits

An edit is when a respondent’s inconsistent answer is changed to reflect the correct answer based on information they have provided. In total, only 45 edits were made throughout the survey. Edits were made only where there was clear information provided elsewhere by the respondent to inform a change.

**Ethnicity**

Ethnicity, as defined by Statistics New Zealand for the GSS, is the ethnic group or groups that people identify with or feel they belong to. Thus, ethnicity is self-perceived and people can belong to more than one ethnic group. Ethnicity is a measure of cultural affiliation, as opposed to race, ancestry, nationality, or citizenship. Generally GSS outputs its ethnicity data using total response ethnicity data. This means all responses recorded for the respondent is counted against the relevant ethnic response. However single and combination ethnicity data can also be acquired from the NZGSS dataset.
For this study a prioritisation method is applied. Prioritisation is when a respondent who records multiple ethnic responses is allocated to a single ethnic group. For this study Pacific is the top of the prioritisation, followed by Māori, Asians, other non-European groups, and other European ethnicities, with ‘New Zealand European’ as the residual. For example, people of Samoan, Tongan, and German ethnicities would be counted (when outputting at the highest level of the classification) once in the Pacific ethnic group only. Note this respondent would not be counted in the European ethnic category. The reason for applying this method is because the researcher wants to capture the Pacific ethnic group in isolation of other ethnic groups and to gain the largest number of respondents for this study.

**Why GSS 2008 data was selected to answer this research question**

For this study no primary data was collected, therefore the only ethical consideration given is access and storage of data used for the research. Access to NZGSS: 2008 dataset has been approved by Statistics New Zealand via Statistics New Zealand – Confidentialised Unit Record File Programme (CURF). Both researcher (John Patolo) and Primary Supervisor (Professor Charles Crothers) have signed the CURF licence agreement with Statistics New Zealand October 2009.

Three methods of analysis were conducted to answer the research question; does information about Pacific Peoples OWB and SWB illuminate existing perspectives on what it’s like to be a Pacific Islander in Aotearoa-New Zealand?

- Firstly, two-way cross-tabulations using ethnicity and selected NZGSS: 2008 variables
- Secondly three-way cross-tabulations using ethnicity, selected NZGSS: 2008 variables and 4 social variables; age, place of birth, family type and sex
- Thirdly a factor analysis investigating interrelationships among selected NZGSS: 2008 variables.

Cross-tabulations and factor analysis are used because the variables are mostly categorical in nature. For example many questions in GSS 2008 are dichotomous and non-dichotomous in nature such as ethnicity. The cross-tabulation method used 5 categories for ethnicity; European only, Māori only, Pacific peoples, Asian only and all other ethnicities. Where the variable is non-categorical such as age and
income it is converted (grouped) to a categorical variable. The three-way cross-tabulation method is used to see if what appears on the surface of the two-way cross-tabulations are better explained by some other factor such as age, place of birth, family type and sex. The third method, factor analysis is a statistical approach that can be used to analyse interrelationships among a large number of variables and to explain these variables in terms of their common underlying dimensions (factors). This study used the exploratory factor analysis for data reduction to investigate if the pacific ethnic group and non-pacific ethnic group have similar or different factor structures. A cultural lens is then used to explain the similarities and differences in factor structures. Categorical variables are commonly used for surveys and widely used for marketing and decision making. Categorical or nominal variables are the lowest level of measurement in statistical analysis. This means it is limited by the mathematical operations it can use, for example, the central tendencies are limited to mode or median

**Cross-Tabulation with Chi-Square Analysis**

The Chi-square statistic is the primary statistic used for computing the statistical significance of the cross-tabulation table. The chi-square statistic is used as the means of testing, or determining if the relationship is “statistically significant”. The chi-square statistic, along with the associated probability of chance observation, may be computed for any table. If the variables are related (i.e., the observed table relationships would occur with very low probability, say as is common in social research only 5%) then we say that the results are "statistically significant" at the “0.05 or 5% level”. This means that the variables have a low chance of being independent. Depending on the cost of making mistakes, the researcher may apply more stringent criteria for declaring “significance” such as 0.01 or 0.005. The probability values (0.05 or 0.01) reflect the researcher's willingness to accept a type I error, or the probability of rejecting a true null hypothesis (meaning that we thought there was a relationship between the variables when there really was not). Furthermore, these probabilities may be cumulative, meaning that if 20 tables are tested, the researcher can be almost assured that one of the tables is incorrectly found to have a relationship (20 x .05 = 100% chance).
1: Two-way cross tabulation

Selected variables were chosen from the NZGSS: 2008 survey. Variables were selected based on its correlations with similar variables and representative of the various life domains across the NZGSS: 2008 survey. The responses from these variables were then cross-tabulated with predetermined ethnic categories which were defined as European only, Māori only, Pacific peoples, Asian only and All other producing two-way contingency tables. Each two-way contingency table is accompanied by chi-square tests, directional measures and symmetric measures (Figure 4). An initial ninety-nine contingency tables with accompanying statistical tests were produced.
Two-way cross tabulations investigated in this study

The type of data used in this study are primarily categorical, that is qualitative, in nature. Therefore the level of measurement used for cross-tabulations are mostly nominal and in some cases ordinal (non-dichotomous). In the case where quantitative data is used such as age and income (continuous variables) in cross tabulations they are converted to categorical variables. According to Stevens (1946) a nominal scale is a primitive form and is most commonly tested by using contingency methods or hypotheses regarding the distribution of cases among the classes. The current study utilises cross-tabulations to investigate the frequency of cases amongst a variety of variables.
To give further meaning to the analysis and reduce the number of tables the researcher adopted the tests of significance accompanied by an effect-size statistic. This approach is applied to all ninety-nine Statistical Package for Social Sciences (SPSS) output tables. In statistics, a result is called statistically significant if it is unlikely to have occurred by chance. The significance level or p-value chosen for this study is \( p = 0.05 \) or (5\%). The criterion for assessing effect size or strength of association is equal to or greater than ETA = 0.1 (according to Cohen’s guidelines). Thus the results for each table under investigation are unlikely to have occurred by chance and the estimated magnitude or relationship of size-effect is of small to large substantive importance.

The p-value is measured by the Pearson Chi-square – Asymp. Sig. 2-sided value (SPSS output- Chi-square Tests table). The size-effect is measured by the ETA value where the dependent variable (DV) is equal to the selected NZGSS: 2008 variable. (SPSS output- Directional Measures). For example, from Figure 92 above, \( p = 0.000 \) and ETA = 0.117. After applying the tests of significance and size-effect statistic, fifty one SPSS outputs were further investigated. In terms of size-effect 39 variables had a small ETA value between 0.1 – 0.23; 5 variables with a medium value between 0.24 – 0.36, 7 variables with a large value of greater than 0.37 with the largest size-effect value recorded at ETA = 0.701. Of the 51 SPSS outputs 30 were deemed objective variables and 21 subjective variables. In terms of NZGSS: 2008 variables 17 were related to “core person” mostly demographic variables also asked in several other Statistics New Zealand social surveys. Twelve are related to culture and identity variables. The remaining 19 variables are evenly distributed among the other life domains e.g. housing, physical environment and safety and security. Refer to Figure 5 Summary of two-way cross tabulations.
<table>
<thead>
<tr>
<th>NZGSS: 2008 Domains</th>
<th>Code</th>
<th>Dependent Variable</th>
<th>Measure</th>
<th>Pearson Chi-Square (Asymp. Sig. 2 sided)</th>
<th>Directional Measures - Nominal by Interval - Ena Value = Dependent Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Person variable</td>
<td>CORDV12</td>
<td>Amount personal income</td>
<td>Objective</td>
<td>0.000</td>
<td>0.142</td>
</tr>
<tr>
<td>Core Person variable</td>
<td>CORDV15</td>
<td>Highest qualification</td>
<td>Objective</td>
<td>0.000</td>
<td>0.240</td>
</tr>
<tr>
<td>Core Person variable</td>
<td>CORDV6</td>
<td>Household size</td>
<td>Objective</td>
<td>0.000</td>
<td>0.291</td>
</tr>
<tr>
<td>Core Person variable</td>
<td>CORDV7</td>
<td>Length of stay in NZ care</td>
<td>Objective</td>
<td>0.000</td>
<td>0.375</td>
</tr>
<tr>
<td>Core Person variable</td>
<td>CORDV4_12</td>
<td>Sources personal income: self-employment or business</td>
<td>Objective</td>
<td>0.000</td>
<td>0.108</td>
</tr>
<tr>
<td>Core Person variable</td>
<td>CORDV4_13</td>
<td>Sources personal income: interest, dividends, rent, other investments</td>
<td>Objective</td>
<td>0.000</td>
<td>0.208</td>
</tr>
<tr>
<td>Core Person variable</td>
<td>CORDV4_14</td>
<td>Sources personal income: regular payments from ACC or a private work accident insurer</td>
<td>Objective</td>
<td>0.000</td>
<td>0.169</td>
</tr>
<tr>
<td>Core Person variable</td>
<td>CORDV4_16</td>
<td>Sources personal income: government benefits</td>
<td>Objective</td>
<td>0.000</td>
<td>0.178</td>
</tr>
<tr>
<td>Core Person variable</td>
<td>CORDV4_19</td>
<td>Sources personal income: domestic purposes benefit</td>
<td>Objective</td>
<td>0.000</td>
<td>0.153</td>
</tr>
<tr>
<td>Core Person variable</td>
<td>CORDV5_21</td>
<td>Sources personal income: student allowance</td>
<td>Objective</td>
<td>0.000</td>
<td>0.110</td>
</tr>
<tr>
<td>Core Person variable</td>
<td>CORDV5_24</td>
<td>Sources personal income: no source of income during that time</td>
<td>Objective</td>
<td>0.000</td>
<td>0.143</td>
</tr>
<tr>
<td>Core Person variable</td>
<td>CORDV9</td>
<td>Age</td>
<td>Objective</td>
<td>0.000</td>
<td>0.212</td>
</tr>
<tr>
<td>Core Person variable</td>
<td>CORPQ1</td>
<td>Were you born in New Zealand?</td>
<td>Objective</td>
<td>0.000</td>
<td>0.513</td>
</tr>
<tr>
<td>Core Person variable</td>
<td>CORPQ2</td>
<td>What country were you born in?</td>
<td>Objective</td>
<td>0.000</td>
<td>0.704</td>
</tr>
<tr>
<td>Core Person variable</td>
<td>CORPQ13</td>
<td>What year did you first arrive in New Zealand to live?</td>
<td>Objective</td>
<td>0.000</td>
<td>0.372</td>
</tr>
<tr>
<td>Core Person variable</td>
<td>CORPQ6</td>
<td>What is your highest completed secondary school qualification?</td>
<td>Objective</td>
<td>0.000</td>
<td>0.381</td>
</tr>
<tr>
<td>Core Person variable</td>
<td>CORPQ21</td>
<td>In what year did you complete this qualification?</td>
<td>Objective</td>
<td>0.000</td>
<td>0.211</td>
</tr>
<tr>
<td>Culture &amp; Identity variable</td>
<td>CULDV1</td>
<td>Number of people who raised respondent who were born in NZ.</td>
<td>Objective</td>
<td>0.000</td>
<td>0.158</td>
</tr>
<tr>
<td>Culture &amp; Identity variable</td>
<td>CULDV2</td>
<td>Number of generations in NZ</td>
<td>Objective</td>
<td>0.000</td>
<td>0.544</td>
</tr>
<tr>
<td>Culture &amp; Identity variable</td>
<td>CULDV3</td>
<td>Birthplace of parents</td>
<td>Objective</td>
<td>0.000</td>
<td>0.479</td>
</tr>
<tr>
<td>Culture &amp; Identity variable</td>
<td>CULQ01</td>
<td>Do you feel that you belong to New Zealand?</td>
<td>Subjective</td>
<td>0.000</td>
<td>0.105</td>
</tr>
<tr>
<td>Culture &amp; Identity variable</td>
<td>CULQ02</td>
<td>Would you say you feel that very strongly, strongly or not very strongly?</td>
<td>Subjective</td>
<td>0.000</td>
<td>0.255</td>
</tr>
<tr>
<td>Culture &amp; Identity variable</td>
<td>CULQ03</td>
<td>Do you feel that you belong to any other country?</td>
<td>Subjective</td>
<td>0.000</td>
<td>0.367</td>
</tr>
<tr>
<td>Culture &amp; Identity variable</td>
<td>CULQ04</td>
<td>Here in New Zealand, how easy or difficult is it for you to express your own identity?</td>
<td>Subjective</td>
<td>0.000</td>
<td>0.156</td>
</tr>
<tr>
<td>Culture &amp; Identity variable</td>
<td>CULQ05_11</td>
<td>Person finds it difficult to express their identity in NZ because it is illegal to do it</td>
<td>Subjective</td>
<td>0.000</td>
<td>0.122</td>
</tr>
<tr>
<td>Culture &amp; Identity variable</td>
<td>CULQ05_15</td>
<td>Person finds it difficult to express their identity in NZ because they worry about what other people might do</td>
<td>Subjective</td>
<td>0.004</td>
<td>0.105</td>
</tr>
<tr>
<td>Culture &amp; Identity variable</td>
<td>CULQ05_16</td>
<td>Person finds it difficult to express their identity in NZ because of other reason</td>
<td>Subjective</td>
<td>0.003</td>
<td>0.106</td>
</tr>
<tr>
<td>Culture &amp; Identity variable</td>
<td>CULQ07</td>
<td>As far as you know, how many of those people were born in New Zealand?</td>
<td>Objective</td>
<td>0.000</td>
<td>0.226</td>
</tr>
<tr>
<td>Culture &amp; Identity variable</td>
<td>CULQ09</td>
<td>Was that (other) person born in New Zealand?</td>
<td>Objective</td>
<td>0.000</td>
<td>0.103</td>
</tr>
<tr>
<td>Economic Standard of Living variable</td>
<td>ELSQ01</td>
<td>Economic living standard derived variable (grouped);</td>
<td>Objective</td>
<td>0.000</td>
<td>0.256</td>
</tr>
<tr>
<td>Economic Standard of Living variable</td>
<td>ELSQ06</td>
<td>Generally, how would you rate your standard of living?</td>
<td>Subjective</td>
<td>0.000</td>
<td>0.226</td>
</tr>
<tr>
<td>Economic Standard of Living variable</td>
<td>ELSQ07</td>
<td>Generally, how satisfied are you with your current standard of living?</td>
<td>Subjective</td>
<td>0.000</td>
<td>0.143</td>
</tr>
<tr>
<td>Economic Standard of Living variable</td>
<td>ELSQ08</td>
<td>Would you say you have not enough money, just enough money, enough money, or more than enough money?</td>
<td>Subjective</td>
<td>0.000</td>
<td>0.217</td>
</tr>
<tr>
<td>Housing variable</td>
<td>HOUQ02</td>
<td>Household crowding</td>
<td>Objective</td>
<td>0.000</td>
<td>0.206</td>
</tr>
<tr>
<td>Housing variable</td>
<td>HOUQ03</td>
<td>Major problems with house or neighbourhood</td>
<td>Objective</td>
<td>0.000</td>
<td>0.107</td>
</tr>
<tr>
<td>Housing variable</td>
<td>HOUQ04</td>
<td>How do you feel about where you are currently living?</td>
<td>Subjective</td>
<td>0.000</td>
<td>0.117</td>
</tr>
<tr>
<td>Human Rights variable</td>
<td>HUMQ05</td>
<td>In the last 12 months, have you been treated unfairly or had something nasty done to you because of the group you belong to or seem to belong to?</td>
<td>Subjective</td>
<td>0.000</td>
<td>0.167</td>
</tr>
<tr>
<td>Knowledge &amp; Skills variable</td>
<td>KASQ01</td>
<td>How do u feel about your knowledge, skills and abilities?</td>
<td>Subjective</td>
<td>0.000</td>
<td>0.304</td>
</tr>
<tr>
<td>Knowledge &amp; Skills variable</td>
<td>KASQ03</td>
<td>Are you currently doing any study or training?</td>
<td>Objective</td>
<td>0.004</td>
<td>0.116</td>
</tr>
<tr>
<td>Overall Life Satisfaction</td>
<td>LESQ01</td>
<td>How do you feel about your life as a whole right now?</td>
<td>Subjective</td>
<td>0.000</td>
<td>0.304</td>
</tr>
<tr>
<td>Physical Environment variable</td>
<td>PHYQ01</td>
<td>How many of the facilities (such as shops, schools, post shops, libraries, medical services) that you want to go to can you easily get to?</td>
<td>Objective</td>
<td>0.000</td>
<td>0.159</td>
</tr>
<tr>
<td>Physical Environment variable</td>
<td>PHYQ05</td>
<td>Overall, how do you feel about the quality of council services such as water supply, drainage, rubbish collection and roads in your town, city or rural area?</td>
<td>Subjective</td>
<td>0.000</td>
<td>0.129</td>
</tr>
<tr>
<td>Safety &amp; Security variable</td>
<td>SAFQ03</td>
<td>Most adverse impact of safety and security accidents derived variable</td>
<td>Subjective</td>
<td>0.000</td>
<td>0.121</td>
</tr>
<tr>
<td>Safety &amp; Security variable</td>
<td>SAFQ04A</td>
<td>How safe do you feel at work?</td>
<td>Subjective</td>
<td>0.000</td>
<td>0.119</td>
</tr>
<tr>
<td>Safety &amp; Security variable</td>
<td>SAFQ01D</td>
<td>How safe do you feel walking alone during the day in your neighbourhood?</td>
<td>Subjective</td>
<td>0.000</td>
<td>0.106</td>
</tr>
<tr>
<td>Social Connectedness variable</td>
<td>SOCQ01</td>
<td>Availability of help in time of need</td>
<td>Subjective</td>
<td>0.000</td>
<td>0.150</td>
</tr>
<tr>
<td>Paid Work variable</td>
<td>WORQ02</td>
<td>If you had the opportunity, would you choose to work pay-related more/less hours</td>
<td>Subjective</td>
<td>0.000</td>
<td>0.176</td>
</tr>
<tr>
<td>Paid Work variable</td>
<td>WORQ09</td>
<td>How do you feel about your employment arrangement?</td>
<td>Subjective</td>
<td>0.000</td>
<td>0.150</td>
</tr>
</tbody>
</table>
2: 3-way cross tabulation

The three-way cross-tabulation method is used to see if what appears on the surface of the two-way cross-tabulations, are better explained by some other factor such as age, place of birth, family type and sex. Similar to the two-way cross tabulations, selected variables were chosen from the NZGSS: 2008 survey. Variables were selected based on their correlation with similar variables and representativeness of the various life domains across the NZGSS: 2008 survey. The responses from these variables were then cross-tabulated with two predetermined ethnic responses i.e. Pacific peoples ethnic group, and All other ethnic groups; as well as one each of four predetermined social variables i.e. age, sex, place of birth & family type producing 3-way contingency tables. Each 3-way contingency table is accompanied by chi-square tests, directional measures and symmetric measures (Figure 6). An initial seventy two contingency tables with accompanying statistical tests were produced, 36 contingency tables related to Pacific peoples ethnic group, and 36 contingency tables related to All other ethnic groups. Only the 36 Pacific peoples ethnic group contingency tables were considered for further investigation.
Figure 6: Example 3-way cross tabulation SPSS output

<table>
<thead>
<tr>
<th>Pacific peoples ethnic groups</th>
<th>How do you feel about your life as a whole right now?</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>very satisfied</td>
<td>satisfied</td>
</tr>
<tr>
<td>No Sex male</td>
<td>1244</td>
<td>2198</td>
</tr>
<tr>
<td>% within Sex</td>
<td>30.8%</td>
<td>54.5%</td>
</tr>
<tr>
<td>female</td>
<td>1409</td>
<td>2259</td>
</tr>
<tr>
<td>% within Sex</td>
<td>54.2%</td>
<td>52.6%</td>
</tr>
<tr>
<td>Total</td>
<td>2710</td>
<td>4454</td>
</tr>
<tr>
<td>% within Sex</td>
<td>52.6%</td>
<td>53.5%</td>
</tr>
<tr>
<td>Yes Sex male</td>
<td>46</td>
<td>108</td>
</tr>
<tr>
<td>% within Sex</td>
<td>25.0%</td>
<td>56.3%</td>
</tr>
<tr>
<td>female</td>
<td>50</td>
<td>107</td>
</tr>
<tr>
<td>% within Sex</td>
<td>25.3%</td>
<td>54.0%</td>
</tr>
<tr>
<td>Total</td>
<td>96</td>
<td>215</td>
</tr>
<tr>
<td>% within Sex</td>
<td>25.1%</td>
<td>55.1%</td>
</tr>
</tbody>
</table>

Chi-Square Tests

<table>
<thead>
<tr>
<th>Pacific peoples ethnic groups</th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>34.413</td>
<td>4</td>
<td>.000</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>34.479</td>
<td>4</td>
<td>.000</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>5.070</td>
<td>1</td>
<td>.024</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>8322</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>.667</td>
<td>4</td>
<td>.955</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>.674</td>
<td>4</td>
<td>.954</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>.220</td>
<td>1</td>
<td>.638</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>390</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 46.02.
b. 2 cells (20.0%) have expected count less than 5. The minimum expected count is 1.48.

Directional Measures

<table>
<thead>
<tr>
<th>Pacific peoples ethnic groups</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>.064</td>
</tr>
<tr>
<td>Nominal by Interval Elia</td>
<td>Sex Dependent</td>
</tr>
<tr>
<td>How do you feel about your life as a whole right now? Dependent</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>.043</td>
</tr>
<tr>
<td>Nominal by Interval Elia</td>
<td>Sex Dependent</td>
</tr>
<tr>
<td>How do you feel about your life as a whole right now? Dependent</td>
<td></td>
</tr>
</tbody>
</table>
3-way cross tabulations investigated in this study (For 3-way cross tabulations the same rules as 2-way cross tabulations apply)

The p-value is measured by the Pearson Chi-square – Asymp. Sig. 2-sided value where Pacific peoples ethnic group = Yes (SPSS output- Chi-square Tests table). The size-effect is measured by the ETA value, where the Pacific peoples ethnic group = Yes and the dependent variable (DV) is equal to the selected NZGSS: 2008 variable (SPSS output- Directional Measures). For example from Figure 94 above, p= 0.955 and ETA = 0.024. After applying the tests of significance and size-effect statistic, fourteen SPSS outputs were further investigated. In terms of size-effect 13 variables had a small eta value between 0.1 – 0.23 the remaining variable had a medium ETA value between 0.24 – 0.36, recorded at eta = 0.261. All 14 SPSS outputs were deemed subjective variables. In terms of NZGSS: 2008 variables 1 related to culture and identity, 3 related to economic standard of living, 2 related to leisure and recreation, 1 related to overall life satisfaction, 5 related to the physical environment and the final 2 related to safety and security. In terms of the four predetermined social variables, 5 related to age, 5 related to family type, 2 related to place of birth, and the final 2 related to sex. Refer to summary of 3-way cross tabulations in Figure 7 below.
Figure 7: Summary of 14 3-way SPSS outputs selected for this study

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Age Pacific peoples ethnic group</td>
<td>Age Pacific peoples ethnic group</td>
<td>Economic Standard of Living variable</td>
<td>ELSQ07</td>
<td>Generally, how satisfied are you with your current standard of living?</td>
<td>Subjective</td>
<td>0.003</td>
<td>0.212</td>
</tr>
<tr>
<td>Age Pacific peoples ethnic group</td>
<td>Age Pacific peoples ethnic group</td>
<td>Leisure &amp; Recreation variable</td>
<td>LEIQ01</td>
<td>In the last four weeks, do you feel that you had too much free time, the right amount of free time or not enough free time?</td>
<td>Subjective</td>
<td>0.015</td>
<td>0.195</td>
</tr>
<tr>
<td>Age Pacific peoples ethnic group</td>
<td>Age Pacific peoples ethnic group</td>
<td>Physical Environment variable</td>
<td>PHYQ03</td>
<td>How do you feel about your access to public transport in your town, city or rural area?</td>
<td>Subjective</td>
<td>0.043</td>
<td>0.109</td>
</tr>
<tr>
<td>Age Pacific peoples ethnic group</td>
<td>Age Pacific peoples ethnic group</td>
<td>Physical Environment variable</td>
<td>PHYQ12</td>
<td>How do you feel about the state of the lakes, rivers, harbours, oceans and coastlines that you’ve been to?</td>
<td>Subjective</td>
<td>0.018</td>
<td>0.212</td>
</tr>
<tr>
<td>Age Pacific peoples ethnic group</td>
<td>Age Pacific peoples ethnic group</td>
<td>Safety &amp; Security variable</td>
<td>SAFQ01E</td>
<td>How safe do you feel walking alone at night in your neighbourhood?</td>
<td>Subjective</td>
<td>0.048</td>
<td>0.237</td>
</tr>
<tr>
<td>Age Pacific peoples ethnic group</td>
<td>Age Pacific peoples ethnic group</td>
<td>Culture &amp; Identity variable</td>
<td>CULQ04</td>
<td>Here in New Zealand, how easy or difficult is it for you to express your own identity?</td>
<td>Subjective</td>
<td>0.008</td>
<td>0.141</td>
</tr>
<tr>
<td>FamType Pacific peoples ethnic group</td>
<td>FamType Pacific peoples ethnic group</td>
<td>Economic Standard of Living variable</td>
<td>ELSQ07</td>
<td>Generally, how satisfied are you with your current standard of living?</td>
<td>Subjective</td>
<td>0.011</td>
<td>0.214</td>
</tr>
<tr>
<td>FamType Pacific peoples ethnic group</td>
<td>FamType Pacific peoples ethnic group</td>
<td>Leisure &amp; Recreation variable</td>
<td>LEIQ01</td>
<td>In the last four weeks, do you feel that you had too much free time, the right amount of free time or not enough free time?</td>
<td>Subjective</td>
<td>0.006</td>
<td>0.199</td>
</tr>
<tr>
<td>FamType Pacific peoples ethnic group</td>
<td>FamType Pacific peoples ethnic group</td>
<td>Physical Environment variable</td>
<td>PHYQ03</td>
<td>How do you feel about your access to public transport in your town, city or rural area?</td>
<td>Subjective</td>
<td>0.018</td>
<td>0.135</td>
</tr>
<tr>
<td>FamType Pacific peoples ethnic group</td>
<td>FamType Pacific peoples ethnic group</td>
<td>Physical Environment variable</td>
<td>PHYQ12</td>
<td>How do you feel about the state of the lakes, rivers, harbours, oceans and coastlines that you’ve been to?</td>
<td>Subjective</td>
<td>0.018</td>
<td>0.135</td>
</tr>
<tr>
<td>NZBorn Pacific peoples ethnic group</td>
<td>NZBorn Pacific peoples ethnic group</td>
<td>Economic Standard of Living variable</td>
<td>ELSQ07</td>
<td>Generally, how satisfied are you with your current standard of living?</td>
<td>Subjective</td>
<td>0.005</td>
<td>0.121</td>
</tr>
<tr>
<td>NZBorn Pacific peoples ethnic group</td>
<td>NZBorn Pacific peoples ethnic group</td>
<td>Physical Environment variable</td>
<td>PHYQ12</td>
<td>How do you feel about the state of the lakes, rivers, harbours, oceans and coastlines that you’ve been to?</td>
<td>Subjective</td>
<td>0.005</td>
<td>0.180</td>
</tr>
<tr>
<td>Sex Pacific peoples ethnic group</td>
<td>Sex Pacific peoples ethnic group</td>
<td>Physical Environment variable</td>
<td>PHYQ12</td>
<td>How do you feel about the state of the lakes, rivers, harbours, oceans and coastlines that you’ve been to?</td>
<td>Subjective</td>
<td>0.036</td>
<td>0.138</td>
</tr>
<tr>
<td>Sex Pacific peoples ethnic group</td>
<td>Sex Pacific peoples ethnic group</td>
<td>Safety &amp; Security variable</td>
<td>SAFQ01E</td>
<td>How safe do you feel walking alone at night in your neighbourhood?</td>
<td>Subjective</td>
<td>0.000</td>
<td>0.261</td>
</tr>
</tbody>
</table>
3: Factor Analysis

In this study, factor analysis is used to see if a large number of indicators can be reduced to a smaller set. Factor analysis is a statistical approach that can be used to analyse interrelationships among a large number of variables and to explain these variables in terms of their common underlying dimensions (factors). This statistical approach involves finding a way of condensing the information contained in a number of original variables into a smaller set of dimensions (factors) with a minimum loss of information (Hair et al., 1992). There are four basic factor analysis steps; data collection and generation of the correlation matrix, extraction of initial factor solution, rotation and interpretation, construction of scales or factor scores to use in further analyses.

For this study, the researcher attempts to compare factor analyses of the social indicators between two groups; Pacific peoples and non-Pacific peoples. For the question, “Do these two groups have the same factor structure?” Factor analysis could be used to verify conceptualizations of a construct of interest. In this study the researcher also seeks to interpret these factors through a cultural lens. 23 variables were selected for the factor analysis. As with the cross tabulations analysis, selected variables were chosen from the NZGSS: 2008 survey. Variables were selected based on its correlations with similar variables and representativeness of the various life domains across the NZGSS: 2008 survey.

For Pacific peoples, eight dimensions in the component space account for 62.49% of the rotated variance (Figure 8). For Non-Pacific, seven dimensions in the component space account for 53.98% of the rotated variance (Figure 9). This means that non-Pacific are far more variable in their answers, as compared to Pacific, who are more homogenous in answers.
### Total Variance Explained

<table>
<thead>
<tr>
<th>Component</th>
<th>Initial Eigenvalues</th>
<th>Extraction Sums of Squared Loadings</th>
<th>Rotation Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% of Variance</td>
<td>Cumulative %</td>
</tr>
<tr>
<td>3</td>
<td>2.043</td>
<td>8.514</td>
<td>34.619</td>
</tr>
<tr>
<td>5</td>
<td>1.495</td>
<td>6.231</td>
<td>47.504</td>
</tr>
<tr>
<td>7</td>
<td>1.158</td>
<td>4.824</td>
<td>58.039</td>
</tr>
<tr>
<td>9</td>
<td>.973</td>
<td>4.053</td>
<td>66.541</td>
</tr>
<tr>
<td>10</td>
<td>.914</td>
<td>3.807</td>
<td>70.348</td>
</tr>
<tr>
<td>11</td>
<td>.856</td>
<td>3.566</td>
<td>73.914</td>
</tr>
<tr>
<td>12</td>
<td>.829</td>
<td>3.454</td>
<td>77.368</td>
</tr>
<tr>
<td>13</td>
<td>.773</td>
<td>3.219</td>
<td>80.587</td>
</tr>
<tr>
<td>14</td>
<td>.692</td>
<td>2.882</td>
<td>83.468</td>
</tr>
<tr>
<td>15</td>
<td>.655</td>
<td>2.728</td>
<td>86.196</td>
</tr>
<tr>
<td>16</td>
<td>.587</td>
<td>2.447</td>
<td>88.643</td>
</tr>
<tr>
<td>17</td>
<td>.486</td>
<td>2.027</td>
<td>90.670</td>
</tr>
<tr>
<td>18</td>
<td>.470</td>
<td>1.960</td>
<td>92.630</td>
</tr>
<tr>
<td>19</td>
<td>.449</td>
<td>1.871</td>
<td>94.501</td>
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<td>20</td>
<td>.384</td>
<td>1.599</td>
<td>96.101</td>
</tr>
<tr>
<td>21</td>
<td>.356</td>
<td>1.483</td>
<td>97.583</td>
</tr>
<tr>
<td>22</td>
<td>.316</td>
<td>1.317</td>
<td>98.900</td>
</tr>
<tr>
<td>23</td>
<td>.264</td>
<td>1.100</td>
<td>100.000</td>
</tr>
<tr>
<td>24</td>
<td>-3.267E-16</td>
<td>-1.361E-15</td>
<td>100.000</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.

a. Pacific peoples ethnic groups = Yes

### Figure 8: Pacific Peoples ethnic group, rotated variance

### Figure 9: Non-Pacific Peoples ethnic groups, rotated variance
<table>
<thead>
<tr>
<th>Component</th>
<th>Initial Eigenvalues</th>
<th>Extraction Sums of Squared Loadings</th>
<th>Rotation Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% of Variance</td>
<td>Cumulative %</td>
</tr>
<tr>
<td>1</td>
<td>4.217</td>
<td>17.570</td>
<td>17.570</td>
</tr>
<tr>
<td>3</td>
<td>1.880</td>
<td>7.832</td>
<td>34.376</td>
</tr>
<tr>
<td>5</td>
<td>1.233</td>
<td>5.138</td>
<td>45.125</td>
</tr>
<tr>
<td>6</td>
<td>1.092</td>
<td>4.551</td>
<td>49.676</td>
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<tr>
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<td>1.034</td>
<td>4.306</td>
<td>53.982</td>
</tr>
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<td>.948</td>
<td>3.950</td>
<td>57.932</td>
</tr>
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<td>.899</td>
<td>3.746</td>
<td>61.679</td>
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<td>65.319</td>
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<td>68.923</td>
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<td>3.421</td>
<td>72.344</td>
</tr>
<tr>
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<td>.797</td>
<td>3.320</td>
<td>75.664</td>
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<tr>
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<td>.780</td>
<td>3.249</td>
<td>78.913</td>
</tr>
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<td>.755</td>
<td>3.146</td>
<td>82.059</td>
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<td>16</td>
<td>.706</td>
<td>2.943</td>
<td>85.002</td>
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<td>18</td>
<td>.577</td>
<td>2.406</td>
<td>90.141</td>
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<tr>
<td>19</td>
<td>.562</td>
<td>2.343</td>
<td>92.484</td>
</tr>
<tr>
<td>20</td>
<td>.518</td>
<td>2.157</td>
<td>94.640</td>
</tr>
<tr>
<td>21</td>
<td>.471</td>
<td>1.961</td>
<td>96.602</td>
</tr>
<tr>
<td>22</td>
<td>.437</td>
<td>1.822</td>
<td>98.424</td>
</tr>
<tr>
<td>23</td>
<td>.378</td>
<td>1.576</td>
<td>100.000</td>
</tr>
<tr>
<td>24</td>
<td>-3.217E-16</td>
<td>-1.341E-15</td>
<td>100.000</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.

a. Pacific peoples ethnic groups = No
For Pacific peoples four variables were dropped from the analysis, because its communalities extraction is less than 0.6 and correlation loading did not fit the factor solution, leaving nineteen variables for further investigation (Figure 10).

**Figure 10: Pacific Peoples ethnic group, rotated matrix**

<table>
<thead>
<tr>
<th>Rotated Component Matrix</th>
<th>Component 1</th>
<th>Component 2</th>
<th>Component 3</th>
<th>Component 4</th>
<th>Component 5</th>
<th>Component 6</th>
<th>Component 7</th>
<th>Component 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall, how do you feel about the quality of council services such as water supply, drainage, rubbish collection and roads in your town, city or rural area?</td>
<td>.707</td>
<td>.020</td>
<td>-.009</td>
<td>.068</td>
<td>.101</td>
<td>.070</td>
<td>.034</td>
<td>-.126</td>
</tr>
<tr>
<td>How do you feel about the condition of public transport vehicles, such as buses and trains, in your town, city or rural area?</td>
<td>.704</td>
<td>-.036</td>
<td>.009</td>
<td>.183</td>
<td>.303</td>
<td>-.039</td>
<td>-.137</td>
<td>.055</td>
</tr>
<tr>
<td>How safe do you feel waiting for or using public transport such as buses and trains at night?</td>
<td>.641</td>
<td>.390</td>
<td>-.085</td>
<td>-.004</td>
<td>-.174</td>
<td>-.005</td>
<td>-.306</td>
<td>-.105</td>
</tr>
<tr>
<td>How safe do you feel waiting for or using public transport such as buses and trains during the day?</td>
<td>.601</td>
<td>.410</td>
<td>-.126</td>
<td>-.078</td>
<td>-.304</td>
<td>.096</td>
<td>-.030</td>
<td>.042</td>
</tr>
<tr>
<td>Major problems with house or neighbourhood</td>
<td>.380</td>
<td>.018</td>
<td>-.253</td>
<td>.147</td>
<td>.149</td>
<td>.046</td>
<td>-.309</td>
<td>-.163</td>
</tr>
<tr>
<td>How safe do you feel walking alone during the day in your neighbourhood?</td>
<td>.084</td>
<td>.940</td>
<td>.084</td>
<td>.068</td>
<td>.150</td>
<td>.045</td>
<td>.541</td>
<td>-.025</td>
</tr>
<tr>
<td>Generally, how would you rate your standard of living?</td>
<td>-.041</td>
<td>.015</td>
<td>.774</td>
<td>.061</td>
<td>.115</td>
<td>.046</td>
<td>-.596</td>
<td>.065</td>
</tr>
<tr>
<td>Would you say you have not enough money, just enough money, enough money, or more than enough money?</td>
<td>.018</td>
<td>-.219</td>
<td>-.762</td>
<td>-.004</td>
<td>-.214</td>
<td>-.042</td>
<td>-.059</td>
<td>-.010</td>
</tr>
<tr>
<td>Generally, how satisfied are you with your current standard of living?</td>
<td>-.176</td>
<td>.051</td>
<td>.691</td>
<td>.199</td>
<td>.092</td>
<td>.169</td>
<td>.204</td>
<td>-.016</td>
</tr>
<tr>
<td>How do you feel about your employment arrangement?</td>
<td>-.016</td>
<td>.151</td>
<td>-.118</td>
<td>.794</td>
<td>.007</td>
<td>-.011</td>
<td>.915</td>
<td>-.028</td>
</tr>
<tr>
<td>Think about the last four weeks, how do you feel about your job?</td>
<td>.089</td>
<td>-.119</td>
<td>.068</td>
<td>.758</td>
<td>-.031</td>
<td>.283</td>
<td>-.255</td>
<td>.107</td>
</tr>
<tr>
<td>How do you feel about the condition of facilities in your town, city or rural area?</td>
<td>-.120</td>
<td>.048</td>
<td>-.036</td>
<td>-.269</td>
<td>.684</td>
<td>.263</td>
<td>-.055</td>
<td>-.161</td>
</tr>
<tr>
<td>How many of the facilities (such as shops, schools, post shops, libraries, medical services) that you want to go to can you easily get to?</td>
<td>-.042</td>
<td>.130</td>
<td>.215</td>
<td>.076</td>
<td>.367</td>
<td>-.035</td>
<td>-.146</td>
<td>-.115</td>
</tr>
<tr>
<td>How do you feel about your access to public transport in your town, city or rural area?</td>
<td>.175</td>
<td>.265</td>
<td>.041</td>
<td>.439</td>
<td>.534</td>
<td>-.308</td>
<td>.101</td>
<td>.196</td>
</tr>
<tr>
<td>How do u feel about your knowledge, skills and abilities?</td>
<td>.127</td>
<td>.055</td>
<td>.066</td>
<td>.106</td>
<td>.109</td>
<td>.766</td>
<td>.137</td>
<td>.031</td>
</tr>
<tr>
<td>How do you feel about your life as a whole right now?</td>
<td>.478</td>
<td>.195</td>
<td>.417</td>
<td>.049</td>
<td>.068</td>
<td>.520</td>
<td>.083</td>
<td>.001</td>
</tr>
<tr>
<td>In the last four weeks, do you feel that you had too much free time, the right amount of free time or not enough free time?</td>
<td>.342</td>
<td>-.124</td>
<td>-.146</td>
<td>-.151</td>
<td>.127</td>
<td>-.459</td>
<td>.158</td>
<td>-.046</td>
</tr>
<tr>
<td>Would you say that you have too much contact, about the right amount of contact, or not enough contact with friends?</td>
<td>-.261</td>
<td>.095</td>
<td>.069</td>
<td>-.007</td>
<td>-.305</td>
<td>.006</td>
<td>.732</td>
<td>-.162</td>
</tr>
<tr>
<td>If you had the opportunity, would you choose to:</td>
<td>.411</td>
<td>-.201</td>
<td>-.406</td>
<td>-.047</td>
<td>.044</td>
<td>.044</td>
<td>.154</td>
<td>.008</td>
</tr>
<tr>
<td>In general, would you say your health is excellent, very good, good, fair or poor?</td>
<td>.059</td>
<td>.183</td>
<td>.210</td>
<td>.341</td>
<td>.083</td>
<td>.255</td>
<td>.170</td>
<td>.126</td>
</tr>
<tr>
<td>Here in New Zealand, how easy or difficult is it for you to express your own identity?</td>
<td>.016</td>
<td>.106</td>
<td>-.034</td>
<td>-.259</td>
<td>.312</td>
<td>-.152</td>
<td>.663</td>
<td></td>
</tr>
<tr>
<td>Would you say that you have too much contact, about the right amount of contact, or not enough contact with family/relatives?</td>
<td>-.008</td>
<td>.190</td>
<td>-.059</td>
<td>.045</td>
<td>.008</td>
<td>-.106</td>
<td>.307</td>
<td>-.600</td>
</tr>
<tr>
<td>How do you feel about your access to public transport during the day?</td>
<td>.534</td>
<td>.195</td>
<td>-.047</td>
<td>-.158</td>
<td>.239</td>
<td>.054</td>
<td>-.071</td>
<td>-.359</td>
</tr>
<tr>
<td>How safe do you feel at work?</td>
<td>.026</td>
<td>.274</td>
<td>-.287</td>
<td>.180</td>
<td>-.198</td>
<td>.068</td>
<td>.957</td>
<td>.586</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Pacific peoples ethnic group = Yes
b. Rotation converged in 11 iterations.
For non-Pacific six variables were dropped from the analysis because their communalities extraction were less than 0.6 and correlation loading did not fit the factor solution, leaving seventeen variables for further investigation (Figure 11).

**Figure 11**: Non-Pacific Peoples ethnic groups, rotated matrix

<table>
<thead>
<tr>
<th>Rotated Component Matrix</th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>How safe do you feel walking alone during the day in your neighbourhood?</td>
<td>0.916</td>
</tr>
<tr>
<td>How safe do you feel waiting for or using public transport such as buses and trains during the day?</td>
<td>0.689</td>
</tr>
<tr>
<td>How safe do you feel waiting for or using public transport such as buses and trains at night?</td>
<td>0.575</td>
</tr>
<tr>
<td>Would you say you have not enough money, just enough money, enough money, or more than enough money?</td>
<td>-0.1</td>
</tr>
<tr>
<td>Generally, how satisfied are you with your current standard of living?</td>
<td>0.079</td>
</tr>
<tr>
<td>Generally, how would you rate your standard of living?</td>
<td>0.059</td>
</tr>
<tr>
<td>Major problems with house or neighbourhood?</td>
<td>-0.07</td>
</tr>
<tr>
<td>Think about the last four weeks, how do you feel about your job?</td>
<td>0.036</td>
</tr>
<tr>
<td>How do you feel about your employment arrangement?</td>
<td>0.048</td>
</tr>
<tr>
<td>How do you feel about your life as a whole right now?</td>
<td>0.042</td>
</tr>
<tr>
<td>How do you feel about your knowledge, skills and abilities?</td>
<td>0.019</td>
</tr>
<tr>
<td>In general, would you say your health is excellent, very good, good, fair or poor?</td>
<td>0.077</td>
</tr>
<tr>
<td>How safe do you feel at work?</td>
<td>0.351</td>
</tr>
<tr>
<td>How do you feel about your free time?</td>
<td>0.194</td>
</tr>
<tr>
<td>How do you feel about the condition of public transport vehicles, such as buses and trains, in your town, city or rural area?</td>
<td>0.054</td>
</tr>
<tr>
<td>How do you feel about your access to public transport in your town, city or rural area?</td>
<td>0.009</td>
</tr>
<tr>
<td>How do you feel about the condition of facilities in your town, city or rural area?</td>
<td>0.029</td>
</tr>
<tr>
<td>How many of the facilities (such as shops, schools, post shops, libraries, medical services) that you want to go to can you easily get to?</td>
<td>0.087</td>
</tr>
<tr>
<td>Overall, how do you feel about the quality of council services such as water supply, drainage, rubbish collection and roads in your town, city or rural area?</td>
<td>0.033</td>
</tr>
<tr>
<td>In the last four weeks, do you feel that you had too much free time, the right amount of free time or not enough free time?</td>
<td>0.026</td>
</tr>
<tr>
<td>If you had the opportunity, would you choose to:</td>
<td>-0.03</td>
</tr>
<tr>
<td>Would you say that you have too much contact, about the right amount of contact, or not enough contact with family/relatives?</td>
<td>-0.04</td>
</tr>
<tr>
<td>Would you say that you have too much contact, about the right amount of contact, or not enough contact with friends?</td>
<td>0.014</td>
</tr>
</tbody>
</table>

**Extraction Method**: Principal Component Analysis.

**Rotation Method**: Varimax with Kaiser Normalization.

a. Pacific peoples ethnic groups = No
b. Rotation converged in 7 iterations.

**Summary**

This chapter outlined the methods involved in undertaking this study. The first section described the research methods for the New Zealand General Social Survey: 2008. The section outlined the bases for designing and constructing the NZGSS survey as well as the data collection and instrument used. An explanation of the sampling technique and the key variable (ethnicity) under investigation is clarified. The second and final section describes the three methods of analysis conducted to...
answer the research question; does information about Pacific Peoples OWB and SWB illuminate existing perspectives on what it is like to be a Pacific Islander in Aotearoa-New Zealand?

Firstly two-way cross-tabulations using ethnicity and selected NZGSS: 2008 variables. This method was deployed to find out if there were any differences between the five predetermined ethnic categories which were defined as European only, Māori only, Pacific peoples, Asian only and All other. Secondly, three-way cross-tabulation method was deployed to examine whether the two-way cross-tabulations are better explained by the inclusion of some other factor such as age, place of birth, family type and sex. Thirdly, the study used the exploratory factor analysis for data reduction to investigate if the pacific ethnic group and non-pacific ethnic group have similar or different factor structures. A cultural lens is then utilised to examine similarities and anomalies.
CHAPTER 4: FINDINGS

This chapter provides a critical commentary about the results obtained from the New Zealand General Social Survey: 2008. Of significance is the extraction of data specific to Pacific peoples of Aotearoa-New Zealand. This chapter expands in detail on overall results presented in the preceding chapter.

Introduction

The findings of this study are organised into 12 sections:

1. selected core person measures,
2. overall life satisfaction,
3. culture and Identity,
4. economic standard of living and the New Zealand deprivation index,
5. knowledge and skills,
6. housing,
7. physical environment,
8. paid work,
9. leisure and recreation,
10. human rights,
11. social connectedness,
12. and safety and security.

Each of these approximates a ‘life domain’. To conclude the chapter findings from the factor analysis is presented. The factor analysis shows the reduced factor structure of two groups; Pacific peoples and non-Pacific peoples.

The general format within these sections begins with a descriptive analysis of the data, followed by a figure. Some discussion is given to provide a further explanation of the findings. The organisation of this section follows the format used by Statistics New Zealand for its standard outputs.

Note 1: Labels of figures in this section begin with a variable name then the description (in most cases the actual question asked in the GSS survey). For example Figure 9 CORPQ11: Were you born in New Zealand?
Note 2: Some figures represent derived variables. In these cases the data is derived from other questions within the GSS survey. For example Figure 9 CORDV9: Age. Age is collected by recording date of birth and single year age of respondent. Age in the basic CURF dataset is only available in age groups e.g. 15-19 years. At the time of writing this thesis, specifications of derived variables were not readily available.

Note 3: Given the time and constraints in completing this thesis only a selection of 2010 GSS indicators are used in the findings and analysis of the data. At the time of completing this thesis the 2012 GSS is currently in the field.

**Selected Core person measures [what do pacific peoples look like?]**

Selected core person measurements can also be described as what do Pacific peoples look like in the General Social Survey 2008. Seven figures are presented; New Zealand regions, urban areas, age structure, whether born in New Zealand or overseas, place of birth, year first arrived in New Zealand, and length of stay in New Zealand.

Pacific peoples primarily live in the northern part of the North Island and are highly urbanised. If you are Pacific you are 1.5 times more likely to live in the northern North Island than the general population, 64.5% and 44% respectively. Furthermore, Pacific peoples have the lowest proportion of population to live in the South Island, 10.20% (Figure 12). Also if you are Pacific you are 1.2 times more likely than the general population to live in a major urban area, 91.6% (Figure 13).
Pacific peoples have a youthful population which has significant implications in terms of Aotearoa-New Zealand’s future workforce, and challenges to Aotearoa-New Zealand’s current education system and also general implications for social cohesion such as embracing diversity from different cultures. 31 percent of Pacific peoples respondents are between the ages of 15-24 and only 11 percent are over the age of 55 (Figure 14). For Total other respondents 18 percent and 29 percent are between the ages of 15-24 and over 55 years of age respectively (Figure 14). The age structure of the respondents in this study is similar to the 2006 New Zealand Census of population and dwellings (2006 Census). Pacific peoples have a considerably younger age profile than the total Aotearoa-New Zealand population,
with far greater proportions in the younger age groups (Statistics New Zealand & Ministry of Pacific Island Affairs, 2011).

Figure 14: CORDV9- Age

![Age structure of respondents](image)

Over time the Pacific population has changed from a mainly migrant group to a largely New Zealand-born population. 50 percent of Pacific respondents were born overseas (Figure 15). Only Asian has a higher proportion of respondents born overseas, 94 percent (Figure 15). For all respondents 3 in 4 people were born in New Zealand and one-quarter born overseas (Figure 15). The 2006 Census recorded 60 percent of the Pacific population born in New Zealand; it was 19 percent in 1986. The difference presumably arises from sampling difficulties.

Figure 15: CORPQ11 were you born in New Zealand?

![were you born in New Zealand?](image)
Pacific and Asian peoples tend to be born in their homelands. Of the Pacific respondents born overseas 98 percent were born in the Oceania (and Antarctic!) region. For Asian respondents 90 percent were born in South-East Asia, North-East Asia and the Southern and Central Asia region (Figure 16).

Figure 16: CORPQ12 What country were you born in? Recoded to regions

The tendency for Asian and Pacific peoples being born overseas is also evident in the migration data reported in Figure 12. Since 1990, 85 percent of Asian respondents had arrived in New Zealand (Figure 17). For Pacific respondents 20 percent arrived during the late 1980’s (Figure 17).

Figure 17: CORPQ13 What year did you first arrive in New Zealand to live?

1 in 4 Pacific respondents lived in New Zealand for less than 10 years at the time of the study compared to 2 in 5 of the total population (Figure 18). 5 in 8 Asian respondents lived in New Zealand for less than 10 years at the time of the study (Figure 18).
The five figures presented above; age structure, whether born in New Zealand or overseas, place of birth, year first arrived in New Zealand, and length of stay in New Zealand suggest that Pacific peoples surveyed in the NZGSS2008 have intentionally decided to make Aotearoa-New Zealand their permanent place of residence. Migration is considered as the movement of people from one geographical region to another, which may be on temporary or permanent basis (Trlin, 1992, p. 1-2). People migrate based on the prevailing conditions and the reasons for it vary from one person to another depending on the situation that brought about the decision. Migration is a selective process affecting individuals or families with certain economic, social, educational and demographic characteristics (Trlin, 1992, p.23-24). According to the Organisation for Economic Co-operation and Development (OECD) Aotearoa-New Zealand has been identified as one of a small group of countries classified as ‘settlement countries’ (Keeley, 2009, p. 30). These patterns of migration contrasts earlier ‘sojourner’ era.

**Overall Life Satisfaction [are pacific peoples satisfied with life in Aotearoa-New Zealand?]**

The question on overall life satisfaction (Figure 19) is a single-item question asked in module 2 of the personal questionnaire. It is a measure of people’s perceived satisfaction with their lives overall. A number of circumstances may influence overall life satisfaction, such as your economic status, physical environment, income, housing conditions, education, safety and security and cultural well-being. These subjective well-being indicators are discussed individually, in detail later in this study where satisfaction measures within each of these domains will be analysed and compared to the overall life satisfaction.
In this section two charts are described – they include the question- how do you feel about your life as a whole right now? The question of how do you feel about your life as a whole right now is further investigated for Pacific peoples by controlling for family type. As discussed in the methods chapter contingency tables were selected based on statistical criteria being met.

86 percent of New Zealanders are satisfied with their life overall compared to 80 percent of Pacific peoples. Pacific peoples proportion satisfied with their life overall is second lowest of the ethnic groups. Māori have the largest proportion 13 percent dissatisfied with their life overall compared to 7 percent of all New Zealanders. If you are Pacific you are 1.8 times more likely to be neither satisfied nor dissatisfied with life overall than European.

Figure 19: OLSQ01 How do you feel about your life as a whole right now?

27 percent of ‘Pacific couple with adult children and possible others’ are neither satisfied nor dissatisfied with life overall. If you are a ‘Pacific couple with adult children and possibly others’ you are 2.2 times more likely to be neither satisfied nor dissatisfied with life overall than non-Pacific.
Culture and Identity [who are pacific peoples and can they live like they did in the Islands?]

There is an identified (Robinson, 1997; Statistics New Zealand, 2001) need for more detailed information about how people living in Aotearoa-New Zealand identify themselves, the interconnection between different cultural groups, and strength of 'belonging' in Aotearoa-New Zealand. Culture encompasses the customs, practices, language and beliefs that define a particular social group. Identifying with a particular cultural group provides a sense of inclusion, and facilitates access to social networks with shared values and aspirations. A sense of belonging is important for a person's sense of self-worth and how they relate to others, and thus contributes to overall well-being. Robinson (1997) suggests that the collection of such data (social capital) may be used as an advocacy tool, particularly if there were a relative disadvantage for a particular sector or grouping in relation to other sectors or groupings.

Culture refers to the customs, practices, languages, values and world views that define social groups such as those based on nationality, ethnicity, region or common interests. Cultural identity is important for people’s sense of self and how they relate to others. A strong cultural identity can contribute to people’s overall wellbeing.

In this section thirteen charts are described they include;
1. the number of people who raised the respondent who were born in New Zealand,
2. the question- as far as you know how many of those people were born in New Zealand,
3. the question- was that (other) person born in New Zealand,
4. number of generations in New Zealand,
5. birthplace of parents;
6. the question- do you feel that you belong to New Zealand,
7. the question- would you say you feel very strongly, strongly or not very strongly about belonging to New Zealand,
8. the question- do you feel that you belong to any other country,
9. the question- here in New Zealand how easy or difficult is it to express your own identity,
10. the question- here in New Zealand, how easy or difficult is it to express your own identity is further investigated for Pacific peoples by controlling for family type (3 charts) and the final chart
11. the question- person finds it difficult to express their identity in New Zealand.

Pacific and Asian communities have the highest proportions of respondents whom were not raised by anyone born in New Zealand. If you are Pacific you are 2.4 times more likely than the total population not to have been raised by anyone born in New Zealand.
Of the population of respondents who were raised by ‘more than 2 but less than 6’ people, for Pacific 65.5 percent were born overseas (Figure 22). For Asian people 98.7 percent were born overseas (Figure 22). These statistics show the recent migration patterns of these communities to New Zealand. Note: this question is filtered from question CULQ06.

Figure 22: CULQ07 As far as you know, how many of those people were born in New Zealand?

Of the population of respondents who were raised by at least one person for Pacific 83.6 percent were born overseas; for Asian people 98.9 percent were born overseas (Figure 23).
Pacific and Asian respondents are highly represented as being in the first generation living in New Zealand. Also if you are Pacific you are 3.9 times more likely to be a second generation living in New Zealand than the usual population. On other hand, quite surprisingly the proportion of 3rd generation is quite high.

Pacific and Asian are highly represented in terms of where parents of respondents were born. Two in three Pacific respondents were raised by parents/people born overseas.
Pacific people feel relatively the same as most other ethnic groups when asked “Do you feel that you belong to New Zealand? 94.3 percent with national average being 95 percent. Asian communities were the lowest at 86.5 percent.

How a person feels about belonging to New Zealand is further exemplified when respondents were asked the degree to which they felt about belonging to New Zealand. Pacific peoples appear to be split between feeling ‘very strongly’ and feeling ‘strongly’. Whereas with most other ethnic groups except Asian reported a higher proportion of feeling ‘very strongly’ about their convictions of belonging to New Zealand.
When asked “Do you feel that you belong to any other country? Pacific peoples scored the highest 92.9 percent next highest being Asian 91.4 percent. This suggests how these communities self-identify back to the homelands of themselves and/or their ancestral roots. None more so evident in the Pacific community who are mostly New Zealand born. This assumption is not further tested because of the criterion rules for contingency table selection detailed in the methods chapter.

When asked “Here in New Zealand, how easy or difficult is it for you to express your own identity? Pacific communities again compared favourably with most
other ethnic communities. Asian scored well below the national average 66.3 percent and 83.2 respectively.

Figure 29: CULQ04 Here in New Zealand, how easy or difficult is it for you to express your own identity?

Expressing a person’s identity is further investigated by Pacific and Non-Pacific and then by family type. This investigation showed that Pacific peoples compared comparatively well with the rest of the population. If you were Pacific household with one parent with adult children you were 1.19 times more likely to find it easy to express your identity when compared to Non-Pacific 91.7 percent and 77.4 percent respectively.

Figure 30: CULQ04 Here in New Zealand, how easy or difficult is it for you to express your own identity? BY Family type by child dependency status BY ethnic group Pacific and Non-Pacific

Pacific people not in family nucleus were also found it easy to express their identity compared to Non-Pacific 91.5 percent and 84.1 percent.
Also noted is if you were Pacific couple without children you were 2 times more likely than Non-Pacific to find it difficult to express your own identity. The primary reason for this is Non-Pacific group are mainly European ethnic group who have lived here for a number of generations.

Selected reasons why people find it difficult to express their identity in New Zealand were also investigated. For Pacific peoples it being illegal to express your identity was not an issue with 100 percent of respondents reporting it was not an issue. In terms of being worried about what other people might do, Pacific peoples reported this as being the major reason for not expressing their identity, 29.2 percent. 18.8 percent of Pacific respondents reported that other reasons is why they felt they could not express their identity.
Cultural identity is an important contributor to people’s wellbeing. Identifying with a particular culture helps people feel they belong and gives them a sense of security. However, strong cultural identity expressed in the wrong way can contribute to barriers between groups, as members of smaller cultural groups can feel excluded from society if others obstruct, or are intolerant of, their cultural practices (Ministry of Social Development, 2010, p. 84).

**Economic Standard of Living and New Zealand Deprivation Index [is money everything to pacific peoples?]**

In this section on the economic standard of living ten charts are described;

1. the derived variable for economic living standards,
2. generally, how would you rate your standard of living,
3. generally, how satisfied are you with your current standard of living,
4. generally, how satisfied are you with your current standard of living is further investigated for Pacific peoples by controlling for age, family type, respondents who are born in New Zealand
5. would say that you have enough money just enough money, enough money, or more than enough money,
6. sources of personal income,
7. amount of personal income, and a chart representing the
8. New Zealand Deprivation Index.
The distribution of living standards by ethnicity shows marked differences for the different ethnic groupings as illustrated in figure 34. The European population on the whole has a favourable distribution, with the majority of the population having living standards that are described as “fairly comfortable” or “good”. In contrast, the distributions for the Māori and Pacific populations are less favourable, with higher proportions at the lower and middle parts of the scale and lower proportions at the top end of the scale. For Pacific peoples there seemed to be a shift from middle restricted to comfortable living standard. For the total population living standards stayed relatively the same.

Figure 34: ELSDV1 Economic standard of living

Also of interest is the comparison between GSS2008 and 2010 as illustrated in figure 35. Of note are the changes for Pacific peoples at each ends of the scale. For Pacific peoples ‘very restricted’ had a negative change by almost 3% from 9.2% in 2008 to 12.1% in 2010, this is one of the largest movements in any category. On the opposite side for Pacific people ‘very good’ has had a relatively large negative change at just under -2.0%, from 4.6% in 2008 to 2.8% in 2010. What this suggests is that middle Pacific peoples are doing relatively well whereas the two extremes ‘very restricted’ and ‘very good’ are doing poorly. It could also be suggested that middle class Pacific peoples are doing better than middle class New Zealanders, at least between 2008 and 2010 according to the NZGSS survey. The global financial crisis (GFC) probably had a more severe impact on Pacific populations in New Zealand than New Zealanders overall. However, this would be too soon to be reflected in the 2008 data on which the thesis is based.
Similar to the other ethnic groups, Pacific peoples proportionally rate their standard of living as being ‘medium’. However, Pacific peoples are disproportionately represented when rating themselves as ‘fairly low and low’ 12.7 percent, similar to Māori, 11.6 percent. Pacific peoples are 3.85 times more likely to rate their standard of living as fairly low to low than European people (Figure 36).

Figure 36: ELSQ06 Generally, how you rate your standard of living?

Pacific peoples as with other ethnic groups are mostly ‘very satisfied to satisfied’ with their current standard of living 74.2 percent, total population 80.9 percent. Pacific peoples are 1.69 times more likely to be ‘dissatisfied and very dissatisfied’ with their current standard of living.
The following three charts further investigate the question—generally, how satisfied are you with your current standard of living but controls for age, family type and being New Zealand born. These control variables only examine ethnicity by Pacific and Non-Pacific ethnic groups. The investigation also only looks at responses for ‘dissatisfied and very dissatisfied’.

When controlling for age, Pacific age 25-34 show the highest dissatisfaction with their current standard of living 14.8 percent (Figure 38). If you are Pacific aged 55+ you are 2.49 times more likely to be dissatisfied and very dissatisfied with your current standard of living than non-Pacific (Figure 38). Pacific aged 15-24 years are less likely to be dissatisfied and very dissatisfied than non-Pacific aged 15-24 years, 2.4 percent and 6.8 percent respectively (Figure 38).
When controlling for family type, families with ‘one parent with at least one dependent child and possibly others’ record the highest level of dissatisfaction for their current standard of living Pacific 22.9 percent, non-Pacific 24.4 percent (Figure 39). If you are Pacific ‘couple without children’ you are 3.35 time more likely to be dissatisfied with your current standard of living than non-Pacific ‘couple without children’ 11.4 percent and 3.4 percent respectively (Figure 39).
When controlling for place of birth Pacific born people show a higher level of dissatisfaction of current standard of living than non-Pacific born people (Figure 40). If you are Pacific born in New Zealand you are 1.53 times more likely to be ‘dissatisfied and very dissatisfied’ with your current living standard than non-Pacific born in New Zealand (Figure 40).

**Figure 40:** ELSQ07 Generally, how satisfied are you with your current standard of living? BY Were you born in New Zealand? BY ethnic group Pacific and Non-Pacific

Pacific peoples along with Māori show similarly high proportions of not having enough money. If you are Pacific you are 2.85 times more likely than European and 2.16 times more likely than total population to not have enough money.

**Figure 41:** ELSQ08 Would you say that you have not enough money, just enough money, enough money, or more than enough money?
From a selection of ‘Sources of Income’ Pacific peoples are highly represented on benefits especially dpb and no source of income. Pacific peoples like Māori are lowly represented in income from business and interest sources. If you are European you are 7.15 times more likely than Pacific to gain income from interest, this suggests the low levels of investment that Pacific peoples engage with.

Figure 42: CORDV8 Sources of personal income

Consistent with much literature, Pacific are overrepresented in low income statistics. If you are Pacific you are 2.19 times more likely to have less than or zero income than the general population. The encouraging news is that if you are Pacific you are 1.4 times more likely to earn between $35,001 - $40,000, than the general population. According to Statistics New Zealand Census data the median income for New Zealand was $24,400 in 2006.
New Zealand Deprivation Index

If you are of Pacific ethnicity you are 4.6 times more likely to appear in the most deprived areas (mesh blocks- 10) than if you were in the general population.

Also of interest is the comparison between GSS2008 and GSS2010 as illustrated in figure 45. The pattern suggests favourably for Pacific peoples, increase in decile 1 and 2 representation and significant decreases in the less desirable deciles 9 and 10. Deciles 3, 4 and 5 show moderate declines in representation and increase representation in deciles 6 and 7. Once again as per the derived economic standard
of living variable the changes suggest an emerging middle ‘class’ Pacific community. It could also be again suggested that middle class Pacific peoples are changing at a greater rate than middle class New Zealanders, at least between 2008 and 2010 according to the NZGSS survey.

Figure 45: NZDep New Zealand Deprivation Index 2006 (based on 2006 Census) 2008 & 2010

Knowledge and Skills [how much do pacific peoples value education?]

Knowledge and skills enhance people’s ability to meet their basic needs, widen the range of options open to them in every sphere of life, and enable them to influence the direction their lives take. The skills people possess can also enhance their sense of self-worth, security and belonging. Educational attainment is an indicator of the skills available in the economy. The level of formal educational qualifications in the population is a commonly used proxy for stock of human capital, i.e. the skills available in the population and labour force.

In this section on knowledge and skills six charts are described;

1. the question- how do you feel about your knowledge skills and abilities,
2. the question- are you currently doing any study or training,
3. the derived variable highest qualifications for Level 1 certificate and highest qualification Doctorate degree,
4. the question- what is your highest completed secondary school qualification, and
5. the question- in what year did you complete this qualification-highest completed qualification apart from secondary school qualification.
A high proportion of most communities feel satisfied about their knowledge, skills and abilities. The national average is 87 percent and most communities except Māori (78.1 percent) are over 80 percent. Pacific (11.8 percent), Māori (12.5 percent) and Asian (12 percent) communities have higher proportions of respondents that responded ‘neither satisfied nor dissatisfied’ than other communities.

Figure 46: KASQ01 How do you feel about your knowledge, skills and abilities?

When asked ‘Are you currently doing any study or training? Pacific peoples significantly more often said yes when compared to other communities. If you are Pacific you were 1.7 times more likely than European to be currently studying. This suggests that the drive towards upward mobility from studying or gaining credentials is an important aspect to Pacific peoples.
In terms of the respondents highest qualification, Pacific peoples (76 percent) overall has the second lowest for having at least a level 1 qualification, national average being 80 percent, Pacific peoples only a tad below this level.

However Pacific peoples are doing very well in terms of proportions that have a Doctorate degree 12.2 percent second only to Asian 18.2 percent and well above national average of 4.7 percent.
Pacific peoples compare comparatively well in terms of having a secondary school qualification. 72.4 percent of Pacific has completed a secondary school qualification, the national average being 71.9 percent. If you are Pacific you are 1.5 times more likely than Māori to have a completed secondary school qualification.

With a slight hiccup between 1980 to 1984, Pacific peoples completing at least a National Certificate level 1 has had a rapid increase since 1970. A promising sign is the recent rate of Pacific and Māori has accelerated and since 1995 have surpassed national averages but are also among the top two ethnic groups.
Housing [is Aotearoa-New Zealand really home away from home?]

Housing space adequate to the needs and desires of a family is a core component of quality of life. In this section on housing four charts are described; the derived variable household crowding, the derived variable household size, the derived variable major problems with house or neighbourhood and the question- how do you feel about where you are currently living.

Gray (2004) presented a paper on housing an extended family in Aotearoa-New Zealand is her research amongst others made 2 observations; an evolving definition of the qualitative requirements of social housing, and that dwellings that are built to the minimum requirements of the Building Code do not necessarily meet the diverse and reasonable requirements of extended family households (p. 8). A report by Housing New Zealand (2009) suggests that for Pacific peoples, housing is a means of reaffirming cultural identity. This generally means for Pacific peoples the housing layout and expressions of cultural practices such as birthdays, weddings and funerals are held at the home. Moreover, the preferred layout of the home reflects these values and norms therefore the home becomes the focal point for immediate and extended family members even after children have left home (Centre for Housing Research Aotearoa-New Zealand, 2007; Koloto and Sharma, 2005).
The Canadian National Occupancy Standard calculates crowding by when household need exceeds the number of bedrooms available. This measure is complex and calculates the number of bedrooms needed based on the members of a household. It presumes that there should be no more than two people to a bedroom but that couples and children of certain ages can share a bedroom (Statistics New Zealand, 2012, p. 8). Therefore crowding occurs when the dwellings that people live in are too small to accommodate the number of people in a household.

In Aotearoa-New Zealand, Māori have consistently lived in more crowded conditions than Europeans. In recent years, Pacific peoples have experienced the highest levels of crowding (Statistics New Zealand, 2012). The level of crowding experienced by Pacific peoples and Māori appears to be the result amongst other factors; include larger household size (including a higher proportion of households with multiple families or extended families) and affordability issues (the household cannot afford a dwelling large enough to accommodate its members (p.10).

Studies have also shown that poor housing (including crowded housing) and poor health are linked (Milne and Kearns, 1999). Studies have also found that crowded households are associated with a wide range of health conditions in adults such as mental illness (Gabe and Williams, 1993) and tuberculosis deaths (Antunes and Waldman, 2001) and children (including acute lower respiratory disease (Cardoso, Cousens, de Goes Siqueira et al, 2004) and meningococcal disease (Baker, McNicholas, Garrett et al, 2000).

Figure 52 shows that Pasifika and Māori have alarmingly high proportions needing one or more bedrooms to cope with the number of people in the home. If you are Pacific you are 4.3 times more likely than the total population to need one or more bedrooms. If you are European you are 3 times more likely than Pacific to have two or more bedrooms spare.
Also of interest is the comparison between GSS2008 and GSS2010 as illustrated in figure 53. For Pacific peoples needing one or more bedrooms, they have increased significantly relative to the other categories. This seems to suggest that the problem of overcrowding has not improved over this period. In 2010, if you are Pacific you are 5.4 times more likely than the total population to need one or more bedrooms.

Figure 53: HOUDV2 Household crowding 2008 & 2010
If you are Pacific you are 4.9 time more likely to eight people or more living in your household, than the general population. Māori have similar levels. Pacific peoples are highest in five people, six people and seven people living in one household, 21.2 percent, 9.7 percent and 9.7 percent respectively.

Figure 54: CORDV6 Household size

Problems with house/flat, street or neighbourhood you live in reduces the quality of life for those living in their homes. If you are Pacific you are 1.2 times more likely to experience a major problem with housing than the general population. Pacific is also the second highest behind Māori with major problems with housing, 62.1 percent and 64.3 percent respectively (Figure 55).

Figure 55: HOUDV3 Major problems with house or neighbourhood
Lack of space and poor housing conditions may go some way to explaining why a high proportion of Pacific and Māori are dissatisfied or very dissatisfied with their current living standards. If you are Pacific you are 1.5 times more likely than the general population to be dissatisfied or very dissatisfied with your current living standard (Figure 56). Very satisfied and satisfied have been excluded.

Figure 56: HOUQ01 How do you feel about where you are currently living?

Physical Environment [do pacific peoples miss living in the Islands]

The physical environment includes both the 'built' environment and the natural environment in which people live. A healthy environment and the desire to maintain this environment is important for people's physical and emotional well-being.

In this section on the physical environment seven charts are described; the question-how many of the facilities that you want to go to can you easily get to, and the question- overall how do you feel about the quality of council services and roads in your town, city or rural area. The question- how do you feel about your access to public transport in your town, city or rural area is presented for Pacific peoples by controlling for age. The remaining four charts present the question- how do you feel about the state of the lakes, rivers, harbours, oceans and coastlines that you’ve been to further investigated for Pacific peoples by controlling for sex, age, family type and place of birth.
When asked “How many of the facilities that you want to go to can you easily get to? Only 47.6 percent of Pacific peoples said ‘all of them’ the lowest of all ethnic communities and well below the national average of 65.1 percent.

Figure 57: PHYQ01 How many of the facilities (such as shops, schools, post shops, libraries, medical services) that you want to go to can you easily get to?

![Bar chart showing percentage of easy access to facilities by ethnicity.]

When asked “Overall, how do you feel about the quality of council services such as water supply, drainage, rubbish collection and roads in your town, city or rural area? 71.6 percent of Pacific peoples felt they were very satisfied/satisfied with the quality of council services, highest being Asian at 80.4 percent.

Figure 58: PHYQ05 Overall, how do you feel about the quality of council services such as water supply, drainage, rubbish collection and roads in your town, city or rural area?

![Bar chart showing satisfaction levels with council services by ethnicity.]

Respondents were asked “How do you feel about your access to public transport in your town, city or rural area? Pacific peoples felt positive overall when compared
to Non-Pacific 75.3 percent and 65.7 percent respectively. Investigating further if you are Pacific 55+ you are more likely to be satisfied with access to public transport when compared to Non-Pacific in the same age group, 95.8 percent and 72 percent respectively. This suggests that Pacific peoples choose to live in areas better served by public infrastructure and services.

Figure 59: PHYQ03 How do you feel about your access to public transport in your town, city or rural area? BY Age BY ethnic group Pacific and Non-Pacific

Respondents were asked “How do you feel about the state of the lakes, rivers, harbours, oceans and coastlines that you’ve been to? The questions were further investigated by four different social indicators; whether the respondent was born in New Zealand or not; sex of the respondent; age of respondent; and the type of family structure they belong to. These were all analysed using Pacific versus Non-Pacific.

When comparing Non-Pacific with Pacific, overall Pacific felt less satisfied than Non-Pacific in terms of the nation’s natural physical environment. Higher proportions of Pacific were found answering ‘neither satisfied nor dissatisfied’. For example, if you are a Pacific female then you are 2.2 times more likely to be neither satisfied nor dissatisfied about the state of lakes etc. than a non-Pacific female (Figure 60); if you are Pacific born in New Zealand you are 1.9 times more likely to be neither satisfied nor dissatisfied than Non-Pacific born in New Zealand (Figure 61); if you are Pacific between 25 to 34 years you are 2.17 times more likely to be neither satisfied nor dissatisfied than Non-Pacific (Figure 62); and if you are Pacific one parent with at least one dependent child and possibly others then you are 3.83 times more likely to be neither satisfied nor dissatisfied than Non-Pacific (Figure 63).
These analyses suggest that Pacific single parent New Zealand born females aged between 25 to 34 are more than likely to not be concerned about the nation’s states of lakes etc. than Non-Pacific of the same social status.
Paid Work [for pacific peoples is having a job enough to be satisfied with life?]

Safety at work is an important contributor to wellbeing and the risk of work-related accidents or illness can be seen as one component of the quality of work. Safety at work could also mean security of employment and opportunities to enhance financial security for individuals and families.

In this section on paid work three charts are described; the question- how safe do you feel at work, opportunities you would choose from pay and hours worked, and the question- how do you feel about your employment arrangement.

According to GSS2008 when asked “How safe do you feel at work? Pacific peoples have the lowest unsafe (unsafe + very unsafe) proportion (0.08 percent) compared to other ethnic groups and lower than the national average (2.0 percent). In terms of being safe (very safe + safe) Pacific is second to European, 93.3 percent and 93.5 percent respectively both higher than the national average of 92.9 percent.

Figure 64: SAFQ01A How safe do you feel at work?

When asked “If you had the opportunity, would you choose to work pay-related more/less hours? 53.6 percent of Pacific peoples said they would work more hours and receive more pay. The next highest response was Asian 52.1 percent with the national average at 31.4 percent. This implies that Asian and Pacific are not afraid to work longer. It also suggests strong work ethics accustomed to hard work and that economic or monetary gain is very important to these communities. This could
be due to necessity and more so for Pacific peoples because of the large family sizes.

**Figure 65: WORQ02 If you had the opportunity would you choose to:**

In addition to Pacific wanting to work more for more pay, when asked “How do you feel about your employment arrangement? Pacific were 3 times more likely than European and 2.2 more likely than the average person to be dissatisfied (dissatisfied + very dissatisfied) with their employment arrangements. A useful analysis would have been to investigate further what these arrangements are however due to the statistical criterion outlined in the methods chapter no further analysis is conducted.
Leisure and Recreation [what is leisure and recreation to pacific peoples?]

It is desirable to be satisfied in participation in leisure and recreational activities. Having sufficient time to do this is a crucial component for a balanced healthy lifestyle. The Ministry of Social Development Social Report (2010) describes leisure time as “time when people can do what they want to do, away from work and other commitments” (p92). Work/life balance is about people having the right combination of participation in paid work and other aspects of their lives. People’s perception of their work/life balance have an impact on their perception of personal wellbeing. The 2010 Social Report also indicated that 74 percent of Pacific peoples were satisfied with their leisure time. This had similar levels with European ethnic group (76 percent) and Māori (75 percent). Asian ethnicity had the lowest level of satisfaction (70 percent).

The chart below has been extracted from a multivariate three-way cross tabulation analysis examining the question “in the last four weeks, do you feel that you had too much free time, the right amount of free time or not enough free time? The remaining two cross tabulations are age categories (15-24 years; 25-34 years; 35-54 years; and 55+ years) and ethnicity (Pacific and Non Pacific).
If you are Pacific aged 55+ or aged 25 to 34 you are 2.1 and 2.5 times more likely to have too much free time than non-Pacific, respectively. The 2010 Social Report reported that New Zealanders aged 25 to 34 years were less satisfied overall than other age groups (68 percent). It also found that New Zealanders aged 55 to 64 were more likely to report being satisfied with their leisure time (77 percent). New Zealanders aged 65 years and over reported the highest levels of overall satisfaction with their leisure time (90 percent).

Figure 67: LEIQ01 In the last four weeks, do you feel that you had too much free time, the right amount of time or not enough free time? BY Age BY ethnic group Pacific and Non-Pacific

In addition to this, if you are a Pacific couple without children or a Pacific couple with adult children and possibly others you are 3 and 3.9 times more likely to have too much free time than non-Pacific couple without children and non-Pacific with adult children, respectively. It is not uncommon for these types of families to have high free time it is interesting that Pacific is so much higher. For Pacific families that have adult children it is not uncommon that the children take on a lot of household responsibilities. For Pacific peoples participation in leisure and recreation activities can also mean family bonding and families doing things together in their leisure time. It would be interesting to glean if Pacific respondents took this into account when responding to this question. It is possible that what is viewed as work by one individual or within one culture could be viewed as leisure by another individual or within another culture. It is also possible that the same individual may consider the same activity in two different categories (i.e. eating lunch with a client is a work activity but eating dinner at home is a social/leisure activity) depending on circumstances (i.e. purpose of food consumption, dominantly business for lunch, and dominantly nutrition/enjoyment for dinner)
(Manrai, 1995). In contrast if you are Pacific one parent with adult children only, too much free time is nil.

Figure 68: LEIQ01 In the last four weeks, do you feel that you had too much free time, the right amount of time or not enough free time? BY Family type by child dependency status BY ethnic group Pacific and Non-Pacific

The chart above has been extracted from a multivariate three-way cross tabulation analysis examining the question “in the last four weeks, do you feel that you had too much free time, the right amount of time or not enough free time? The remaining two cross tabulations are family type by child dependency (couple without children; couple with at least one dependent children and possibly others; couple with adult children and possibly others; one parent with adult children only; and not in family nucleus) and ethnicity (Pacific and Non Pacific).

In the two multivariate analyses examining leisure and recreation it appears Pacific seem to be doing better than other ethnic communities in terms of having too much free time. Pacific couples without children and Pacific couples with Adult children tend to have higher too much free time than non-Pacific. Whereas Pacific households with one parent with adult children do not feel they have too much free time in fact nil too much free time. Of interest is the conceptual understanding of what is meant by ‘free time’ in a cultural setting. Access to data on pre-testing of GSS questions is out of scope for this study but would be useful for further study.
**Human Rights [what do human rights mean to Pacific peoples?]**

The enjoyment of civil and political rights enables people to participate in decision-making, to be fairly represented, to seek redress for discrimination and to conduct business with public officials in an open and transparent manner, without fear of involvement in corrupt practices.

Figure 69 is the only table discussed in this section because it was the only contingency table to passed the statistical criterion discussed in the methods chapter.

Although relatively smaller in proportion when compared to those who responded No to the question “In the last 12 months, have you been treated unfairly or had something nasty done to you because of the group you belong to or seem to belong to?” 10.1 percent of all respondents said Yes. Pacific 14.1 percent have similar levels of unfair treatment as Māori 16.7 percent and All other ethnicities 14.2 percent. European 7.3 percent has the least and Asian 23.5 percent the highest.

*Figure 69: HUMQ05 In the last 12 months, have you been treated unfairly or had something nasty done to you because of the group you belong to or seem to belong to?*
Social Connectedness [can pacific peoples live the way they – those that did - did in the Islands]

Families and friends are key sources of social support and give people a sense of belonging. Staying in touch with family and friends who live elsewhere helps maintain social connectedness between households.

In terms of ‘Availability of help in time of need’ Pacific have the lowest ‘support in time of crisis and small favours’ 85.2 percent the national average being 93.5 percent. Consequently it has the highest ‘neither support in time of neither crisis nor small favours’ 9.7 percent. Both these statistics are concerning considering it is commonly known that Pacific societies in comparison to most other Western societies actively practice collective ways of living. These practices or exchanges as described by Gershon, 2007, p. 479, have been brought to Aotearoa-New Zealand by these migrants from their homelands (p. 479). Furthermore Gershon asserts that ethnographers of Pacific diaspora examine how families shape diaspora instead of presuming diaspora shapes families (p. 490). Diener and Lucas (1999) also support this notion that human behaviours are based on ‘we’ as actors in our lived environment determined by our culture (p. 61).

However acculturation in ethnicity or ethnic identity can also impact on cultural practices from families homelands (Kim, Laroche, and Joy, 1990). Acculturation as described by Hui et al. (1992) is the extent to which an individual originating from another culture has integrated in the host culture. It appears the data presented may support these views described by Hui et al.
Safety and Security [can pacific peoples live the way they did in the Islands]

Safety is fundamental to wellbeing: violence and avoidable injuries, at the most extreme, threaten life itself. In other cases, they reduce the quality of life for the victim and other people in various ways. Both safety and security are important. Safety is freedom from physical or emotional harm, while security is freedom from threat or fear of harm or danger.
In this section on safety and security six charts are described; the question- how safe do you feel walking alone during the day in your neighbourhood, and most adverse impact of safety and security incidents. Also included is the question- how do you feel walking alone at night in your neighbourhood further investigated for Pacific peoples by controlling for age and gender.

When asked “How safe do you feel walking alone during the day in your neighbourhood?” Pacific peoples were positive about their safety 95.3 percent second only to All other ethnic groups 96.4 percent. The lowest is recorded by Māori at 91.8 percent well below the national average of 94.6 percent. Reasons for Pacific being relatively high could be because this community tend to clustered around their own communities. Pacific peoples proportionately feel safer than other communities, similar to All other ethnic group and higher than national level. As described earlier in this chapter Pacific peoples tend to be urbanised and live in the northern part of the North Island e.g. Auckland region South Auckland is commonly referred to by the media as the Polynesian capital of the world. Furthermore in the methods chapter of this study it is noted that high level analysis of the Pacific grouping indicated that the sample is representative of the population.

Figure 72: SAFQ01D How do you feel walking alone during the day in your neighbourhood?

When asked “How safe do you feel walking alone at night in your neighbourhood?” Pacific compares comparatively well with the rest of population. However, after further investigation by Age group Pacific peoples 55+ years felt significantly unsafe when compared to the rest of the population, 57.6 percent and 37.2 percent
respectively. The level of unsafeness of Pacific peoples 55+ years is also the highest when compared to other age groups with the Pacific population.

**Figure 73: SAFQ01E How do you feel walking alone at night in your neighbourhood? BY Age BY ethnic group Pacific and Non-Pacific**

Further investigation on how safe people feel walking alone at night in their neighbourhoods by sex showed that males feel safer than their female counterparts for both Pacific and the rest of the population. However if you are Pacific female you are 1.18 more likely than Rest of population to feel safer walking alone at night in your neighbourhood, 40.9 percent and 34.8 percent respectively.
In terms of most adverse impact of safety and security incidents for Pacific peoples it worked out better when compared to all other ethnic communities. If you are Pacific it is 1.5 times more likely for the incident to work out better in the end than someone from the Asian ethnic community, 4.8 percent and 3.1 percent respectively.
Comparing Factor Analyses in Two Groups

In the case of this study two groups (Pacific peoples and non-Pacific peoples) and one set of variables (23) were investigated. The factor analysis seeks to investigate if the two groups have the same factor structure and if the Pacific people’s factor analysis can be interpreted through a cultural lens i.e. the researcher’s and also his community cultural values.

Factor structure

It is apparent that the factor structures of both groups differ considerably (Figures 78 and 79). For this factor analysis, factor structure potentially contrasts ‘domains’ as described by Statistics New Zealand if peoples experiences do not fit with these. For Pacific peoples, eight dimensions in the component space account for 62.49% of the rotated variance. For Non-Pacific, seven dimensions in the component space account for 53.98% of the rotated variance.

The exploratory factor analysis largely verifies the factor structure (6 of 7) for the non-Pacific peoples ethnic group, which can also be described as the blue print for the NZGSS: 2008 Survey. However the Pacific people’s ethnic group 5 of the 8 factors resembles the domains of the NZGSS2008 survey. What this suggests for
the Pacific peoples ethnic group is that the questions asked in the NZGSS 2008 does not reflect those domains for this group and there is more variability so maybe a better fit. Moreover only one factor matched across the two ethnic groupings i.e. factor two for Non-Pacific ethnic group and factor three for Pacific peoples ethnic group. This factor related to economic living standard.

In the case that NZGSS: 2008 does not reflect survey domains for Pacific peoples, Moore, Brown and Scarupa (2003) propose some areas that may contribute to this dilemma; firstly, that social indicators need to be measured for the appropriate population, The primary purpose of the NZGSS is to provide information on the social well-being of general population of Aotearoa-New Zealand. Can then the NZGSS measure accurately sub-populations such as Pacific peoples? Furthermore, indicator measures need to reflect the different conceptualizations. There is a raft of literature on cultural diversity and its impact on society. Pacific Islanders differ from people from Asia and Europe. Even within these sub-populations diversity exists for example generational, socio-economic statuses, citizen and migrant groups.

Interpretation through a cultural lens

The following are interpretations (based on my own experience and knowledge) of what the eight factors could represent in terms of a Samoan view (Figure 79).

1. Village setting. Variables include feelings about the quality of council services and condition of public transport and safety of public transport night and day.
2. Village security (curfew or ‘Sa ole nuu’). Variable related to safety during the day in the local neighbourhood.
3. Fa’alavelave\(^1\). Variables related to rating of living standard, having enough money and satisfaction of current standard of living.
4. Fa’alavelave. Variables that relate to feelings about employment and job.

\(^1\) In Samoan the word faalavelave literally means an interruption. It speaks of an interruption to the family’s usual schedule. Families would have to reorganise their day or week in order to rally family members for enough resources to meet their faalavelave obligations. In earlier times faalavelave made it possible for the burden of resourcing large family events to be shared. The belief was that participating in faalavelave were acts of reciprocity. In the ideal these acts were manifestations and demonstrations of family love and bonding. They personified the best of family loving.
5. Village infrastructure. Variables that relate to facilities and access to public transport.

6. Leaving the homeland. Variables that relate to knowledge and skills and how we feel about life at the moment.

7. Aiga. Variable that relates to contact with friends.

8. Aiga. Variables that relate to identity, contact with family/relatives and safety at work.
Figure 78: Factor Structure for Non-Pacific peoples ethnic group

<table>
<thead>
<tr>
<th>Factor</th>
<th>Selected NZGSS: 2008 variable</th>
<th>Correlation Loadings</th>
<th>Communalities Extraction</th>
<th>Mean</th>
<th>SAS Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>How safe do you feel walking alone during the day in your neighbourhood?</td>
<td>0.916 0.878</td>
<td>11.62</td>
<td></td>
<td>SAFQ01D</td>
</tr>
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<td>1</td>
<td>How safe do you feel waiting for or using public transport such as buses and trains during the day?</td>
<td>0.689 0.588</td>
<td>11.92</td>
<td></td>
<td>SAFQ01B</td>
</tr>
<tr>
<td>1</td>
<td>How safe do you feel waiting for or using public transport such as buses and trains at night?</td>
<td>0.575 0.444</td>
<td>13.05</td>
<td></td>
<td>SAFQ01C</td>
</tr>
<tr>
<td>2</td>
<td>Would you say you have not enough money, just enough money, enough money, or more than enough money?</td>
<td>-0.750 0.588</td>
<td>12.54</td>
<td></td>
<td>ELSQ08</td>
</tr>
<tr>
<td>2</td>
<td>Generally, how satisfied are you with your current standard of living?</td>
<td>0.734 0.670</td>
<td>12.03</td>
<td></td>
<td>ELSQ07</td>
</tr>
<tr>
<td>2</td>
<td>Generally, how would you rate your standard of living?</td>
<td>0.727 0.599</td>
<td>12.46</td>
<td></td>
<td>ELSQ06</td>
</tr>
<tr>
<td>3</td>
<td>Think about the last four weeks, how do you feel about your job?</td>
<td>0.759 0.605</td>
<td>12.04</td>
<td></td>
<td>WORQ07</td>
</tr>
<tr>
<td>3</td>
<td>How do you feel about your employment arrangement?</td>
<td>0.699 0.500</td>
<td>11.66</td>
<td></td>
<td>WORQ09</td>
</tr>
<tr>
<td>3</td>
<td>How do you feel about your life as a whole right now?</td>
<td>0.512 0.482</td>
<td>11.91</td>
<td></td>
<td>OLSQ01</td>
</tr>
<tr>
<td>3</td>
<td>How do you feel about your knowledge, skills and abilities?</td>
<td>0.507 0.307</td>
<td>11.92</td>
<td></td>
<td>KASQ01</td>
</tr>
<tr>
<td>4</td>
<td>How do you feel about the condition of public transport vehicles, such as buses and trains, in your town, city or rural area?</td>
<td>0.813 0.686</td>
<td>12.41</td>
<td></td>
<td>PHYQ04</td>
</tr>
<tr>
<td>4</td>
<td>How do you feel about your access to public transport in your town, city or rural area?</td>
<td>0.788 0.647</td>
<td>12.35</td>
<td></td>
<td>PHYQ03</td>
</tr>
<tr>
<td>5</td>
<td>How do you feel about the condition of facilities in your town, city or rural area?</td>
<td>0.735 0.624</td>
<td>11.94</td>
<td></td>
<td>PHYQ02</td>
</tr>
<tr>
<td>5</td>
<td>How many of the facilities (such as shops, schools, post shops, libraries, medical services) that you want to go to can you easily get to?</td>
<td>0.727 0.584</td>
<td>11.44</td>
<td></td>
<td>PHYQ01</td>
</tr>
<tr>
<td>6</td>
<td>In the last four weeks, do you feel that you had too much free time, the right amount of free time or not enough free time?</td>
<td>0.765 0.610</td>
<td>12.35</td>
<td></td>
<td>LEIQ01</td>
</tr>
<tr>
<td>7</td>
<td>Would you say that you have too much contact, about the right amount of contact, or not enough contact with family/relatives?</td>
<td>0.795 0.661</td>
<td>12.23</td>
<td></td>
<td>SOCQ05</td>
</tr>
<tr>
<td>7</td>
<td>Would you say that you have too much contact, about the right amount of contact, or not enough contact with friends?</td>
<td>0.690 0.567</td>
<td>12.20</td>
<td></td>
<td>SOCQ10</td>
</tr>
</tbody>
</table>
Figure 79: Factor structure for Pacific peoples ethnic group

<table>
<thead>
<tr>
<th>Factor</th>
<th>Selected NZGSS: 2008 variable</th>
<th>Correlation</th>
<th>Communalities</th>
<th>Mean</th>
<th>SAS Name</th>
<th>Researcher Interpretation - Pacific</th>
<th>Researcher Interpretation - Mainstream</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Overall, how do you feel about the quality of council services such as water supply, drainage, rubbish collection and roads in your town, city or rural area?</td>
<td>0.707</td>
<td>0.545</td>
<td>12.30</td>
<td>PHYQ05</td>
<td>1 - Village settings</td>
<td>1 - Public administration</td>
</tr>
<tr>
<td>1</td>
<td>How do you feel about the condition of public transport vehicles, such as buses and trains, in your town, city or rural area?</td>
<td>0.704</td>
<td>0.546</td>
<td>12.24</td>
<td>PHYQ04</td>
<td>1 - Village settings</td>
<td>1 - Public administration</td>
</tr>
<tr>
<td>1</td>
<td>How safe do you feel walking for or using public transport such as buses and trains during the day?</td>
<td>0.641</td>
<td>0.706</td>
<td>11.97</td>
<td>SAFQ01B</td>
<td>1 - Village settings</td>
<td>1 - Public administration</td>
</tr>
<tr>
<td>1</td>
<td>How safe do you feel walking for or using public transport such as buses and trains at night?</td>
<td>0.601</td>
<td>0.655</td>
<td>12.08</td>
<td>SAFQ01C</td>
<td>1 - Village settings</td>
<td>1 - Public administration</td>
</tr>
<tr>
<td>2</td>
<td>How safe do you feel walking alone during the day in your neighbourhood?</td>
<td>0.540</td>
<td>0.739</td>
<td>11.73</td>
<td>SAFQ04D</td>
<td>2 - Village security</td>
<td>2 - Social Unit</td>
</tr>
<tr>
<td>3</td>
<td>Generally, how would you rate your standard of living?</td>
<td>0.734</td>
<td>0.634</td>
<td>12.40</td>
<td>ELSQ06</td>
<td>3 - Fa'alavelave’s</td>
<td>3 - Economic Well-being</td>
</tr>
<tr>
<td>3</td>
<td>Would you say you have not enough money, just enough money, or more than enough money?</td>
<td>0.582</td>
<td>0.634</td>
<td>12.13</td>
<td>ELSQ08</td>
<td>3 - Fa'alavelave’s</td>
<td>3 - Economic Well-being</td>
</tr>
<tr>
<td>3</td>
<td>Generally, how satisfied are you with your current standard of living?</td>
<td>0.608</td>
<td>0.630</td>
<td>12.22</td>
<td>ELSQ07</td>
<td>3 - Fa'alavelave’s</td>
<td>3 - Economic Well-being</td>
</tr>
<tr>
<td>4</td>
<td>How do you feel about your employment arrangement?</td>
<td>0.784</td>
<td>0.609</td>
<td>11.88</td>
<td>WORQ09</td>
<td>4 - Fa'alavelave’s</td>
<td>4 - Economic Well-being</td>
</tr>
<tr>
<td>4</td>
<td>Think about the last four weeks, how do you feel about your job?</td>
<td>0.784</td>
<td>0.607</td>
<td>11.88</td>
<td>WORQ10</td>
<td>4 - Fa'alavelave’s</td>
<td>4 - Economic Well-being</td>
</tr>
<tr>
<td>5</td>
<td>How many of the facilities (such as shops, schools, post shops, libraries, medical services) that you want to go to can you easily get to?</td>
<td>0.584</td>
<td>0.655</td>
<td>12.09</td>
<td>PHYQ01</td>
<td>5 - Village infrastructure</td>
<td>5 - Public administration</td>
</tr>
<tr>
<td>5</td>
<td>How do you feel about your access to public transport in your town, city or rural area?</td>
<td>0.584</td>
<td>0.655</td>
<td>12.09</td>
<td>PHYQ03</td>
<td>5 - Village infrastructure</td>
<td>5 - Public administration</td>
</tr>
<tr>
<td>6</td>
<td>How do you feel about your knowledge, skills and abilities?</td>
<td>0.756</td>
<td>0.654</td>
<td>12.11</td>
<td>KASQ01</td>
<td>6 - Leaving homeland</td>
<td>6 - Advancement</td>
</tr>
<tr>
<td>6</td>
<td>How do you feel about your life as a whole right now?</td>
<td>0.580</td>
<td>0.704</td>
<td>12.07</td>
<td>OLSQ01</td>
<td>6 - Leaving homeland</td>
<td>6 - Advancement</td>
</tr>
<tr>
<td>7</td>
<td>Would you say that you have too much contact, about the right amount of contact, or not enough contact with friends?</td>
<td>0.732</td>
<td>0.667</td>
<td>12.15</td>
<td>SOCQ10</td>
<td>7 - A'iga</td>
<td>7 - Social Unit</td>
</tr>
<tr>
<td>7</td>
<td>Here in New Zealand, how easy or difficult is it for you to express your own identity?</td>
<td>0.603</td>
<td>0.605</td>
<td>11.92</td>
<td>CULQ04</td>
<td>8 - A'iga</td>
<td>8 - Social Unit</td>
</tr>
<tr>
<td>8</td>
<td>Would you say that you have too much contact, about the right amount of contact, or not enough contact with family/relatives?</td>
<td>0.600</td>
<td>0.507</td>
<td>12.21</td>
<td>SOQQ03</td>
<td>8 - A'iga</td>
<td>8 - Social Unit</td>
</tr>
<tr>
<td>8</td>
<td>How safe do you feel at work?</td>
<td>0.386</td>
<td>0.380</td>
<td>11.70</td>
<td>SAFQ01A</td>
<td>8 - A'iga</td>
<td>8 - Social Unit</td>
</tr>
</tbody>
</table>
CHAPTER 5: DISCUSSION AND CONCLUSION

This chapter employs the cultural framework referred to in chapter one, to analyse the data specific to the Pacific cohort, to address the three key questions relevant to this research regarding social well-being of Pacific peoples and their communities in Aotearoa-New Zealand. It is unique because it looks at quantitative data firstly by number crunching e.g. running tests to filter data then grouping by domains as per design of survey e.g. health culture etc. It then attempts to answer the three research questions; how well and not so well are Pacific peoples doing when compared to other communities and the total population?; how well and not so well are Pacific peoples doing amongst their own communities? And how well and not so well are Pacific peoples doing in other areas of life domains?

**Discussion**

In this section three questions will be addressed. The first is how well and not so well are Pacific peoples doing compared with other communities and the total population? Secondly, how well and not so well are Pacific peoples doing when compared amongst their own communities? Thirdly, how well and no so well are Pacific peoples doing in areas of life domains? The section will then close with a summary.
How well and not so well are Pacific peoples doing when compared to other communities and the total population?

Figure 80: Summary of variables describing Pacific peoples

<table>
<thead>
<tr>
<th>Are Pacific doing better?</th>
<th>Researchers groupings</th>
<th>NZGSS: 2008 Labels</th>
<th>GSS Code</th>
<th>Dependent Variable</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>😊</td>
<td>Overall Life Satisfaction</td>
<td>Overall Life Satisfaction</td>
<td>OLSQ01</td>
<td>How do you feel about your life as a whole right now?</td>
<td>Subjective</td>
</tr>
<tr>
<td></td>
<td>Age</td>
<td>Core Person variable</td>
<td>CORDV9</td>
<td>Age</td>
<td>Objective</td>
</tr>
<tr>
<td>🌏</td>
<td>Place of birth</td>
<td>Core Person variable</td>
<td>CORPQ13</td>
<td>What year did you first arrive in New Zealand to live?</td>
<td>Objective</td>
</tr>
<tr>
<td>🌏</td>
<td>Place of birth</td>
<td>Core Person variable</td>
<td>CORPQ17</td>
<td>Length of stay in NZ core</td>
<td>Objective</td>
</tr>
<tr>
<td>🌏</td>
<td>Place of birth</td>
<td>Core Person variable</td>
<td>CORPQ11</td>
<td>Were you born in New Zealand?</td>
<td>Objective</td>
</tr>
<tr>
<td>🌏</td>
<td>Place of birth</td>
<td>Core Person variable</td>
<td>CORPQ12</td>
<td>What country were you born in?</td>
<td>Objective</td>
</tr>
<tr>
<td>🌏</td>
<td>Place of birth</td>
<td>Culture &amp; Identity variable</td>
<td>CULQ09</td>
<td>Was that (other) person born in New Zealand?</td>
<td>Objective</td>
</tr>
<tr>
<td>🌏</td>
<td>Place of birth</td>
<td>Culture &amp; Identity variable</td>
<td>CULDV1</td>
<td>Number of people who raised respondent who were born in NZ</td>
<td>Objective</td>
</tr>
<tr>
<td>🌏</td>
<td>Place of birth</td>
<td>Culture &amp; Identity variable</td>
<td>CULQ07</td>
<td>As far as you know, how many of those people were born in New Zealand?</td>
<td>Objective</td>
</tr>
<tr>
<td>🌏</td>
<td>Place of birth</td>
<td>Culture &amp; Identity variable</td>
<td>CULDV3</td>
<td>Birthplace of parents</td>
<td>Objective</td>
</tr>
<tr>
<td>🌏</td>
<td>Place of birth</td>
<td>Culture &amp; Identity variable</td>
<td>CULDV2</td>
<td>Number of generations in NZ</td>
<td>Objective</td>
</tr>
<tr>
<td>🌏</td>
<td>Location</td>
<td>UA</td>
<td>Urban area</td>
<td></td>
<td>Objective</td>
</tr>
<tr>
<td>🌏</td>
<td>Location</td>
<td>Region</td>
<td>Region</td>
<td></td>
<td>Objective</td>
</tr>
</tbody>
</table>
As illustrated in the findings Pacific peoples overall life satisfaction is similar to other ethnic groups. Pacific peoples have a youthful population this has significant implications in terms of Aotearoa-New Zealand’s future workforce, and challenges to Aotearoa-New Zealand's current education system. The age structure of the respondents in this study is similar to the 2006 New Zealand Census of population and dwellings. Pacific peoples have a considerably younger age profile than the total New Zealand population, with far greater proportions in the younger age groups.

The journey from other shores
Migration occurs as a response to economic development as well as social, cultural, environmental and political factors and effects on areas of origin as well as destination. People tend to move away from a place due to need to escape violence, political instability, drought, congestion in various dimensions. For Pacific peoples their story is about progress for themselves, extended families and future generations. The young age group of Pacific peoples has also resulted in a growing Aotearoa-New Zealand born population. The narration at the beginning of this thesis illustrates these notions. Lealasalanoa travelled to Aotearoa-New Zealand initially to fulfil her appetite for adventure but ultimately settling for a better future here and for those back in Samoa. Lealasalanoa and Uia Snr had children, raised and educated them in Aotearoa-New Zealand. They found a place to live, furnished it whilst continuing to send money back to their parents in Samoa. Their residence became the ‘transition’ home for immediate and extended families arriving from Samoa. In the early years cultural practices such as ‘umus’ (outdoor ovens) were still being used to cook for everyday needs to meet the large number of families sharing the one home. Not only was Aotearoa-New Zealand an attractive destination for migrants but it allowed (at least in the early years) to practice their traditions and cultures they left.
Figure 81: Summary of variables measuring well-being of Pacific peoples compared to other ethnic groups

<table>
<thead>
<tr>
<th>Are Pacific doing better? Researchers groupings</th>
<th>NZGSS: 2008 Labels</th>
<th>GSS Code</th>
<th>Dependent Variable</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economics</td>
<td>Core Person variable</td>
<td>CORDV12</td>
<td>Amount personal income</td>
<td>Objective</td>
</tr>
<tr>
<td>Economics</td>
<td>Economic Standard of Living variable</td>
<td>ELSQ08</td>
<td>Would you say you have not enough money, just enough money, enough money, or more than enough money?</td>
<td>Subjective</td>
</tr>
<tr>
<td>Economics</td>
<td>Economic Standard of Living variable</td>
<td>ELSQ06</td>
<td>Generally, how would you rate your standard of living?</td>
<td>Subjective</td>
</tr>
<tr>
<td>Economics</td>
<td>Paid Work variable</td>
<td>WORQ09</td>
<td>How do you feel about your employment arrangement?</td>
<td>Subjective</td>
</tr>
<tr>
<td>Economics</td>
<td>Paid Work variable</td>
<td>WORQ02</td>
<td>If you had the opportunity, would you choose to work pay-related more/less hours</td>
<td>Subjective</td>
</tr>
<tr>
<td>Economics</td>
<td>Economic Standard of Living variable</td>
<td>ELSQ07</td>
<td>Generally, how satisfied are you with your current standard of living?</td>
<td>Subjective</td>
</tr>
<tr>
<td>Economics</td>
<td>Core Person variable</td>
<td>CORDV9S_12</td>
<td>Sources personal income: selfemployment or business</td>
<td>Objective</td>
</tr>
<tr>
<td>Economics</td>
<td>Core Person variable</td>
<td>CORDV9S_21</td>
<td>Sources personal income: student allowance</td>
<td>Objective</td>
</tr>
<tr>
<td>Economics</td>
<td>Core Person variable</td>
<td>CORDV9S_19</td>
<td>Sources personal income: domestic purposes benefit</td>
<td>Objective</td>
</tr>
<tr>
<td>Economics</td>
<td>Core Person variable</td>
<td>CORDV9S_24</td>
<td>Sources personal income: no source of income during that time</td>
<td>Objective</td>
</tr>
<tr>
<td>Economics</td>
<td>Core Person variable</td>
<td>CORDV9S_14</td>
<td>Sources personal income: regular payments from ACC or a private work accident insurer</td>
<td>Objective</td>
</tr>
<tr>
<td>Economics</td>
<td>Core Person variable</td>
<td>CORDV9S_16</td>
<td>Sources personal income: government benefits</td>
<td>Objective</td>
</tr>
<tr>
<td>Economics</td>
<td>Core Person variable</td>
<td>CORDV9S_13</td>
<td>Sources personal income: interest, dividends, rent, other investments</td>
<td>Objective</td>
</tr>
<tr>
<td>Economics</td>
<td>Economic Standard of Living variable</td>
<td>ELSIDV1</td>
<td>Economic living standard derived variable (grouped)</td>
<td>Objective</td>
</tr>
<tr>
<td>Economics</td>
<td>Safety &amp; Security variable</td>
<td>NZDep</td>
<td>NZDep</td>
<td>Objective</td>
</tr>
<tr>
<td>Identity</td>
<td>Culture &amp; Identity variable</td>
<td>CULQ05_15</td>
<td>Person finds it difficult to express their identity in NZ because they worry about what other people might do</td>
<td>Subjective</td>
</tr>
<tr>
<td>Identity</td>
<td>Culture &amp; Identity variable</td>
<td>CULQ05_16</td>
<td>Person finds it difficult to express their identity in NZ because of other reasons</td>
<td>Subjective</td>
</tr>
<tr>
<td>Identity</td>
<td>Culture &amp; Identity variable</td>
<td>CULQ05_11</td>
<td>Person finds it difficult to express their identity in NZ because it is illegal to do it</td>
<td>Subjective</td>
</tr>
<tr>
<td>Identity</td>
<td>Culture &amp; Identity variable</td>
<td>CULQ03</td>
<td>Do you feel that you belong to any other country?</td>
<td>Subjective</td>
</tr>
<tr>
<td>Identity</td>
<td>Culture &amp; Identity variable</td>
<td>CULQ01</td>
<td>Do you feel that you belong to New Zealand?</td>
<td>Subjective</td>
</tr>
<tr>
<td>Identity</td>
<td>Culture &amp; Identity variable</td>
<td>CULQ04</td>
<td>Here in New Zealand, how easy or difficult is it for you to express your own identity?</td>
<td>Subjective</td>
</tr>
<tr>
<td>Identity</td>
<td>Human Rights variable</td>
<td>HUMQ09</td>
<td>In the last 12 months, have you been treated unfairly or had something nasty done to you because of the group you belong to or seem to belong to?</td>
<td>Subjective</td>
</tr>
<tr>
<td>Identity</td>
<td>Culture &amp; Identity variable</td>
<td>CULQ02</td>
<td>Would you say you feel that very strongly, strongly or not very strongly?</td>
<td>Subjective</td>
</tr>
<tr>
<td>Resources</td>
<td>Physical Environment variable</td>
<td>PHYQ05</td>
<td>Overall, how do you feel about the quality of council services such as water supply, drainage, rubbish collection and roads in your town, city or rural area?</td>
<td>Subjective</td>
</tr>
<tr>
<td>Resources</td>
<td>Physical Environment variable</td>
<td>PHYQ01</td>
<td>How many of the facilities (such as shops, schools, post shops, libraries, medical services) that you want to go to can you easily get to?</td>
<td>Subjective</td>
</tr>
<tr>
<td>Safety</td>
<td>Safety &amp; Security variable</td>
<td>SAPDV1</td>
<td>Most adverse impact of safety and security incidents derived variable</td>
<td>Subjective</td>
</tr>
<tr>
<td>Safety</td>
<td>Safety &amp; Security variable</td>
<td>SAPQ01D</td>
<td>How safe do you feel walking alone during the day in your neighbourhood?</td>
<td>Subjective</td>
</tr>
<tr>
<td>Support</td>
<td>Social Connectedness variable</td>
<td>SOCDV08</td>
<td>Availability of help in time of need</td>
<td>Subjective</td>
</tr>
</tbody>
</table>
Economics

Is money everything to Pacific peoples? The findings presented suggest not (Figure 81). Ten of the 13 selected variables showed that Pacific peoples were not well represented. Pacific peoples were over represented at the polar ends of key economic indicators such economic standard of living and New Zealand Deprivation Index. When asked how satisfied they were of their current standard of living, Pacific peoples reported the same as other communities. In terms of total personal income the comparison was favourable.

In Lealasalanoa narrative, she struggled financially to make ends meet. Well-paid jobs were out of her reach because of her limited education; therefore she worked multiple jobs and improvised to get her children through schooling such as working part time at the school her children attended. The data suggests, in terms of employment arrangement, Pacific peoples wanted to work more for more pay, also large proportion of Pacific peoples if given the opportunity would choose to work more and receive less pay, these notions of economic survival was experienced by Lealasalanoa over 40 years ago and apparently still exists today.

In addition the factor analysis also supports these findings. Factors 2 and 3 of the Pacific peoples factor structure groups’ economics and work related variables and I have assigned a cultural term of ‘fa’alavelave’.

Expressing identity

Figure 81 suggests that Pacific peoples feel comfortable expressing who they are in Aotearoa-New Zealand, seven of the 8 selected variables compare favourably with other communities.

In the narrative Lealasalanoa and Uia Snr. with other likeminded Samoan’s living in Aotearoa-New Zealand, pioneered the Samoan Catholic Community in Auckland beginning with the Kingsland Catholic Community. Governance and structures were put into place with several levels of entities such as Sunday school and youth groups. These were cultural practices they brought with them from Samoa. Today Pacific peoples have representation in central and local government and in Auckland a huge annual cultural event called “Pasifika Festival” enjoyed by thousands of people from all communities around the world.
Resources / Safety / Support

Few variables were selected to measure the above domains. Three of the 5 selected variables compared favourably with other communities. However, importantly, the social connectedness variable related to the support domain showed inconsistency with anecdotal evidence and the narrative from this thesis. It showed that Pacific peoples were well below other communities in terms of availability of help in time of need. Further exploration is needed to flesh this out more but as explained in the findings in this thesis; acculturation could be described as a reason for this phenomenon. By this one means that the environment is different from the homelands. In Samoa, communal living is a norm. It is difficult to practice village communal living here in Aotearoa-New Zealand with homes being spread over vast areas. Commuting then becomes an issue. Financial pressures of day to day living are different than in Samoa, in Aotearoa-New Zealand financial prudence equals comfortable quality of life.

In summary it would seem from the data that Pacific peoples are not doing so well when compared to other communities in Aotearoa-New Zealand. Suffice to say I would interpret from the data that Pacific peoples have not progressed since the days when Lealasalanao first came to Aotearoa-New Zealand. This could be a hypothesis for further investigation that takes into account data over time.
How well or not so well are Pacific peoples doing amongst their own community?

Four predetermined social variables were used to measure how well or not so well Pacific peoples are doing amongst their own communities; age, family type, New Zealand born and sex.

Figure 82: summary of variables measuring well-being within Pacific peoples

<table>
<thead>
<tr>
<th>Are Pacific doing better?</th>
<th>Independent (Predictor) Variable</th>
<th>GSS08 Domain</th>
<th>GSS08 Code</th>
<th>Dependent Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>🧐 Age</td>
<td>Economic Standard of Living Variables</td>
<td>ELSQ07</td>
<td>Generally, how satisfied are you with your current standard of living?</td>
<td></td>
</tr>
<tr>
<td>🧐 Age</td>
<td>Safety &amp; Security Variables</td>
<td>SAFQ01E</td>
<td>How safe do you feel walking alone at night in your neighbourhood?</td>
<td></td>
</tr>
<tr>
<td>🧐 Age</td>
<td>Physical Environment Variables</td>
<td>PHYQ12</td>
<td>How do you feel about the state of the lakes, rivers, harbours, oceans and coastlines that you’ve been to?</td>
<td></td>
</tr>
<tr>
<td>🧐 Age</td>
<td>Physical Environment Variables</td>
<td>PHYQ03</td>
<td>How do you feel about your access to public transport in your town, city or rural area?</td>
<td></td>
</tr>
<tr>
<td>🧐 Age</td>
<td>Leisure &amp; Recreation Variables</td>
<td>LEIQ01</td>
<td>In the last four weeks, do you feel that you had too much free time, the right amount of free time or not enough free time?</td>
<td></td>
</tr>
<tr>
<td>🧐 FamType</td>
<td>Economic Standard of Living Variables</td>
<td>ELSQ07</td>
<td>Generally, how satisfied are you with your current standard of living?</td>
<td></td>
</tr>
<tr>
<td>🧐 FamType</td>
<td>Overall Life satisfaction</td>
<td>OLSQ01</td>
<td>How do you feel about your life as a whole right now?</td>
<td></td>
</tr>
<tr>
<td>🧐 FamType</td>
<td>Physical Environment Variables</td>
<td>PHYQ12</td>
<td>How do you feel about the state of the lakes, rivers, harbours, oceans and coastlines that you’ve been to?</td>
<td></td>
</tr>
<tr>
<td>🧐 FamType</td>
<td>Culture &amp; Identity Variables</td>
<td>CULQ04</td>
<td>Here in New Zealand, how easy or difficult is it for you to express your own identity?</td>
<td></td>
</tr>
<tr>
<td>🧐 FamType</td>
<td>Leisure &amp; Recreation Variables</td>
<td>LEIQ01</td>
<td>In the last four weeks, do you feel that you had too much free time, the right amount of free time or not enough free time?</td>
<td></td>
</tr>
<tr>
<td>🧐 NZBorn</td>
<td>Economic Standard of Living Variables</td>
<td>ELSQ07</td>
<td>Generally, how satisfied are you with your current standard of living?</td>
<td></td>
</tr>
<tr>
<td>🧐 NZBorn</td>
<td>Physical Environment Variables</td>
<td>PHYQ12</td>
<td>How do you feel about the state of the lakes, rivers, harbours, oceans and coastlines that you’ve been to?</td>
<td></td>
</tr>
<tr>
<td>🧐 Sex</td>
<td>Physical Environment Variables</td>
<td>PHYQ12</td>
<td>How do you feel about the state of the lakes, rivers, harbours, oceans and coastlines that you’ve been to?</td>
<td></td>
</tr>
<tr>
<td>🧐 Sex</td>
<td>Safety &amp; Security Variables</td>
<td>SAFQ01E</td>
<td>How safe do you feel walking alone at night in your neighbourhood?</td>
<td></td>
</tr>
</tbody>
</table>
Age

Amongst Pacific communities’ age had varying degrees of how well or not so well the community was faring within certain life domains. When asked how satisfied they were with their current standard of living, Pacific aged 25-34 showed the highest dissatisfaction when compared to other Pacific age groups in addition if you were Pacific aged 55+ you are 2.49 times more likely to be dissatisfied and very dissatisfied with your current standard of living than non-Pacific. When asked “How safe do you feel walking alone at night in your neighbourhood? Pacific peoples 55+ years felt significantly unsafe when compared to the rest of the population and amongst other age groups within Pacific peoples. When asked “How do you feel about the state of the lakes, rivers, harbours, oceans and coastlines that you’ve been to? Pacific peoples between 25 to 34 years were 2.17 times more likely to be neither satisfied nor dissatisfied than Non-Pacific. When asked “How do you feel about your access to public transport in your town, city or rural area? Pacific age 55+ was more likely to be satisfied with access to public transport when compared to Non-Pacific. When asked “In the last four weeks, do you feel that you had too much free time, the right amount of free time or not enough free time? Pacific aged 55+ were 2.1 times more likely to have too much free time than non-Pacific. From the data presented two Pacific peoples age groups have been identified as standing out from others age groups and against non-Pacific ethnic group, 25-34 & 55+. Pacific peoples aged 25-34 showed higher dis-satisfaction with their current standard of living compared to other Pacific peoples age groups and non-Pacific ethnic groups but were found to be neither satisfied nor dis-satisfied with the state of public transport. Pacific peoples aged 55 and over also showed significant dissatisfaction with current standard of living and with safety walking alone at night. Pacific peoples 55 years and over were also satisfied with access to transport and the amount of free time.

These two age groups more so than other age groups within Pacific peoples, are dissatisfied with their current standard of living but generally happy with other parts of life.

Family Type

In terms of types of Pacific families across the nominated domains Pacific peoples did not do so well in economic standard of living and overall life satisfaction. For
example Pacific ‘one parent with at least one dependent child and possibly others’ recorded the highest level of dissatisfaction for their current standard of living compared to non-Pacific. Also a Pacific ‘couple without children’ are 3.35 time more likely to be dissatisfied with their current standard of living, than non-Pacific. If you are a ‘Pacific couple with adult children and possibly others’ you are 2.2 more likely to be neither satisfied nor dissatisfied with life overall than non-Pacific. When asked how do you feel about the state of the lakes, rivers, harbours, oceans and coastlines that you've been to? If you are Pacific one parent with at least one dependent child and possibly others you are 3.83 times more likely to be neither satisfied nor dissatisfied than Non-Pacific.

If you are Pacific couple without children or Pacific couple with adult children and possibly others you are 3 and 3.9 times more likely to have too much free time than non-Pacific couple without children and non-Pacific with adult children, respectively.

If you were Pacific household with one parent with adult children you were 1.19 times more likely to find it easy to express your identity when compared to Non-Pacific. Pacific people not in family nucleus were also found it easy to express their identity compared to Non-Pacific. However notably is if you were Pacific couple without children you were 2 times more likely than Non-Pacific to find it difficult to express your own identity.

Of all the different family types’ Pacific single parent with children and Pacific couples with children are most dissatisfied with their current standard of living. Pacific couples with adult children, and Pacific couples without children seem to have more free time and are satisfied with how they express their identity. This would suggest that for Pacific people with families, it is difficult to be happy about life.

- NZBorn

Pacific born in New Zealand, are 1.53 times more likely to be ‘dissatisfied and very dissatisfied’ with their current living standard than non-Pacific born in New Zealand. Pacific born in New Zealand, are 1.9 times more likely to be neither satisfied nor dissatisfied than non-Pacific born in New Zealand.
• Sex

Pacific female are 2.2 times more likely to be neither satisfied nor dissatisfied about the state of lakes etc. than a non-Pacific female.

Further investigation on how safe people feel walking alone at night in their neighbourhoods by sex showed that males feel safer than their female counterparts for both Pacific and the rest of the population. However, Pacific female are 1.18 more likely than the rest of the population to feel safer walking alone at night in one’s neighbourhood, 40.9 percent and 34.8 percent respectively.

Culturally, Pacific peoples found it easy to express their identity, especially Pacific one parent with adult children, and Pacific not in family nucleus. Pacific couples without children found it difficult when compared to non-Pacific. Pacific couple with adult children were more dissatisfied with how they felt about life than all other types of families e.g. Pacific couple without children.

Is money everything to Pacific peoples? At most levels money is an issue for Pacific peoples, many reporting dissatisfaction of their current economic standard of living from 25 to 34 year olds and 55+ age people to one parent with at least one child and couples with children and those born in New Zealand.

In summary, the data suggests, excepting economic standard of living variable, that Pacific peoples are doing moderately well within their own communities. These results resonate with the conceptual framework applied in the Vanuatu study.
How well or not so well are pacific peoples doing in areas of life domains?

Figure 83: Summary of variables measuring well-being in different life domains

<table>
<thead>
<tr>
<th>Are Pacific doing better?</th>
<th>Researchers groupings</th>
<th>NZGSS: 2008 Labels</th>
<th>GSS Code</th>
<th>Dependent Variable</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>☀️</td>
<td>Education</td>
<td>Core Person variable</td>
<td>CORPQ21</td>
<td>In what year did you complete this qualification?</td>
<td>Objective</td>
</tr>
<tr>
<td>☀️</td>
<td>Education</td>
<td>Core Person variable</td>
<td>CORDV15</td>
<td>Highest qualification</td>
<td>Objective</td>
</tr>
<tr>
<td>☀️</td>
<td>Education</td>
<td>Knowledge &amp; Skills variable</td>
<td>KASQ01</td>
<td>How do u feel about your knowledge, skills and abilities?</td>
<td>Subjective</td>
</tr>
<tr>
<td>☀️</td>
<td>Education</td>
<td>Core Person variable</td>
<td>CORPQ16</td>
<td>What is your highest completed secondary school qualification?</td>
<td>Objective</td>
</tr>
<tr>
<td>☀️</td>
<td>Education</td>
<td>Knowledge &amp; Skills variable</td>
<td>KASQ03</td>
<td>Are you currently doing any study or training?</td>
<td>Objective</td>
</tr>
<tr>
<td>☀️</td>
<td>Shelter</td>
<td>Core Person variable</td>
<td>CORDV6</td>
<td>Household size</td>
<td>Objective</td>
</tr>
<tr>
<td>☀️</td>
<td>Shelter</td>
<td>Housing variable</td>
<td>HOUDV3</td>
<td>Major problems with house or neighbourhood</td>
<td>Objective</td>
</tr>
<tr>
<td>☀️</td>
<td>Shelter</td>
<td>Housing variable</td>
<td>HOUDV2</td>
<td>Household crowding</td>
<td>Objective</td>
</tr>
<tr>
<td>☀️</td>
<td>Shelter</td>
<td>Housing variable</td>
<td>HOUQ01</td>
<td>How do you feel about where you are currently living?</td>
<td>Subjective</td>
</tr>
</tbody>
</table>
• Education [Is education important?]
A promising sign is the recent rate of Pacific peoples attaining education qualifications has accelerated sharply since 1995, and actually surpassed the nation average during this period. It terms of highest qualification, it is a mixed bag for Pacific peoples; level 1 certificate Pacific peoples have the second lowest rate but for doctorate degrees Pacific peoples are second only to the Asian ethnic group and 3 times higher than the national rate. High proportions of Pacific peoples are satisfied with their current levels of knowledge, skills and abilities. The proportions of Pacific peoples who are neither satisfied nor dissatisfied are also the same the European and Asian ethnic group and higher than the national average. Pacific peoples were 1.7 times more likely than European to be currently studying or training. The data suggests education is important to the advancement and aspirations of Pacific peoples.

• Shelter [Are our homes big enough?]
There is an embarrassing amount of literature pertaining to the poor housing of Pacific peoples and my data perpetuates those statistics. The literature also suggests that for Pacific peoples, housing is a means of reaffirming cultural identity. This generally means for Pacific peoples, the housing layout and expressions of cultural practices such as birthdays, weddings and funerals are held at the home. Moreover the preferred layout of the home reflects these values and norms, therefore the home becomes the focal point for immediate and extended family members even after children have left home. This resonates in my mother’s narrative, in that our home was used at the centre of community and family activities. The home was where the first Kingsland Sunday School started it was also the ‘half way’ house for relatives migrating from Samoa then moving to other parts of Auckland ton start a new life. To compound this, the tool used to measure ‘overcrowding’ does not comply with Pacific ways of living. The Canadian National Occupancy Standard calculates crowding by when household need exceeds the number of bedrooms available. This measure is complex and calculates the number of bedrooms needed based on the members of a household. It presumes that there should be no more than two people to a bedroom and that couples and children of certain ages can share a bedroom.
Conclusion

For Pacific peoples, Aotearoa-New Zealand has always been a land of opportunity. All have come with hopes and dreams and a vision of a better life for themselves and their children. They have moved from economically disadvantaged regions into the workforce of a developed country. But have these dreams been realised? A critical examination of the data from the first ever New Zealand General Social Survey (GSS) 2008 attempts to answer the question, ‘Does information about Pacific peoples OWB and SWB illuminate existing perspectives on what it is like to be a Pacific Islander in Aotearoa-New Zealand?’ This is critical as Pacific peoples have, do and will increasingly play a major role in the social and economic fabric of Aotearoa-New Zealand.

The researcher has identified promising new developments for measuring social wellbeing from this study. The method for interpreting and presenting the data is framed in a cultural lens as the researcher is from the Pacific. Further to this, the research is grounded in the narrative expressed by Lealasalanoa, her ambitions, struggles and successes during her life serving as a reminder to the researcher not to lose sight of the reasons why Pacific families migrated from the Islands to Aotearoa-New Zealand. This factor influenced the researcher’s selection of themes to scrutinize. In investigating the well-being of Pacific peoples by extracting and interpreting the data the researcher kept referring back and making comparisons with lived experiences and realities of Lealasalanoa and her community.

The literature review primarily focused on issues relating to social wellbeing, its various definitions, its origins, its usage and also major contemporary thinking around subjective (SWB) and objective (OWB) wellbeing. Furthermore, the New Zealand context in terms of social well-being was explored in detail, from its origins and how it is measured in New Zealand to relevant major works (projects and reports) such as; Big Cities quality of Life, Family; Family Whanau Wellbeing Project; and Aotearoa-New Zealand Social Reports. Therefore the literature review combined with the Lealasalanoa narrative provides a new way of interpreting the GSS: 2008 data.
Firstly, different from the extraction of data in most publically readily available data on Pacific peoples, this study applied proven statistical rules and conventions to provide a set of contingency tables for analysis i.e. statistical tests of significance accompanied by an effect-size statistic were conducted; p-value $p = 0.05$ or (5%) and effect size or strength of association is equal to or greater than $\eta^2 = 0.1$. These rules provided a set of data that are statistically robust enough to give solid meanings to the researcher’s interpretations. Many social wellbeing outputs including the NZ GSS and the NZ Social Reports produced by the Ministry of Social Development, do not apply these rules. Of the initial one hundred and seventy one contingency tables, a final sixty one tables were examined in this thesis.

The primary purpose of the GSS is to provide information on the social well-being of Aotearoa-New Zealanders. The second point to be made however, is that social statistics generally say the same thing primarily because most are based on dominant mainstream principles of a “one size fits all” way of measuring social wellbeing. This has a significant impact on minority groups such as Pacific Islanders. My literature review found that social indicators is widely used to measure social well-being at a national level. Very few studies have scrutinised the use of these national indicators to measure sub populations or for that matter the use or application of indicators that are intrinsically developed on economic premises. For indigenous communities, well-being is not necessarily driven by economic well-being; in fact, indigenous cultural practices and values are the measure of individual and social well-being. These cultural underpinnings can be seen in the interpretations of the statistical factor analysis where a Samoan interpretation to the eight factor structure is provided. Therefore it follows that social indicators developed primarily on the cultural values of a targeted sub population like Pacific peoples would provide a better platform to measure Pacific people’s well-being rather than the current approach of using ethnicity as a residual mechanism to measure Pacific peoples well-being. Certainly this research provides evidence that this should be the case.

A final point of significance is that the data also suggests that well established key measures or indicator tools used for economic well-being economic living standard derivative (ELSDV) and New Zealand deprivation index (NZDep), showed that
there is definitely an emerging Pacific middle-class that is producing better outcomes than mainstream middle-class. It also shows that Pacific peoples are not doing so well at polar ends, and the gap is widening.

Pacific migrants have formed permanant communities in Aotearoa-New Zealand reflected by the establishment of churches, educational contexts, sporting and professional bodies and community centres where they can celebrate their identities as Pacific peoples. It is at these places, where languages, dance, art forms, rituals of encounter and associated formalities and memories of home are shared, like Lealasalanoa’s story/narrative, which reaffirm their identities as Pacific peoples. This is reflected in Lealasalanoa’s statement expressed in typical fa’asamoa style, “Ia ole ‘auga tonu lena o lo’u olaga lena e te fai mai” literally meaning “Well that’s the root of my life. . .” ‘Ou te le fefe’ means I am not afraid; Pacific peoples indeed have demonstrated this in the waves of migration from their homelands to new lands including Aotearoa-New Zealand. Pacific peoples form an intrinsic part of the cultural and demographic mosaic of Aotearoa-New Zealand’s society and its future. Therefore those involved in developing statistical measures that measure the social well-being of Pacific peoples equally should not be afraid of developing new frameworks which reach out and capture the voices of Pacific peoples living in Aotearoa-New Zealand so they can respond appropriately to their aspirations.
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GLOSSARY: MĀORI

Pākehā Non-Māori
Tangata whenua Indigenous people of the land
Te Tiriti o Waitangi The Treaty of Waitangi
Whānau Family

GLOSSARY: SAMOAN

‘Aiga Family
‘Ou te le fefe Determination
Fa’asamoa Samoan customs and traditions
Faautaga Loloto Provision of sound based policy
Fale Dwelling
Feagaiga Brother-sister relationship
Ie toga Fine mats
Maea Traditionally made rope
Matai A titled head of a Samoan extended family
Niu Sila New Zealand
Tagaloalelagi Source of life
Taigaafi A fireplace made by mixing earth and lime with water and lining a depression in the floor of a house
Tofa mamo Search for deeper meanings
Tofa saili Search for wisdom
Va tapuia Time, space, sacred relations