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***Sexual Health Knowledge, Attitudes and
Behaviour of Sāmoan Youth in Aotearoa
New Zealand***

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

**Doctor of Philosophy
in
Public Policy**

**at Massey University, Albany
New Zealand**

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ABSTRACT

Sex and sexuality in many cultures are sensitive topics. For many Pacific communities where sex is often regarded as *tapu* (sacred), cultural and religious values largely frame how sexuality and pregnancy are understood. For many Sāmoans, sex is regarded as a taboo subject. While sexual activity may be a pleasurable experience, its consequences can be life-altering. In New Zealand, the sexual health status of teenagers, particularly Pacific young people, is concerning. Compared with other countries, the rates of sexually transmitted infections (STIs), unintended teenage pregnancies and suboptimal levels of contraceptive use in New Zealand are high. From a public health perspective, these issues pose serious social, economic and health risks. For teenagers, early sexual involvement and pregnancy can drastically affect their social, educational and emotional development and life chances. In an attempt to understand and address these sexual health issues, public policy agents seek appropriate information that can assist them in designing responsive interventions.

This mixed methods study explores the factors that influence the sexual health knowledge, attitudes and behaviours of Sāmoan secondary school students in Aotearoa New Zealand. An analysis of information from 535 Sāmoan students that participated in the *Youth '07* health survey was undertaken. Individual interviews with eight key informants, and eight focus groups comprised of 55 Auckland Sāmoan secondary school students were carried out.

This study presents a comprehensive picture of the sexual health patterns and issues unique to Sāmoan youth living in Aotearoa New Zealand. Three broad factors - the individual, family and wider environment - influence the sexual health knowledge, attitudes and behaviours of Sāmoan youth. This study proposes that to address sexual health issues for Sāmoan communities requires an understanding of three essential concepts: '**Context**', '**Communication**' and '**Co-ordination**'. The significance of this research and its findings extend to a range of audiences including Sāmoan young people, families, schools, health and social service providers and policy agents.

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DEDICATION

This dissertation is dedicated to my family:
my husband Peter, my mother Malia Paula Ulugia Alefosio,
my children Paula and Michael and
our *āiga* - past, present and future.

To you Lord - The supreme creator, doctor, philosopher, healer,
sexual health and relationship expert.

The I AM, the author of my past, present and future.

In this journey of life, you continue to reveal LOVE in its various manifestations
For this gift, I am extremely grateful.

Love is patient, Love is kind.

It does not envy, it does not boast, it is not proud.

It does not dishonour others, it is not self-seeking,

It is not easily angered, it keeps no record of wrongs.

Love does not delight in evil, but rejoices with the truth.

It always protects, always trusts,

always hopes, always perseveres.

Love never fails.

1 Corinthians 13: 4 - 8

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GLOSSARY OF SĀMOAN WORDS AND PHRASES

Āiga	A generic term for kinship and family which is commonly used by Sāmoans when talking about family household and/or extended family units.
Amio foi lele, le talafeagai	Behaviour that is inappropriate.
Ava	Reverence.
E sā	Not allowed.
Fa'aaloalo	Respect.
Fa'a Sāmoa	A term that describes the Sāmoan way of life; the customs and language of Sāmoa.
Fa'afafine	Sāmoan biological males who behave in a range of feminine-gendered ways.
Fale	Sāmoan house.
Fono	Councils or meetings great and small and applies to national assemblies and legislatures, as well as local village councils or any type of meeting between people.
Mamā	Pure.
Matai	Sāmoan chief.
Palagi	A non-Sāmoan person, term used to describe European westerners or Caucasians. The term is also used to describe foreigners or anything that does not belong to Sāmoa or Sāmoan culture.
Sa'o	Senior chief of a village or family.
Tapu	Sacred.
Tafao	Going out in a social setting.
Ta'u valea ai le āiga	The idea that one has brought shame to the family; dishonoured the family name. The family name has been defiled; tarnished; shamed; made foolish.
Teine lelei	Concept used to describe a 'good Sāmoan girl'.
Va fealoaloa'i	A term that recognises that people are sacred.

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CHAPTER ONE: INTRODUCTION

1.1 Background and Context

As a recently graduated social worker in 2003, I was excited that I was working in a role that enabled me to support Pacific families. Pani¹ was a young woman I was helping. In preparation for her 17th birthday we devised a plan to equip her with the necessary skills to live independently. In New Zealand legislation² the 17th birthday marks the point when an individual is no longer considered a young person and no longer in need of state care and protection.

When I heard rumours that Pani was ‘working the streets’, selling her body for money, drugs and other goods, I visited an organisation that worked with prostitutes in the area to find out if the claim that Pani was prostituting was indeed true. I walked out with a deeper knowledge of the sad realities facing some young people in my community. I was filled with shock, sadness and anger because Pani and I lived in the very same neighbourhood, yet here was this young girl involved in prostitution. Pacific peoples are often described as God-fearing and family-centred. Yet Pani, like the many other young people working the streets, is someone’s child, someone’s sister, brother, niece or nephew. I couldn’t help but wonder where was her family? Where was her church?

I was given a care pack for Pani containing resources such as condoms and emergency contact information that help keep street workers safe. I told my manager that I would chat with Pani and give her the care pack. Although I couldn’t confirm that she was working the streets, I wanted to make sure that if she was sexually active, she would have some knowledge and resources to keep her safe. However, I was instructed not to give Pani the care pack as it would appear that our organisation, which was funded by the New Zealand government, was

¹ Pani* is an alias name used to protect the identity of the young person.

² Children, Young Persons, and Their Families Act 1989.

condoning her sexual activity. This instruction left me feeling quite unsettled as I thought my role was to support these young people. If she had made the decision to have sex, then wasn't part of my role to make sure she had tools to keep herself safe?

My journey in the field of Pacific sexual health over the last two decades can be traced back to my community and professional experiences such as that described above. As a Sāmoan health professional, I have supported many Pacific young people like Pani in journeys involving dealing with complex social issues. I have seen the paths Pacific youth and their families have taken as they have sought to improve their social, economic and health position. The stories of some families are inspiring and humbling, while other stories like Pani's are heart-breaking. Pani's story, although an extreme case, illustrates a number of concerning sexual health issues facing young Pacific people. These issues include the secrecy surrounding discussion of sexual behaviours, potentially unsafe sexual activity, and the role family, adults, health professionals and wider society play in the lives of young people.

This study focuses on sexual health issues of Sāmoan young people aged 13 to 19 years in Aotearoa, New Zealand. It arose out of a deep concern about the consequences of the difficulties and struggles young Pacific people face as they navigate the turbulent waters of sexuality. This study is located within the disciplines of public policy and public health. From a public health perspective, the sexual and reproductive health status of young New Zealanders is concerning. Compared with other Organization for Economic Cooperation and Development (OECD) countries, the rates of sexually transmitted infections (STIs), unintended teenage pregnancies and suboptimal levels of contraceptive use in New Zealand are high (Health Committee, 2013; Psutkla, Conner, Cousins, & Kypri, 2012).

1.2 Issues of Sexual Health

This section provides a brief description of some of the issues of sexual health discussed in this thesis.

Sexually Transmitted Infections (STIs)

Sexually transmitted infections (STIs) are common in New Zealand (Ministry of Health, 2014f). In 2013, chlamydia was the most commonly reported STI in New Zealand, with Māori and Pacific peoples having higher rates of STI's than other ethnic groups (The Institute of Environmental Science and Research Ltd, 2014).

Teenage Pregnancy

Although teenage birth rates have declined, New Zealand's rates are still comparatively high. The United States has the highest teen pregnancy and birth rate in the developed world, followed by New Zealand and the United Kingdom (Superu, 2015a, 2015b). In New Zealand, teen births as a proportion of all births reached 5.9 percent in 2013, and over 71 percent of all teen births in 2013 were to 18 and 19 year old's (National Institute of Demographic and Economic Analysis, 2014; Superu, 2015b).

The Pacific population is one of the fastest growing sub-groups in New Zealand, with one of the highest teenage birth rates of all ethnic populations (Taha: Well Pacific Mother and Infant Service, 2015b). A report by the New Zealand Child and Youth Epidemiology Service (NZCYES) that explored teenage birth rates amongst Pacific women in New Zealand, and which used information from the birth registration dataset, noted that during 2006-2010 the teenage birth rates for Pacific women were significantly higher than for European, Asian/Indian and other women, but lower than Māori women (Craig, Adams, Oben, Reddington, Wicken & Simpson, 2012). Earlier figures show that Pacific teenagers' birth rate (44 per 1,000), although lower than that for Māori (70 per 1,000) was over twice the European rate (17 per 1,000) (Statistics New Zealand, 2003). However, the high teenage birth rates for Māori and Pacific women need to be viewed in the

context of the higher overall fertility rates for these groups. The differences between these ethnic groups were also seen during 2000-2010 (Craig, et. al., 2012; Craig, Taufa, Jackson & Yeo-Han, 2008).

Contraceptive Use

New Zealand has one of the lowest proportions of students using condoms (National Institute of Demographic and Economic Analysis, 2014). A review of the findings from the *Youth 2000* survey series³ (2000; 2007; 2012) found that contraceptive use has not increased over the intervening 10 years (Superu, 2015a). The proportion of sexually active students who reported always using contraception remained unchanged at around 60 percent (Clark, Fleming, Bullen, Crengle, et al., 2013; National Institute of Demographic and Economic Analysis, 2014).

Two studies illustrate the contraceptive patterns for Pacific peoples living in New Zealand. The *Youth '07*⁴ survey (Helu, Robinson, Grant, Herd, & Denny, 2009). revealed that among the Pacific students who were sexually active, 66 percent reported using some form of contraception 'always' or 'most of the time' to protect against pregnancy, and 58 percent reported using a condom 'always' or 'most of the time' to protect against sexually transmitted infections (Helu, et al., 2009). An earlier study undertaken in 2000 (Paterson, Cowley, Percival, & Williams, 2004), explored the contraceptive practices of 1365 Pacific birth mothers. The study revealed that 60 percent of the mothers had not planned their pregnancy. Over two-thirds (71%) were not using contraception when they conceived. Factors significantly associated⁵ with non-use of contraception⁶ were lack of post-school qualifications and strong alignment with Pacific culture (Paterson, et al., 2004).

³ The *Youth 2000* survey series is a New Zealand health and wellbeing survey that was conducted in 2001, 2007 and 2012 (Clark, Fleming, Bullen, Denny, et al., 2013).

⁴ '07 is an abbreviation for 2007. The *Youth '07* survey is part of the *Youth 2000* survey series (Clark, Fleming, Bullen, Denny, et al., 2013).

⁵ P-value of <0.05.

⁶ By birth mothers who did not plan their pregnancy (Paterson, et al., 2004).

Consequences

While sexual activity may be a pleasurable experience, the consequences can be life-altering and life-threatening. Sexually transmitted infections (STIs), unintended pregnancies and terminations pose serious social, economic and health risks. Sexually transmitted infections (STIs) are a major global cause of acute illness, infertility, long-term disability and death (World Health Organisation, 2012b). Teenage pregnancy and parenthood is strongly associated with educational under-achievement, unemployment and poverty (Kirby, Lepore, & Ryan, 2005; Ministry of Health, 2001b, 2008c; Paul, Fitzjohn, Herbison, & Dickson, 2000). These negative sexual health outcomes, and particularly STIs and unintended pregnancy, are avoidable. The role of policy agents includes resourcing efforts that address these negative outcomes.

Policy Response

Improving the sexual and reproductive health of New Zealanders is a priority for the New Zealand Government (Ministry of Health, 2001; New Zealand Government, 2014). An aspiration expressed in *Sexual and Reproductive Health - A resource book for New Zealand health care organisations*, is for New Zealand to be:

A society where individuals have the knowledge, skills and confidence to enjoy their sexuality, to choose when or if to have children, and to keep themselves safe from harm. (Ministry of Health, 2003b, p. vi)

Although this document was published over a decade ago, its significance lies in that it is one of two Ministry of Health documents that illustrate the government's goals in sexual health.⁷ These guidelines are but one of the many policy instruments that policy agents can draw upon to address sexual health issues. Examples of policy instruments include legislation, government strategies,

⁷ The other central document is the *Sexual and Reproductive Health Strategy* (Ministry of Health, 2001a). Publications that are specific to sexual health issues have also been published. These include STI management guidelines and STI Surveillance reports (Ministry of Health, 2014f).

government inquiries and funding interventions to achieve the governments desired sexual health outcomes.

In New Zealand, there is an increasing requirement for public sector programmes to demonstrate evidence-based practice (Gluckman, 2013; Gluckman & Hayne, 2011). The need for public programmes to respond to the cultural needs of ethnically diverse communities, including Māori and Pacific, and of the disabled, is widely recognised (Ministry of Health, 2001a). The issues facing Pacific communities are acknowledged in a number of settings (Ministry of Education, 2012; Ministry of Health, 2014c; Ministry of Social Development, 2014), including sexual health (Ministry of Health, 2001a). The *New Zealand Sexual Reproductive Health Strategy* (Ministry of Health, 2001a) noted that both relevant information and the development of responsive services and programmes are necessary. Programmes that can increase the awareness and understanding of sexual health issues, in culturally appropriate and relevant ways for Pacific communities, are essential. However, a challenge is the lack of information on the sexual health needs of young Pacific people growing up in New Zealand.

There are few studies of contraceptive practices and values among Pacific families in New Zealand (Anae et al., 2000; Paterson, et al., 2004). Although the importance of documenting and monitoring ethnic information, particularly for Māori and Pacific groups, is recognized, the literature is disappointingly limited. For example, the need for recording of STI information for Māori and Pacific groups is acknowledged in annual surveillance reports for STIs in New Zealand (The Institute of Environmental Science and Research Ltd, 2014).

Pacific Understandings

Undertaking research with Pacific communities, especially in sexual health is a challenging task. Sexuality in many cultures is a sensitive and delicate topic. Literature suggests that for Sāmoan peoples and the broader New Zealand Pacific populations, cultural and religious values largely frame how sexuality, fertility and pregnancy are understood (Anae, et al., 2000; Naea, 2008; Taha: Well Pacific

Mother and Infant Service, 2015b). Sex for Pacific people is often regarded as *tapu* or sacred (Anae, et al., 2000) and children are viewed as a 'gift from God' (Anae, et al., 2000; Taha: Well Pacific Mother and Infant Service, 2015b). These values influence to some extent the level and content of conversations that occur between parents and their children. Sāmoan women are reportedly hesitant in discussing sexual subjects (Naea, 2008; Paterson, et al., 2004; Tupuola, 2000), particularly as it may violate Sāmoan principles of *fa'aaloalo* (respect) and *ava* (reverence) (Tupuola, 2000). The resistance that some Sāmoans show towards biomedical contraceptives can be attributed to health and religious beliefs (Anae, et al., 2000).

Studies with Pacific youth populations in New Zealand indicate that sexual health is an area of concern (Anae, et al., 2000; Ministry of Health, 2008c). Although Pacific young people are exposed to a range of sexual material either through school, social networks and social media, literature suggests that Pacific young people's knowledge of sexuality is limited because it is a subject they are not encouraged to talk about with their parents (Ministry of Health, 2008c). In a forum discussion of sexual health knowledge, a group of Pacific young people shared that talking to their parents about sexual health was considered culturally inappropriate. Accessing sexual health care services was associated with fear that they would be seen by somebody connected to their family or church. The young people were opposed to healthcare options that carried the risk of their parents finding out that they were sexually active (Ministry of Health, 2008c).

1.3 Rationale for this Research

There are compelling reasons to undertake sexual health research with Pacific communities in New Zealand:

- 1) sexual health disparities, which include the high rates of sexually-transmitted infections, high rates of unintended teenage pregnancies and suboptimal levels of contraceptive use, are more evident within Pacific and Māori populations;

- 2) public policy agents seek to implement programmes that can increase the awareness and understanding of sexual health issues, in culturally appropriate and relevant ways for Pacific communities; and
- 3) the literature on the sexual health needs of young Pacific people growing up in New Zealand is disappointingly limited.

1.4 Research Aim

The primary aim is to:

- ❖ Identify factors that influence the sexual health knowledge, attitudes and behaviours of Sāmoan secondary school students in Aotearoa, New Zealand.

The study focuses on the Sāmoan youth population for several reasons, including that I am Sāmoan and have an in-depth understanding of the organisation of Sāmoan communities in Auckland. My parents, who were born in Sāmoa, immigrated to New Zealand in the 1960s, and I was born in New Zealand. I was raised in Mangere, South Auckland, a predominantly Pacific and Māori community, and exposed to Sāmoan culture through family and church activities. I have held several professional roles, including social worker, tertiary liaison, research and management roles. In each of these positions, I have worked primarily with Pacific clients and families. These roles have provided opportunities to witness the challenges and identify the needs of Pacific families across a broad spectrum that include education, social services and health. A further value in focusing on the Sāmoan population is that it is the largest of the six main Pacific ethnic groups in New Zealand. In 2013, nearly one in two people of Pacific ethnicity is Sāmoan (144,138 of 265,974 Pacific Peoples) (Statistics New Zealand, 2015a).

1.5 Research Objectives

The objectives of this study are to:

- ❖ Determine the prevalence of sexual health behaviours of Sāmoan secondary school students in New Zealand;
- ❖ Explore and describe risk and protective factors associated with sexual behaviours among Sāmoan secondary school students in New Zealand;
- ❖ Explore the perceptions of Sāmoan secondary school students and key informants on sexual and reproductive health issues;
- ❖ Explore the significance of these findings to public health interventions and policy.

Anticipated Outcomes

The intention of this study is to provide quality information that can assist a range of groups, such as policy agencies, schools, health and social service agencies, local communities, Pacific families and young people to have a better understanding of the sexual health issues facing Sāmoan young people in New Zealand. These insights may prove helpful in identifying areas that policy agents and current sexual and reproductive health providers can most productively focus their efforts, as they aspire to improve the health and wellbeing of communities in New Zealand.

1.6 Thesis Outline

The thesis contains seven chapters. An overview of the subsequent chapters is presented below.

Chapter Two - Literature Review

The literature review surveys the available information on sexual health in Pacific populations. This chapter comprises six sections. Section One outlines the literature search methods used. Section Two defines and explores key sexual health behaviours. Section Three examines the principles of sexual health risk and protective factor theory. Section Four identifies key sexual health policies relevant to the New Zealand context. Section Five provides a brief population overview of Pacific peoples in Aotearoa New Zealand, and fleshes out cultural understandings

of health and wellbeing in relation to sexual health. The concluding section summarises the key findings of the literature review topics.

Chapter Three – Methodology

Chapter Three presents the research methodology - the theoretical framework that guides the design and facilitation of this study. This chapter comprises three sections. Section One discusses the role that Pragmatism and a Pacific research approach play in exploring the area of Pacific sexual health. Section Two explains how a mixed methods approach has framed the overall research plan. Specific details that highlight technical design features are provided. Section Three presents the research methods - the techniques and practices used to gather and analyse the research data. An explanation of the three information sources used: The *Youth '07* quantitative survey, focus group discussions and key informant interviews (of a qualitative nature) is provided.

Chapter Four – Quantitative Findings from *Youth '07* Survey

In Chapter Four the results from the analysis of the *Youth '07* survey data are presented. These findings are organised into two sections. The first section provides an answer to one of the research objectives, *'Determine the prevalence of sexual behaviours of Sāmoan secondary school students in New Zealand'*. In this section the results of the univariate analysis are revealed shedding light on a range of sexual health behaviours for Sāmoan secondary students. In Section Two, the results of the multivariate association tests are presented. This analysis reveals what factors were found to either heighten sexual risk-taking or serve as a protective feature. The results from this analysis correspond with the second objective of this study, *'Identify and explore factors that are associated with the sexual behaviours of Sāmoan secondary school students in New Zealand'*.

Chapter Five – Qualitative Findings from Focus Group Discussions and Key Informant Interviews:

In Chapter Five the findings from the analysis of the focus group discussions with Sāmoan secondary school students and key informant interviews are presented. These findings are organised into two sections. In the first section, three factors: individual, family and environmental that were found to influence the sexual health knowledge, attitudes and behaviours of Sāmoan secondary school students in Aotearoa, New Zealand are identified and explained. These findings address the research aim, 'Identify factors that influence the sexual health knowledge, attitudes and behaviours of Sāmoan secondary school students in Aotearoa, New Zealand.' The second section identifies the characteristics that Sāmoan secondary school students and key informant interviews felt are necessary for public health interventions. The results from this analysis correspond with two objectives of this study, '*Explore the perceptions of Sāmoan secondary school students and key informants on sexual and reproductive health issues*' and '*Explore the significance of these findings to public health interventions and policy*'.

Chapter Six – Discussion

In Chapter Six the key study findings are reviewed. This chapter comprises three sections. Section One identifies the key issues concerning the sexual health behaviours of Sāmoan young people. Section Two discusses the central factors that influence the sexual health knowledge, attitudes and behaviours of Sāmoan youth. Section Three explores the current and potential role of government interventions and considers how this research may contribute to policy efforts. Throughout the commentary, the contribution this thesis makes to the Pacific knowledge pool and the implications for public health policy are considered. Many of these considerations apply not only to Sāmoan youth and their families, but wider New Zealand society. In addition to the contributions made by this research, the limitations of the study findings are also identified.

Chapter Seven – Conclusion

In this concluding chapter an overall summary of the key study findings are presented. The intentions of this study are reviewed and a summary of the research process used to answer these research questions are revisited. The main findings from this study are then discussed. The concept of “Three C’s – Context, Communication and Co-ordination” is offered as a way to understand as well as address sexual health issues, specifically for Sāmoan communities. The chapter concludes with an outline of implications of the study findings, in particular, the implications for a public policy audience.

1.7 Summary

In this chapter the rationale for undertaking sexual health research with Sāmoan youth in Aotearoa, New Zealand has been presented. A summary of the contextual issues, such as concerning public health statistics, lack of Pacific sexual research as well as cultural sensitivities, are briefly discussed. The aim and objectives of this research are identified and a succinct overview of the thesis structure is presented. In the following chapter, the literature review provides an in-depth account of the key issues, theories, practices and gaps associated with Pacific sexual health.

CHAPTER TWO: LITERATURE REVIEW

2.1 Chapter Overview

This chapter provides a review of current knowledge on sexual health behaviours, sexual risk and protective factors and sexual health policies in New Zealand. This review comprises six sections.

Section 2.2 is an overview of the methods used to source the literature, outlines previous literature reviews that are relevant for this study and discusses the limitations associated with the review.

Section 2.3 discusses key sexual health behaviours. Beginning with a review of sexual health terms and definitions, the public health concerns (teenage pregnancy and STIs⁸/HIV⁹) arising from sexual behaviour are also outlined. A summary of international and New Zealand sexual health statistics (including a subset relating to Pacific youth in New Zealand) is presented. These statistics include the timing of sexual initiation, use of contraception (including condoms), teenage pregnancies and sexually transmitted infections (STIs).

Section 2.4 summarises the literature pertaining to sexual health risk and protective factors. Key terms and frameworks guiding the risk and protective literature are presented and defined. A summary of international and national evidence is presented. The section concludes with a discussion of the practical implications arising from the risk and protective evidence.

Section 2.5 provides a brief population overview of Pacific peoples in Aotearoa New Zealand. Pacific understandings of health and wellbeing in relation to sexual

⁸ STIs - Sexually Transmitted Infections.

⁹ HIV - Human Immunodeficiency Virus.

health are explored. This section concludes with a summary of studies that explore Sāmoan understandings in relation to sexuality and sexual health.

In the final section (2.7) a summary of the key points from the literature are revisited. The available evidence highlights the sexual health disparities for Pacific peoples, in particular for Pacific youth in New Zealand when compared to the general population. The review findings provide evidence that a study of factors that influence the sexual health knowledge, attitudes and behaviours of Sāmoan youth is warranted.

2.2 Review Method

An electronic search of national and international material in databases in the Massey University library was undertaken. The terms and phrases (and combinations of these) used in the search included, but were not limited to: Pacific youth; sexual health; risk and protective factors; sexual behaviour; sexual health interventions; and Pacific health. Using these search terms, several relevant articles were found. A full list of titles and abstracts was obtained from each search and those articles deemed relevant were accessed and reviewed.

This search was supplemented by a search of references listed in bibliographies and 'snowballing' from cited references. Publicly accessible government websites, such as Statistics New Zealand, the Ministry of Health, Ministry of Education and Ministry of Social Development were also reviewed. From these government sites, technical reports, policy manuals, grey literature were also accessed. Grey literature refers to reports not widely available to the public. Searches were limited to material in the English language.

2.2.1 Previous Reviews

The following literature reviews provide some context in relation to the broader areas of: New Zealand sexuality research (Jackson, 2004); Pacific cultural

competencies in health (Tiatia, 1998); Pacific sexual violence (Percival et al., 2010a); engaging Pacific parents and communities¹⁰ (Gorinski & Fraser, 2006); sexual coercion, resilience and young Māori (Moewaka Barnes, 2010) and youth development (McLaren, 2000).

Prior to this study, I completed two literature reviews that explored aspects in relation to sexual health promotion for Pacific communities in New Zealand and sexual risk and protective factors (Ulugia-Veukiso, 2010; Veukiso-Ulugia, 2012b). These two literature reviews provide some foundational evidence that partly contributes to this current review. The 2010 literature review (Ulugia-Veukiso, 2010) explored whether a relationship existed between patterns of spiritual engagement and the sexual health activities of Sāmoan attending secondary schools in New Zealand. The review presented a background of Pacific peoples (including Pacific youth) in New Zealand; evidence on the sexual health status of young Pacific peoples in New Zealand; an outline of the role of spirituality and religion in the lives of young people; and a review of the studies that have explored the associations between spiritual engagement and sexual health activities of young people (Ulugia-Veukiso, 2010). The 2012 review (Veukiso-Ulugia, 2012b) explored key components of models and approaches to deliver sexual and reproductive health promotion to Pacific peoples in New Zealand. This literature reviews expands on this earlier work and provides a current update on studies undertaken in sexual health.

Defining youth

In the 2010 literature review, definitions of youth and associated terms for youth were presented. As this study focuses on Sāmoan youth these definitions bear repeating. The terms 'youth'; 'teenager'; 'adolescents'; 'young people'; are often used interchangeably and are defined by age or developmental milestones (Ministry of Health, 2002a; WHO, 2008). The World Health Organisation defines 'adolescence' as the period of life between 10-19 years, 'youth' aged between 15-

¹⁰ This review is in the context of the New Zealand education setting; however, the concepts are relevant to the population within the scope of this study.

24 years and 'young people' aged between 10-24 years (WHO, 2008). In a New Zealand report entitled *Youth health – A guide to action*, the Ministry of Health (2002) state that 'youth' is a term describing both the whole group and various sub-groups in ages that range from 10 years to the mid-twenties (Ministry of Health, 2002a). The age criterion presents a limitation in that it does not enable a complete understanding of young people. Blum (1998) contends that the term 'adolescence' refers to the developmental period between childhood and adulthood and that the timing and duration of these developmental stages varies across individuals, communities and cultures. A common physical and cultural milestone that occurs within adolescence is the onset of puberty: when young people develop their reproductive capacity (Ministry of Health, 2002a).

2.2.2 Limitations

There were some limitations with this literature review. Sexuality covers a broad range of behaviours, with over 1,000 risk and protective factors identified in the literature (Ahmad, Awaluddin, Ismail, Samad, & NikAbdRashid, 2014; Mmari & Blum, 2009; Mmari & Sabherwal, 2013). While general risk and protective factors are discussed in further detail in section three, a comprehensive exploration of each individual factor is not feasible. For example, this study does not explore in specific detail individual factors, such as sexual violence, which is a factor identified in the sexual health literature (Kirby & Lepore, 2007; Ohene, Johnson, Atunah-Jay, Owusu, & Borowsky, 2015). For a more detailed understanding of sexual violence particularly within Pacific communities in New Zealand, a qualitative study commissioned by the Ministry of Pacific Island Affairs entitled *Pacific pathways to sexual violence prevention research* (Percival, et al., 2010a) provides insights from seven Pacific ethnic groups in Aotearoa New Zealand. *Pacific pathways to sexual violence prevention research* provide rich cultural insights, particularly for organisations tasked with developing sexual violence prevention strategies for Pacific communities in New Zealand (Percival, et al., 2010a). Ethnic-specific reports present the perspectives from communities such as the Cook Islands (Robati-Mani & Percival, 2010); Fiji (Powell, Rankine, & Percival, 2010); Niue (Kingi, Rankine, & Percival, 2010); Sāmoa (Peteru & Percival,

2010a); Tokelau (Hope, Rankine, & Percival, 2010); Tonga (Finau & Percival, 2010); and Tuvalu (Selu & Percival, 2010).

This study is concerned with sexual health status of Sāmoan youth in New Zealand. Given the range of studies undertaken in the general field of sexual and reproductive health, the literature review method focused on national (New Zealand) studies (Clark, Fleming, Bullen, Crengle, et al., 2013; Clark, Robinson, & Crengle, 2006; Copland et al., 2011; Psutkła, et al., 2012) as well as international reviews of multiple studies (Madkour et al., 2014; Mmari & Blum, 2009; Mmari & Sabherwal, 2013). While a study undertaken in Sāmoa (World Health Organisation, 2012c) is included in this review, a comprehensive exploration of other Pacific countries was not undertaken. International and national statistics are presented in this review. However, caution is advised in drawing direct comparisons. Obtaining reliable data on sexual health is difficult and, as Burtney and Duffy (2004) note, obtaining directly comparable data across countries is virtually impossible. Drawing comparisons can be difficult because the reliability of data depends on the quality of sampling frames, sampling methods used, data-quality assurance procedures, statistical data analyses and accuracy of participant responses (World Health Organisation, 2014c).

2.3 Sexual Health Behaviours

This section summarises New Zealand and international sexual health data. The timing of sexual initiation, use of contraception (including condoms), teenage pregnancies and sexually transmitted infections (STIs) are reported.

A large and growing body of literature has shown that sexual activity of individuals generally progresses along a continuum beginning with kissing experiences, to sexual touching (light petting, heavy petting) and finally to coitus (sexual intercourse). This progression generally occurs over a period of years (Asayama, 1975; Bearman & Bruckner, 2001; Brook, Balkder, Abernathy, & Hamburg, 1994; Davis & Lay-Yee, 1999; Kirby, et al., 2005). Although there are a wide range of

sexual health behaviours and practices (Asayama, 1975; Atwood et al., 2012; Kaltiala-Heino & et al, 2003; Mmari & Sabherwal, 2013; Ulugia-Veukiso, 2010), international experts identify the following sexual behaviours as important: 1) initiation of sex; 2) frequency of sex; 3) use of condoms; 4) use of other contraception; and 5) number of partners (Blum & Mmari, 2004; Kirby & Lepore, 2007; Ma et al., 2014). Many sexual health programmes are tasked with addressing one or more of these behaviours (Kirby, 2003; Ministry of Health, 2001a).

2.3.1 Definition

Sexual health is multifaceted and difficult to define (Bogle, 2006).¹¹ A definition proposed by the World Association for Sexual Health (2008) is adopted for this study. Developed out of a WHO-convened international technical consultation on sexual health in January 2002, and subsequently revised by a group of experts from different parts of the world, Sexual health is defined as:

Sexual health is a state of physical, emotional, mental and social well-being related to sexuality; it is not merely the absence of disease, dysfunction or infirmity. Sexual health requires a positive and respectful approach to sexuality and sexual relationships, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence. For sexual health to be attained and maintained, the sexual rights of all persons must be respected, protected and fulfilled. (World Association for Sexual Health, 2008, p. 1)

2.3.2 Issues arising from Sexual Health Behaviour

Although engaging in sexual activity may be a pleasurable experience for those involved, there is also the opportunity to be exposed to life-altering and life-threatening consequences, regarded as negative public health outcomes. These negative health outcomes include sexually transmitted infections (STIs), and

¹¹ A comprehensive discussion of sexual health terminology and sexual health behaviours is reported in Ulugia-Veukiso (2010).

unintended pregnancies and terminations (Blum & Mmari, 2004; Lammers, Ireland, Resnick, & Blum, 2000; Psutkla, et al., 2012; United Nations, 2015). The attention paid to these by government agencies is warranted, as each of these sexual health outcomes (STIs, pregnancy and abortions) is potentially avoidable and potentially has high social and economic costs (Voisin, Hotton, Tan, & DiClemente, 2013; World Health Organisation, 2012b).

Sexually transmitted infections (STIs) are a major global cause of acute illness, infertility, long-term disability and death with serious medical and psychological consequences for millions of men, women and infants (World Health Organisation, 2012b). International evidence suggests that 498 million people aged 15 to 49 are infected each year with chlamydia, gonorrhoea, syphilis, or trichomoniasis (World Health Organisation, 2012b). In 2012, estimates suggest that 2.3 million people were newly infected with HIV and that a total of 35.3 million people were living with HIV (World Health Organisation, 2014d).

Although pregnancy may be an enriching experience, early sexual involvement and pregnancy are behaviours that pose a risk to teenagers' social, educational, emotional development and life-chances. There is a significant body of literature that identifies the negative consequences of teenage pregnancy (Copland, et al., 2011; Kennedy, Gray, Azzopardi, & Creati, 2011; Kirby, et al., 2005; Madkour, et al., 2014; Ministry of Health, 2001b, 2008c; Paul, Fitzjohn, Herbison, et al., 2000; United Nations, 2015). For example, research suggests that adolescent girls under 15 years of age are physiologically unprepared for pregnancy; their cervixes are more vulnerable to STI infection; and they have "lower cognitive capacity for making safe, informed, and voluntary decisions" due to immaturity of the prefrontal cortex before the age of 15 (Madkour, et al., 2014, p. 115).

Teenage pregnancy and parenthood are strongly associated with subsequent educational under-achievement, unemployment and poverty. This comes from the interruption in education; failure to attain educational potential; reduced earning potential; reduced career prospects; and being emotionally and socially

unprepared for childrearing (Kirby, et al., 2005; Ministry of Health, 2001b, 2008c; Paul, Fitzjohn, Herbison, et al., 2000). The effects are also felt by the children born of teenage parents. The responsibilities involved with early parenthood have long lasting effects on the socioeconomic wellbeing of the women and children involved (Ministry of Health, 2001a). However, the literature does not show the effects on the male partners involved.

2.3.3 Sexual Behaviours

This review presents a summary of international and national literature that addresses the following sexual behaviours: initiation of sex, use of condoms, use of other contraception, sexual health outcomes, pregnancy, and sexually transmitted infections.

Timing of sexual initiation & proportion that have had sexual intercourse

The timing of first sexual intercourse is deemed important from a public health perspective as evidence shows that earlier sexual initiation (ESI) has been linked with increased risk for sexually transmitted infections (STIs) (Ma, et al., 2014) and pregnancy during adolescence (Mmbaga, Leonard, & Leyna, 2012), short-term increases in depressive symptoms among girls, lower educational attainment by early adulthood, greater sex partner accumulation (Madkour, et al., 2014; Tsunokai, McGrath, & Hernandez-Hernandez, 2012), and risky sexual practices in adulthood (Ma, et al., 2014; Madkour, et al., 2014). In another study (Ma, et al., 2014), the term 'early sexual debut' is used. The age in which early is defined also differs in the literature. For example, Ma, et. al., (2014) defines early sexual debut as having sexual intercourse before the age of 16, whereas Lohman and Billings (2008) defines early sexual debut as having sexual intercourse before the age of 15 years.

The age of sexual initiation has reportedly decreased in several industrialized countries (Avery & Lazdane, 2010; Burtney & Duffy, 2004; Hassan & Creatsas, 2000; Lohman & Billings, 2008; Paul, Fitzjohn, Herbison, et al., 2000; Ramiro et al.,

2015). In developing countries, the average age of first sexual intercourse is between 17.5 and 18 years of age (Avery & Lazdane, 2010). As reported by Avery and Lazdane (2010), a global survey carried out by Durex in 2004 found that, compared with previous generations, young people (16-20 year olds) were having intercourse for the first time at an earlier age. The average age in the 2004 survey was 16.5 years. Over 350,000 individuals from 41 countries took part in this survey, deemed the largest international survey of sexual attitudes and behaviour (Durex, 2005). A report by the Guttmacher Institute (2014) states that among American teenagers, 48 percent of those aged 17 years, 61 percent of 18 year olds, and 71 percent of 19 year olds have had sex. There was little difference between males and females. The Guttmacher Institute produces a wide range of resources on topics pertaining to sexual and reproductive health, publishes two peer-reviewed journals, *Perspectives on Sexual and Reproductive Health* and *International Perspectives on Sexual and Reproductive Health*, and the public policy journal *Guttmacher Policy Review* (Guttmacher Institute, 2015). However, a challenge in the literature is ascertaining what the baseline levels are as there were no statistics that capture the age for earlier generations.

A study of 17 European countries¹² (Madkour, et al., 2014) examined the relationship between country-level age norms for sexual initiation timing and early sexual initiation (ESI) among adolescent boys and girls. Early sexual initiation in Madkour's study is defined as having sexual intercourse before the age of 15 years. Nationally representative data from the countries that participated in the 2006/2007 *European Social Survey* and the 2005/2006 *Health Behaviour in School-Aged Children Study* were analyzed. Age norms for sexual initiation were based on a survey question that asked participants 'At what age is someone too young to have sexual intercourse'. Participants reported an age they felt was too young. The researchers created three different age norm variables. These three variables were: an overall measure, a youth cohort measure and a parent cohort measure. The *overall measure* captured the average of all responses to this question within

¹² Denmark, Estonia, Finland, Great Britain, Sweden, Bulgaria, Hungary, Russia, Ukraine, Portugal, Slovenia, Austria, Belgium, France, Germany, Netherlands, and Switzerland.

each country, the *youth cohort measure* captured the average response among respondents aged 15-20 years, and the *parent cohort measure* captured the average response among respondents aged 31-65 years. Higher responses indicated less tolerance for Early Sexual Initiation (Madkour, et al., 2014).

The analysis of country data showed the age that the participants from each of the 17 participating countries felt were too young to have sexual intercourse. Findings revealed significant differences between European countries in the prevalence of ESI (Early Sexual Initiation). The likelihood of ESI was lower among adolescents that lived in countries with older age norms for sexual initiation (when compared with adolescents living in countries with younger age norms). The authors suggest that it is possible that the timing of adolescents' sexual initiation is influenced by a larger cultural system and that health system and demographic factors, though they vary across countries, have an impact on the timing of sexual initiation (Madkour, et al., 2014).

An international survey conducted by the World Health Organisation (2012a), provides information on the health behaviours of youth aged 13 to 17 years across a number of countries. The *Global school-based Student Health Survey* (GSHS) was conducted in 2011 with participating countries from six regions¹³. The GSHS is a collaborative surveillance between the World Health Organisation and the US Centers for Disease Control and Prevention (CDC). This project is designed to help countries measure and assess the behavioural risk factors and protective factors. In the survey, students completed a self-administered questionnaire that captured information on their health behaviours and other health topics. These topics included: sexual behaviours, alcohol use, dietary behaviours, drug use, hygiene, mental health, physical activity, protective factors, tobacco use and violence and unintentional injury. Pacific countries that participated in the survey included: Sāmoa, Cook Islands, Fiji, Kiribati, Nauru, Niue, Sāmoa, Tonga and Vanuatu.

¹³ These regions include: Africa, Americas, Europe, Eastern Mediterranean, Western Pacific, South-East Asia.

Individual country reports are available on the World Health Organisation website (see World Health Organisation, 2012a).

As this study focuses on Sāmoan secondary school students in New Zealand, an overview of the sexual health status of youth residing in Sāmoa is useful. A total of 2418 students in Sāmoa¹⁴ aged 13 to 15 years participated in the *Global school-based Student Health Survey* (World Health Organisation, 2012c). A two-stage cluster sample design was used to produce data representative of all students in grades 9-10 in Sāmoa. However, the report did not specify whether the survey was undertaken in Western Sāmoa, American Sāmoa or in both Western Sāmoa and American Sāmoa. Findings show that 56 percent of respondents have had an experience of sexual intercourse. A higher proportion of males have had sex (69%) when compared with females (45%). Of the Sāmoan students that reported having had an experience of sexual intercourse, a large proportion (81%) had their first experience before the age of 14 years, and over half (56%) used a condom the last time they had sexual intercourse. The findings show variation between male and female condom use. Some 62 percent of males reported using a condom the last they had sex, compared with 50 percent of females (World Health Organisation, 2012c). These findings highlight important issues, particularly the large proportion engaging in early sexual behaviour and the increased risk of unwanted pregnancy and STI acquisition.

In New Zealand, studies have shown that in the late 1980s the average age for first sexual intercourse was 17 years for males and 16 years for females (Ministry of Health, 2001b; Paul et al., 2000). Findings from the Dunedin Multidisciplinary Health and Development longitudinal study revealed that at 15 years of age, 32 percent of females and 28 percent of males had had penetrative sexual intercourse (Paul, Fitzjohn, Eberhart-Phillips, Herbison, & Dickson, 2000). The Dunedin longitudinal study was based on a cohort of 1020 people born in Dunedin, New Zealand in 1972 and 1973 and followed up to age 21 years. Demographic

characteristics of the sample were similar to the New Zealand population of that age, except that a smaller proportion (3%) was Māori or Pacific (Paul, et al., 2000). In a study exploring early sex and its behavioural consequences in New Zealand, Davis and Lay-Yee (1999) concluded that earlier onset (that is sexual activity before 16 years) of sexual experiences are more common among the less educated, ethnic minorities, and respondents who profess no religious affiliation.

Two recent studies (Clark, Fleming, Bullen, Crengle, et al., 2013; Psutkla, et al., 2012) undertaken with New Zealand populations provide some evidence in relation to the timing of first sexual experience and the proportion of individuals that have had sexual intercourse. Findings from a study examining the sexual behaviour of New Zealand university students aged 17 to 24 years showed that of students who reported having had an experience of sexual intercourse, the median age at sexual debut was 17 years overall (16 for women, 17 for men). Some 21 percent of respondents reported that they had sex before they were 16 years old (24% of women, 16% of men) (Psutkla, et al., 2012). The study conducted in 2009 invited a random sample of 5770 students to participate in an online survey. 2922 students responded (51% of the sample) that included 1857 women and 1065 men. Students were asked questions on current sexual behaviours, lifetime unintended pregnancies, terminations, and sexual orientation.

Findings from *Youth '12*, a national cross-sectional health and wellbeing survey of New Zealand secondary school students (aged 12-18) undertaken in 2012, revealed that 25 percent of males and 24 percent of females have had sexual intercourse. The *Youth '12* is part of the *Youth 2000* survey series, a national health and wellbeing survey that was conducted in 2001, 2007 and 2012 (Clark, Fleming, Bullen, Crengle, et al., 2013). Over 27,000 secondary school students have participated in this survey over a period of 11 years. As this survey forms a central component to this research, further information about the *Youth 2000* survey series is presented in the following chapter (Methodology).

When compared with similar surveys undertaken in 2001 and 2007, the proportion of students who reported ever having had sex has decreased. The 2001 and 2007 surveys revealed approximately a third of New Zealand secondary school students have had sexual intercourse, however the 2012 results were lower (24%). The authors acknowledge the lower figures may be due to a revision in the survey questionnaire. The 2012 survey question in relation to ever having sex specifically prompted students not to count abuse or unwanted sexual experiences (whereas in 2007 and 2001 this was not stated) (Clark, Fleming, Bullen, Denny, et al., 2013).

Although there is some literature that highlights the timing of sexual initiation and the proportion of New Zealanders that have had sexual intercourse, there is even less for Pacific peoples in New Zealand. Some evidence has been gathered from the *Youth 2000* survey series (as mentioned above). A Pacific report highlighted the findings for Pacific students that completed the *Youth 2000* survey (undertaken in 2000) (Mila-Schaaf, Robinson, Schaaf, Denny, & Watson, 2008). In this report, the sexual health statistics for Pacific students are shown with the information being divided and presented by two age groups: students that were aged 14 years and under¹⁵ and students aged 15 years and over¹⁶. The authors identified that in the 14 and under age group, Pacific students were more than twice as likely as New Zealand European students to report ever having had sex. This analysis controlled for age, SES and gender differences. In the same age group (14 years and under), female students were less likely than males to report ever having had sex. The proportion of Pacific students that reporting having had an experience of sexual intercourse are presented in Table 1. This report also presented ethnic-specific health profiles. For Sāmoan students who have had an experience of sex, a large proportion, that is 69 percent of females, and 75 percent of males reported having had sex at the age of 14 years or younger (Mila-Schaaf, et al., 2008).

¹⁵ Age categories in the survey were under 12 years, 12 years, 13 years, 14 years. Students were drawn from Years 9 to 13 in the New Zealand school system with approximate ages of 10 years to 19 years.

¹⁶ Age categories in the survey were 15 years, 16 years, 17 years, 18 years, and over 19 years. Students were drawn from Years 9 to 13 in the New Zealand school system, with approximate ages of 10 years to 19 years.

Table 1: Proportion of Pacific students that have had sex (%)

	Females (%)	Males (%)
Pacific students aged 14 and under	27	36
Pacific students aged 15 years or over	36	44

A subsequent report based on the *Youth '07* survey (the second of the *Youth 2000* survey series) showed the health behaviours of Pacific students attending New Zealand secondary schools (Helu, et al., 2009). The findings revealed that a higher proportion of Pacific students (45%) reported having had an experience of sexual intercourse when compared with the overall high school population (36%) (Copland, et al., 2011; Helu, et al., 2009). Māori students had the highest self-reporting rates of sexual intercourse at 56 percent (Copland, et al., 2011). Some 32 percent of Pacific students were currently sexually active, that is they reported having had sex in the last three months. Ethnic specific information was also presented. The survey results show that 42 percent of Sāmoan students reported ever having had sex and almost a third (32%) reported they were sexually active (Helu, et al., 2009). A comparison of the two survey sets (2000 and 2007), shows an increase in the proportion of Pacific students that have had an experience of sexual intercourse from 36 percent in 2000 to 45 percent in 2007 (Helu et al., 2009; Mila-Schaaf et al., 2008).

Use of condoms and other contraception:

Contraception (or birth control) is a term used to describe the methods women and men use to prevent from becoming pregnant. These methods range from abstinence (not having sex); natural fertility awareness; barrier methods such as condoms and diaphragms; intra-uterine devices (IUD); and hormonal methods, including the oral contraceptive pill, intra-uterine systems (IUS), long-acting injection or implants (New Zealand Family Planning, 2014). Using contraception helps reduce the number of unintended pregnancies, unsafe abortions and maternal deaths (United Nations, 2015). Condoms are often recommended to individuals as they are the only contraceptive that helps prevents both pregnancy and most sexually transmitted diseases (Health Navigator New Zealand, 2015).

International research (World Health Organisation, 2014c) shows that despite increasing overall levels of contraceptive use, there still remain significant gaps between the desire of women to delay or avoid having children and their actual use of contraception. The World Health Organisation (WHO) produces an annual statistical series that collects health information, including sexual health data for 194 Member States (World Health Organisation, 2014c). Globally in 2011, around one in every eight women aged 15 to 49 years who were married or in a union had an unmet need for family planning. In the WHO African region, the figure was around one in four (World Health Organisation, 2014c). Figures show that the proportion of women aged 15 to 49 who were using contraceptive methods increased from 55 percent in 1990 to 64 percent in 2015 (United Nations, 2015). These figures however do not show the wide variations of contraceptive patterns across countries.

In New Zealand, findings from a review of the *Youth 2000* survey series (2000; 2007; 2012) found that contraception use has not increased over the intervening 10 years (Superu, 2015a). The proportion of sexually active students who reported always using contraception remained unchanged at around 60 percent (Clark, Fleming, Bullen, Crengle, et al., 2013; National Institute of Demographic and Economic Analysis, 2014). Compared with Organization for Economic Cooperation and Development (OECD) countries, New Zealand has one of the lowest proportions of students using condoms (National Institute of Demographic and Economic Analysis, 2014). In 2012, over half (58%) of sexually active New Zealand secondary school students reported using contraception 'all of the time' to prevent pregnancy, while 46 percent reported using condoms 'all of the time' to protect against sexually transmitted infections (Clark, Fleming, Bullen, Crengle, et al., 2013). Seventeen percent of students who are currently sexually active reported that they 'did not use', or only 'sometimes used', condoms or other contraception. The proportion of students that 'did not use' or 'sometimes used' condoms or other contraception was higher among younger students and students from

neighborhoods with high levels of socio-economic deprivation (Clark, Fleming, Bullen, Crengle, et al., 2013).

Similar findings were reported from a study of New Zealand tertiary students aged 17 to 24 years (Psutkla, et al., 2012). Fifty-four percent of sexually active tertiary students reported using a condom the last time they had sex (men 58%; women 51%). The survey questionnaire did not specify the type of condoms being used (i.e. female or male condoms). The study results showed condom use decreased as students became older, and women were less likely to use condoms than men. Furthermore, the use of a condom at their last sexual experience declined as the number of sexual partners increased and as partner choice became more stable. The authors note that while condoms and other contraception in New Zealand are widely available, New Zealand's teenage pregnancy rates suggest that contraceptives are not being effectively used. An issue raised in this study is that enabling access to contraceptives in itself is not enough to ensure that they are appropriately used. The authors contend that further efforts in promoting condom use amongst young people in New Zealand are required. Further studies that can explore the reasons that students do not use condoms can help inform new approaches (Psutkla, et al., 2012).

As highlighted in the earlier discussion, there are even few nationwide studies that capture the proportion of condom and contraceptive use for Pacific peoples living in New Zealand. Two studies present some evidence, the *Youth 2000* survey series (Helu, et al., 2009; Mila-Schaaf, et al., 2008) and a study undertaken with Pacific birth mothers (Paterson, et al., 2004). A New Zealand study undertaken in the 2000 explores the contraceptive practices of 1365 Pacific birth mothers (Paterson, et al., 2004). The mothers in the study ranged from under 20 years to over the age of 40, and were interviewed about the planning of their pregnancy six weeks after the birth. Questions included if the pregnancy was planned or unplanned; the form of contraception used; or, if not used, their main reasons for not using contraception (Paterson et al, 2004). The findings revealed that 60 percent of

Pacific mothers had not planned their pregnancy. Over two-thirds (71%) were not using contraception when they conceived. The main reasons that mothers identified for not using contraception were that they never thought about contraception (46.8%), did not like using contraception (42.5%), decided to take a chance (39.4%), did not want to risk the associated weight gain (30.4%), and did not think they could have a baby (17.3%).

Findings suggest that there were two factors significantly associated¹⁷ with not using contraception for the birth mothers who did not plan their pregnancy; these were a lack of post-school qualifications and strong alignment with Pacific culture. The authors provide some explanation for these findings, noting a cultural preference within Pacific communities for large families and women not being encouraged to use contraception. The authors note that Pacific women are not accessing contraceptive services that are available and advocate further efforts to examine the accessibility and acceptability of family planning services (Paterson, et al., 2004).

In terms of contraceptive use, findings from the *Youth 2000* survey (Mila-Schaaf, et al., 2008) revealed that Pacific students aged 15 years and over were more likely to report they did not use contraception the last time they had sex compared to NZ European students of the same age. As previously mentioned, the Pacific findings are shown in two age groups: students aged 14 years and under¹⁸ and students aged 15 years and over¹⁹. Findings show that 63 percent of sexually active females and 74 percent of sexually active males aged 14 and under (or their partners) used a condom) as a method of protection the last time they had sex. Of those aged 15 years and over, the rates were slightly lower: 50 percent of the sexually active

¹⁷ P-value: <0.05.

¹⁸ Age categories in the survey were under 12 years, 12 years, 13 years, 14 years, Students were drawn from Years 9 to 13 in the New Zealand school system, with approximate ages of 10 years to 19 years.

¹⁹ Age categories in the survey were 15 years, 16 years, 17 years, 18 years, and over 19 years. Students were drawn from Years 9 to 13 in the New Zealand school system, with approximate ages of 10 years to 19 years.

females and 70 percent of the males reported using condoms as a method of protection the last time they had sex (Mila-Schaaf, et al., 2008).

Findings from the subsequent *Youth '07* study (the survey conducted in 2007) (Helu, et al., 2009) revealed different rates of condom and contraceptive use between Pacific and New Zealand (NZ) European students. Lower levels of contraception and condom use were reported among the Pacific students who were sexually active. For example, 66 percent of the Pacific students who were sexually active reported using a form of contraception to protect against pregnancy compared to 87 percent of NZ European students. Over half (58%) of the Pacific students reported using a condom to protect against STI or HIV compared to 77 percent of the NZ European students (Helu, et al., 2009). Ethnic-specific health profiles were also presented. Some 60 percent of Sāmoan students who were sexually active reported using some form of contraception to protect against pregnancy and 50 percent reported using condoms to protect against sexually transmitted infections. While these figures show that there are Pacific students that are displaying safe sexual practices, such as using condoms and contraception, that there is still a large group of Pacific students that placing themselves at risk of contracting an STI or an unwanted pregnancy by not using condoms or contraceptives.

2.3.4 Sexual Health Outcomes

Pregnancy and childbearing:

Pregnancy is primarily affected by the age when sexual intercourse is initiated, the frequency of sex, and the use of contraception (Kirby & Lepore, 2007). Pregnant women in developed countries have a choice of continuing with the pregnancy or choosing to have a medically approved termination. As previously reported, a central focus amongst many nations is reducing the number of teenagers becoming pregnant (Superu, 2015a; World Health Organisation, 2014c). This policy is based on the evidence that early childbearing increases risks for both mothers and their newborns (Copland, et al., 2011; World Health Organisation, 2014c), and that

pregnant adolescents are more likely than adults to have unsafe abortions (World Health Organisation, 2014c). Complications from pregnancy and childbirth are a major cause of death among girls aged 15–19 in low and middle-income countries (World Health Organisation, 2014c).

International studies reveal that despite progress in reducing the birth rate among adolescents, more than 15 million of the estimated 135 million live births worldwide are to girls aged 15 to 19 years (World Health Organisation, 2014c). In 1990 the birth rate among adolescent girls aged 15 to 19 was 59 births per 1,000 girls, and in 2015, the birth rate decreased to 51 births per 1,000 girls. However, this rate does not show the wide variations amongst international countries (United Nations, 2015). In New Zealand, adolescent pregnancy rates are higher than in other developed countries (Paul, Fitzjohn, Eberhart-Phillips, et al., 2000; Psutkla, et al., 2012; Superu, 2015a). The United States has the highest teen pregnancy and birth rates, followed by New Zealand and the United Kingdom (Superu, 2015a). In 2013, New Zealand's teenage birth rate (that is, births to 15-19 year olds) was 23.8 births per 1,000 women (National Institute of Demographic and Economic Analysis, 2014).

Although New Zealand's teen birth rates are comparatively high, they have been declining (Superu, 2015b). In New Zealand teen births as a proportion of all births reached 5.9 percent in 2013, the lowest percentage ever recorded (National Institute of Demographic and Economic Analysis, 2014). Over 71 percent of all teen births in 2013 were to 18 and 19 year olds (Superu, 2015b). It is acknowledged that there are many factors that drive birth rates, and that the decline in New Zealand teen birth rates may be due to the delay in becoming sexually active among school-aged teenagers (National Institute of Demographic and Economic Analysis, 2014), and increased contraceptive use (Superu, 2015b). It is important to note that studies with New Zealand secondary school students over the past decade have shown that contraceptive patterns remain relatively unchanged (Clark, Fleming, Bullen, Crengle, et al., 2013).

The Pacific population is one of the fastest growing subgroups in New Zealand, with the highest birth rate compared to other ethnicities (Gao, et al., 2008; Taha: Well Pacific Mother and Infant Service, 2015b). A report exploring trends for teenage births in New Zealand highlighted that current data by ethnicity of a birth mother was 'unavailable as this information is presented by Statistics New Zealand based on the census data every five years' (National Institute of Demographic and Economic Analysis, 2014, p. 20). However, findings from a study undertaken by the New Zealand Child and Youth Epidemiology Service (NZCYES) showed that during 2002 to 2006 the teenage birth rates for Pacific women were significantly higher than for European, Asian-Indian and other women, but lower than Māori women. This study explored a number of health indicators for Pacific children and young people in New Zealand, this included teenage birth rates amongst Pacific women in New Zealand using information from the birth registration dataset (New Zealand Child and Youth Epidemiology Service, 2008).

Pacific and Māori have a higher proportion of women giving birth during their teenage years than any other ethnicity in New Zealand (Ingham & Partridge, 2004; Taha: Well Pacific Mother and Infant Service, 2015b). Some authors attribute the high Pacific birth rates to low utilization of contraception and a cultural preference for large families (Anae, et al., 2000; Gao, et al., 2008), while others comment that cultural heritage and economic deprivation may contribute to the patterns of teenage pregnancies (Ingham & Partridge, 2004). Authors have commented on the need to explore the role of access to health care for sexually experienced Māori and Pacific students, as they are the ethnic groups shown to be at greatest risk of teenage pregnancy in New Zealand (Copland, et al., 2011). A study by Copland, et al., (2011) explored self-reported pregnancy and access to primary health care among sexually experienced New Zealand high school students. The study analysed the *Youth '07* survey findings and found that 10.6 percent of sexually experienced high school students self-reported that they had been pregnant (11.6%) or caused a pregnancy (9.9%). The figures were higher for Māori (15.3%) and Pacific (14.1%) students, and higher among female (11.6%) than male (9.9%) students. Self-reported pregnancy was lowest among New Zealand European

(7.5%) and Asian students (7.9%) (Copland, et al., 2011). The researchers in this study acknowledge that similar ethnic trends have been recognized in New Zealand and international studies and are reflective of structural disparities, that include colonization, marginalisation, poverty, and discrimination (Copland, et al., 2011).

The discussion at this point has highlighted teenage pregnancy and birth rates. Unplanned pregnancy is an important issue that requires brief consideration. The rates of unplanned pregnancy for the general New Zealand population vary in the literature. The *Growing Up in New Zealand Longitudinal Study* reported that 40 percent of pregnancies in New Zealand are unplanned (Growing Up in New Zealand, 2015); other estimates suggest that 60 percent of pregnancies are unplanned (Health Committee, 2013). In an earlier discussion, some 60 percent of Pacific mothers had not planned their pregnancy (Paterson, et al., 2004). The rates for New Zealand teenagers are even higher. A report by Superu (2015a) states that approximately 88 percent of teenage pregnancies are unplanned. These findings show that a large proportion of births are unplanned has widespread implications on the health of the birth mother, unborn child and wider family unit.

Sexually Transmitted Infections:

The transmission of sexually transmitted infections is primarily affected by the age when sexual intercourse is initiated, the frequency of sex, the number of sexual partners, and the use of condoms (Kirby & Lepore, 2007). The associated complications of STIs include chronic pain, infertility, neonatal morbidity and genital tract cancer (Ministry of Health, 2014f).

International evidence suggests that 498 million people aged 15 to 49 are infected each year with chlamydia, gonorrhoea, syphilis, or trichomoniasis (World Health Organisation, 2012b). Approximately 2.2 million adolescents are living with HIV and more than half of them are females (Ahmad, et al., 2014). In 2012, an estimated 2.3 million people were newly infected with HIV, this is a significant decline (33%) compared with the 3.4 million new infections estimated for 2001.

People living in sub-Saharan Africa accounted for 70 percent of all new infections. In 2012, an estimated 35.3 million people were living with HIV. Globally, an estimated 1.6 million people died of HIV and AIDS in 2012, down from the peak of 2.3 million in 2005 (World Health Organisation, 2014c).

Sexually transmitted infections (STIs) are common in New Zealand (Ministry of Health, 2014f) with New Zealand having a high prevalence of chlamydia (Psutkla, et al., 2012). In 2013, chlamydia was the most commonly reported STI in New Zealand, with Māori and Pacific having higher rates of STIs compared to other ethnic groups (The Institute of Environmental Science and Research Ltd, 2014). A disproportionate burden of STIs are also common amongst those aged under 25 years (Ministry of Health, 2014f). The chlamydia rate had been stable between 2009 and 2011 and then decreased in 2012.

The importance of documenting and monitoring ethnic STI information, particularly for Māori and Pacific groups, is recognised (The Institute of Environmental Science and Research Ltd, 2014). When compared with other international countries, New Zealand has one of the lowest HIV prevalence rates in the world (NZ AIDS Foundation, 2015). Figures show that from 1985 to 2011, 3608 New Zealanders were tested positive for HIV (Ministry of Health, 2014e). Recent 2014 figures show that currently 2900 New Zealanders are living with HIV. Gay and bisexual men are the most at risk population group of contracting an HIV. In 2014, 136 of the 217 diagnoses were amongst gay, bisexual and other men who have sex with men (MSM). Of all the 136 MSM individuals that were found to be infected, seven were of Pacific ethnicity (5%). Of the 45 individuals that were infected with HIV through heterosexual sex, four were of Pacific ethnicity (9%) (AIDS Epidemiology Group, 2015; NZ AIDS Foundation, 2015).

2.3.5 Additional Health Issues for New Zealand Youth

In addition to the high levels of sexual health need (when compared to other OECD²⁰ countries), New Zealand youth also have higher rates of suicide, motor vehicle deaths, students classed as overweight or obese, and students reporting medically attended injuries. However, in comparison with OECD young people, New Zealand youth fare better in relation to overall general health, lower cigarette and alcohol use, and lower involvement in physical fights (Clark, Fleming, Bullen, Crengle, et al., 2013).

2.4 Sexual Risk and Protective Factors

This section presents a summary of literature discussing sexual risk and protective factors.

2.4.1 Definitions

The terms risk and protective factors are often used in public health settings (World Health Organisation, 2014c). The World Health Organisation (2014c) identifies unsafe sex as a risk factor associated with increased morbidity and mortality. In the sexual health field, the following definition of ‘risk’ and ‘protective’ factors as proposed by Kirby and Lepore (2007) are pertinent for this study:

“Risk factors” are those that encourage one or more behaviors that might lead to pregnancy or sexually transmitted disease (e.g., initiating sex at a young age or having sex frequently and with many sexual partners) or discourage behaviors that might prevent pregnancy or sexually transmitted disease (e.g., using contraception, or condoms in particular). Similarly, “protective factors” are those that do just the opposite – they discourage one or more behaviors that might lead to pregnancy or STD or encourage behaviours that might prevent them. (p. 1)

²⁰ Organization for Economic Cooperation and Development (OECD): A group of 30 member countries that discuss and develop economic and social policy.

The number of identified risk and protective factors vary in the literature. Mmari and Sabherwal (2013) report more than 1,000 risk and protective factors across sexual health outcomes. World-renown sexual health expert, Douglas Kirby, whose efforts in the field of adolescent sexual health has received international acclaim, has identified more than 500 risk and protective factors (Kirby, 2007). Douglas Kirby (1943-2012) was a leading expert on programmes to reduce sexual risk taking. He served as a scientific adviser to the CDC, USAID, WHO, UNFPA, UNESCO, and the National Campaign to Prevent Teen and Unplanned Pregnancy (ETR Associates, 2015). Kirby and his colleague Gina Lepore reviewed over 400 American studies that examined the impact of factors relating to the following sexual behaviours: sexual initiation, frequency of sex, number of sexual partners, condom or other contraceptive use, pregnancy, childbearing, or sexually transmitted disease (Kirby & Lepore, 2007). Their selection criteria included:

- ❖ A sample of teenagers, aged 18 or younger;
- ❖ A sample size of at least 100 for significant results and a sample of at least 200 for non-significant results;
- ❖ Meeting scientific criteria required for publication in professional peer reviewed research journals or other publications;
- ❖ Published in 1990 or thereafter; and
- ❖ Include multivariate analyses.

Although the review completed by Kirby and Lepore has not been peer-reviewed, it is often referred to in other sexual health studies (Ahmad, et al., 2014; Manlove et al., 2011; Markham et al., 2012; Mueller et al., 2010; Pilgrim & Blum, 2012). Kirby and Lepore (2007) developed a diagram that depicts the relationships between risk and protective factors and sexual health behaviours and outcomes (see Figure 1). This figure shows some of the causal relationships among key risk and protective factors and pregnancy and contraction of STDs²¹.

²¹ STDs: Sexually Transmitted Diseases, now more commonly referred to as STIs – Sexually Transmitted Infections.

Kirby and Lepore (2007) present the following explanation for the diagram (Figure 1):

In general, the factors that are farthest to the right in Figure 1 (the most proximal psychosocial sexual factors) have the greatest impact on behaviour and outcomes. Therefore, interventions that target these factors directly and successfully improve them may have the greatest chance of actually changing behavior. Many studies have demonstrated the efficacy of this approach.

On the other hand, some of the more distal factors on the left in Figure 1 (e.g., community disorganization or family values) also affect outcomes like pregnancy and sexually transmitted disease, in part, because they affect the more proximal factors. Therefore, addressing distal factors can also be an effective strategy that has been demonstrated to reduce risky sexual behavior and pregnancy. Although distal factors may be more difficult to address, they have the potential to affect a greater variety of factors and behaviors (e.g., substance use, depression, and violent behavior).

Given that teen pregnancy and STD rates can be affected by addressing proximal and distal factors, each organisation concerned about teen pregnancy or STD must decide which to focus upon. This decision should be determined in part by considering the resources of each organization and the factors it can actually change. (p. 22)

The inclusion of Kirby and Lepore's findings and framework are central for this study. Their work highlights the importance of understanding sexual risk and protective factors and how interventions can be designed to successfully address sexual health issues. In addition, they show that there are several risk and protective factors, and that these factors vary for different populations, communities and circumstances.

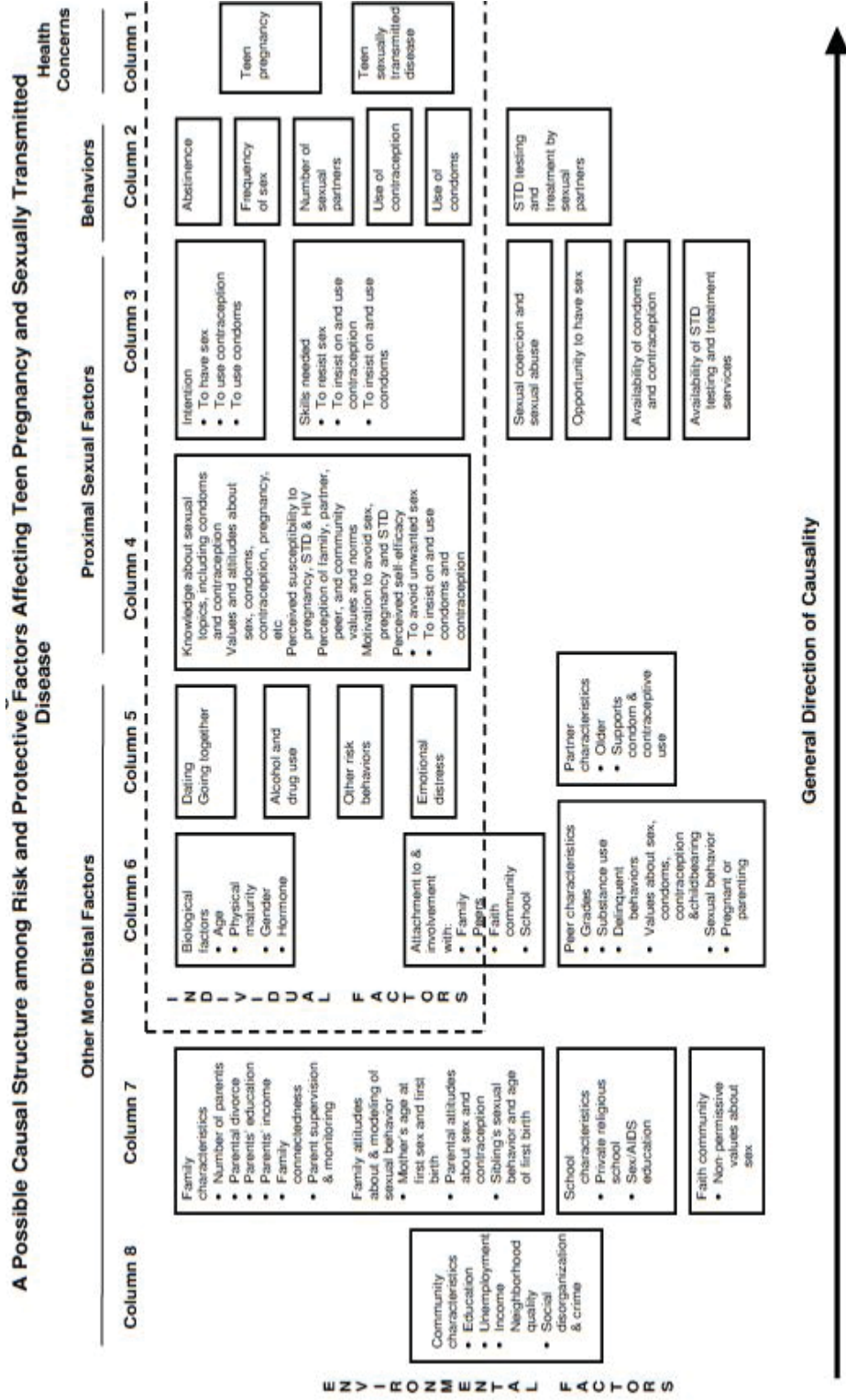


Figure 1 - Kirby and Lepore's (2007) 'Possible causal structure among risk and protective factors affecting teen pregnancy and sexually transmitted disease' (p. 27).

2.4.2 International Studies

The study of adolescent sexual risk and protective factors is well-established (Ahmadian, Hamsan, Abdullah, Samah, & Noor, 2014; DiClemente, Winggood, & Crosby, 2003; East & Hokoda, 2015; Farid, Dahlui, Al-Sadat, & Che'Rus, 2013; Kerpelman, McElwain, Pittman, & Adler-Baeder, 2016; Kirby, 2003; Kirby, et al., 2005; Manlove, et al., 2011; Markham, et al., 2012; Mmari & Blum, 2009; Mmari et al., 2013; Pilgrim & Blum, 2012; Svaneymyr, Amin, Robles, & Greene, 2015; Valle, Roysamb, Sundby, & Klepp, 2009; Van Der Put, 2015). The focus of studies vary; some examine individual sexual health outcomes, for example early sexual initiation (Farid, et al., 2013; Tsunokai, et al., 2012; Valle, et al., 2009) and pregnancy (Brahmbhatt et al., 2014), while other studies explore multiple sexual health outcomes with one or more population groups (Ahmad, et al., 2014; Blum & Mmari, 2004; Kirby & Lepore, 2007; Ma, et al., 2014; Mmari & Sabherwal, 2013; Wellings et al., 2006). As an exhaustive examination of individual studies was not practical, the seven studies in the following discussion provide a general picture of the range of factors that have been shown to be protective or heighten risk.

Two international meta-level reviews of adolescent sexual and reproductive health literature were conducted in 2004 and 2012 (Blum & Mmari, 2004; Mmari & Sabherwal, 2013). Commissioned by the World Health Organization, the main aim of both reviews was to identify and summarize the key risk and protective factors that are associated with adolescent sexual and reproductive health outcomes in developing countries (Mmari & Sabherwal, 2013). The 2004 review involved a comprehensive literature search on studies undertaken between 1990 to 2004 examining factors in relation to the following outcomes: ever had premarital sex, condom use, pregnancy, early childbearing, sexually transmitted infections, and HIV (Mmari & Blum, 2009). To be included in the review, studies had to include a sample where the majority were young people between the ages of 10 and 24 years and use multivariate analysis for determining the impact on factors related to the sexual health outcomes. The search identified 11,542 publications. The screening process reduced the number of studies down 2200 articles, with only 61 meeting the study criteria and were used in the final analysis.

In the 2012 study, Mmari and Sabherwal reviewed 224 studies that examined risk and protective factors relating to the following sexual behaviours: initiation of sex, number of sexual partners, condom or other contraceptive use, pregnancy and early childbearing, HIV and STIs, and sexual coercion. Their selection criteria included:

- ❖ Publications that were conducted in low or middle income countries;
- ❖ A sample size of at least 100 young people aged 10-24 years;
- ❖ Meeting scientific criteria required for publication in professional peer reviewed research journals or other publications;
- ❖ Published between 1990 and 2010; and
- ❖ Include multivariate analyses. (Mmari & Sabherwal, 2013)

Mmari and Sabherwal (2013) conducted a comparison of the 2004 and 2012 review results and found little change in the factors identified as key risk and protective factors across multiple adolescent sexual and reproductive health outcomes between 2004 and 2012. They also found a slight difference in the types of studies that were undertaken. In the first review undertaken in 2004, sexual initiation was the most studied outcome, followed by condom use. However, the second review in 2012 revealed a significant focus in the literature on sexual coercion among adolescents over the last decade (Mmari & Sabherwal, 2013).

Mmari and Sabherwal (2013) found sexual risk and protective factors operating at three levels: the individual; partner and family level. At the individual level: being married, older, having employment, and drinking alcohol were all key risk factors for the sexual health outcomes examined, whereas having a higher level of education was protective. At the partner level, having experienced forced sex with their first sexual partner was a key risk factor, whereas adolescents who were able to discuss reproductive health issues with sexual partners was protective. At the family level, urban residence and orphan status were key risk factors for the sexual health outcomes examined. These two family factors 'urban residence' and 'orphan status' are attributed to the context in which many of the studies were undertaken;

i.e., in Sub-Saharan African contexts. The authors note that this finding may be reflective of the issues facing youth in African cities. Not only does this include the challenges associated with living in poor urban settings, but also the HIV/acquired immunodeficiency syndrome epidemic that has orphaned millions of children (Mmari & Sabherwal, 2013).

An international study (Brahmbhatt, et al., 2014) exploring factors associated with adolescent pregnancy across five urban disadvantaged settings found that risk and protective factors vary substantially across similar economically disadvantaged urban settings. The *Well-being of Adolescents in Vulnerable Environments* (WAVE) study explores factors relating to sexual intercourse and 'ever been pregnant'²² with adolescents aged 15 to 19 years living in disadvantaged areas in Baltimore Maryland, America; Johannesburg, South Africa; Ibadan, Nigeria; New Delhi, India; and Shanghai, China. Approximately 500 adolescents were recruited at each of these areas²³. The findings revealed a mixed of sexual health behaviours for adolescents across these five settings.

The proportion of students that reported 'ever pregnant' ranged from 15 percent in Shanghai to 53 percent in Baltimore. For Baltimore and Johannesburg participants, protective factors that decreased the likelihood of pregnancy among females were condom use and currently attending school. The risk factors, i.e. factors associated with higher odds of pregnancy, varied across (and within) the different population groups. For Johannesburg participants and Baltimore females early sexual debut was a risk factor, for Johannesburg females being raised by someone other than two parents was a risk factor. For Baltimore participants, alcohol use and binge drinking in the past month was a risk factor, and for Baltimore males and Johannesburg participants, greater community violence and poor physical environments were a risk factor. This study demonstrates the variability of factors within and across different settings. The findings outline the

²² The classification of 'ever pregnant' varied across genders. For female participants, the question asked if they had 'ever been pregnant' whereas for males if they had 'gotten a partner pregnant'.

²³ The participants in Shanghai were migrant adolescents.

need to understand the specific context that adolescents reside in (Brahmbhatt, et al., 2014).

Studies (Ahmad, et al., 2014; Atwood, et al., 2012) undertaken with two different Asian adolescent communities (Malaysian and Thai) reveal different factors were associated with sexual behaviours. A cross-sectional study undertaken by Ahmad, et al., (2014) highlighted sexual risk and protective factors for Malaysian school students. The study used data from the 2012 Malaysia *Global School-based Student Health Survey* (GSHS). A total of 234 schools were randomly selected from a total pool of 2344 government secondary schools in Malaysia. A systematic random sampling method was used to select students from ages 12 to 17 years resulting in a total of 23,645 students completed the sexual health component of the survey.

The study found that 8.3 percent of Malaysian school students have had an experience of sexual intercourse. Factors that were protective against ever having sex were: having a close friend; supportive peers and parental connectedness. Risk factors were having used illicit drugs; had smoked and consumed alcohol. The study also identified the concerns with early sexual exposure (intercourse) and unsafe sex. Half of the school students who had ever had sex initiated sex before the age of 14 and one fourth of students that ever had sex did not use condoms or contraception at their last experience. These findings have public health implications as there is a group of students that are risk of an unwanted pregnancy and STIs (Ahmad, et al., 2014).

A cross-sectional study undertaken by Atwood, et al., (2012) highlighted sexual risk and protective factors associated with sexual behaviors among 420 Thai youth aged 13 to 14 living in Bangkok. The study undertaken in 2012 used a random sample of households. Three sexual outcomes were measured: the intention to have sexual intercourse²⁴; pre-coital behaviors²⁵; and sexual initiation – where

²⁴ Respondents were asked, “How likely do you think it is that you will have sexual intercourse by the time you finish high school?”

respondents were asked, “Have you ever had sexual intercourse (by this we mean ‘going all the way’ or ‘doing it’).” In the case of pre-coital behaviours, the findings from the multivariate analysis showed two factors heightened risk: having a boyfriend or girlfriend; and exposure to pornographic material. Two protective factors were found: parental disapproval of sex and sexual refusal self-efficacy. Similar factors were revealed for the intention to have sex. The risk factors were having a boyfriend or girlfriend and exposure to pornographic material. Parental disapproval of sex was found to be protective. Again, similar findings were found when exploring the association with ever having sex. Exposure to pornographic media (internet or TV) heightened risk, and parental disapproval of sex was protective against ever having sex. The authors note that these study findings highlight the competing influences of parent disapproval and exposure to pornographic media on adolescent sexual behaviors and that these should be considered when adapting sexual health interventions for Thai youth (Atwood, et al., 2012)

One American study (Mueller, et al., 2010) explored the relationship between internal and external resources of adolescents and two sexual risk behaviours: ever had sex and birth control use. Internal assets refer to protective factors that are within the individual, such as competence, future aspirations and use of time, and external resources that are external to the individual, such as adult or peer role models and parent-child communication. The study drew on two data sets that were merged: a cross-sectional data from the *HEART of OKC* evaluation project, which was conducted in 1999-2000, and data from the *Youth Asset Study (YAS)* which were collected in 2003-2004. The YAS study is a five-wave longitudinal study. Information from 1,219 females and 1,116 males, and their parents were analysed. The sample included adolescents of African American descent, non-Hispanic Whites and Hispanic adolescents.

²⁵ A six-item index was used to measure pre-coital behaviours that included questions about kissing, sexual touching.

The findings from the study showed that there are important differences between males and females. A protective factor for females, i.e. a factor associated with never having had sex, was the involvement of nonparent role models and having family communication as a resource. These females were more likely to report never having had sexual intercourse when compared with females without these resources. A protective factor for males, i.e. a factor associated with never having had sex, was having aspirations for the future and responsible choice assets. There were two factors that were found protective (that is, never having had sexual intercourse) for both females and males; these were peer role models, and use of time (religion). The findings from this study suggest that sexual health programmes take into account how factors operate differently for female and male young people (Mueller, et al., 2010).

The findings from two American studies (Ma, et al., 2014; Voisin, et al., 2013) which focuses on sexual risk and protective factors unique to ethnic minority groups provide some insights for this study. In their longitudinal study of risk and protective factors associated with drug use and unsafe sex among 715 African American females aged 15 to 21 years, Voisin, et al., (2013) found that nearly a third of these women reported sex under the influence of alcohol or substances, had two or more sexual partners and casual sex partners in the two months prior to undertaking the survey. Nearly 75 percent of the participants reported not using condoms consistently.

The findings revealed that having multiple sex partners and not using condoms in a consistent manner were risk factors for sexual sensation-seeking. Sexual sensation-seeking was assessed by a validated nine-item scale for African-American youth, for example, "I enjoy having sex on the spur of the moment," "Having sex with a new partner is exciting to me". Risky peer norms were also a risk factor for having sex under the influence of alcohol. Risky peer norms were based on an established eight-item scale that evaluates participant's perception of their friends' risky sexual practices; "How many of your friends do you think are having sex without condoms?". In this instance, women who reported that their

friends' sexual practices were high on a risk scale were likely to have sex under the influence of alcohol. The study also found that higher sex refusal self-efficacy, i.e. when the women reported greater levels of confidence in being able to say no to have sex, was protective against having multiple; casual; and concurrent sex partners. The evidence from this study suggests that prevention programmes would benefit from tailoring strategies for this population group (Voisin, et al., 2013).

A study (Ma, et al., 2014) undertaken with 226 Latino youth aged 13 to 16 years explored whether cultural values were associated with eight sexual risk factors. In Ma et. al.'s study (2014), the adolescents completed a survey using an audio-computer assisted self-interview programme that included questions on demographics, cultural orientations, Latino cultural values and sexual risk self-efficacy behaviours. The findings revealed that four cultural factors are protective. For example, higher levels of Latino cultural orientation were related associated with fewer sexual partners and greater sexual initiation self-efficacy for Hispanic females, but not males. Stronger endorsement of *respeto* (respect towards parents and other authority figures) was correlated with a lower intention to have sex during secondary school. This is a landmark study, the first to examine the relationship between a complete set of core Latino cultural values and sexual risk factors among Latino adolescents. The findings suggest that Latino cultural values may be protective against sexual risk behaviours among Latino youth (Ma, et al., 2014).

The findings by Ma, et. al, (2014) have important implications for this research in that evidence is provided that cultural values can shape sexual health knowledge, attitudes and behaviours. Latinos in America and Pacific youth in New Zealand share similarities in their sexual health status and cultural values. For example, the chlamydia infection rate among Latino adolescents were much higher compared with non-Hispanic whites in 2012 (Ma, et. al., 2014). In New Zealand, the rates of STIs are higher for Pacific than the general New Zealand population (The Institute of Environmental Science and Research Ltd, 2014). Values important to the Latino

culture include *simpatia* (a belief in interpersonal relationship harmony and pleasant social interactions); *respeto* (a value that emphasizes deference and respect towards parents and other authority figures); and *ethnic pride* (a strong sense of affiliation with one's ethnic group coupled with high regard for one's cultural heritage) (Ma, et al., 2014). Sāmoan cultural values are highlighted in several studies as desirable (Anae, et al., 2000; Fa'alau & Jensen, 2006; Macpherson & Macpherson, 2009; Tupuola, 2000). Fa'alau and Jensen (2006) identify *fa'aaloalo* (respect) and *Fa'a Sāmoa* (Sāmoan way of life; the customs and language of Sāmoa):

Fa'a Sāmoa is a complex structure of value based on family and kinship relationships where responsibilities and obligations, service, respect, and identity are practiced through reciprocity and interaction during cultural and family activities....The *Fa'a Sāmoa* concept of *fa'aaloalo* (respect) is embedded within the value systems of the *āiga* (family)....defines the relationship between child and parent. As the child, participants [Sāmoan youth in the *Youth Mental Health Promotion* study] accepted that they were not allowed to do certain things such as questioning their parents' or elders' authority. (Fa'alau & Jensen, 2006, pp. 19, 21)

2.4.3 New Zealand Studies

There is a growing body of New Zealand evidence that identifies risk and protective factors relating to a variety of sexual health outcomes, including sexual initiation (Paul, Fitzjohn, Herbison, et al., 2000), number of sexual partners (Psutkla, et al., 2012), condom and contraceptive use (Clark, et al., 2006; Psutkla, et al., 2012) and pregnancy and early childbearing (Gao, et al., 2008; Paterson, et al., 2004). A summary of the study undertaken by Psutkla, et al., (2012) that identifies condom use patterns is previously reported (see section *Sexual behaviours: use of condoms and contraception*, p. 28).

Although it has been over a decade since the cohort reached adulthood, findings from the Dunedin Longitudinal study revealed 13 risk and protective factors for initiation of sexual intercourse before the age of 16 years. Predictors for early sexual initiation for males were not having outside home interests at age 13 years; no religious activity at age 11 years; not being attached to school at age 15 years; a low reading score; and a diagnosis of conduct disorder in early adolescence. For females, independent predictors were socioeconomic status in the middle range; mother having her first child before age 20 years; IQ in the middle range; not being attached to school; being in trouble at school; planning to leave school early; cigarette smoking; and higher self-esteem score (Paul, Fitzjohn, Herbison, et al., 2000).

A study of Māori youth (Clark, et al., 2006) identified two factors significantly associated with consistent contraception use. Sexually active Māori youth that used contraception consistently are more likely to report getting enough time with a parent and less likely to report weekly marijuana use. This analysis of the *Youth 2000* survey revealed that half of the Māori students have had sexual intercourse (54% males; 48% females) and a third are currently sexually active (33% males; 34% females) (Clark, et al., 2006).

Findings from a longitudinal study of Pacific families in New Zealand (Gao, et al., 2008) revealed an association between intimate partner violence (IPV) and unplanned pregnancy. The Pacific Islands Family (PIF) study, led by a team of researchers from Auckland University of Technology, followed a cohort of Pacific infants born at Middlemore Hospital in Auckland, New Zealand, between March and December 2000. A total of 1088 mothers were questioned about IPV and whether their pregnancy had been planned (Gao, et al., 2008). Women identified as victims of physical violence were more likely to report an unplanned pregnancy than those who were not victims (Gao, et al., 2008).

Summary of International and New Zealand Studies:

The findings from the international and New Zealand studies have shown that a range of factors impact on sexual health behaviours, such as: school attendance, family communication and connectedness, drinking alcohol, and exposure to pornographic material (Ahmad, et al., 2014; Atwood, et al., 2012; Brahmabhatt, et al., 2014; Clark, et al., 2006; Mmari & Sabherwal, 2013; Mueller, et al., 2010). These factors operate in a different manner in different contexts. For example, a protective factor that may be protective in one study may not be shown as protective in another. Kirby and Lepore (2007) explain this in their own review, that whilst there is no single set of risk and protective factors, there is generally more agreement across studies:

It is important to keep in mind that some of the factors included in the matrix might have been significant for only particular groups of youth, might have been significant only at particular points in time, might have been significant only when the factor was measured in a particular way, and/or might have been significant only when other factors were (or were not) controlled in a study....On the other hand, many of the factors included in the matrix were significant in multiple studies, with many groups of adolescents and at different times. (p. 4)

The ecological systems theory (or model) is often used in the sexual health literature as a way of describing the relationship between risk and protective factors and sexual health outcomes (Clark, et al., 2006; Kirby, 2009; Madkour, et al., 2014; Mmari & Sabherwal, 2013; Ohene, et al., 2015; Svaneymyr, et al., 2015). Based on Urie Bronfenbrenner's (1979) model, sexual health writers propose that each person functions within a complex network of individual, family, school, and community contexts and that within these contexts there are factors that influence sexual health knowledge, attitudes and behaviour (Clark, et al., 2006; Kirby, 2009; Madkour, et al., 2014; Mmari & Sabherwal, 2013).

2.4.4 From Theory to Practice - Targeted Interventions

Understanding risk and protective factors is important from a public policy perspective in that it identifies where resources and interventions (designed to influence sexual health behaviour) should be targeted. Experts agree that interventions may be most effective if they are appropriately targeted (Gluckman & Hayne, 2011; Health Committee, 2013; Kirby & Lepore, 2007; National Institute of Demographic and Economic Analysis, 2014). In addition, given that there are broad number of factors that drive sexual health behaviour, such as teen pregnancy, interventions designed to prevent and address sexual behaviours also need to be multifaceted (Ministry of Health, 2001a; National Institute of Demographic and Economic Analysis, 2014). Sexual health theorists pose that public programmes should have a broad focus in relation to adolescent sexual and reproductive health concerns rather than focusing on one isolated behaviour (Kirby & Lepore, 2007; Mmari & Blum, 2009). This study is premised on the notion that understanding the range of risk and protective factors is pertinent, particularly for populations such as Sāmoan youth. An understanding of these factors is necessary in developing appropriate resources and interventions. This point is captured in a Ministry of Health (2001a) report:

The issues affect and impact on different communities and at different periods in people's lives. Therefore, a successful [sexual and reproductive health] strategy must focus on population-specific actions....The groups most likely to be in at-risk situations are youth, Māori, and Pacific people. One model does not fit all. (p. 2)

2.5 Pacific and Sāmoan Sexual Health

The literature review at this point has highlighted the range of sexual health issues in relation young people from around the world, including New Zealand. Where possible, evidence highlights the sexual health issues facing New Zealand Pacific youth and New Zealand Sāmoan youth populations. The following section provides a population overview of Pacific peoples in Aotearoa New Zealand. A discussion of

Pacific and Sāmoan understandings of health and wellbeing in relation to sexual health is presented.

2.5.1 Pacific Peoples in Aotearoa New Zealand

The terms 'Pacific peoples' or 'Pasifika' is a term often used to describe the diverse cultures of peoples from Polynesia, Melanesia and Micronesia (Macpherson, 1991). The history of Pacific peoples in New Zealand is well documented (Fairbairn-Dunlop & Makisi, 2003; Macpherson, Spoonley, & Anae, 2001). In the New Zealand context Pacific peoples often refers to people of Cook Island, Niue, Tokelau, Sāmoa, Tonga, Fiji and other Pacific ethnicities who live in New Zealand (Bedford & Didham, 2001; Macpherson, 1996; McFall-McCaffery, 2010). There is a long history of people from Pacific countries settling in New Zealand (Macpherson & Macpherson, 2009; Statistics New Zealand, 2011). In the last century and a half there have been several waves of migration from different parts of the Pacific, with significant periods of immigration during the 1960s and 1970s (Macpherson & Macpherson, 2009; Statistics New Zealand, 2011).

Although Pacific communities are often referred to as a single body of peoples, Pacific communities can be defined in a number of ways (Bedford & Didham, 2001; Health Research Council, 2003; Macpherson, 1996). That is:

There is no generic 'Pacific community' but rather Pacific peoples who align themselves variously, and at different times, along ethnic, geographical, religious, family, school, gender, age, island-born/New Zealand-born, occupational lines, or a combination of these. (M. Anae, Coxon, Mara, Wendt-Samu, & Finau, 2001, p. 7)

In 2013, there were 265,974 people of Pacific ethnicity living in New Zealand, equating to 7.8 percent of the New Zealand population. Pacific peoples in New Zealand were the fourth-largest ethnic group, behind European, Māori and Asian ethnic groups (Statistics New Zealand, 2014). The seven largest Pacific ethnic

groups in New Zealand are Sāmoan followed by Cook Islands Maori, Tongan, Niuean, Fijian, Tokelauan and Tuvaluan (Statistics New Zealand, 2014). Sāmoans comprise 48.7 percent of the total Pacific population, that is 144,138 people out of 265,974 (Statistics New Zealand, 2014). It is projected that by the year 2025 the Pacific population will increase to 440,000 to 480,000 (Statistics New Zealand, 2015b). By the year 2038, it is estimated that the Pacific population will make up 10.9 percent of the population.

This growth rate is attributed to the current young age structure: the high proportions of Pacific peoples at the child and childbearing ages (Statistics New Zealand, 2015b). For example, during 2012 to 2014, Pacific fertility rates (2.7 births per woman) were higher than 'European or Other rate' (1.9 births per woman) and the overall New Zealand total fertility rate (2.0 births per woman) (Statistics New Zealand, 2015b). In 2006 the median age of Pacific peoples was 21.1 years, which is considerably lower than the median age of the New Zealand population overall (35.9 years).

The health status of Pacific people are reported in a number of public reports (Ministry of Health, 2008a, 2012, 2014a; New Zealand Child and Youth Epidemiology Service, 2008; Statistics New Zealand and Ministry of Pacific Island Affairs, 2011). In summary, when compared with other New Zealanders, Pacific peoples' health (from childhood to elderly) is poorer. For example, the life expectancy for Pacific peoples is about four years less than for the total population. Pacific children have higher rates of hospitalisation for serious infectious and respiratory diseases than New Zealand European children; Pacific students have higher rate of obesity; Pacific adults have higher rates of heart disease, stroke, diabetes and respiratory disease when compared with other ethnic groups (Statistics New Zealand and Ministry of Pacific Island Affairs, 2011). As highlighted in an earlier discussion, Pacific secondary school students are significantly less likely than New Zealand European students to use condoms or contraceptives. This heightens their risk of contracting an STI or becoming pregnant.

Assimilation and acculturation processes have also had a significant impact upon Pacific families living in New Zealand (Le Va, 2009; Macpherson, 2001; Northern DHB Support Agency Ltd, 2010). Pacific peoples have changed from being a predominantly migrant group to a largely New Zealand-born population. Now almost 60 percent of Pacific peoples are born in New Zealand. For those who were born in Pacific countries and migrated to New Zealand, two in five arrived in New Zealand 20 or more years ago (Statistics New Zealand, 2007a). The proportions of Pacific ethnic intermarriage, where parents are of different ethnicities, have also increased. A report by Statistics New Zealand (Statistics New Zealand, 2015b) indicates that in about one-quarter of Pacific births (i.e. where the child is identified as Pacific), the mother is non-Pacific and the father is Pacific. The social and policy implications that arise from ethnic intermarriage are reported (Callister, 2004; Callister, Didham, & Potter, 2005). Children that are born to parents of mixed ethnicities will experience different identity issues compared to their parents. These children will be exposed to a range of cultural norms and practices (Callister, 2004; Callister, et al., 2005). This influences the way they view issues, such as sexual activity.

There are some commonalities and shared experiences across Pacific cultures (Te Pou o Te Whakaaro Nui, Kingi-Uluave, & Olo-Whanga, 2010). These include core values, beliefs systems and extended family accountability (Health Research Council of New Zealand, 2005; Ministry of Pacific Island Affairs, 1999). Language and church beliefs are an important component of Pacific culture. In 2006, the proportion of Pacific peoples who could speak more than one language (49%) was much higher than for the overall New Zealand population (18%). Around half of the people in the seven largest Pacific ethnic groups could speak the language associated with their ethnicity. Religion plays an important part in many Pacific people's lives. In 2006, 83 percent of Pacific peoples stated that they had at least one religion, which was higher than for New Zealand overall (61%). A significant proportion (97%) of those with at least one religious affiliation identified with the Christian religion (Statistics New Zealand, 2006). However, there are also significant differences between each Pacific group, such as cultural practices (see

Macpherson, 1996; Northern DHB Support Agency Ltd, 2010; Te Pou o Te Whakaaro Nui, Kingi-Uluave, & Olo-Whanga, 2010). Therefore, care must be exercised in referring to Pacific people as if they are a homogenous group (Bedford & Didham, 2001; Macpherson, 1996; McFall-McCaffery, 2010).

Sāmoans in Aotearoa New Zealand

A recent report published by Statistics New Zealand (2015a) highlights the demographic characteristics of Sāmoans living in New Zealand. As Sāmoan youth are the focus in this study, a summary of the key findings from this report are highlighted. The following topics are outlined: regions where Sāmoans live; median age; type of ethnicity (sole or mixed); number of languages spoken; type of religious affiliation; highest qualification levels; income levels and family household composition. As reported, Sāmoans are the largest Pacific ethnic group in New Zealand. People of Sāmoan descent make up 3.6 percent of the total New Zealand population. In 2013, two-thirds (95,916) of Sāmoans lived in the Auckland region, followed by the Wellington region (22,383), and the Canterbury region (6,984). The median²⁶ age of Sāmoans is 21.5, with similar gender proportions, that is 49.1 percent were male (70,761) and 50.9 percent were female (73,380). Some 62 percent of Sāmoans stated Sāmoan was their only ethnicity. Almost a quarter (23.9%) said they belonged to two ethnic groups and 14.2 percent reported belonging to three or more ethnic groups. Almost two-thirds (62.7%) of Sāmoans were born in New Zealand, this is an increase compared to the 2006 census where 59.7 percent of Sāmoans were born in New Zealand (Statistics New Zealand, 2015a).

There is a slight variation in the number of languages spoken by Sāmoans. Some 45.4 percent of Sāmoans reported speaking one language, 48.5 percent spoke two languages and 3 percent spoke three or more languages (Statistics New Zealand, 2015a). English was the most widely spoken language; 90 percent of Sāmoans spoke English. Figures show that New Zealand-born Sāmoans were less likely than

²⁶ Median age refers to where half of the group are young, and half are older than this age.

those born overseas to speak Sāmoan (36.1% and 88.5% respectively). Some 83.4 percent (113,739) of the Sāmoan population affiliated with at least one religion. This is higher than for New Zealand overall population (58%). The most common religion was Catholic (22.8%), followed by Presbyterian, Congregational and Reformed (17.1%), and Christian not further defined (11.4%). In terms of qualifications, almost three-quarters (73.3%) had a formal qualification and the median income was \$20,800. Almost three quarters (72.3%) of Sāmoans live in a one-family household (72.3%) followed by two-family households (20.1%).

However, care must be exercised in interpreting these results. It is possible that having extended family that may live in the same household may not be viewed or reported as an 'extra' family, in this case a two-family household. In Sāmoan culture the term *āiga* is used to describe kinship and family. *Āiga* is commonly used when talking about family household and extended family units. Further figures show that the proportion of Sāmoans who lived as an extended family (36.2%) was higher than for the total New Zealand population (11.7%) (Statistics New Zealand, 2015a).

2.5.2 Pacific Views of Health and Wellbeing

The discussion of sexual health within Pacific communities firstly requires an overall understanding of how health and wellness is viewed by these groups. Pacific health writers have proposed a variety of metaphorical frameworks for thinking through how Pacific worldviews are conceptualized (Fotu & Tafa, 2009; Pulotu-Endemann, 2009; Tuitahi, 2009). Although Pacific health worldviews are discussed in Chapter Three of this thesis, it is important to note that the concepts of 'holism', 'wellbeing' and 'relationships' prominently feature in Pacific understandings (Health Research Council of New Zealand, 2005; Macpherson & Macpherson, 1990; Northern DHB Support Agency Ltd, 2010; Percival, et al., 2010a; Statistics New Zealand and Ministry of Pacific Island Affairs, 2011; Te Pou o Te Whakaaro Nui, et al., 2010). These concepts of holism and relationships are demonstrated in the following quotes:

Pacific definitions of health take as their starting point the state of wellbeing. For a Pacific person, wellbeing exists when their relationships with their environment, their God and other people are in a state of mental, physical, psychological, emotional and spiritual balance'. (Percival et al., 2010b, p. 6)

Pasifika world views and identities are based on a collective approach, with health and well-being relying on safe and balanced relationships. This is a holistic view of relationships. Within Pasifika cultural world views, considerable significance is placed on developing and maintaining relationships. A Pasifika world view and identity is based on a collective approach, which is governed by a complex set of inter-relationships between their individuals, their families and their communities. These relationships are often upheld through adherence to a set of core values and practices. Western world views and paradigms usually center on the notion of individualism. (Te Pou o Te Whakaaro Nui, et al., 2010, p. 14)

Culture influences sexuality (Fogel, 1990; Ma, et al., 2014; Smith, 1990). Literature shows that cultural norms, values and traditions influence sexual health outcomes, such as teenage birth rates (Ministry of Health, 2001a; National Institute of Demographic and Economic Analysis, 2014). For example, as reported by the National Institute of Demographic and Economic Analysis (2014), American studies with African-American, Latino and American-Indian youth identify a range of cultural factors that explain ethnic differentials in teenage birth rates. These include cultural attitudes or norms towards early motherhood, cultural support systems for young mothers and their children, cultural identity transition and conflict between traditional family culture and the culture of wider society. Cultural norms often dictate what acceptable sexual behaviour is. The following excerpt demonstrates how this occurs:

The meaning of a given act, be it sexual or otherwise, can only be fully understood when it is examined within the cultural context in which it

occurs. The culture of a society also determines the expression of sexuality by defining what is sexual and what is not. This is achieved by transferring the sexual code of rules, definitions, expectations, sanctions and taboos from older to young members of the society. (Smith, 1990, p. 87)

Seven Pacific ethnic reports based on a qualitative study entitled *Pacific pathways to sexual violence prevention* (Percival, et al., 2010a) provide useful cultural insights in how sexuality and reproductive abilities are understood in traditional Pacific communities. These seven reports highlight understandings for the following Pacific ethnic groups: Cook Islands (Robati-Mani & Percival, 2010), Fiji (Powell, et al., 2010), Niue (Kingi, et al., 2010), Sāmoa (Peteru & Percival, 2010a), Tokelau (Hope, et al., 2010), Tonga (Finau & Percival, 2010), and Tuvalu (Selu & Percival, 2010). The following excerpt describes how Fijian and Sāmoan women are viewed:

Fijian women embodied divine reproductive powers, as a daughter or sister made a new family line. In Sāmoa, as child bearers, women were seen as sharing divinity with the gods. (Tui Atua, 2007, as cited in Percival, et al., 2010b, p. 7)

2.5.3 Sāmoan Views of Health and Wellbeing

Sāmoan writers have proposed that the identity of a Sāmoan is based on unique features (Le Tagaloa, 1997; Tamasese, Peteru, & Waldegrave, 2005). In one study (Tamasese, et al., 2005), a concept of the Sāmoan self is highlighted. Within this concept, there are four core features that are integral to a Sāmoan person. Firstly, a Sāmoan person is a relational being. That is, an individual's sense of meaning is derived only in relationship with others, not just with oneself. In addition, there is *tapu*, otherwise regarded as a sacredness that exists in relationships. There is also a strong influence of spirituality for Sāmoans. This spirituality is not exclusive to Christian beliefs; instead, extend to land, sea, ancestors and God. The fourth

component of this understanding is that the whole self cannot be divided, that, features of mental, physical, spiritual elements and not separate, but are intertwined (Tamasese, et al., 2005). This concept of the 'Sāmoan sense of self' embraces a collective and holistic view of relationships and wellbeing.

Sāmoa is a highly structured and hierarchical society, where members have distinct and unique roles (Macpherson, 2002; Macpherson & Macpherson, 2009; Tupuola, 2000). The *āiga* (immediate and extended family unit) plays a pivotal role in the lives of Sāmoans: young and old (Anae, et al., 2000; Fa'alau & Jensen, 2006; Macpherson & Macpherson, 2009; Tupuola, 2000). There are unique ways of relating within a Sāmoan *āiga* and *nu'u* (village).

An example is the *feagaiga* relationship (a sacred covenant in the sister–brother relationship). This concept is closely linked with *va fealoaloa'i* (the relationship between sister and brother), *ali'i* (high chief) and *tulafale* (orator) (Fa'alau & Jensen, 2006; Peteru & Percival, 2010b). There is also a unique gender identity. *Fa'afafine* is a traditional form of gender identity specific to Sāmoan culture. *Fa'afafine* describes individuals who are physically male, but are reported to have the spirits of women or behave in the fashion of a woman. *Fa'afafine* do not fit neatly into western categories of male, female, heterosexual, homosexual, bisexual or transsexual. There are also various aspects of being a *fa'afafine* with differences observed in traditional and contemporary settings, being born in the Pacific islands and being raised or born in New Zealand (Farran, 2010; Pulotu-Endemann & Peteru, 2001; Sua'alii, 2001). The important role of *fa'afafine* is evidenced in the following excerpt:

Fa'afafine firstly denotes a Sāmoan and then a sexuality which must be seen in that cultural context. They are unique in their historical role as carers for and guardians of families or *āiga*, which are the foundation of Sāmoan culture or *fa'a Sāmoa*....Many *fa'afafine* have had *matai* or chiefly titles bestowed on them by their *āiga* in recognition of their services. This is the highest form of recognition for any Sāmoan and underlies the

recognition of their importance within that society. (Pulotu-Endermann & Peteru, 2001, p. 131)

As Fa'alau and Jensen (2006) note, there is a belief that in the *āiga*, members are responsible for each other. Individual obligations and duties are undertaken to contribute to the family as a unit rather than for personal benefit. Members of an *āiga* are expected to contribute towards activities, such as providing food, shelter, familial, village or church requirements. These gender roles are further outlined in a study undertaken by Anae et al., (2000) that explored the knowledge and practices of Sāmoan men and women in relation to reproduction. Three research methods were used: focused life story interviews with 40 women and 40 men, 21 key person interviews and five focus groups that involved older men; older women; younger women and two groups of younger men. Participants were between 18 and 86 years of age (Anae, et al., 2000). Mature study participants confirmed that male and female roles amongst Sāmoans are clearly prescribed:

Males were the “head of the household”, i.e. they worked in plantations, and females cared for children, performed domestic duties and administered the household funds....One participant explained that the onus was on the woman (in her capacity as a wife and mother), who was the heart of the family, to ensure she successfully organised and managed the household activities, assisted in familial and cultural obligations, and raised the children well. (Anae, et al., 2000, p. 195)

The term *teine lelei* is often used to describe a ‘good Sāmoan girl’:

Common characteristics of a good Sāmoan girl included someone who showed respect for her family elders, love for her *āiga*; protected her virginity; was cautious of irresponsible boys who only want one thing – sex; fulfilled her female place in the home by doing “women’s work”: and raising good children; did not ‘talk’ to boys; did not want to ‘go out’

(*tafao*) – especially with boys; tried hard to achieve educational success; and attended church regularly, upholding its codes of conduct. (Anae, et al., 2000, p. 88)

As outlined above, Sāmoan belief systems have influenced the way in which sexual behaviour is governed (Anae, et al., 2000; Tupuola, 2004). The following excerpt highlights traditional Sāmoan understandings of sexuality and how virginity is viewed:

According to Sāmoan indigenous traditions, the reproductive and sexual organs of the human body underline human divinity and spirituality. They are instruments for procreation and symbolize the power to make new life....In ancient Samoa...it was more common for girls to marry during adolescence and virginity prized as a sign of good breeding. (Tamasese, 2009, p. 12)

This emphasis on a Sāmoan female to remain a virgin explains the range of measures and restrictions placed upon Sāmoan females. As Tupuola (2000) discusses, a further role of the Sāmoan *āiga*, particularly for males, is the protection and control of the sexuality of an unmarried Sāmoan girl. In Sāmoa, female virgins are valued and cherished. Unmarried women are held responsible for the status of their *āiga* and village and are therefore strictly watched and guarded from the time of their first period (Tupuola, 2000). A Sāmoan female becoming pregnant outside of marriage would result in shame to the individual and their *āiga* (Anae, et al., 2000; Tupuola, 2004).

An expectation within *Fa'a Sāmoa* is that an *āiga* protects and counsels their young members. A female becoming pregnant outside of marriage or being caught in a sexual act suggests that the *āiga* were not fulfilling their duties (Anae, et al., 2000). This concept of shame is felt very strongly within Sāmoan families. As Anae, et al (2000) reports:

It is clear from the women's stories [Sāmoan female participants in the study] that the potential for family shame resulting from a pre-marriage pregnancy is without question. Having sex before marriage without falling pregnant is in itself, as long as one is able to keep it out of public knowledge, not going to bring the family intense public shame. Rather, as one participant points out, it is the fact of 'getting caught', either through becoming pregnant, getting caught in the act of sexual intercourse, developing the reputation for being *pa'umutu* (promiscuous) or all of the above, that brings public shame and personal shame on her family and herself. (Anae, et al., 2000, p. 86)

A high profile case that hit international headlines provides further illustration. In 2009, a Sāmoan woman gave birth and abandoned the baby on an Auckland-bound plane. The judge commented:

"this mother had concealed her pregnancy from her family as the child was conceived out of wedlock and would have caused her family and her village shame and embarrassment...." (in Ruscoe, 2009)

A relative told the media:

"This woman's actions would be considered by village leaders on her return to Sāmoa and may face "sanctions" for the disgrace she had brought on her family and village." (in Ruscoe, 2009)

These concepts of traditional relationships and pride are outlined in a later mixed methods study undertaken with Sāmoan youth in New Zealand (Fa'alau & Jensen, 2006). Data for Sāmoan young people aged 12 to 27 years that participated in two projects, the *Youth 2000* survey and the *Youth Mental Health Promotion* project, were extracted and analysed. Findings from this study stress the importance of family relationships for Sāmoan youth. The findings also reveal the strong

influence of the values, structure and practices of the *Fa'a Sāmoa* in the lives of Sāmoan youth (Fa'alau & Jensen, 2006). Additionally, the findings show that changes have occurred in the way Sāmoan young people relate with their families compared to traditional perspectives.

Fa'alau and Jensen (2006) highlight '*O le Faasinomaga*', a Sāmoan perspective offered by Le Tagaloa (1997) that describes the importance of identity and places of belonging for a Sāmoan person. This perspective recognizes three foundational elements. These are: connection and belonging to an *āiga* and/or *matai* (chief); ownership and connection to land and property; and the knowledge of the Sāmoan language. Findings from Fa'alau and Jensen's (2006) study show that in the New Zealand context, these elements have slightly changed; identity and collective relationships are still maintained through the *matai* (chief) as well as family heritage. However, church and community activities have become importance venues for maintaining collective relationships and maintaining identity.

Contemporary Pacific Studies of Sexual Health

There is a growing body of qualitative studies that provide insights in relation to Pacific understanding of sexual health knowledge and values (Jameson, Sligo, & Comrie, 1999; Matenga-Ikihele, 2012; Ministry of Health, 2008c; Taufu, 2015). A similar number of studies focus on the sexual and reproductive health issues for Sāmoans (Anae, et al., 2000; Naea, 2008; Tupuola, 2004). A consistent theme in the Pacific sexual health literature is that the discussion of sexual and reproductive health matters, particularly between parents and their children are viewed as 'taboo', with reluctance on the part of parents to engage in these conversations (Anae, et al., 2000; Jameson, et al., 1999; Ministry of Health, 2008c; Naea, 2008; Tupuola, 2004). The idea of lifting the taboo whereby the communication between parents and children would become more open in respect of sexual health issues, has been raised (Anae, et al., 2000).

In their study Anae et. al., (2000) noted a wide variation in participant responses, attributing the mixed responses to participants conservative or liberal views. For

example, some participants were against lifting the taboo, citing religious grounds. Some participants accepted that they would need to have more open relationships with their children. An interesting point raised by participants is the influences within the New Zealand context. Some shared that in Sāmoa they could control the sources of sexual information their children would be exposed to, whereas in New Zealand, this was not the case.

The studies undertaken with Sāmoan communities in New Zealand suggest that generations perceive sexuality and reproduction in different ways (Anae, et al., 2000; Naea, 2008; Tupuola, 2004). Naea (2008) explored the views of 18 Sāmoan women aged 30 to 79 years in relation to sexuality and school sexuality education. The women were categorized into three groups: 1) Traditional: women who had lived mostly in Sāmoa and have grandchildren; 2) Transitional: women who came to New Zealand as young women, then married and had their children in New Zealand and; and 3) Modern: women who were born in New Zealand and who had children. The findings showed similarities and differences in the relationships between Sāmoan-born and New Zealand-born mothers and their children. Modern mothers highlighted the need for Sāmoan parents, who hold traditional values and beliefs, to be educated on the importance of giving correct sexuality information to young people.

The study also identified strategies that could help reduce the cultural gaps between Sāmoan families and school based sexuality programmes. Some of the strategies include developing culturally appropriate programmes that will be accepted by Sāmoan families in New Zealand; educate Pacific people that it is okay to talk about sexuality; using innovative mediums to engage with Pacific communities; and of significant importance is the recognition that culture and religion are very intertwined for many Sāmoan parents and grandparents. Naea (2008) outlines that intervention programmes need to have a cultural perspective that will raise Pacific students' awareness of the traditional values and beliefs of their parents, and acknowledge the tensions associated with migration,

acculturation and religion and these issues impact their identity as a young New Zealand-born Sāmoan.

The implications arising from Anae, et. al. (2000) are similar to those expressed by Naea (2008). In Anae, et. al. (2000), 29 implications are offered as ways to address sexual health issues for Pacific peoples in New Zealand. These findings are relevant to a range of communities, including policy makers²⁷. These implications are directly relevant to this study. Four are highlighted:

- ❖ Sexual health promotion and education packages need to address the different cultural nuances inherent within the different expectations of ‘older’ and ‘younger’ generations around forming premarital sexual and friendship relationships;
- ❖ The forming of sexual health promotion and education packages. Framed under the umbrella of forming responsible family and peer “relationships” “general health”, rather than on “safe-sex;
- ❖ ‘Forming responsible relationships’ needs to be promoted at all learning sites such as church, preschool, school, peer group networks; and
- ❖ There needs to be cohesion, coordination and consolidation of sexual health programmes to maximise effectiveness for Pacific groups. (pp. 239-241)

Similar implications were raised in a study by Tupuola (2000). Her study explored how Sāmoan women in New Zealand viewed adolescent development theories, with a focus of Sāmoan understandings of sexuality. In the study, cultural values, such as practices within the *Fa’a Sāmoa* were discussed and debated. The study raised several implications for future sexual health interventions. These include:

- ❖ the need for programmes to empower women by including them in the development, implementation and evaluation processes;

²⁷ These communities include: individual members of the Sāmoan community, churches, schools, local and national health and Pacific organisations and policy agents.

- ❖ Programmes needs to be flexible, collaborative and a reflection of both Sāmoan and western principles and lifestyles;
- ❖ Forums should be run by the youth themselves to educate health authorities and elders, *āiga*, parents in their respective communities about young people's perspectives on sexuality. (Tupuola, 2000, pp. 70-71)

These studies highlight the need for an appreciation of protocols and etiquettes relevant to the cultural setting. For example, literature suggests that it may be inappropriate to include for example, brother and sister, older and younger siblings, mothers and daughters, or church leaders and non-church leaders in the same sexual health programme (Jameson, et al., 1999; Ministry of Health, 2008b; Tupuola, 2004). The involvement of Pacific input in all stages of programme design is stressed. As well as using language that is relevant for the audience group. For example initiatives targeted towards mature Sāmoans may need to be conducted in the Sāmoan language, whereas younger New Zealand born Sāmoans that are not conversant in the Sāmoan language may prefer speaking English (Anae, et al., 2000; Naea, 2008; Tupuola, 2000).

This section has highlighted Pacific and Sāmoan views of health and wellbeing, as well as discussing cultural issues unique for Sāmoan communities living in New Zealand. The literature in the sexual health field acknowledges that social and cultural factors influence sexual health behaviour (Fogel, 1990; Ma, et al., 2014; Smith, 1990), however, few studies capture the way in which cultural factors operate. This is raised by Jackson (2004):

The statistical approach often used in the risk and protective literature is unable to identify the nuanced ways those factors operate at the level of individual understanding....Understanding **how** social and cultural factors operate to influence young people's sexual behaviour is paramount to the development of effectively targeted sexual and reproductive health programmes [emphasis mine]. (p. 1)

In their review of international studies, Blum and Mmari (2004) expand on the idea that an understanding of contextual factors are important:

Very few studies explore the contextual factors associated with ASRH (Adolescent Sexual and Reproductive Health) – whether it is government policy, the economic climate, family functioning, school climate and relationships, peer or community; rather, most research focuses on adolescent knowledge, attitudes, and beliefs with little attention as to how these are derived. (p. 3)

The literature review has highlighted that over the last decade there is increase in the number of sexual health studies exploring family, peer relationships and community characteristics. A review undertaken by Ekeroma et al., (2013) summarises the quantity and characteristics of reproductive health research output by 14 Pacific Island countries from 2000 to 2011. One hundred and seventy-four papers were published in the Pacific Island Forum Countries (PIFC). The authors identify a relationship between countries with well-funded research centers and strong relationships with Australian researchers. The authors identify the need for further reproductive research in PIFC (Ekeroma et al., 2013).

However, a limitation is the few studies capturing the influence of social and cultural factors. This study aims to understand the contextual factors that are unique to Sāmoan youth in Aotearoa New Zealand. The following section (2.6) explores one of these factors listed – the role of government policy in New Zealand and current sexual and reproductive health interventions on offer.

2.6 Sexual Health Policies in New Zealand

This section explores national policy developments in the field of sexual and reproductive health in New Zealand and attempts to relate these to young people's sexual health outcomes. Beginning with a summary of international directions in

the field of sexual and reproductive health interventions, New Zealand's key legislation, policy strategies, interventions and inquiries are presented.

2.6.1 Public Policy & Public Health

This study is located within the discipline of public policy and public health. The important role that government plays in the framing of public policy is described by Burtney and Duffy (2004):

National policies are key vehicles for framing issues, identifying priorities and allocating resources. They influence action at national, regional and local levels, encouraging and enabling work in some areas. (p. 35)

Public health has a unique focus. The World Health Organisation (2015) states:

Public health refers to all organized measures (whether public or private) to prevent disease, promote health, and prolong life among the population as a whole. Its activities aim to provide conditions in which people can be healthy and focus on entire populations, not on individual patients or diseases. Thus, public health is concerned with the total system and not only the eradication of a particular disease. (p. 1)

There are three main functions in public health. These are:

1. The assessment and monitoring of the health of communities and populations at risk to identify health problems and priorities;
2. The formulation of public policies designed to solve identified local and national health problems and priorities; and

3. To assure that all populations have access to appropriate and cost-effective care, including health promotion and disease prevention services. (World Health Organisation, 2015, p. 1)

When viewed through a public health lens, this study provides information on the sexual health behaviours of Sāmoan youth in Aotearoa New Zealand. It will also identify risk and protective factors associated with sexual health outcomes and highlight issues that Sāmoan youth feel are priorities. From a public policy perspective, it is desired that the study findings will provide policy agents with relevant information that can help them understand the issues unique to Sāmoan youth and respond appropriately. This may be through revisiting the current allocation of resources (Blum & Mmari, 2004).

2.6.2 International Context

Across the world, policy makers and practitioners are paying increasing attention to the field of sexual and reproductive health, especially in supporting young people to make safer choices such as encourage sexually active youth to use contraceptives (Blum & Mmari, 2004; Burtney & Duffy, 2004; Ministry of Health, 2004; United Nations, 2013). Much of this focus is driven by the high prevalence of teenage pregnancies, HIV and AIDs (Blum & Mmari, 2004; Burtney & Duffy, 2004; United Nations, 2013). Governments and experts in the health field, including medical, public health and allied social service professionals use a variety of public health means and methods to influence behaviours with the aim of influencing sexual health (Bogle, 2006; Department of Health, 2003; Whitehead, 2001). These methods include media campaigns; publicising local sexual health services and screening and testing. A comprehensive list of these interventions is outlined in Table 2 below.

Table 2: Examples of government interventions to address sexual and reproductive behaviour

Types of Interventions	Examples and description
Media campaigns	National and local campaigns. Also via the press or the internet. The purpose of such campaigns is usually to raise public awareness and/or to target particularly vulnerable in terms of sexual health and HIV.
Sex and relationship education	Formal and informal education, youth and community settings. Give information and advice about causes and effects of sexual ill-health. Explore myths, values and attitudes to enable informed decisions to be made. Facilitate the development of skills required for healthy living
One-to-one work (Client-centred)	Individual one-to-one work in a sexual health services setting with service users. Or it may be done by non-clinical staff in community settings. Work with individuals on their own terms, addressing their sexual health issues, choices and actions. Empower client to take responsibility for his or her own sexual health
Group work	Particularly with vulnerable groups such as young people, teenage parents.
Peer education programmes	With parents and carers, young people and gay and bisexual men.
Arts work	Theatre, video making, Children's Express writing.
Condom distribution	Via Schools (school condom-availability programmes), Primary Care, youth workers, youth clinics, Family Planning Clinics, street-work with commercial sex workers or outreach work.
Production and dissemination of material	Leaflets, posters, video's, CD-ROMs, games and magazines to increase information and knowledge levels as well as stimulating uptake of services.
Publicising local sexual health services	And encouraging uptake of these, particularly by those who have not traditionally been service-users.
Outreach / Street work	Publicising and promoting sexual health services to groups, communities and individuals who might otherwise not be aware of them or confident enough to use them.
Community development approaches	Approaches which work with vulnerable and marginalized communities (e.g. gay and bisexual men, black & minority ethnic communities) to empower them and build capacity.
Targeted work with particularly vulnerable groups	With young women who may be abused.
Screening and testing	Example: HIV and other Sexually Transmitted Infections.
Training courses and workshops	For staff to develop the necessary confidence and professional and personal skills to enable them to deliver the work effectively.
Conferences and seminars	Which models of good practice can be shared and new research disseminated.
Informal dissemination	Updates, training resources, newsletters and new research disseminated.
Development of policies and	Aimed to positively support sexual health and HIV prevention.

strategies	
Research	Research into most effective practice. Also dissemination of research findings from both national and international studies.
Working with political heads	That will enable them to be fully aware of the complexities. Action to change the physical environment to enable the choice of healthier lifestyle, by use of legislation, public pressure, lobbying, advocacy and community involvement
Needs assessments	For example through surveys or seeking the opinions of service-users or non-users and via action-research projects.
Promotion of strong inter-agency working.	Sexual health promotion is most likely to be effective when initiatives are multi-agency. Therefore joint working, inter-agency support and opportunities for shared training all make a positive contribution.
Non-sexual programmes	Service learning programmes. Vocational education and employment programmes.
Youth development programmes	Growing and developing the skills and attitudes young people need to take part in society. Building strong connections and active involvement in all areas of life. Young people being involved and having a say in decisions that affect them, their family, their community and their country and putting into practice and reviewing those decisions
Education programmes	These include: parenting, life skills, contraceptive education, Abstinence-only; Sex and HIV education programmes.
Medical	Promote medical interventions to prevent or ameliorate sexual ill-health Encourage people to seek detection and treatment of sexual problems
Behavioural	Focus on clients attitudes and behaviour change to encourage adoption of healthier lifestyles to prevent sexual ill-health

Adapted from Bogle, 2006; Department of Health, 2003; Kirby, 2003; McLaren, 2000; as cited in Veukiso-Ulugia, 2012b, p. 21

In many countries, programmes have been developed that focus on improving access to reproductive health interventions (Ministry of Health, 2001a; United Nations, 2013; World Health Organisation, 2014c). Some of these efforts are aligned with international instruments, such as the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), United Nations HIV/AIDS Declaration, United Nations Convention on the Rights of the Child and the Millennium Development Goals (MDGs) set by the United Nations (Ministry of Health, 2001a; World Health Organisation, 2014c). In Articles 12 and 16 of CEDAW Women's access to health care and family planning services, and their right to decide freely the number and spacing of their children, are identified (Health Committee, 2013).

The United Nations MDGs are eight goals that UN Member States have agreed to try to achieve by the year 2015²⁸. These goals include: eradicating extreme poverty and hunger; achieve universal primary education; promote gender equality and empower women; reduce child mortality; combat HIV/AIDS and other diseases; ensure environmental sustainability; and develop a global partnership for development. The fifth MDG is to improve maternal health. In each of the goals, targets and indicators have been set to assist in monitoring the progress from 1990. The two targets for maternal health are:

- Target 5.A. Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio.
- Target 5.B. Achieve, by 2015, universal access to reproductive health services.

²⁸ The MDGs ended in 2015. In 2015, leaders adopted the *2030 Agenda for Sustainable Development* that identifies 17 Sustainable Development Goals (SDGs) to be achieved over the next 15 years.

To achieve these targets there are four indicators. These are: comparisons of the contraceptive prevalence rate; adolescent birth rate; antenatal care coverage; and unmet need for family planning (5.6) (United Nations, 2013; World Health Organisation, 2014a, 2014c). A recent report (United Nations, 2015) shows that contraceptive prevalence has risen from 1990 to 2015. Contraceptive use among women aged 15 to 49 increased from 55 percent in 1990 to 64 percent in 2015. However, the unmet need for family planning is still high in some regions.

2.6.3 New Zealand Legislation

In their review of *Sexual health policies and trends in the USA, New Zealand and Australia*, Ingham and Partridge (2004) note that in New Zealand, policies relating to sex education and young people's service provision have been a topic of intense debate, that the general view of sexuality is "conservative" and these appear to have influenced the provision of services for young people, the level of school-based education and general cultural attitudes (p. 85).

The *Contraception, Sterilisation and Abortion Act 1977* (CSA), the *Education Act 1989* and the *Crimes Act 1961* are three examples of New Zealand law that underpin and frame sexual and reproductive health interventions. The Crimes Act 1961 outlines the age of legal consent for sexual intercourse. In New Zealand, it is illegal to have sex with someone under the age of 16 years (Parliamentary Counsel Office, 2015). The *Contraception, Sterilisation and Abortion Act 1977* outlined the circumstances in which contraceptives and information relating to contraception may be supplied and given to young persons; defined the circumstances under which sterilisations may be undertaken; and provided for the circumstances and procedures under which abortions may be authorised (Collins, 2000). In 1990, Section 3 of the CSA Act was repealed in response to the mounting pressure from human rights lobby groups and the advent of HIV and AIDs (Ingham & Partridge, 2004). The restrictions on the advice and supply of contraceptives to those under 16 years of age were removed meaning

that young people have the right to access information about contraception and can access contraceptive products without parental consent (Collins, 2000).

The *Education Act 1989* (including the Education Amendment Bills, National Administration Guidelines, National Education Guidelines and National Education Goals) governs New Zealand's education system (Ministry of Education, 2015b). This Act outlines the official policy related to teaching and learning in English-medium New Zealand schools. The curriculum was recently revised and a notable feature is the inclusion of the health and physical education as one of the eight key learning areas in the education curriculum. Sexuality education features in the health and physical education strand and requires the engagement of students in exploring the interpersonal and societal factors that influence sexual attitudes, choices, and behaviour (Education Review Office - The Ministry of Education NZ, 2007a; Ingham & Partridge, 2004; Ministry of Education, 2007). The findings from a 2013 New Zealand Health Committee inquiry have led to the Ministry of Education reviewing the sexuality education guidelines in 2014. This is aimed to better support boards of trustees and principals to deliver sexuality education programmes in line with the New Zealand Curriculum (New Zealand Government, 2014).

2.6.4 Government Strategies

A central document that directly addresses the New Zealand government's direction for sexual health is the *New Zealand Sexual and Reproductive Health Strategy* launched in 2001. The *Sexual and Reproductive Health Strategy* (SRHS) sits under the New Zealand Health and Disability Strategies. The SRHS sets out the strategic direction in how positive and improved sexual and reproductive health outcomes in New Zealand will be achieved. The Strategy aspires to focus on the determinants of sexual and reproductive health, including societal issues, structural issues (social, environmental, educational, cultural, emotional and spiritual) and power imbalances in relationships and to examine these issues with reference to specific age, ethnicity, disability and

population group cultural norms (MOH, 2001). The Strategy recognises the need to involve other government sectors, including education, families and communities as well as the issues facing Māori and Pacific populations (Ingham & Partridge, 2004; Ministry of Health, 2001a).

Māori and Pacific communities often feature as a priority population group within public health, education and social service efforts in New Zealand. The commitment to improving the health, social and economic outcomes for Pacific peoples, especially for Pacific youth are expressed in a number of public documents (Health Committee, 2013; Minister of Health and Minister of Pacific Island Affairs, 2010; Ministry of Education and Ministry of Pacific Island Affairs, 2012; Ministry of Health, 2014a). The following excerpt from *Pacific Youth Health: A paper for the Pacific Health and Disability Action Review* (Ministry of Health, 2008c) discusses the needs of Pacific youth:

Pacific youth face more challenges to achieving and maintaining good health and wellbeing than most other New Zealanders. The majority demonstrate considerable resiliency and where possible the health system should be looking to support and strengthen protective factors for all young Pacific people. Continuing to address risk factors and develop effective interventions for Pacific youth at risk of poor health outcomes needs to be considered a worthwhile investment in the future of the nation. (p. vii)

In addition to the *New Zealand Sexual and Reproductive Health Strategy*, the last decade has seen a growth in the number of national, regional and local strategic plans that inform discussions in the areas of sexual health, Pacific health and Pacific youth in New Zealand. These include the *New Zealand Health Strategy* (Ministry of Health, 2000); *Pacific Health And Disability Action Plan* (PHDA) (Ministry of Health, 2002b); *Youth health: A guide to action* (Ministry of Health, 2002c); *HIV/AIDS Action Plan:*

Sexual and Reproductive Health Strategy (Ministry of Health, 2003a); *Pacific Youth Health* (Ministry of Health, 2008b); *Statement of Intent 2010-2013* (Ministry of Health, 2010); *Ala mo'ui - Pathways to Pacific health and wellness: 2014-2018* (Ministry of Health, 2014a). These strategies signal a commitment by the government to supporting and improving the health of Pacific and youth communities in New Zealand.

Policy agents acknowledge that the demographic profile of New Zealand is changing and this will influence the design of government interventions. The following two excerpts highlight this recognition of the diverse cultures in New Zealand and the need for programmes and services to be responsive:

The young people of New Zealand reflect the changing ethnic mix of our population. While the issues and their solutions are generic across all of our population, programmes must be developed and delivered in culturally appropriate ways to the very different communities that now make up young New Zealand. (Gluckman & Hayne, 2011, p. 2)

Great effort must be made to ensure that Māori and Pasifika people have access to services that are culturally centered. (Health Committee, 2013, p. 6)

2.6.5 Government Interventions

There are a variety of interventions that address sexual and reproductive behaviour. These can be delivered at various levels, in various contexts and by people from a range of disciplines. These settings include schools, informal youth settings, health clinics and surgeries, sexual health services, residential care settings, further education, tertiary and training colleges and universities, community centers,

community and faith groups (Department of Health, 2003; New Zealand Family Planning, 2014; Ministry of Education, 2015b). Examples of interventions that address sexual and reproductive behaviour are outlined in Table 2 above.

In New Zealand, many interventions designed to address sexual and reproductive knowledge, attitudes and behaviour are supported and funded through various government ministries, including the Ministry of Education, Ministry of Health and Ministry of Social Development (New Zealand Government, 2014). There has been a greater drive towards the coordination of activities across the government sector to assist in the improvement of health, education and social outcomes for New Zealand society. A recent report (New Zealand Government, 2014) shows that over \$56 million of taxpayer funds are invested each year to nationwide health promotion and primary care services. A further \$14.9 million was invested in 2010 for initiatives that provided supports for teenage parents and their children. These included intensive case workers, supported housing for vulnerable teen parents, and parenting support for teen fathers (New Zealand Government, 2014). *Budget 2011*, for example, included \$7.3 million over four years to enable better support for high priority groups such as young Māori and Pasifika people. This reflects an increasing tendency to target specific sub-populations.

Other examples of publicly funded sexual and reproductive health interventions include, but are not limited to:

- ❖ Sexuality education in schools;
- ❖ School based health clinics, community health and medical clinics;
- ❖ Sexual and reproductive health promotion services and clinics such as New Zealand AIDS Foundation, Family Planning, Auckland Sexual Health Clinic, Body Positive, Health Ed, Village Collective;

- ❖ National media campaigns such as 'Get It On', a public health promotion initiative delivered by the New Zealand AIDS Foundation. (Health Committee, 2013; Ministry of Health, 2014f; New Zealand Government, 2014);
- ❖ Teen Parent Units (TPU): Teen Parent Units are educational facilities attached to state secondary schools, which provide education for teenage students who are pregnant or already parents. There are about 22 TPUs in New Zealand, with an average roll of about 30 students (Health Committee, 2013; New Zealand Government, 2014).

In addition to mainstream initiatives that target the general New Zealand population, there has also been investment towards Pacific sexual health promotion services. *Village Collective* and the *South Waikato Pacific Islands Community Service Inc* (SWIPIC) are two examples of Pacific services supporting Pacific communities in New Zealand with sexual and reproductive health needs. The *Village Collective* was established in 1997 as *Family Life Education Pasefika* (FLEP); this charitable trust based in Auckland delivers a range of customised targeted education programmes, primarily for Pacific communities (primary and intermediate aged children, teenagers, rainbow community) as well as for non-Pacific working with Pacific children, youth and families (Village Collective, 2014). SWIPIC provide sexual and reproductive education for Pacific youth within the South Waikato district (New Zealand Sexual Health Society, 2015). These Pacific services have adapted current sexual health resources and developed tailored programmes to suit the different Pacific communities they meet with (Veukiso-Ulugia, 2012a).

Evaluation plays an important role for policy agents and services delivering sexual health programmes. Although an exhaustive review of sexual health evaluations was beyond the scope of this study, one study is highlighted for its focus on Pacific sexual health programmes. In 2000, McClellan and Guttenbeil undertook an evaluation of regional sexual and reproductive health regional pilot programmes for Pacific peoples

in New Zealand. The review identified several issues related to improving access, programme acceptability, programme effectiveness, resource efficiency, programme safety and future directions for Pacific sexual health activities. The evaluators also identified the importance of training “messengers” who were competent in their own indigenous languages as an appropriate approach (McClellan & Guttenbeil, 2000). The findings from this evaluation strengthen the call for services and health professionals to become culturally competent, that is, having the ability to understand and appropriately apply cultural values and practices that underpin Pacific people’s world views and perspectives on health (Auckland District Health Board - Pacific Family Support Unit, 2012; Le Va, 2009; Te Pou o Te Whakaaro Nui, et al., 2010; Tiatia, 2008). This study intends to develop a deeper understanding of the values and issues that are unique to Sāmoan youth in Aotearoa New Zealand.

2.6.6 Ministerial Inquiries

New Zealand government ministers can commission inquiries to explore various public issues. These inquiries include statutory commissions of inquiry²⁹, ministerial inquiries, standing statutory bodies and parliamentary committees (Ministry for Culture and Heritage 2015). Two inquiries into key sexual and reproductive health as key issues for New Zealanders are *Improving the transition: Reducing social and psychological morbidity during adolescence* (Gluckman & Hayne, 2011), and *Inquiry into improving child health outcomes and preventing child abuse, with a focus on pre-conception until three years of age* (Health Committee, 2013).

Gluckman and Hayne’s (2011) report explored ways to improve the outcomes from young people in their transition from childhood to adulthood. In October 2009, the Prime Minister asked the Office of the Chief Science Advisor to review the scientific

²⁹ Commissions of inquiry are independent of the government. They report findings, give advice and make recommendations. While their findings are not legally binding, they can be highly influential. (Ministry for Culture and Heritage 2015).

understandings related to the high rate of social morbidity associated with being an adolescent in New Zealand (when compared to other OCED countries). Chapter 10 of the report focuses on sexual health for young people in New Zealand. An overview of the international evidence on causative factors and effective prevention programmes are provided (Gluckman & Hayne, 2011). The authors stress the importance of adopting a life-course approach to prevention, noting that remediation in adolescence is not likely to be as effective as prevention.

Pre-conception care and sexual and reproductive health were key areas explored by the Health Committee (2013) in its inquiry into improving child health outcomes and preventing child abuse. Concerns about the quality of sexual health education offered in schools, high teenage pregnancy rates, access to sexual and reproductive health care in schools and communities were identified (New Zealand Government, 2014). The Health Committee (2013) put forward 130 recommendations to the Government. Of relevance is Recommendation 6 that reads:

We recommend that the Government develop a co-ordinated cross-sectoral action plan with the objective of giving New Zealand world-leading, best-practice evidence-based sexuality and reproductive health education, contraception, sterilisation, termination, and sexual health services, distributed to cover the whole country. The plan should be developed within 12 months of this report being published and be matched with appropriate, sustainable resourcing. The plan should also be monitored by tracking trends in teenage pregnancy, sexually transmitted diseases, unplanned pregnancy, and terminations. (Health Committee, 2013, p. 29)

In its response to the Inquiry's recommendations, the New Zealand House of Representatives acknowledged the efforts made towards improving sexual and

reproductive health care for New Zealanders, but recognised there was still room for improvement. As a result, the Ministry of Health is tasked with working with district health boards (DHBs) and service providers to improve regional planning and service coordination, and to improve data gathering and monitoring (New Zealand Government, 2014).

The key findings from both inquiries are closely aligned. Both reports acknowledged that:

- ❖ Early childhood is a critical period. Evidence shows that prevention and intervention strategies applied in early childhood are more effective in altering outcomes and reap more economic returns over life course than do strategies applied later (Gluckman & Hayne, 2011, p. 2; Health Committee, 2013, p. 29);
- ❖ Programmes need to be effective – based on evidence with early intervention (Health Committee, 2013, p. 29);
- ❖ interventions need to be targeted towards the higher-risk sections of the community (Gluckman & Hayne, 2011, p.2; Health Committee, 2013, p.9).

2.7 Chapter Summary

In this chapter the sexual health status of Pacific youth in New Zealand was examined in light of national and international literature. As outlined, from a public health perspective, the sexual health status of young New Zealanders, particularly Pacific youth is concerning. The rates of sexually transmitted infections (STIs), unintended teenage pregnancies and suboptimal levels of contraceptive use in New Zealand are high when compared with other OECD countries.

Around the world, policy makers and practitioners are focusing efforts in sexual and reproductive health. Given the high rates of teenage pregnancy and sexually transmitted infections, emphasis has been on improving the sexual health status of

young people. As this review has shown, government officials use a variety of public health methods to influence sexual health behaviours. Two crucial elements are the quality of sexual health evidence and an understanding of risk and protective factors. From a public policy perspective, an understanding of the risk and protective factors is valuable to identify where resources and interventions designed to influence sexual health behaviour should be targeted. The literature has shown that the factors that influence sexual health knowledge, attitudes and behaviour are located within the context of family, school, and community environments.

As revealed in the literature trends and drivers for sexual activity vary for teenagers of different ages and ethnicities. Cultural norms, values and traditions influence sexual health behaviours and outcomes. Despite the acknowledgement that social and cultural factors play a role in relation to sexual health behaviour, there are very few quantitative studies that show how cultural factors affect sexual behaviour. Furthermore, how social and cultural factors are incorporated into the design of sexual health interventions. This review has outlined Pacific and Sāmoan understandings of health and wellbeing. Values and traditions that are unique to Sāmoans are highlighted. These values and the associated roles within Sāmoan families influence how Sāmoan youth receive sexual health knowledge as well how their sexual health attitudes are shaped.

The New Zealand government acknowledges there is room to improve sexual and reproductive health care for New Zealanders. Public policy agents seek to increase the awareness of sexual health issues in culturally appropriate and relevant ways for Pacific communities. However, the literature on the sexual health needs of young Pacific people growing up in New Zealand is limited.

As noted in Chapter One, my personal experiences of working with Sāmoan youth and their families in the field of sexual health and in reviewing the current literature led to the framing of this study. The aim of this chapter was to survey existing literature to

construct a picture of sexual health behaviours; to investigate what risk and protective factors are associated with sexual behaviours; to seek further understanding of the issues and experiences that Sāmoan youth face and; reviewing how this information can assist public health agents particularly in the field of current interventions and policy.

The following chapter (Chapter Three - Methodology) explains how these desires were transformed into research practice and located within a theoretical framework.

CHAPTER THREE: METHODOLOGY

3.1 Chapter Overview

This chapter provides a biographical sketch of the researcher and review of the theoretical framework guiding the design and implementation of this study. The rest of the chapter comprises three sections. Section 3.3 discusses how pragmatism and Pacific health research approach provide the philosophical worldviews underpinning this study. A summary of theoretical foundations of research is presented. An explanation of pragmatism is followed with an overview of Pacific health research approach. This section ends with a discussion of how these two complementary philosophical frameworks, pragmatism and Pacific health research approach, are woven together in this study.

Section 3.4 provides a summary of 'Mixed Methods', the research approach selected for this study. A brief outline and historical account of Mixed Methods is presented. The purpose in selecting Mixed Methods is also explained. The section concludes with a discussion of the 'convergent parallel design', the research design utilised for this study.

Section 3.5 presents the research methods - the techniques and practices used to gather and analyse the research data. This section is divided into two segments: Part A and Part B. In Part A, a description of the *Youth '07* survey that forms the quantitative component of this study, is presented. In Part B, an overview of the focus group process that was used with Sāmoan secondary school students and the key informant interviews undertaken with key informants is provided. These two research practices form the qualitative component of this study. Within these two segments the development of the survey questionnaires, recruitments of participants, interview

process and data analysis procedures are discussed. This chapter concludes with a discussion of the strengths and limitations with this study.

A visual model illustrating the research methodology employed for this study is presented in Figure 2. Adapted from a model developed by Creswell (2014), this model shows the detail and flow of the research activities:

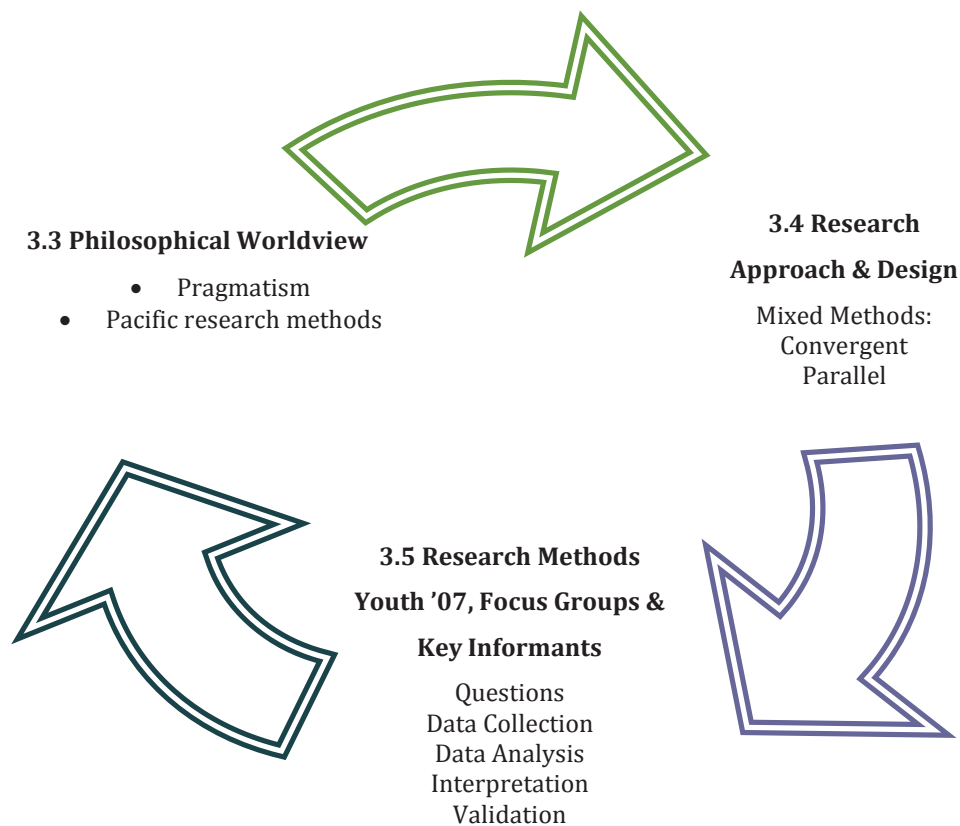


Figure 2: A framework for this research - The interconnection of worldviews, design and research methods. (Adapted from Creswell, 2014, p. 5)

3.2 About the Researcher

My name is Analosa Veukiso-Ulugia. I am a wife, mother, daughter and an active member of my local community. I am also of Sāmoan ethnicity. I understand some of the realities facing Pacific young people and their families. My parents were born in Sāmoa and migrated to New Zealand in the 1960s. I was born in Auckland, New Zealand and grew up in Mangere, located in South Auckland. My exposure to aspects of the Sāmoan culture primarily occurred through family and church activities. I attended Christian schools and held youth leadership positions in school, church and my local Counties Manukau community.

Empowering and improving the health and wellbeing for members in my community holds special meaning for me. This desire has shaped the choices I have made in tertiary education. In 2002 I completed a Bachelor of Social Work degree and have worked predominantly with Pacific and Māori families in the Counties Manukau region, over a period of 10 years. This region in South Auckland, New Zealand, has a large proportion of Pacific and Māori families who experience significant hardship and poor socio-economic status. I have also held Pacific tertiary liaison, Pacific research, and Pacific research management roles. The experience of working with many Pacific youth and families facing complex social and health issues such as teenage pregnancy, family violence, and educational disruption prompted me to complete a Post-Graduate Certificate in Health Sciences, majoring in Youth Health and a Master's in Public Policy.

In 2007 I was awarded a Health Research Council (HRC) Career Development Award that enabled me to complete the thesis component for the Master's in Public Policy. This Masters study explored the relationship between patterns of spiritual engagement and the sexual health activities of Sāmoan youth (Ulugia-Veukiso, 2000). Sexual health and spirituality data from the *Youth 2000* survey was explored, including nine sexual health activities. Data relating to spiritual engagement and

sexual health activities of Sāmoan (646) and New Zealand European (5219) were analysed and compared.

I was awarded a second HRC award in 2009 that provided support towards this PhD study. The PhD study expands on the findings from the Masters study, drawing on data from the subsequent *Youth '07* survey (Adolescent Health Research Group, 2008) and includes the addition of interviews and focus groups conducted with Sāmoan secondary students and key informants. The *Health Research Council Pacific Career Development Awards* are designed to help build the Pacific research knowledge base (Health Research Council of New Zealand, 2014b). It is desired that Pacific research will build the capacity and capability of Pacific peoples in research, and contribute to the Pacific knowledge base (Health Research Council of New Zealand, 2005).

As a Pacific researcher, with experiences in both Sāmoan and *Palagi* (non-Pacific) environments, the choice of pragmatism and Pacific health research approach as the key philosophical frameworks was undoubtedly clear in my mind. Both frameworks strongly resonate with me and inform the way I think about and undertake research. The Health Research Council (2005) states that, “Pacific research design, methods and approaches, will be informed, first and foremost, from within the continuum of Pacific world-views” (p.11). As a Pacific researcher, I have been exposed to several worldviews and Pacific models that explain worldviews through the eyes of Pacific peoples. Of the Pacific health models available, the *Fonofale* model presents a useful way of understanding health and wellbeing for Pacific peoples (Pulotu-Endemann, 2009). These are discussed within this chapter.

3.3 Research Methodology

The discussions of the theoretical and philosophical foundations of this study are necessary as all research has a philosophical foundation (Creswell & Plano Clark, 2011). The way in which a research objective or question is framed and investigated

draws on the theoretical perspective or perspectives adopted by a researcher (Creswell, 2014). This section discusses the theoretical foundations for this study.

The terms 'methodology', 'methodological movement', 'research method', and 'research techniques' are often used interchangeably in social research, yet may mean different things (Greener, 2011; Walter, 2013). Walter (2013) provides a comprehensive description of these terms which is fitting for the purposes of this study:

Methodology is the worldview through which the research is designed and conducted. It is comprised of our standpoint, theoretical and conceptual frame and our method. A conceptual framework is the theoretical framework that we use to conceptualise the collection, and to analyse and interpret our data. (p. 10)

Creswell and Plano Clark (2011) provide a further definition, located within the discipline of mixed methods research, which builds upon this foundation:

All research has a philosophical foundation and inquirers should be aware of assumptions they make about gaining knowledge during their study. These assumptions shape the processes of research and the conduct of inquiry....Philosophical assumptions operate at a broad, abstract level. Philosophical assumptions in mixed methods research consist of a basic set of beliefs or assumptions that guide inquiries....A term that we would use to describe these assumptions is worldview, and we say that mixed methods researchers bring to their inquiry a worldview composed of beliefs and assumptions about knowledge that informs their study. A term that is often used synonymously with worldview would be *paradigm*. (pp. 38-39)

Many theoretical foundations are commonly associated with western social research. The four common worldviews are: post-positivism, constructivism, transformative, and pragmatism. These theoretical frameworks differ in their position in regards to:

- ❖ the nature of social reality;
- ❖ the place for values;
- ❖ truth: reliability and the validity of data;
- ❖ the nature of human beings and society;
- ❖ what counts as evidence. (Davidson & Tolich, 2001)

The major elements of the four theoretical foundations are highlighted in Table 3 below, developed by Creswell and Plano Clark (2011, p. 4).

Table 3: Basic characteristics of four worldviews used in research

Post-positivism	Constructivism	Transformative	Pragmatism
Determination	Understanding	Political	Consequences of actions
Reductionism	Multiple participant meanings	Power and justice oriented	Problem-centred
Empirical observation and measurement	Social and historical construction	Collaborative	Pluralistic
Theory verification	Theory generation	Change-oriented	Real-world practice oriented

3.3.1 Pragmatism

This study draws upon Pragmatism as one of two philosophical underpinnings.

Origins of Pragmatism:

Three North American philosophers Charles Sanders Peirce (1839-1914), William James (1842-1910) and John Dewey (1859-1952) are regarded as the pioneers of

pragmatism (Bacon, 2012; Baranov, 2012; Creswell, 2014; Plowright, 2011). The term 'pragmatism' was introduced into philosophy in a lecture given in August 1898 by William James at the University of California in Berkeley (Bacon, 2012). As Bacon (2012) reports, in this lecture James stated he "will seek to define you with merely what seems to be the most likely direction in which to start upon the trail of truth" (1977, p. 347; as cited in Bacon, 2012, p. 1). This 'direction' James refers to is pragmatism.

According to Bacon (2012), James acknowledges that pragmatist ideas are found in the work of philosophers as diverse as Socrates, Aristotle, Locke and Hume; however he identifies Charles Sanders Peirce as the inventor of pragmatism as a philosophy. Peirce's writings propose that philosophy would benefit by examining thoughts and ideas in terms of the difference made to human behaviour (Bacon, 2012, p. 1). Literature suggests that the birth of pragmatism was a result of a combination of events (Bacon, 2012; Menand, 2001) unique to the North American context, which include the widening of the franchise, the professionalization of philosophy, and the experience of the Civil War where over 600,000 lives were lost (Bacon, 2012). It is reported that the tragedy raised doubts in men such as Peirce and James, doubts as to the influence of the dominant thinking at the time. As an alternative, Peirce and James argued for a different approach to philosophy that was open to the alternatives offered by new interests and ideas (Bacon, 2012).

Pragmatism has evolved over the past century. A strong relationship between pragmatism and feminism is also reported (Baranov, 2012). Jane Addams³⁰ is an early feminist theorist identified as responsible for changing pragmatism from simply a theory into a practical transformative tool (Baranov, 2012). Central to this transformation, and as Bacon (2012) notes, pragmatism's "key contribution to

³⁰ Jane Addams (1860–1935) was a prominent figure in developing pragmatism. Addams was a well respected social reformer earning her a Nobel Peace Prize in 1931 (Stanford Encyclopedia of Philosophy, 2004).

philosophy” is the resources it finds in and develops from social practices. For pragmatists, suggestions for improvements to an identified social issue are themselves worked up from elements contained within those practices (Bacon, 2012, p. vii).

However, the growth and development of pragmatism has been a far from smooth encounter, rather it is often described as a deeply contested tradition (Bacon, 2012; Creswell & Plano Clark, 2011; Morgan, 2014). In reference to suggestions put forward by Bernstein (1995, p. 55), Bacon (2012) writes:

The history of pragmatism has always – from its “origins” right up to the present – been a conflict of narratives. Despite family resemblances among those who are labelled pragmatists, there have always been sharp – sometimes irreconcilable – differences within this tradition. There are (as a pragmatist might expect) a *plurality* of conflicting narratives... For this reason, pragmatism is best viewed as a tradition of thought rather than as a set of doctrines. (p. 2)

Core Characteristics of Pragmatism:

Due to these tensions, identifying the central features of pragmatism is not a simple task. There is a wide variation in the way pragmatism and pragmatic research is carried out that consists of a multiplicity of views and approaches (Bacon, 2012; Baronov, 2012; Creswell, 2014; Creswell & Plano Clark, 2011). Creswell (2014) and Creswell and Plano Clark (2011) present a comprehensive description of pragmatism. In their writings, the ontological (reality and truth), epistemological (relationship between the researcher and that being researched), axiology (role of values), methodology (process of research) and rhetoric (language of research) associated with pragmatism are discussed. However, despite the differences noted within

pragmatism, there are specific themes that often recur. Creswell (2014) provides a useful description of these key themes:

There are many forms of this philosophy, but for many, pragmatism as a worldview arises out of actions, situations, and consequences rather than antecedent conditions (as in post-positivism). There is a concern with applications – what works – and solutions to problems (Patton, 1990). Instead of focusing on methods, researchers emphasise the research problem and use all approaches available to understand the problem (see Rossman & Wilson, 1985). As a philosophical underpinning for mixed methods studies, Morgan (2007), Patton (1990), and Tashakkori and Teddlé (2010) convey its importance for focusing attention on the research problem in social science research and then using pluralistic approaches to derive knowledge about the problem. (pp. 10-11)

Pragmatism is primarily focused on the research question or problem and draws on all types of approaches that can help understand the issues (or problem) (Creswell & Plano Clark, 2011; Mackenzie & Knipe, 2006). The phrase “what works” is often used by Creswell and Plano Clark (2011) to describe pragmatism. This phrase refers to the range of approaches and worldviews that individuals draw on to understand an issue (Mackenzie & Knipe, 2006). As previously discussed, there are four theoretical foundations commonly associated with western social research (see Table 3) (Creswell & Plano Clark, 2011). These are: post-positivism, constructivism, transformative, and pragmatism. A post-positivist lens views knowledge as objective, where attention is paid to observation and measurement; that there is an objective reality that exists “out there” (Creswell, 2014). A constructivist lens views knowledge as subjective. That is, individuals develop subjective meanings of their experiences and attribute these meanings towards objects or things. Pragmatism acknowledges that both objective and subjective knowledge have a place (Creswell & Plano Clark,

2011). Mackenzie and Knipe (2006) highlight the emphasis pragmatism places on the research question and draws on what is best suited to answer the research question:

With the research question 'central', data collection and analysis methods are chosen as those most likely to provide insights into the question **with no philosophical loyalty to any alternative paradigm** [emphasis mine]. (p. 195)

Pragmatism offers this research a number of features: a greater understanding of social issues, an acknowledgment of the role that social values play, and an interest in the outcome of social research (Creswell & Plano Clark, 2011). From a pragmatic view, the purpose of social research is to enable a better understanding of the world. Pragmatism does not believe that scientific research is value neutral or value free. Instead the beliefs and values of the researcher and the larger research community influence the research that is being undertaken. Pragmatism is focused on promoting social progress and advancing the human condition (Baronov, 2012; Creswell, 2014). Pragmatism offers a mechanism in which the results of this study not only provide new theoretical insights, but (and this is my hope as the researcher) will result in practical policy prescriptions that will lead to specific actions. In other words, the study findings will equip policy makers with information that will enable them to revisit and adjust current efforts. The ultimate aim is an improvement in the health and wellbeing of Sāmoan and Pacific communities.

3.3.2 Pacific Health Research Approach

This study also draws upon a Pacific Health Research approach that provides the cultural philosophical basis for this study. The Pacific Health Research approach recognises that for Pacific peoples in the New Zealand context, health is holistic and includes inter-relating dimensions such as emotional, mental, physical and spiritual dimensions. This approach recognises the core role Pacific play in improving the

health status of Pacific communities, and this can be undertaken in a variety of research positions. Furthermore, an understanding of the context in which Pacific people live is important. The Pacific Health Research approach is pertinent as the study is concerned with the sexual health status of Sāmoan young people in New Zealand.

Development:

The last 30 years have seen the growth of Pacific and Māori frameworks and guidelines that describe approaches for working with Pacific and Māori communities (Agnew, et. al., 2001; Health Research Council of New Zealand, 2014b; Henry & Pene, 2001; Moewaka Barnes, 2001; Pipi, et. al., 2004; Pulotu-Endemann, 2009). The development of indigenous frameworks are often linked to concerns that theoretical models and frameworks developed by Western theorists are guided by assumptions that may not necessarily reflect indigenous worldviews, indigenous values and belief systems, and indigenous ways of sharing knowledge (Cunningham & Stanley, 2003; Denzin & Lincoln, 2005; PHRC: University of Auckland, 2003; Thaman, 2003). Māori scholar Linda Tuhiwai Smith has articulated these issues in *Decolonizing Methodologies: Research and Indigenous Peoples* (1999), a book which has gained international acclaim (Denzin & Lincoln, 2005; Thaman, 2003; Tuhiwai Smith, 2012). Tuhiwai Smith and other Māori researchers therefore considered that the demand for kaupapa Māori research methodologies and methods emerged from a Māori need to design, direct and control research that was happening in Māori communities and on Māori-related issues (Bishop, 1996; Bishop & Glynn, 1999; Callister, 2004; Henry & Pene, 2001; Moewaka Barnes, 2000; Pipi et al., 2004). A similar demand arose from Pacific scholars regarding research in Pacific communities, and on topics relating to and of importance to Pacific peoples.

Pacific Health Research:

The definition of Pacific health research produced by the Health Research Council of New Zealand (2005)³¹ provides the theoretical framework underpinning this study:

Pacific research is a broad descriptor that encompasses various approaches to research. The primary role of Pacific research is to generate knowledge and understanding both about, and for, Pacific peoples. *The primary role of Pacific health research is to gain knowledge and understanding that will improve the health of Pacific peoples* [emphasis mine].

Pacific research requires the active involvement of Pacific peoples (as researchers, advisors and stakeholders), and demonstrates that Pacific people are more than just the subjects of research. Pacific research will build the capacity and capability of Pacific peoples in research, and contribute to the Pacific knowledge base.

The source material for Pacific health research will most likely be derived from Pacific peoples, and from within Pacific realities - past, present and future.

Pacific research design, methods and approaches, will be informed, first and foremost, from within the continuum of Pacific world-views. Pacific approaches to research will aim to be responsive to changing Pacific contexts. Pacific research will be underpinned by Pacific cultural values and beliefs, and will be conducted in accordance with Pacific ethical standards, values and aspirations. (p. 11)

Pacific Health Models and Frameworks:

The definition of Pacific health research specifies that Pacific research design, methods and approaches, will be informed, first and foremost, from within the

³¹ A revised edition of the *Guidelines in Pacific Research* was published in 2014.

continuum of Pacific world-views (Health Research Council of New Zealand, 2005). Pacific writers have developed models and frameworks to explain Pacific paradigms and worldviews and presenting tools for undertaking a therapeutic relationship with Pacific clients and communities. The value in understanding Pacific models and frameworks is that it can enable policy agents and practitioners gain a better insight into what may be culturally appropriate and effective for Pacific peoples, in order to improve and maintain health and wellbeing (Te Pou o Te Whakaaro Nui, et al., 2010; Tiatia, 2008). A list of Pacific health models and frameworks is outlined in Table 4 below.

Table 4: Pacific health models and frameworks

Model	Theorist
<i>Faafaletui</i>	Carmel Peteru & Kiwi Tamasese (Suaalii-Sauni et al., 2009)
<i>Fonofale</i>	Fuimaono Karl Puluto-Endemann (Pulotu-Endemann, 2009)
<i>Fonua</i>	Sione Tuitahi (Tuitahi, 2009)
<i>Kakala</i>	Konai Helu-Thaman (Te Pou o Te Whakaaro Nui, et al., 2010)
<i>Papao</i>	Papao Group (Fotu & Tafa, 2009)
<i>Seitapu</i>	Fuimaono Karl Puluto-Endemann (Le Va, 2009)
<i>Soifua Maloloia</i>	David Lui (Lui, 2007)
<i>Strands or Pandanus Mat</i>	Although this model is often cited (e.g. Agnew, et al., 2004; Glover, Nosa, Watson, & Paynter, 2010) the original source is unknown.
<i>Te Vaka Atafaga</i>	Kupa Kupa (Kupa, 2009)
<i>Tivaevae</i>	Teremoana Maua-Hodges (Te Pou o Te Whakaaro Nui, et al., 2010)

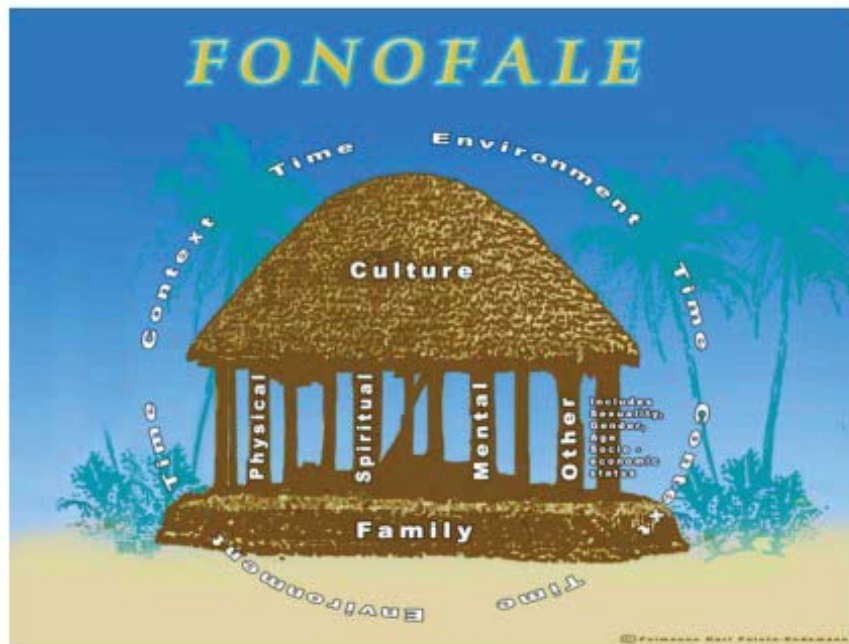


Figure 3: *Fonofale* Model (Source: Pulotu-Endemann, 2009).

Fonofale Model

The *Fonofale* model (Pulotu-Endemann, 2009) is particularly relevant for this study. Firstly, it illustrates some of the key values for Pacific peoples (Agnew, et al., 2004; Pulotu-Endemann, 2009). Developed by Fuimaono Karl Pulotu-Endemann, the *Fonofale* model uses the concept of the Sāmoan *fale* (or house) as a way of describing a Pacific worldview of health (see Figure 3 above). The model features important components central to Pacific peoples. These include the family that is seen as the foundation (or the floor of the house). The family, which includes nuclear and extended is viewed as the foundation for all Pacific cultures. The roof of the *fale* represents cultural values and beliefs that provide a shelter for life. Pulotu-Endemann (2009) acknowledges that culture, in this case Pacific culture, is dynamic, continually evolving and adapting.

There are pou (posts) that link the foundation (family) to the roof (culture). These pou symbolise four dimensions - spiritual; physical; mental; and other. An explanation of these dimensions, as presented by Pulotu-Endemann (2009) is included:

Spiritual - this dimension relates to the sense of wellbeing which stems from a belief system that includes either Christianity or traditional spirituality relating to nature, spirits, language, beliefs, ancestors and history, or a combination of both;

Physical - this dimension relates to biological or physical wellbeing. It is the relationship of the body which comprises anatomy and physiology as well as physical or organic and inorganic substances such as food, water, air and medications that can have either positive or negative impacts on the physical wellbeing'

Mental - this dimension relates to the wellbeing or the health of the mind which involves thinking and emotions as well as the behaviors expressed; Other - this dimension relates to various variables that can directly or indirectly affect health such as, but not limited to, gender, sexuality/sexual orientation, age, socio-economic status. (p. 5)

The *fale* is encapsulated in a cocoon that recognises three dimensions: environment; time; and context, as discussed in the following statement:

Environment - this dimension addresses the relationships and uniqueness of Pacific people to their physical environment. The environment may be rural or an urban setting.

Time - this dimension relates to the actual or specific time in history that impacts on Pacific people.

Context - this dimension relates to the where/how/what and the meaning it has for that particular person or people. The context can be in relation to

Pacific Island reared people or New Zealand reared people. Other contexts include country of residence, legal, politics and socioeconomics. (Pulotu-Endemann, 2009, pp. 5-6)

All the components in the *Fonofale* model have an interactive relationship with each other (Mental Health Commission, 2001; Ministry of Health, 2008a; Pulotu-Endemann, 2009).

A further reason why the *Fonofale* model is relevant for this study is that it developed from Pacific people's discussions about sexual health issues. The ideas for this model developed from conversations that Pulotu-Endemann had with a number of Sāmoans, Cook Islanders, Tongans, Niueans, Tokelauans and Fijians during sexual health and mental health workshops that took place in the early 1970's to 1995 (Pulotu-Endemann, 2009). The usefulness of the *Fonofale* model is that it provides a simple yet comprehensive description of important values for Pacific people. It is the most often quoted and recognized Pacific model within the Pacific health literature (Agnew, et al., 2004; Auckland District Health Board - Pacific Family Support Unit, 2012; Minister of Health and Minister of Pacific Island Affairs, 2010; Northern DHB Support Agency Ltd, 2010; Suaalii-Sauni, et al., 2009; Te Pou o Te Whakaaro Nui, et al., 2010).

Although Pacific researchers agree that no single model can provide a cultural context for all the Pacific cultures (Glover, et al., 2010; Le Va, 2009; Suaalii-Sauni, et al., 2009) there are commonalities across the Pacific models. These are evidenced in the following statement:

These models and frameworks all point to the importance of focusing on the process of interventions and understanding of Pacific concepts such as the use of Pacific languages, spirituality, gender, familial and community responsibilities and intergenerational ethnic concepts of

care. Similarly, many share an overall vision of achieving wellbeing, and strong and vibrant families and individuals. (Suaalii-Sauni, et al., 2009, p. 19)

For this research study, the *Fonofale* model is valuable in that it provides a lens for understanding sexual health issues. Particularly pertinent is that health and wellbeing is viewed holistically. That is, in addition to 'mental' and 'physical' health, concepts of family, culture and spirituality are important features for Pacific peoples.

3.3.3 Weaving Pragmatism and Pacific Health Research

In reviewing the central tenets of pragmatism and Pasifika health research approach, I contend that pragmatism and Pacific health research are complementary philosophical frameworks. The value in blending Western and Pacific methodologies is captured by Anae (2010). Anae's discussion of using 'whatever works' or 'best suits' the cultural complexities and research questions are relevant for this study:

Approaches, methodologies and methods abound. Certainly, quantitative methods are mainly of the Western scientific kind. However, in terms of approaches and methodologies, a burgeoning of Pacific guidelines and methodologies are being developed such as specific, cohort-matched etc. It is important, however, that researchers draw not only on Pacific methodologies, but also on traditional Western interdisciplinary methodologies. Whatever best suits the interaction between cultural complexities, research questions and methods. (p. 16)

The following discussion illustrates how this study aligns with these two theoretical frameworks.

Purpose and Objectives of the Research:

Pragmatism asserts that the purpose of research is to ultimately advance the course of social progress (Baronov, 2012). The primary purpose of Pacific health research is to gain knowledge and understanding that will improve the health of Pacific peoples (Health Research Council of New Zealand, 2005). This study is concerned with the high rates of sexually transmitted infections and unplanned pregnancies for Pacific youth (and Pacific women) in Aotearoa New Zealand. The study intends to gain knowledge of the issues and potential solutions to address sexual and reproductive health issues. The findings from the study are expected to assist communities and those in decision-making positions with an ultimate aim of improving the sexual health status of Pacific communities living in New Zealand.

Reality and 'Truth':

In pragmatism, the purpose is to capture the world as it is lived and experienced so as to advance the course of social progress (Baranov, 2012). Pragmatists recognise that research always occurs in social, historical, political, and other contexts (Baronov, 2012; Creswell, 2014). As noted by Baranov (2012):

Truth cannot be the purpose of social research, because the best that we can strive for is a particular community's most complete understanding of their experiences. (p. 152)

Within pragmatic social research, a central idea is that context shapes meaning. Determining what is 'meaningful' involves a process that is open-ended and continuous. The interpretation of this meaning is based on human experiences that take place in unique historical and cultural settings (Baronov, 2012). Pacific health research advocates recognise the need for research to be responsive to changing Pacific contexts. In addition, the source material for Pacific health research will most

likely be derived from within Pacific realities - past, present and future³² (Health Research Council of New Zealand, 2005).

This study is located within a Public Policy discipline that recognises the role the New Zealand government plays in society and the importance of public-health services for positive health outcomes. This study also acknowledges the changing contexts in which Pacific youth are living (i.e. within New Zealand) when compared to their parents (Fa'alau & Jensen, 2006; Macpherson, Spoonley, & Anae, 2001; Mila-Schaaf, et al., 2008; Ministry of Health, 2008c; Tiatia, 1998). In section 3.4 of this chapter, we learn that 525 Sāmoan secondary school students participated in *Youth '07*, a nationwide cross-sectional health and wellbeing survey. In 2012, 55 Sāmoan students and eight key informants participated in the qualitative component of this study. This study captures the experience of these young people and key experts in these two time periods (2007 and 2012).

Worldviews:

Pragmatism acknowledges that multiple realities exist which draw from diverse culturally defined perceptions of the world (Creswell & Plano Clark, 2011). Pacific health research affirms that Pacific research designs, methods and approaches, are informed, first and foremost, from within the continuum of Pacific world-views (Health Research Council of New Zealand, 2005). This study recognises the multiple worldviews to which Pacific (in this case Sāmoan) young people are exposed given the multi-cultural society in which they live. For this study, these worldviews include both western (also referred to as '*palagi*') and Sāmoan understandings, such as '*Fa'a Sāmoa*' (Anae et al., 2000).

³² The term 'Pacific realities' acknowledges the contemporary and complex experiences of Pacific communities (Health Research Council of New Zealand, 2005, p. 10).

Design of the Research:

In developing a research design, pragmatism offers the use of multiple approaches to viewing research phenomena and multiple methods of data collection to answer the research question (Creswell & Plano Clark, 2011). Pacific health research guidelines do not place restrictions on the type of data or knowledge sources that may be used (Health Research Council of New Zealand, 2005). A mixed methods approach incorporating both qualitative and quantitative methods was used in the design of this study.

Values:

Pragmatists advocate for the deliberate and strategic integration of social values into research. Pragmatism also rejects the notion that scientific research is value-neutral, value-free, recognising that social research is influenced by the beliefs and values of the researcher and the larger research community (Baronov, 2012). The *Guidelines on Pacific Health Research* (Health Research Council of New Zealand, 2005) identify eleven guiding principles that are important when forming and maintain research relationships with Pacific peoples. Developing, cultivating and maintaining respectful relationships is foundational; the other 10 principles require that establishment of these principled relationships. The Sāmoan and English translations of these principles are: *va fealoalaoi* (relationships), *fa'aaloalo* (respect), *tofā manino i le aganu'u* (cultural competency), *tāua o le pululimatagau fa'atasi* (meaningful engagement), *toe tau i atu I 'auala aloa'ia* (reciprocity), *aogā o le soalaupule* (utility), *amana'ia o aiā a tagata lautele poo e o 'auai* (rights), *tafesilafa'i* (balance), *malupuipua o e fa'asoa ma 'auai* (protection), *tulitulimatagau langa tangata o toutai tangata* (capacity building) and *tapulima fa'atasi* (participation) (Health Research Council of New Zealand, 2005).

Building relationships is an essential task in research. These relationships will have a lasting impact on the lives of the researchers, Pacific peoples and future generations.

'*Va fealoaloa'i*' is a Sāmoan term that recognises the sacredness of a person. In many Pacific cultures there are protocols that govern how relationships between people occur, ensuring that personal and collective well-being is maintained. As a Pacific researcher undertaking sexual health research with young Sāmoans, I sought advice from senior Sāmoan leaders on how best to manage relationships with Pacific parents and church leaders.

Relationship between the Researcher and Participants:

Pragmatism recognises that researchers and participants are active agents, actual experiences are grounded in human condition, and that social research is influenced by the beliefs and values of the researcher and the larger research community (Baranov, 2012). Pacific research requires the active involvement of Pacific peoples (as researchers, advisors and stakeholders) (Health Research Council of New Zealand, 2005). In addition to my contribution as a Pacific researcher to this study, several Pacific peers have also provided assistance. Sāmoan secondary school students have also had the opportunity to be actively involved as participants in the study.

3.4 Research Approach – Mixed Methods

The previous section (3.3) outlined how pragmatism and Pacific research provide the philosophical underpinning for this research. This section provides a summary of 'Mixed Methods' the research approach selected for this study. A brief outline and historical account of mixed methods is provided. The rationale for selecting Mixed Methods for this study is explained. The section concludes with a discussion of the 'convergent parallel design' the overall mixed methods research design utilised for this study.

3.4.1 Mixed Methods

Social researchers are able to draw upon three research approaches to conduct their studies: qualitative, quantitative and mixed methods (Bryman, 2008; Creswell & Plano Clark, 2011; Walter, 2013). Mixed methods has been referred to as ‘third methodological movement’ following the developments of first quantitative and then qualitative research (Creswell & Plano Clark, 2011).

Over the last 20 years a few definitions for mixed methods³³ have emerged that incorporate various elements of methods, research processes, philosophy, and research design (Creswell & Plano Clark, 2011). The definition provided by Creswell (2014) states:

Mixed methods research is an approach to inquiry involving collecting both quantitative and qualitative data, integrating the two forms of data, and using distinct designs that may involve philosophical assumptions and theoretical frameworks. The core assumption of this form of enquiry is that the combination of qualitative and quantitative approaches provides a more complete understanding of a research problem than either approach alone. (p. 4)

3.4.2 Development of Mixed Methods

Early accounts suggest that elements of mixed methods were evident as early as the 1960’s and 1970’s (Creswell, 2014; Creswell & Plano Clark, 2011; Tashakkori & Teddlie, 2010). However, the origins of mixed methods were traced to the late 1980s and early 1990s and drew from work undertaken in diverse fields such as evaluation,

³³ Other terms used to describe mixed methods include: integrating, synthesis, quantitative and qualitative methods, multi-method, and mixed methodology (Creswell, 2014).

education, management, sociology and the health sciences³⁴. Mixed methods evolved as a response to the complexity of research problems and the need for more evidence in applied settings (Creswell & Plano Clark, 2011).

Since its beginnings, mixed methods has gone through several periods of development (Creswell & Plano Clark, 2011). Creswell and Plano Clark (2011) identify five phases: formative; paradigm debate; procedural phase; advocacy and expansion phase and; current reflective phase - illustrated below in Table 5.

Table 5: Phases of Mixed Methods development

Phase	Period	Summary	Author(s) and year
1	Formative	Considering multiple forms of data	Campbell & Fiske, 1959; Sieber, 1973; Denzin, 1978; Jick, 1979, Cook & Reichardt, 1979.
2	Paradigm debate	Heated discussions occurred about whether mixed methods inappropriately integrated different philosophical perspectives;	Rossmann & Wilson, 1985; Bryman, 1988, Reichardt & Rallis, 1994, Greene & Caracelli, 1997.
3	Procedural development phase	Writers pushed for increased understanding about conducting a mixed methods study;	Greene, Caracelli & Graham, 1989, Brewer & Hunter, 1989; Bryman, 1988; Morse, 1991; Creswell, 1994; Morgan, 1998; Newman & Benz, 1998; Tashakorri & Teddlie, 1998; Bamberger, 2000.
4	The advocacy and expansion phase	Writers suggested mixed methods was a distinct methodology and its popularity spread to diverse disciplines and different countries around the world	Tashakorri & Teddlie, 2003a; Johnson & Onwuegbuzie, 2004; Creswell, 2009c, Greene, 2007, Plano Clark, Cresswell, 2008; Tashakorri & Teddlie, 2009; Morse & Niehaus, 2009).

³⁴ This work took place across different countries such as the United States, United Kingdom and Canada (Creswell, 2014).

5	Reflective period	Writers discussed the priorities, issues and controversies surrounding mixed methods research	Tashakorri & Teddlie, 2003b; Greene, 2008; Creswell, 2008a, 2009b, Howe, 2004; Giddings, 2006; Holmes 2006; Freshwater, 2007.
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(Source: Creswell & Plano Clark, 2011, p. 23 & p. 50).

3.4.3 Core Characteristics of Mixed Methods

The central features of mixed methods research are discussed in a number of writings (Bryman, 2008; Creswell, 2014; Creswell & Plano Clark, 2011; Hesse-Biber, 2010; Plowright, 2011; Tashakkori & Teddlie, 2010). A useful account is presented by Creswell and Plano Clark (2011):

- ❖ Mixed methods encourages the use of multiple worldviews, or paradigms (i.e., beliefs and values), rather than the typical association of certain paradigms with quantitative and others for qualitative research;
- ❖ Mixed methods involves the collection of both qualitative (open-ended) and quantitative (close-ended) data in response to research questions or hypothesis;
- ❖ Mixed methods include the analysis of both forms of data (quantitative and qualitative);
- ❖ The two forms of data (qualitative and quantitative) are integrated in the design analysis through merging the data, connecting the data, or embedding the data;
- ❖ These procedures are incorporated into a distinct mixed methods design that also includes the timing of the data collection (concurrent or sequential) as well as the emphasis (equal or unequal) for each database. (p. 60)

3.4.4 Rationale for Selecting Mixed Methods for this Study

The use of mixed methods as a research approach was ideal for this study as the use of one research method (i.e. qualitative or quantitative) would not have enabled me as the researcher to answer all the research objectives in a comprehensive manner. The four research objectives for this study are:

1. Determine the prevalence of sexual health behaviours of Sāmoan secondary school students in New Zealand;
2. Explore and describe factors (risk and protective) associated with sexual behaviours among Sāmoan secondary school students in New Zealand;
3. Explore the perceptions of Sāmoan secondary school students and key informants on sexual and reproductive health issues; and
4. Explore the significance of these findings to public health interventions and policy.

The value of mixed methods is well documented (Baronov, 2012; Creswell, 2014; Creswell & Plano Clark, 2011; Plowright, 2011; Tashakkori & Teddlie, 2010). A fitting description in the value for using mixed methods is presented by Creswell (2014) who comments on the strengths and practical nature of this approach:

At a general level, mixed methods is chosen because of its strength of drawing on both qualitative and quantitative research and minimizing the limitations of both approaches. At a practical level, mixed methods provides a sophisticated, complex approach to research that appeals to those on the forefront of new research procedures. At a procedural level, it is a useful strategy to have a more complete understanding of research problems/questions. (p. 219)

Table 6: 16 reasons for Mixing Methods

1	Triangulation or greater validity	Refers to the traditional view that quantitative and qualitative research might be combined to triangulate findings in order that they may be mutually corroborated
2	Offset	Refers to the suggestion that the research methods associated with both quantitative and qualitative research have their own strengths and weaknesses so that combining them allows the researcher to offset the weaknesses and draw on the strengths of both
3	Completeness	Refers to the notion that the researcher can bring together a more comprehensive account of the area of inquiry in which he or she is interested if both quantitative and qualitative research are employed
4	Process	When quantitative research provides an account of structures in social life but qualitative research provides sense of process
5	Different research questions	Argument that qualitative and quantitative research can each answer different questions
6	Explanation	When one is used to help explain the findings by another
7	Unexpected results	Quantitative and qualitative research can be fruitfully combined when one generates surprising results that can be understood by employing the other
8	Instrument development	Contexts in which the qualitative research is employed to develop questionnaire and scale items (e.g., better wording or more comprehensive closed answers can be generated
9	Sampling	Situations in which one approach is used to facilitate the sampling of respondents or cases
10	Credibility	Employing both approaches enhances the integrity of findings
11	Context	Cases in which the combination of rationalized in terms of qualitative research providing contextual understanding coupled with either generalizable, externally valid findings or broad relationships among variables uncovered through a survey
12	Illustration	Use of qualitative data to illustrate quantitative findings, often referred to as putting "meat on the bones" of "dry" quantitative findings
13	Utility or improving the usefulness of findings	A suggestion, which is more likely to be prominent among articles with an applied focus, that combining the two approaches will be more useful to practitioners and others???
14	Confirm and discover	Using qualitative data to generate hypotheses, and using quantitative research to test them within a single project
15	Diversity of views	Includes two slightly different rationales - namely, combining researchers' and participants' perspectives through quantitative and qualitative research respectively and uncovering relationships between variables through quantitative research while also revealing meanings among research participants through qualitative research
16	Enhancement or building upon quantitative and qualitative findings	Reference to making more of or augmenting either quantitative or qualitative findings by generating data using a qualitative or quantitative research approach

(Bryman, 2006 as cited in Creswell & Plano Clark, 2011, p. 62)

A useful and comprehensive explanation in the value for using mixed methods is presented by Bryman (2006) (see Table 6 above). Of these 16 explanations Bryman (2006) offers for mixing methods, there are four that led me to choose mixed methods as the research approach. These are: offset, completeness, different research questions and credibility.

3.4.5 Mixed Methods and Pragmatism

Earlier in this chapter pragmatism, one of the two philosophical underpinnings for this study was discussed (Section 3.3). A formal relationship between pragmatism and Mixed Methods is recognised in the literature (Creswell & Plano Clark, 2011). Within a Mixed Methods study, researchers use multiple philosophical positions and may embrace and address multiple practical issues (Creswell & Plano Clark, 2011; Morgan, 2014; Tashakkori & Teddlie, 2010).

3.4.6 Research Design - Convergent Parallel

This research draws on a convergent parallel research design. The term 'research design' refers to the types of inquiry that are available within the three common research approaches (mixed methods, qualitative and quantitative). These designs, which others have called 'strategies of inquiry' provide specific direction for the research procedures (Creswell, 2014). Within mixed methods there are four major designs: convergent parallel, exploratory sequential; explanatory sequential and; embedded design (Creswell & Plano Clark, 2011). Each design has its own history, purpose, considerations, philosophical assumptions, procedures, strengths, challenges and variants. This study uses a convergent parallel design. However, there was one feature (timing of the strand – see discussion below) that drew from a sequential explanatory design. This design enables researchers to obtain different but complementary information on the same topic, which can aid understanding of a research issue (Creswell, 2014; Creswell & Plano Clark, 2011).

Within any of the four major designs, there are four important areas that require consideration:

- ❖ The level of interaction between the strands³⁵;
- ❖ Relative priority of the strands;
- ❖ Timing of the strands;
- ❖ Procedure for mixing the strands. (Creswell & Plano Clark, 2011)

Level of Interaction Between the Strands - Independent

In this study, the qualitative and quantitative strands were completely separate (as depicted in Figure 4 below) and therefore, in terms of level of interaction between them each strand was completely independent of the other.

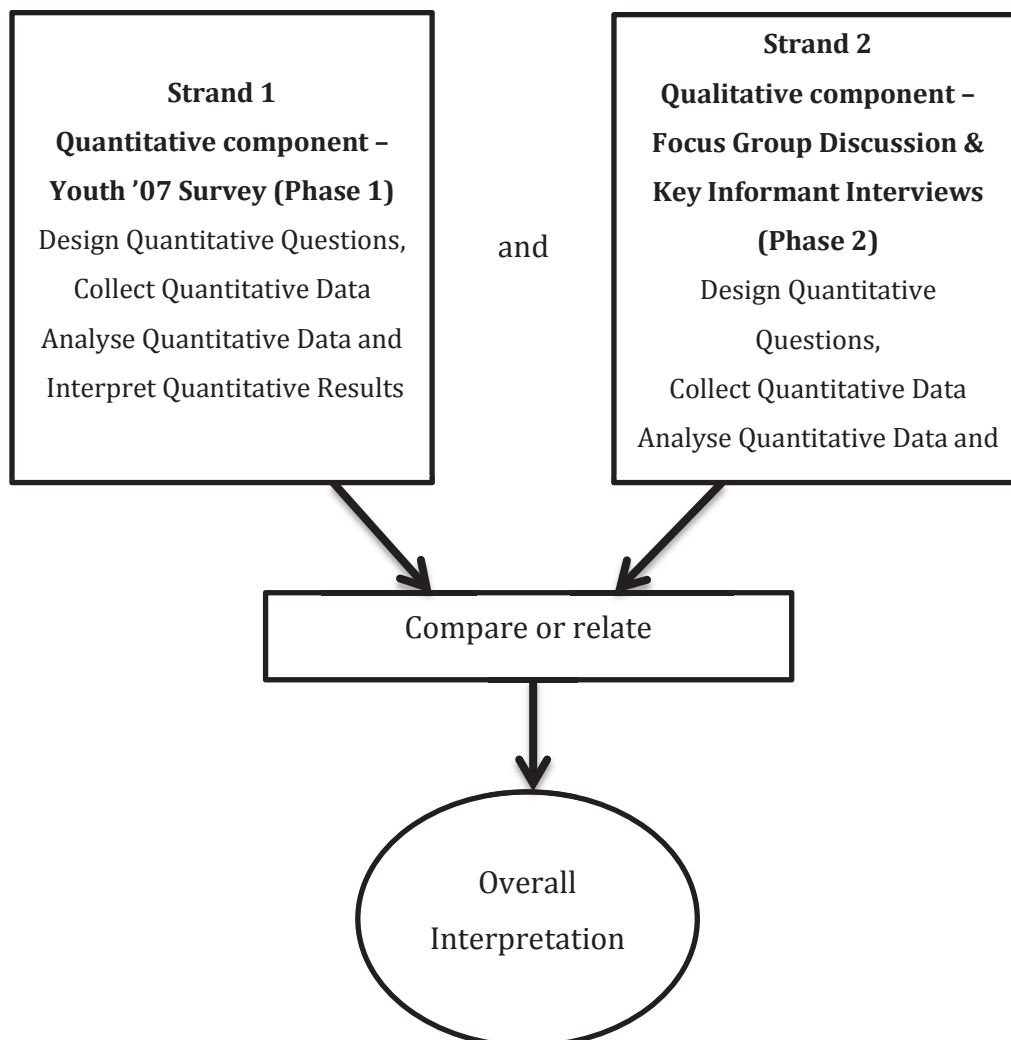


Figure 4: Convergent Research Design (Adapted from Creswell & Plano Clark, 2011)

³⁵ The term strands refer to the qualitative and quantitative components within mixed methods research (see Creswell & Plano Clark, 2011).

The qualitative and quantitative research questions, data collection and data analysis were undertaken separately and independently. The only time the two strands were mixed were when the findings and conclusions were drawn at the overall interpretation (as discussed in Section 3.5).

Relative priority of the strands – Equal

In the case of analysis and priority, both the qualitative and quantitative stands were equally important when it came to addressing the research objectives.

Timing of the strands – Sequential

In a typical convergent parallel design, the timing of the strands occurs concurrently; that is, both the quantitative and qualitative pieces of work are being undertaken at the same time (Creswell & Plano Clark, 2011). However, in this study, the strands occurred sequentially. That is, the strands were undertaken in two distinct phases, with the collection and analysis of one type of data (qualitative) occurring after the extraction and analysis of the other type (quantitative). This was primarily due to the time constraints, given the enormity of the task to extract and analyse the Sāmoan data from the *Youth '07* survey.

Procedure for mixing the strands – Interpretation

This point of interface, also known as 'stage of integration', is the step within the research process where the quantitative and qualitative strands are mixed. In this study, the qualitative design was based on the literature review and the research questions and not the analysis of the quantitative data. The mixing of strands may occur at four points in a mixed methods study (Creswell & Plano Clark, 2011). In this study, the mixing occurred during the final step of the research process - the interpretation. This is after the analysis of both sets of data has occurred. It is at this this stage of the research process that a researcher is able to draw conclusions reflecting what was learned from combining the results from the two strands of the study.

3.5 Research Methods

A Mixed Methods approach involves the collection and analysis of both qualitative and quantitative data. This section (3.5) outlines the research methods utilised; that is, the research techniques or practices used together and to analyse the research data (Walter, 2013). This discussion of the research method is separated into two parts. In Part A, a description of the *Youth '07* survey, which forms the quantitative component of this study, is presented. In Part B, an outline of the qualitative information sources, that is focus group discussions with Sāmoan secondary school students and interviews with key informants, is provided. A brief summary of these components is presented in Table 7 below. In this discussion, the development of the survey questionnaires, recruitments of participants, interview process and procedures used in analysing the data are outlined.

Table 7: Quantitative and qualitative components of study

Quantitative component: <i>Youth '07</i> Survey	Qualitative component: Focus Group discussions and Key Informant interviews
<p>This involved collecting and analysing data for 535 Sāmoan secondary school students that participated in the <i>Youth '07</i> survey. These students ranged from Years 9 to 13 and from schools all across New Zealand. The analysis explores the relationship between sexual activity and potential risk and protective factors. These potential risk and protective factors include questions related to their family, school, church and extracurricular activities.</p> <p>The <i>Youth '07</i> survey provided a cross-sectional analysis of health and well-being of a nationally representative, ethnically diverse, large sample of New Zealand secondary school students. The Adolescent Health Research Group (AHRG) based at the University of Auckland led this study (Adolescent Health Research Group, 2008a).</p>	<p>Eight focus group discussions were held across selected Auckland secondary schools. A total of 55 Sāmoan youth aged 16-19 participated in the focus groups that explored their views on issues relating to the sexual health knowledge, attitudes and behaviour of Sāmoan young people.</p> <p>Individual face to face interviews were undertaken with eight key informants who shared their views and experiences on issues relating to sexual health knowledge, attitudes and behaviour of Sāmoan and Pacific young people in New Zealand.</p>

3.5.1 Reasons for selecting the *Youth '07* survey, Focus Group and Key Informant Interviews

The selection of the *Youth '07* survey dataset, focus group discussion and individual interviews with key informants was purposeful. Each of these three research practices has strengths, as outlined in the following discussion.

Quantitative Component - Youth '07 Survey Data

As noted previously, the *Youth '07* survey is part of the *Youth 2000* survey series, the largest national health and wellbeing survey of New Zealand secondary school students (Adolescent Health Research Group, 2008). The first survey took place in 2001, followed by the *Youth '07* survey. A recent survey was conducted in 2012 (Clark, Fleming, Bullen, Denny, et al., 2013). This anonymous cross-sectional questionnaire of health and wellbeing provided an excellent source of data for answering the present research objectives. Of interest for this study is the fact that the *Youth 2000* survey series provides a cross-sectional analysis of health and wellbeing of a nationally representative, ethnically diverse, large sample of New Zealand secondary school students and gathered material on the variables of interest for this study.

Analysing information from the *Youth '07* survey is an example of secondary data analysis, also known as secondary research (Greener, 2011). In this case, the Adolescent Health Research Group (AHRG) developed and administered the *Youth '07* survey. I was not involved in the development and collection of this information. I sought permission from the AHRG to analyse specific data that they [the research group] had collected (as discussed in Part A). The specific data I was interested in included sexual health and wellbeing indicators for Sāmoan secondary school students. This material has not been previously analysed by the AHRG. The *Youth '07* data contributed to answering the research objectives as outlined in Table 8 below. There are several advantages with undertaking secondary research. These include: ease of access in obtaining research data; it is less expensive for the researcher and saves time in that the researcher does not have to carry out the research design, development and implementation

themselves; the secondary data can answer the research questions, and it minimises research fatigue (Curtis & Curtis, 2011; Greener, 2011). For example, analysing the data collected from *Youth '07* ensured Pacific schools and communities were saved from having to repeat answers on questions relating to sensitive and personal issues (Tamasese, Parsons, Sullivan, & Waldegrave, 2010; Ulugia-Veukiso, 2010).

Qualitative Research

A key feature of qualitative research is that it aims to gather an in-depth understanding of the issues in comparison to quantitative research that aims for representative sample. There are a range of research methods within qualitative research such as one-on-one interviews, phone interviews, observational studies and photo research (Creswell & Plano Clark, 2011). This study draws on focus group discussions and individual interviews with key informants.

Qualitative component - Focus groups

As discussed in Part B below, eight focus group discussions were held with selected Auckland secondary school students. One of the main purposes of the focus group is to gather rich contextual information about a topic, in this case sexual health knowledge and awareness (Curtis & Curtis, 2011; Stewart & Shamdasani, 2015). The selection of eight focus groups was to ensure that theoretical saturation is reached – the point where no new insights are gained (Kruegar & Casey, 2015). In focus groups, several participants, in this case Sāmoan secondary school students, have been brought together (group) with a focused area of interest (focus), that is, sexual health. A facilitator (researcher) poses questions to the group.

A strength of focus groups is that it can enable the discussion of sensitive subjects (see Chapter 3.6: Strengths and Limitations). Focus groups rely on the interaction within the group to explore the issues that are important to the individuals within them. The focus group process can clarify the views of the groups and reveal other perspectives. As noted by Tolich and Davidson (2011), “The hallmark of focus

groups...is the explicit use of the group interaction to produce data and insights that would be less accessible without the interaction found in a group” (p. 119). Participants that are more reluctant to share can feel supported by the group process, and those who feel initially that they have nothing to contribute may engage in discussion that is generated by other group members.

For many non-western communities, such as Sāmoans, focus groups are a culturally appropriate technique and consequently are often used in cross-cultural research (Anae, et al., 2000). The focus group process is similar to the processes used in many Pacific cultures when discussing issues of great importance (Tamasese, et al., 2010). In many Pacific cultures the deliberation of key issues occur in collective settings or *fono* and the process often enables those involved to achieve solidarity and consensus (Tamasese, et al., 2010). The focus group discussion contributed to answering the research objectives as outlined in Table 8 below.

Qualitative - Key Informant Interviews

Key informant interviews are another research technique available within qualitative research. Key informants are individuals that have a formal or informal position that gives them specialist knowledge about the people and processes that are the subject of research (Edwards & Holland, 2013). They can provide crucial information about the individuals, groups and social relations within the chosen research setting.

As discussed in Part B below, key informants were selected based on their knowledge and experience of working within the field of sexual health and Sāmoan communities. A strength in undertaking key informant interviews is that it can shed light on situations, behaviours, and attitudes that researchers otherwise could not understand. A further advantage of in-depth interviews is that the researcher can get more detailed information and be more flexible, amending interview questions when compared to fixed set questions. Through this interactive process (between the researcher and participant) participants may

think about aspects of the topic that have not been previously considered, thereby producing new knowledge (Curtis & Curtis, 2011). Table 8 illustrates how the key informant interview data contributed to answering the research objectives.

Table 8: The connection between the research components and the research objectives

Research Objectives		Research Components		
		Phase 1: Youth '07	Phase 2: Focus Group	Phase 2: Key Informant
1	Determine the prevalence of sexual health behaviours of Sāmoan secondary school students in New Zealand;			
2	Explore and describe factors (risk and protective) associated with sexual behaviours among Sāmoan secondary school students in New Zealand;			
3	Explore the perceptions of Sāmoan secondary school students and key informants on sexual and reproductive health issues;			
4	Explore the significance of these finding to public health interventions and policy.			

3.5.2 Part A: Quantitative Component - Youth '07 Survey

This Part describes the features used to gather and analyse data from the *Youth '07* survey. This survey forms the quantitative component of this study.

Questionnaire Development:

The development and piloting of the *Youth '07* survey is extensively documented (Adolescent Health Research Group, 2008b; Clark, Fleming, Bullen, Crengle, et al., 2013; Helu, et al., 2009). The Adolescent Health Research Group, responsible for developing the *Youth 2000* surveys (2000; 2007; 2013), conducted extensive consultation with young people, their families, schools, health providers, researchers, government agencies, Māori and Pacific Island Advisory Groups (Clark, Fleming, Bullen, Crengle, et al., 2013). The *Youth '07* survey asked students 622 questions across a range of domains. These included questions about ethnicity

and culture, physical health, food and activities, substance use, sexual health, injuries and violence, home and family health, school achievement and participation, neighbourhood environment, spirituality and access to healthcare. The survey was made available in the English and Māori language (Adolescent Health Research Group, 2010).

For the purposes of this study, the following variables were selected from the *Youth '07* study for analysis:

- ❖ Demographic variables: age, gender, ethnicity; measure of socio-economic status³⁶ (see Table 9 below);
- ❖ Sexual health behaviours;
- ❖ Potential Risk and Protective factors.

Table 9: *Youth '07* Demographic Questions

<i>Youth '07</i> question wording:	Possible responses:	AHR code:
How old are you?	<12; 12; 13; 14; 15; 16; 17; 18; >19	Intro1
What sex are you?	Male; female	Intro2
Where were you born?	New Zealand; Australia; Sāmoa; Cook Islands; Fiji; Tonga; Niue; Solomon Islands; PNG; Kiribati; Tokelau; Tuvalu; Vanuatu; China; Hong Kong; Taiwan; India; Sri Lanka; Malaysia....	Intro3_3
How old were you when you first came to New Zealand?	Less than 1 year old; 1 to 4 years old; 5 to 10 years old; 11 years; 12 years; 13 years; 14 years; 15 years; 16 years; 17 years; 18 years; I don't know	Intro4
Where was your mother born?	New Zealand; Australia; Sāmoa; Cook Islands; Fiji; Tonga; United Kingdom; Niue; China (People's Republic of); South Africa; Korea; Hong Kong; India; Sri Lanka; Malaysia; Indonesia; Japan; Europe; Middle East; another country	Intro7_3
Where was your father born?	New Zealand; Australia; Sāmoa; Cook Islands; Fiji; Tonga; United Kingdom;	Intro8_3

³⁶ Proxy socio-economic variables included: NZ deprivation indicators, number of places used as bedrooms in the home (e.g. living room, caravan, other rooms that aren't bedrooms), parents/caregivers ever worrying about food or not having enough money to buy food.

	Niue; China (People's Republic of); South Africa; Korea; Hong Kong; India; Sri Lanka; Malaysia; Indonesia; Japan; Europe; Middle East; another country	
Which ethnic group do you belong to?	New Zealand European; English; Australian; Dutch; Other European; Māori; Sāmoan; Cook Island Māori; Tongan; Niuean; Tokelauan; Fijian; Other Pacific Peoples; Filipino; Chinese; Indian; Japanese; Korean; Cambodian; Other Asian; Middle Eastern; Latin American; African; Other	Ethn1_7=Sāmoan
Which is your main ethnic group?	New Zealand European; English; Australian; Dutch; Other European; Māori; Sāmoan; Cook Island Māori; Tongan; Niuean; Tokelauan; Fijian; Other Pacific Peoples; Filipino; Chinese; Indian; Japanese; Korean; Cambodian; Other Asian; Middle Eastern; Latin American; African; Other; I can't choose only one ethnic group	Ethn2_7=Sāmoan

(Source: Adolescent Health Research Group, 2010b).

Sexual Health Activities:

One of the four objectives of this research is to determine the prevalence of sexual health behaviours of Sāmoan secondary school students in New Zealand. Nineteen questions were analysed from the *Youth '07* survey to identify sexual health behaviours and experiences of Sāmoan participants. A full list of these questions and possible response options is presented below in Table 11.

As reported, the *Youth '07* survey had a branching system that minimised students' exposure to sensitive questions. This was particularly important for this sensitive area of sexuality. The branching system skipped questions that were not relevant to students. For example, if a student ticked that they had not had sex, they were not asked any further questions about sexual activities (Adolescent Health Research Group, 2008b).

Potential Risk and Protective Factors:

One of the four research objectives of this study is to describe factors that are associated with sexual behaviours among Sāmoan secondary school students in New Zealand. Sexual risk and protective factors range across individual, family and community characteristics (see Chapter Two) (Clark, et al., 2006; Kirby, 2009; Madkour, et al., 2014; Mmari & Sabherwal, 2013; Ohene, et al., 2015; Svaneymyr, et al., 2015). As part of this quantitative research process, potential risk and protective factors as well as sexual health outcomes were identified from questions in the *Youth '07* survey. Association tests would be undertaken to examine the relationships between these variables.

Sexual Health Outcomes:

Three sexual health outcomes were selected as the dependent variables for this analysis (see Table 10). These outcomes were: ever had sex; use of a condom at last sex; and use of contraception at last sex. The selection of these outcomes was based on the review of international literature (Kirby et al, 2005; Miller, Sage, & Winward, 2006) that suggests that in order to reduce rates of teenage pregnancy or transmission of STIs³⁷ for young people, public health interventions and programmes must either:

- 1) increase abstinence;
- 2) reduce the frequency of sex, and/or;
- 3) reduce the number of sexual partners;
- 4) increase the use of condoms and other contraception; and
- 5) increase the testing and/or treatment for STIs. (Kirby et al, 2005; Miller, Sage, & Winward, 2006)

The results from the analysis tests that explore 'ever had sex' may reveal factors that influence abstinence or the frequency of sex and the use of condoms and other contraception. In addition, the results from the analysis tests that explore 'use of a

³⁷ These authors use the term STD's in their writings. However, the term STIs is more commonly used nowadays.

condom at last sex’ and ‘use of a contraception at last sex’ may reveal factors that influence use of condoms and other contraception. For the purposes of the analysis, the response option students selected ‘yes’ or ‘no’ were then categorised as either a risk or protective factor (see Table 10).

Table 10: Sexual health outcomes

Sexual health behaviours	Risk Factor (Response option)	Protective factor (Response option)
Ever had sex	Yes	No
Use condom at last sex	No	Yes
Use contraception at last sex	No	Yes

Independent Variables

Based on the literature review and in consultation with senior AHRG staff, 19 survey questions in the *Youth '07* survey were identified as potential risk or protective factors (also referred to as independent variables). These 19 questions, as outlined in Table 12 below, cover 12 domains. These domains include: home environment, school environment, drug use, alcohol use, exposure to violence, suicide attempts, gang involvement, sexual abuse, emotional health, paid work, spiritual engagement and attachment to culture. As this study focuses on the Sāmoan youth population, exploring if an association exists between cultural variables and sexual activity is worthwhile. It may be argued that Sāmoan students secure in their cultural identity have a positive framework from which to make choices and decisions.

In consultation with the lead biostatistician from the AHRG (responsible for the *Youth 2000 survey series*), the response options for questions that had more than three response options were then re-categorised into binary options (i.e. one of two responses) to assist in the multivariate analysis. For example, students were asked if in the last year they had worked for money or had a paid job. There were four potential responses:

- 1) Yes - a regular part time job;
- 2) Yes – worked during the school holidays;
- 3) Yes – sometimes worked during the school term;
- 4) No, I didn't work in the last year.

The first three questions, where students answered 'Yes', were grouped as response option 1 and the subsequent response, 'No, I didn't' work in the last year', was categorised as response option 2.

Table 11: Sexual Health Questions and Response Options

Youth '07 question wording	Possible responses	AHR code
Have you ever spent a long time kissing, hugging and touching someone?	Yes, No	sex1
About how old were you when you first had an experience of sex? By this we mean sexual intercourse or going all the way?	Under 11, 12, 13, 14, 15, 16, 17, 18, never	sex2
In the last year, who have you had sex with (sexual intercourse or going all the way)? Do not include sexual abuse or sex you did not want. You may choose more than one.	Girlfriend, Boyfriend, a person that you didn't know that well or you had just met (for example at a party), someone that is not your boyfriend or girlfriend but you have sex with sometimes, someone went on a date with (but they didn't become your boyfriend or girlfriend), with someone else, I have not had sex in the last 12 months	sex 3
In the last 3 months, how many partners have you had sex with? Do not include sexual abuse, or sex that you did not want	I have not had sex in the last 3 months, 1 partner, 2 partners, 3 partners, 4 or more partners	sex4
How much do you enjoy having sex?	very much, a lot, it's okay, not much, not at all	sex5
Have you ever talked to their partner(s) about preventing pregnancy?	Never, it depends on the situation, always	sex6
Have you ever talked to your partner(s) about preventing sexually transmitted infections or HIV/AIDS?	No, Yes	sex7
Did you use a condom the first time you had sex?	Yes, No	sex8
How often do you use condoms as protection against sexually transmitted disease or infection?	Always, Most of the time, Sometimes, Never	sex9
The last time you had sex did you use condoms as protection against stds or infections?	Yes, No	sex10
What is your main reason for using a condom	to prevent pregnancy, to prevent sexually transmitted diseases, to prevent pregnancy and sexually transmitted diseases	sex11

How often do you or your partner use contraception	Always, Most of the time, Sometimes, Never	sex12
The last time you had sex, did you use any form of contraception	Yes, No	sex13
Which if any, forms of contraception are you or your partner(s) currently using? You may answer as many as needed	The pill, the morning after pill, Depo Provera (the injection), Withdrawal, Rhythm method (eg calendar method), Condom, Other, None	sex14
Have you ever been pregnant or got someone pregnant	Yes, No, Unsure, Does not apply to me	sex15
How many times have you been pregnant or got someone pregnant	Once, Twice, Three or more, Unsure	sex16
What happened to this pregnancy?	I/she is currently pregnant, I/she had an abortion, I/she had a miscarriage, I/she had a baby, I don't know/unsure	sex17
Have you ever had a sexually transmitted disease or infection	Yes, No, Unsure	sex18
Have you ever been touched in a sexual way or made to do sexual things that you didn't want to do?	Yes, No, Unsure, I don't want to answer this question	sex19
In the last year, have you been touched in a sexual way that you did not want, or made to do sexual things that you did not want to do?	Not in the last 12 months, once or twice, two or more times, not sure	sex20
The last time this happened how bad was it?	not bad, a little bad, pretty bad, really bad, terrible	sex21

Table 12: Potential Risk and Protective factors (Independent variables)

Domain	Youth '07 question wording	AHRG code	Possible responses
<i>Culture</i>	How well can you understand spoken Sāmoan language Are you proud of being Sāmoan	Sāmoa6 Sāmoa8	very well, well, fairly well, not very well' 'no more than a few words' I'm very proud, I'm somewhat proud, I'm not at all proud
<i>School environment</i>	How satisfied are of your knowledge of things Sāmoan Do you feel like you are part of your school? How well do you do at school (how good are your school results?)	Sāmoa11 sch6 sch15	Very satisfied, satisfied, somewhat satisfied, not satisfied, not at all satisfied Yes, no Near the top, above middle, about the middle, below the middle, near the bottom
<i>Home environment</i>	How much of the time do you feel close to your mum/dad? Does your family want to know who you are with and where you are? How much do you feel the following people care about you? Mum/Dad	home14_1/ 16_1 home19 home21	Most of the time, sometimes, hardly ever, does not apply to me Always, usually, sometimes, almost never Not at all, a little, some, a lot, this does not apply to me
<i>Alcohol</i>	In the last 4 weeks how many times did you have 5 or more alcoholic drinks in one session (within 4 hours)	alc10	None at all, once in the past 4 weeks, two or three times in the last 4 weeks, every week, several times a week
<i>Violence</i>	In the last 12 months how many times have you seen adults in your home yelling, swearing, hitting, physically hurting a child/each other?	Viol1_(1-4)	never, once or twice, about once or twice a month, about once or twice a week, most days, does not apply to me
<i>Emotional Health – Suicide</i>	During the last 12 months have you tried to kill yourself (attempt suicide?)	emot15_3	not at all, not in the last 12 months, once or twice
<i>Membership in a negative peer group – Gang</i>	Do you belong to a gang right now?	neigh16	Yes, no

<i>Drug use</i>	In the last 4 weeks how often did you smoke marijuana?	mari3	Not at all – I don't smoke marijuana anymore, none in the last 4 weeks, once in the last 4 weeks, two or three times in the last 4 weeks, once a week, several times a week, every day, several times a day
<i>Dangerous driving</i>	During the last month how many times did you drive a car or other vehicle dangerously (e.g. speeding, car chases, or burnouts)?	injury6_4	Not at all, not in the last month, once, two or three times, four or more times
<i>Working</i>	In last year have you worked for money or had a paid job, not including helping around your home?'	actv29_1-4	Yes - a regular part time job, yes – worked during the school holidays, Yes – sometimes worked during the school term, No, I didn't work in the last year
<i>Sexual abuse</i>	Have you ever been touched in a sexual way or made to do sexual things that you didn't want to do?	Sex19	Yes, No, Unsure, I don't want to answer this question
<i>Spiritual</i>	How often do you attend a church/mosque etc	Spirit2	Three times or more a week, about once a week, about once a month, about once a year, never
	How important to you are your spiritual beliefs or religious faith?	Spirit10	very important, somewhat important, not important
<i>Moved Home</i>	In the past year how many times have you moved home?	Movedhome1	I haven't moved, I have moved once, I have moved two times, I have moved 3 or more times

Recruitment of Participants

In the *Youth '07* survey, 12,355 students were invited to take part from 100 randomly selected secondary schools throughout New Zealand. This equates to approximately a third of all high schools in New Zealand. Of this group, 9,107 students participated in the survey, representing 74 percent of those selected and 3.4 percent of the total New Zealand school roll (Adolescent Health Research Group, 2010).

This current study focuses exclusively on Sāmoan youth in New Zealand. A total response method was used to ascertain Sāmoan secondary students that participated in the *Youth '07* survey. Participants who answered 'Sāmoan' to either of the following questions '*Which ethnic group do you belong to?*' and '*Which is your main ethnic group?*' were identified and their corresponding data was extracted and analysed for the quantitative component. A total of 535 students (from the total 9,107 national survey participants) identified themselves as 'Sāmoan'.

The Sample:

The following description of the sample summarises the general characteristics of the Sāmoan students that participated in the *Youth '07* survey:

- ❖ 535 Sāmoan students were interviewed in the *Youth '07* survey;
- ❖ The students ranged from 12 to 19 years of age;
- ❖ 309 (58%) of the participants were male and 226 (42%) were female;
- ❖ 80 percent of Sāmoan respondents were born in New Zealand (423/532). 14 percent were born in Sāmoa (72/532);
- ❖ 61 percent of Sāmoan participants that reported being born overseas came to New Zealand by the age of 10 years (65/106);
- ❖ 54 percent of Sāmoan students reported that their mother was born in Sāmoa (290/534). Similarly, 59 percent of students reported that their father was born in Sāmoa (315/531);

- ❖ The majority of Sāmoan respondents identify positively as Sāmoans. 98 percent reported their pride in being Sāmoan, 83 percent of students reported satisfaction with their knowledge of things Sāmoan and 71 percent of students reported good understanding of the spoken Sāmoan language (refer to Appendix I);
- ❖ Sāmoan students identified feeling close with their parents. 90 percent reported that they felt close to their mum and 78 percent reported they felt close to their dad (Appendix I);
- ❖ A large proportion of Sāmoan students reported that their parents and family are interested in their activities. 89 percent reported that their family wants to know who they are with and where they are, 84 percent reported that their parents* (or people that act as their parents) know who their friends were, 86 percent reported that their parents* know where they go after school and 76 percent reported that their parents* know where they go at night (Appendix I).

In reviewing the data drawn from the *Youth '07* survey it is important to note that the number of students answering each question varies due to the branching system used in the survey. Students could opt out and quit questions, or whole sections. The results are described in percentages (e.g. 65 percent) and where appropriate, numerator and denominator are included that gives an outline of the total number of students that responded (for example, 123/188).

Survey Method:

The survey method used by the Adolescent Health Research Group (AHRG) has been previously reported (Adolescent Health Research Group, 2010; Helu, et al., 2009). The AHRG secured ethical approval from the University of Auckland Human Ethics committee to undertake the research. Students were provided information and given the opportunity to participate. Informed consent was sought. Multi-media technology allowed students to answer questions privately. The complex branching system in the

survey enabled students to answer the questions relevant to them by branching onto questions specific to an individual's circumstances. This process ensured irrelevant questions were automatically skipped. At the conclusion of the survey, students were provided a list of support organisations in the unlikely event that they required additional services (Clark, 2007, p. 34).

Data Analysis:

Univariate and multivariate methods were used to analyse the selected variables. The *Youth '07* survey data was analysed using the computer statistical package SAS (version 9.1). I undertook the data analysis and interpretation. These were verified by senior biostatisticians.

a. Univariate analysis:

Reporting the response rates of each of the selected variables (demographics; sexual health behaviours and potential risk and protective factors requires frequency tables to ascertain the responses and identify missing values. Question responses were analysed with frequency counts and percentages being calculated and reported. Categorical variables were analysed using chi-square tests and logistic regression. Nineteen questions from the *Youth '07* survey that reveal the range of sexual health behaviours for Sāmoan participants were analysed.

b. Multivariate analysis:

Finally, association tests were undertaken to examine the relationships between the variables of interest. The discussion of the questionnaire development revealed that 17 questions from the *Youth '07* survey were identified as potential risk and protective factors (see Table 12, pp. 125-126). Sexual health outcomes were measured by three questions; ever had sex, use of condom at last sex experience, and use of contraception at last sex experience (see Table 10, p. 121).

Regression modelling was used to test associations to measure the significance of any existing relationships. Multiple logistic regression was used to investigate whether associations were found between the identified risk and protective factor variables and sexual health behaviours. Binary outcomes were analysed using proc logistic regression and continuous variables were analysed using proc survey regression. These tests were adjusted for age, gender and socio-economic status (SES). Test statistics and P-values, 95 percent confidence limits and odds ratios are presented.

c. Weighted analyses:

All statistical analyses were weighted to allow for unequal probabilities of students being selected and appropriate statistical procedures (proc survey procedures) were used to account for sampling design. For associations, a 5 percent level of statistical significance was chosen, this means that two variables are statistically significantly associated when the p-value of an appropriate test is less than 0.05.

3.5.3 Part B: Qualitative Component - Focus Group discussion and Key Informant interviews

This Part describes the methods used to gather and analyse data from the focus group discussions and key informant interviews. These two research practices form the qualitative component of this study. Qualitative methods were used to gain an in-depth understanding of what young Sāmoan secondary school students and key informants understood to be the underlying reasons, opinions, and motivations in relation to sexual health understanding. Ethical approval was granted from the Massey University Human Ethics Committee to undertake this qualitative component³⁸.

³⁸ MUHEC number: 12/037

Questionnaire Development - Focus Group discussions and Key Informant interviews:

Semi-structured interview schedules for the focus group discussions and key informant interviews were developed by the researcher (Appendix E; F). The development of these questions was guided by reviewing the study objectives and literature findings. The literature has shown that sexual health behaviours cover a continuum of behaviours. Interview questions were centered on four key themed areas: general knowledge of sexual health issues; potential risk and protective factors; understanding of sexual health interventions; and potential strategies to address sexual and reproductive health issues for Sāmoan and Pacific communities in New Zealand. Key informants were asked to elaborate on their experiences of working with Sāmoan and/or Pacific young people and their families. Any additional interview questions were guided by the discussion that arose in the interviews. Sensitive issues, such as abortion, unwanted sexual activity or rape did not feature in the interview questionnaire, as these issues were not the primary focus for the study. Discussing issues such as abortion and rape requires careful consideration, particularly in the development of research methods to gather this information.

Recruitment of Participants - Focus Group interviews with Sāmoan secondary school students:

A purposive sampling method was used to identify potential participants. Purposive sampling in qualitative research means that researchers intentionally select (or recruit) participants who have experienced the central phenomenon or the key concept being explored in the study (Creswell & Plano Clark, 2011, p. 173). For the focus group discussions, an eligibility criterion was established to closely match the characteristics found for participants in the quantitative component - *Youth '07* survey. To be eligible, participants needed to: identify as Sāmoan; and be aged 16 years or over; and currently attend a New Zealand secondary school. New Zealand secondary schools have robust systems and resources available, which for the

purposes of this research made them the ideal site for recruiting students. These systems include the clear lines of leadership and communication (such as Boards of Trustees, Principals and Senior management), experience in delivering sexual health education to secondary school students, guidance and support staff available if students participating in the focus groups required follow up.

After careful consideration, secondary schools in the Auckland region were selected as the primary site for recruiting Sāmoan youth participants for the focus group discussions. The qualitative component of this study was confined to the Auckland region due to resourcing constraints. However, there is much benefit in undertaking the focus group discussions in the Auckland region alone given the large proportion of Sāmoans living in the Auckland region (Statistics New Zealand, 2015a). In total there are 22 secondary schools in the Auckland region (Ministry of Education, 2015a). Ten Auckland secondary schools were invited to participate in the study. Attempts were made to ensure that the schools reflected the Sāmoan population in Auckland, covering the five geographic areas in Auckland (North, Central, East, West and South Auckland) as well as the range of school decile groupings: 1-3, 4-5 and >6. School deciles are otherwise known as 'Socio-Economic Decile Bands'. Deciles are a measure of the socio-economic position of a school's student community relative to other schools throughout the country. For example, decile 1 schools are the 10% of schools with the highest proportion of students from low socio-economic communities, whereas decile 10 schools are the 10% of schools with the lowest proportion of these students (Ministry of Education, 2015c).

Seven schools agreed to participate in the study, of this group, five were Catholic (state: integrated) and two were state schools. A state: integrated school is a former private school which has integrated into the state education system under the Private Schools Conditional Integration Act 1975. In 2013, there were approximately 331 state: integrated schools, of which 238 identify as Catholic (Ministry of Education,

2012). The recruitment of Sāmoan students from both Catholic schools and state schools was purposeful. Sāmoan secondary students attend both types of schools. In addition, my relationship with these communities (Catholic and state schools) enabled me to gain support for this study. As the focus group sessions were gender specific (that is, only female students could participate in the female focus groups and male students could participate in the male focus groups), an opportunity arose to conduct two focus groups with students from the same school.³⁹ This resulted in a total of eight focus group discussions taking place, with four female and four male focus groups. The following table outlines the characteristics of focus groups, accounting for school features.

Table 13: Focus group characteristics

Focus Group	School Gender	School Decile	Geographic Location	Authority	Total number of participants
1	Girls	1	Auckland South –	State: Integrated	7
2	Co-ed [Girls focus group]	3	Auckland South –	State	10
3	Boys	1	Auckland South –	State: Integrated	6
4	Girls	6	Auckland West –	State: Integrated	10
5	Boys	5	Auckland West –	State: Integrated	9
6	Co-ed [Boys focus group]	3	Auckland South –	State	4
7	Girls	10	Auckland North –	State: Integrated	5
8	Co-ed (Boys group)	3	Auckland South –	State	4

Eight focus groups enabled the perspectives from a diverse range of Sāmoan young people to be captured and ensured that theoretical saturation was reached (Kruegar &

³⁹ This resulted in the facilitation of a male and female focus group.

Casey, 2015). This diversity is reflected in their age, gender, and geographic location. As a general guide, I anticipated that the total number of Sāmoan secondary school students that would participate in the focus group discussions would be no less than 32 and no more than 64. Characteristics of focus groups are discussed in the qualitative research literature (Kruegar & Casey, 2015; Davidson & Tolich, 2001; Tolich & Davidson, 2011; Travers, 2013). In qualitative research, there are no specific answers as to the number of participants (Travers, 2013). However, some authors note that a focus group process generally involves bringing a small group of people together - typically between 5 and 10 (Morgan, 1988; Tolich & Davidson, 2011, Travers, 2013). The number of focus groups vary, Kruegar and Casey (2015) recommend conducting three to four focus groups to check if saturation has been reached.

The recruitment of participants for the study was aided by my relationships with key stakeholders. My role as a social worker in the field of adolescent health, Pacific post-graduate student and former school leader in the Catholic secondary school community has enabled me to develop several relationships with a range of individuals. Prior to this research, I had no direct relationship with all but two of the Principals from the participating schools. Securing the support of the management from the seven secondary schools was due in large part to the relationships I have formed with members of the school community. To elicit the support of school management, I approached three individuals that I was aware had relationships with some of the 10 schools identified. In my conversations with these three individuals, I explained the purpose of my study and asked if they would be willing to offer their support for me, particularly when I approached the Principals of each school. All three were supportive of my endeavours, seeing the benefits this research would provide for the school and wider community. In their conversations with the Principals, these three individuals not only vouched for the research, but expressed their trust and confidence in me, the researcher.

The recruitment process involved:

- 1) Meeting with the school Principal to explain the study and invite participation;
- 2) Meeting with an identified school staff member to explain the study and arrange forum to invite potential students;
- 3) Presentation and invitation to potential students to participate in the focus group discussion.

At the initial meeting with the school Principal, a school staff member was identified who would help be the liaison between myself (the researcher) and potential students. In meeting with the school staff member, I explained the parameters for the research. I was looking for to recruit between four and 10 students per focus group that were between the ages of 16 and 19 years.

Key Informants:

Eight key informants were identified and approached to participate in the study. These key informants were selected on their ability to reflect diverse experiences working with Sāmoan youth and/or in the field of sexual and reproductive health. The informants included: three nurses working in school based health clinics, an alternative education centre and a Primary Health Care Centre; a manager of a Pacific Islands social service provider; an evaluator of Pacific sexual health programmes; a clinical psychologist who has worked with Pacific clients dealing with harmful sexual offending behaviour; an educator specialising in rape prevention; and, a facilitator of a teen dads programme. The key informants had significant experience working with Pacific communities and were all based in the Auckland region.

Contact with these key informants was made via a letter introducing the study. Follow-up contact was then made by either phone or email to arrange a meeting. This meeting provided me (the researcher) with the opportunity to introduce and discuss the study. As discussed earlier, my community roles have enabled me to develop

relationships with a range of individuals, including many of these key informants. At this initial recruitment meeting, participants received information on the study and could ask questions and decide if they wished to participate. All of the eight selected key informants agreed to be involved with the survey.

The Sample:

The following description summarises the general characteristics of the Sāmoan students that participated in the focus group sessions and the key informant interviews. This information was drawn from a demographic questionnaire that participants completed (see Appendix G).

a) Focus Group Participants:

- ❖ A total of 55 Sāmoan secondary school students participated in the focus groups;
- ❖ The students ranged in age from 16 years to 19 years. The average age of the participants was 16 years;
- ❖ 32 participants were female (58%) and 23 were male (42%);
- ❖ 47 percent of participants identified themselves as full Sāmoan, that is they did not identify with any other ethnic group (n=26)⁴⁰;
- ❖ 69 percent of participants were born in New Zealand (38/55). 22 percent were born in Sāmoa (12/55) and 9 percent report being born elsewhere (n=5);
- ❖ 82 percent of students reported that their parents were both Sāmoan (45/55).
- ❖ 43 percent of students reported that both English and Sāmoan are usually spoken at home (n=24);
- ❖ 95 percent of students reported attending a church (n=54);

⁴⁰ Some 29 students reported in addition to being of Sāmoan ethnicity, a range of ethnicities (NZ European, n=6; Other Pacific, n=11; Māori, n=4; Chinese, n=2; and Other, n= 6). Seven students did not answer this question.

- ❖ The most commonly reported church that participants attended is Catholic. Some 42% of students reported attending a Catholic Church (24/57) followed by Methodist (7/57) and Christian (6/57).

b) Key Informants:

- ❖ Eight key informants participated in the interview (n=8);
- ❖ There were seven females and one male;
- ❖ Of the eight key informants, six were of Sāmoan ethnicity, one was of Niuean ethnicity and one was of New Zealand European descent;
- ❖ The key informants had diverse experiences working with Sāmoan youth and/or in the field of sexual and reproductive health. The informants included: three nurses working in a school based health clinic, an alternative education centre and a Primary Health Care Centre; a manager of a Pacific Islands social service provider, an evaluator of Pacific sexual health programmes, a clinical psychologist that has worked with Pacific clients dealing with harmful sexual offending behaviour, an educator specialising in rape prevention; and, a facilitator of a teen dads programme;
- ❖ The informants were based in the Auckland region.

Interview Process:

The following description summarises the interview process used in the focus group sessions and the key informant interviews.

a) Focus Group Interviews with Sāmoan Secondary School Students:

The school Principals and lead staff members offered potential interview times and venues for the focus group sessions. All of the focus group sessions were held on secondary school premises and were generally held when school had ended for the day. The focus group sessions were conducted between February and November 2012 and ranged from 40 minutes to approximately an hour and a half.

Focus group participants were provided with information sheets and consent forms written in the English language (see Appendices A & C). Informed consent was sought. Participants were advised that they could refrain from answering questions or could at any point during the discussion leave the focus group. Participants were aware that an electronic recorder would be used to capture the discussion. Although the interview notes would be transcribed verbatim, participants were informed that their privacy would be maintained. At the conclusion of the focus group discussions, students were reminded that, if needed, they could seek assistance from guidance and support staff within the school or contact support organisations listed on the information sheet.

The decision to conduct gender-specific focus group aligns with Pacific cultural protocols. Due to the sensitivity associated with the discussion of sexual health issues with members of the opposite sex, the focus group sessions were also facilitated by a person of the same gender. I conducted the female focus group sessions and I recruited a male facilitator, with extensive interviewing and Pacific youth experience, to conduct the male focus group interviews. This male facilitator completed a Confidentiality Statement (Appendix H). The interviews were conducted in the English language, however, both facilitators were conversant in the Sāmoan language and participants were advised that they could, at any time during the interview raise matters in the Sāmoan language.

In alignment with Pacific research protocols (Health Research Council of New Zealand, 2003) and adolescent participation guidelines (Ministry of Youth Development, 2009), compensation and refreshments were provided to the parties that supported and participated in the research. This included a donation to the secondary school, staff liaison and participating students.

b) Qualitative - Key Informant Interviews:

The interview process used with the Key Informants was similar to that used with the focus group participants. Key Informants were provided with information sheets and consent forms written in the English language (see Appendices B & D). Informed consent was sought. Participants were advised that an electronic recorder would be used to capture the discussion and that the interview notes would be transcribed.

Key informants proposed the interview venue and time that best suited their schedules. The interviews generally started with the interviewees providing an overall description of their current working experiences with Sāmoan and Pacific young people. As previously highlighted, the interviews were conducted in the English language, however, Sāmoan key informants were provided with the opportunity to discuss issues in the Sāmoan language. The interviews were conducted between July 2012 and January 2013 and lasted approximately an hour. In alignment with Pacific research protocols (Health Research Council of New Zealand, 2003), a donation was provided to the key informants by way of a petrol or grocery voucher.

Data Analysis:

A single procedure was used to analyse the data collected from the focus group discussions and key informant interviews. This procedure combined both sets of interview data as the methodology focuses on identifying key themes (thematic analysis). A visual description of the analysis procedure is presented in Figure 5 (Creswell, 2014). As previously noted, the interviews were audio-recorded. All of the interviews were transcribed verbatim, that is 'word for word'. The 'scissor and sort technique' was used to analyse the data (Stewart & Shamdasani, 2015). This technique involved reviewing each interview transcript, identifying codes⁴¹ and then from this sections that were relevant to theme area. Transcript material that was

⁴¹ This coding process organises data by bracketing chunks (or text) and writing a word representing a category in the margins (Creswell, 2014).

relevant to the themes and topics were then identified. Whilst most the interviews were undertaken in English, participants were able to speak in the Sāmoan language. A senior Sāmoan elder assisted in the translation of Sāmoan terms and phrases.

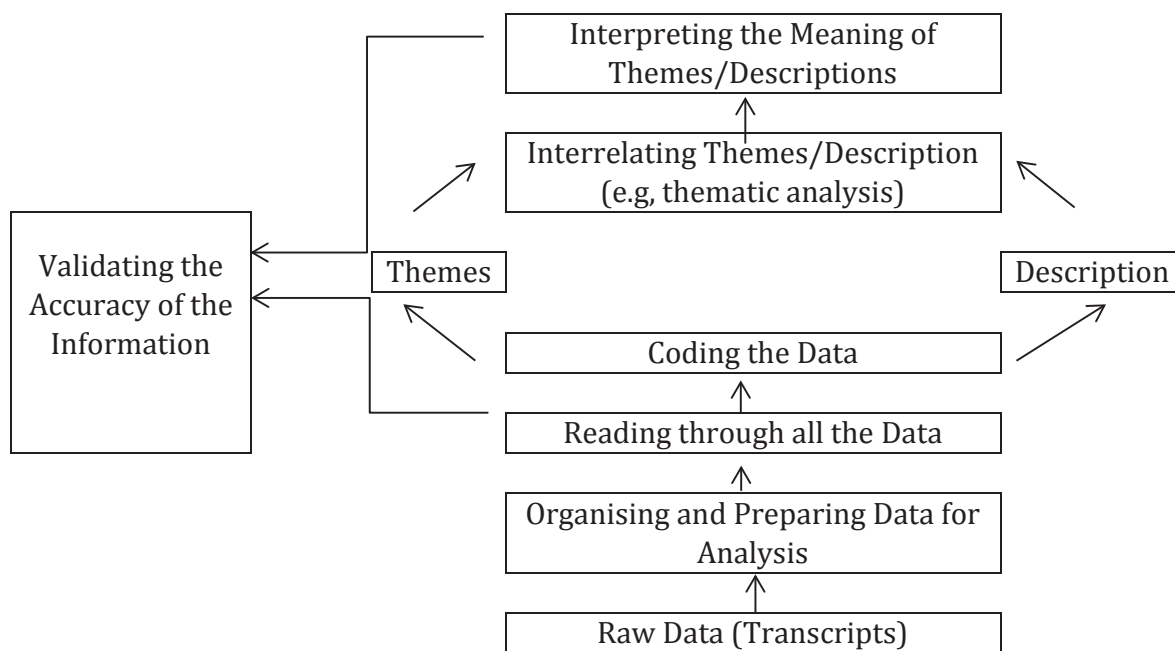


Figure 5: Qualitative Data Analysis procedure (Source: Creswell 2014)

The analytical process incorporated an inductive analysis approach and some pre-determined themes. Thematic analysis, as used in this study, is the most commonly used form of analysis in qualitative research (Willis, 2013). These pre-determined themes were developed from the objectives of the study and based on the review of literature (Kirby & Lepore, 2007). In undertaking this analysis, I was also mindful as to the extent some of themes triggered discussion amongst focus group members as well as topics to which focus group members often returned to. In addition, the time spent on an issue provided some cues as to what the participants thought strongly about. In undertaking research on sexual health, I as a researcher was prepared that

some items may not be discussed due to the sensitivities of the participants. Stewart and Shamdasani (2015) acknowledge these dynamics.

3.6 Strengths & Limitations

Strengths and limitations are inherent in any research design (Tolich & Davidson, 2011). This text begins with a discussion of the strengths of the research methods used in this study. The value of the *Youth '07* survey, focus group interviews and key informant interviews are highlighted. This is followed with an outline of the research limitations.

3.6.1 Strengths

A mixed methods approach draws on the strengths of both qualitative and quantitative research, therefore minimising the limitations inherent in each individual approach (Creswell & Plano Clark, 2011; Tashakkori & Teddlie, 2010). Quantitative research is acknowledged for its ability to generalise findings to a large group due to the sampling methods used (Creswell & Plano Clark, 2011). Qualitative research is praised for its ability to provide rich contextual data, it enables an understanding of the context or setting in which people live as well as enabling the voices of participants to be heard (Creswell, 2014; Creswell & Plano Clark, 2011; Curtis & Curtis, 2011).

a) Quantitative - Youth '07:

A comprehensive discussion of the strengths and weaknesses for the *Youth '07* study is outlined in *Youth '07: The health and wellbeing of secondary school students in New Zealand - Technical Report* (Adolescent Health Research Group, 2008a). In summary, some of the key strengths in the *Youth '07* survey include:

- ❖ comprehensive survey data;
- ❖ representative sampling method used;
- ❖ findings: the comprehensive survey design with a representative sampling method used enables patterns of associations to be determined;
- ❖ self-reporting method: where students reported on their own behaviours;
- ❖ secondary research that enables ease of access to data, reduces financial and time investment, and minimises research fatigue⁴² for the secondary school students and the Pacific community; and the
- ❖ strong youth and community involvement in the development of the survey.

The *Youth '07* dataset contained a comprehensive source of quantitative information for Pacific young people in New Zealand secondary schools. This national study of 9,107 students included 1,190 Pacific students that participated in the survey. The wide range of health and wellbeing domains allows for the ability to look cross-domains and explore previously untested activities and relationships (such as culture and sexual health).

b) Qualitative - Focus Groups & Key Informant Interviews:

In the case of this study, the use of focus groups with Sāmoan teenagers was fitting given that sexual health is regarded as a sensitive topic. As Smith, et. al., (2003) note:

Cultural taboos surrounding explicit discussion of sexual behavior exert strong influences on the conduct of sex research, and may influence which people participate in sex research. (p. 107)

⁴² Communities were spared in not having to repeat a further survey that may ask similar questions of a sensitive nature.

While cultural taboos may exist, sexual health discussions can be an affirming and enlightening experience for Pacific youth if it is delivered in a safe and appropriate manner (Tupuola, 2000). As noted in the feedback received, the students benefited from having the ability to share their views in a setting that is non-judgmental, where they had the ability to learn from others and broaden their world view. Qualitative research measures, in particular face to face interviews, have made significant contributions to the understanding of sexual behavior (Fenton, et al., 2001; Smith, et al., 2003). In face-to-face research settings, such as focus group discussions or interviews with key informant interviews, interviewers can provide an explanation of the research and describe the direction the interview will follow. Having direct contact with a research has a motivating effect on the respondent, where researchers can provide full, clear definitions or probe ambiguous answers (Fenton, et al., 2001; Smith, et al., 2003).

In this study, the focus group process provided students with an opportunity for positive youth development and capacity building (Ministry of Youth Development, 2009). For some of the youth participants, the focus group provided an opportunity to gain the confidence to discuss their own health and wellbeing, and explore ways that their social situations can be strengthened. The youth participants were able to learn new ways in how they can contribute to their society (i.e., being involved in a youth forum; raising sensitive topics, such as sexual health, with adults).

This sentiment is aptly expressed by Gibbs (2002):

Empowerment of participants as they work collaboratively with the moderator and recognition of participants' expertise in the topic that is being discussed cannot be undervalued.

The use of individual interviews with key informants presents several advantages (Curtis & Curtis, 2011). Key informants have expertise in their field. Their knowledge and experience of working with Sāmoan and Pacific communities is invaluable both in design and interpretive phases of projects. Individual interviews present the opportunity to pursue in greater detail, and without any interruption, any interesting areas that arise in the discussion. This includes material that the key informant raised that the researcher may not have anticipated. In the individual semi-structured interviews with key informants, questions and topics were added or adapted as we progressed through the interview.

Qualitative research measures, such as focus group discussions and interviews with key informants, provides opportunities to explore concepts within communities, and furthermore, reveals behaviours or cultural factors which are relevant for developing sexual prevention strategies (Fenton, et al., 2001). A further strength with this research design was the acknowledgement and validation for Pacific worldviews. A constant thread throughout the design of this study was a strong alignment with values unique to Pacific and Youth audiences. I paid careful attention to ensuring that these values were upheld and the integrity of all those involved in the study were maintained.

3.6.2 Limitations

a) Quantitative - Youth '07:

Given the cross-sectional and synchronic nature of the *Youth '07* survey, the findings from the statistical analysis only reveal patterns of association between the variables identified. This survey did not follow the entire youth survey group until adulthood (unlike longitudinal studies), and therefore it is impossible to draw inferences about the causal direction of the relationships found in this study.

The quantitative findings are reported in the following chapter (4). In section 4.2 there are ten sexual behaviours presented. An analysis of gender responses for the first four questions are highlighted. However, from question five onwards (4.2.5: enjoyment of sex), there is no data that compares genders. Access to data and specialist statistical personnel ceased before further analysis could be undertaken.

There is also the possibility of bias due to the self-reporting method used in the *Youth '07* survey. Self-reporting has four commonly known biases (Grinnell & Unrau, 2005). There is the possibility that students lied or gave false responses, possibly due to social stigma. It is possible that students did not want to appear sexually experienced or conversely, did not want to appear to be sexually inexperienced. It is also possible that students gave false responses; either over-reporting or denying certain behaviours. There is the potential for students to have made mistakes without realizing, giving inaccurate answers by accident because they may have misunderstood the question. Efforts were made by the research group (AHRG) to minimise this from occurring (Adolescent Health Research Group, 2003b, 2008a; Helu, et al., 2009).

A further limitation with the *Youth '07* survey design was that not all schools or students who were invited to participate did so (Adolescent Health Research Group, 2008b). The possibility exists that the analysis may not reflect, or under-represent students that are most likely to be at risk. The *Youth '07* survey focused on students who were still in secondary school. Students who were excluded from school or who were absent on the day of the survey were not included in the survey (Adolescent Health Research Group, 2008a). It is highly likely that the students who are not in school are more likely to have greater health concerns. This is particularly relevant for this study, as there is the likelihood that students who may be experiencing sexual health issues such as pregnancy and child-birth are not attending school.

b) Qualitative - Focus Groups & Key Informants:

The inability to generalise the research findings is one limitation often found in qualitative research (Creswell & Plano Clark, 2011). This is largely due to the sampling method employed and relatively small number of participants (Fenton, et al., 2001). A purposive sampling method was used that accounted for variations such as gender, schooling (i.e., religious and secular⁴³, male, female and co-ed) and socio-economic distributions. However, the participants were concentrated in the Auckland region. Despite efforts to ensure that multiple perspectives were included, the study design prevents generalising the findings to the wider Sāmoan population in New Zealand.

Despite the purposive sampling method used to attract Sāmoan secondary school students, this study did not capture the views and experiences of disabled, *fa'afafine*, gay, lesbian and transgendered youth. School liaison staff assisted the researcher to identify potential students. Students that identified with these groups were not explicitly targeted, but neither were they overtly excluded. For practical means, the focus groups took place with the students that presented on the day. Students completed a demographic questionnaire that asked them to self-identify their gender. There were no students that identified themselves as *fa'afafine*, gay, lesbian or transgendered.

The research scope and design was not conducive to exploring in great depth sensitive issues, such as abortion, unwanted sexual activity or rape. Whilst the quantitative component highlighted findings in relation to unwanted sexual activity, these issues (abortion, unwanted sexual activity or rape) did not explicitly feature in the qualitative interview questionnaires, nor did they arise in the qualitative interviews. In addition, the research did not capture in greater depth the growing diversity within the Sāmoan and Pacific communities; for example, young Sāmoan people claiming

⁴³ Secular schools are referred to as State schools and religious schools are also identified as integrated schools (Ministry of Education, 2015a).

more than one primary ethnicity. These perspectives are important and it is hoped that further research can capture these voices.

A limitation with focus groups is that bias such as 'group talk' may occur. This is when interaction of participants with one another and with the facilitator may not be independent of one another, which further restricts the generalisability of the findings (Stewart & Shamdasani, 2015). There is the potential that responses may not be 'truthful', as participants may conform to group think, provide answers that are deemed socially desirable (Fenton, et al., 2001). Efforts were made by the research to minimise the potential for this 'group talk' to occur.

The analysis method used also introduces the potential for bias. The 'scissor and sort technique' is useful and efficient for analysis, but it does rely heavily on the judgement of the analyst, in this case myself (Stewart & Shamdasani, 2015). This distortion may occur in that I, as the researcher, determine which parts of the interview transcripts are important, and subsequently develop coding and themes based on my interpretation of the interview material. Efforts were made, such as discussing with research supervisors, to minimise this potential bias.

3.7 Chapter Summary

In this chapter pragmatism and the Pacific health research approaches are introduced as the philosophical worldviews underpinning this study. The *Fonofale* Model is presented as an example of a Pacific model of health. This model identifies key components of wellbeing, considered specific to Pacific communities living in New Zealand. In this discussion, examples specific to this study highlight how these worldviews have framed the understanding of sexual health issues for Sāmoan communities and its application in the research setting.

The discussion then moves to 'Mixed Methods' the research approach. The history of mixed methods is briefly reviewed and the rationale for using mixed methods is explained. Of the four major designs available within mixed methods, key features of the convergent parallel design, the research design utilised for this study, are explained.

Following from this discussion of the research approach, i.e. Mixed Methods, attention is directed to the research methods used. In Part A of this piece, a description of the *Youth '07* survey, which forms the quantitative component of this survey, is provided. In Part B, the features of the focus group discussions and key informant interviews, which form the qualitative component of this survey, is outlined. The specific techniques and practices used to develop the interview schedules, recruit participants, gather and analyse the research data are presented.

The discussion of methodology and research methods shows in a detailed way how the specific research components, that is the *Youth '07* survey, focus group discussions and key informant interviews, contributed to answering the research objectives (as depicted in Table 8, p. 117). The following chapter (Four) presents the findings from analysis results from the *Youth '07* survey data.

CHAPTER FOUR: QUANTITATIVE RESULTS

4.1 Chapter Overview

This chapter presents the analysis results from the *Youth '07* survey data. These findings are organised into two sections. In Section 4.2, the results from the univariate analysis are outlined. These results show how Sāmoan secondary school students responded to the following sexual health activities:⁴⁴

- ❖ Kissing, hugging and touching experience;
- ❖ Experience of sexual intercourse;
- ❖ Age at first experience of sex;
- ❖ Enjoyment of sex;
- ❖ Sexual partners;
- ❖ Unwanted sexual activity;
- ❖ Condom and contraception use;
- ❖ Sexual health outcomes: Pregnancy and sexually transmitted infections and diseases.

In Section 4.3, the results of the association tests are presented. These tests reveal what factors, based on the analysis of potential factors,⁴⁵ either heighten sexual risk-taking or serve as a protective function.

It is important to recall that for the purposes of the analysis, the secondary school participants identified themselves as Sāmoan. This has important bearing on the interpretation of these findings, particularly in linking patterns to culture. This chapter concludes with a summary of the overall quantitative findings.

⁴⁴ These questions are outlined in the Methodology Chapter (see 3.3.A Questionnaire Development).

⁴⁵ See Methodology Chapter (3.3.A Questionnaire Development).

4.2 Sexual Health Behaviours

An objective of this study is to:

- ❖ Determine the prevalence of sexual behaviours of Sāmoan secondary school students in New Zealand.

In this section, the results of the univariate analysis shed light on a range of sexual health behaviours for Sāmoan secondary students. For each of the sexual behaviours discussed, a discussion and display (in the form of frequency tables, graphs and percentages) illustrate how Sāmoan students responded. No tests of significance were performed on these initial summary statistics.

It is important to alert the reader to the use of the term 'respondent'. This refers to the participants that answered the questions, as referenced in the summary statistics. For example, the following text discusses the kissing, hugging and touching experience for Sāmoan secondary school students. The summary statistics (261/420) reflect that while 535 Sāmoan participated in the *Youth '07* survey, a total of 420 Sāmoan students answered this particular question. In addition, and unless specifically identified, the percentages reported are based on the respondent sample. In this case the 261 participants (out of 420) reflect 62 percent of the sample.

4.2.1 Kissing, Hugging & Touching Someone

Students were asked, '*have you ever spent a long time kissing, hugging and touching someone?*' 62 percent of respondents reported that they had spent a long time kissing, hugging and touching someone (as shown in Figure 6; Table 14 below).

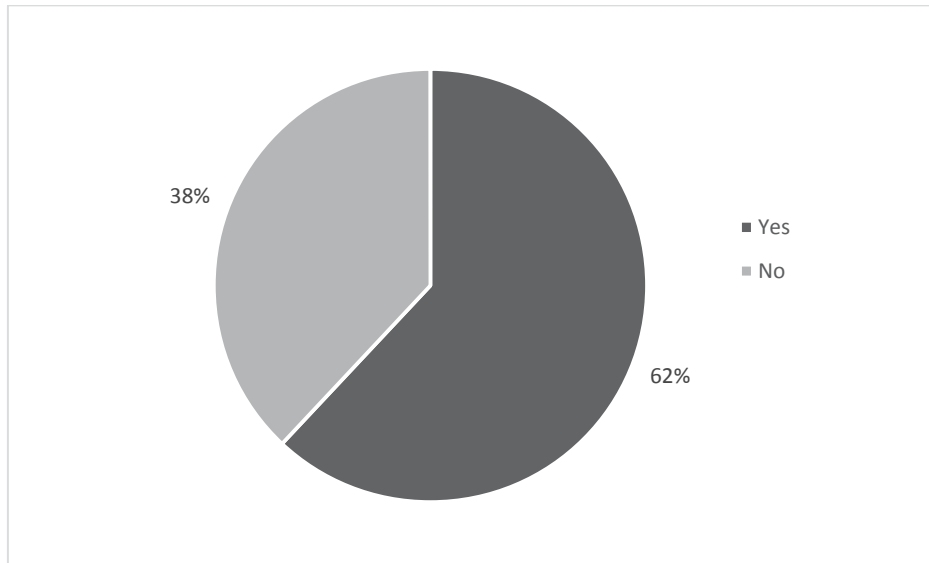


Figure 6: Kissing, hugging and touching experience

Table 14: Kissing, hugging and touching experience

	Frequency	Percentage
Yes	261	62
No	159	38
Total	420	100

As noted by Davis and Lay-Yee (1999), there is a well-established progression in the sequencing of early sexual activity among adolescents, starting with early relationships and associated kissing, cuddling and minor petting, and moving onto longer-term relationships, heavy petting and sexual intercourse.

4.2.2 Sexual Activity

Students were asked 'About how old were you when you first had an experience of sex? (By this we mean sexual intercourse or going all the way)'. A total of 417 participants⁴⁶ answered this single question that provides information on three sexual health facts:

- 1) The proportion of students who have *not* had sex;
- 2) The proportion of those students that *have* had sex; and
- 3) The age of the first sexual encounter.

4.2.3 Experience of Sex

Over half of respondents (55%) reported they had 'never' had an experience of sex (228/417). 45 percent of respondents reported having had sexual intercourse (189/417). A higher proportion of male students reported having had an experience of sex (male 53%) when compared with female students (36%) as shown in Table 15 below.

Table 15: Experience of sexual intercourse by gender

	Male Students		Female Students	
	Frequency	Percentage	Frequency	Percentage
Never had sex	109	47	119	64
Have had sex	121	53	68	36
Total	230	100	187	100

⁴⁶ 118 students of the total sample (535) did not answer this question.

4.2.4 Age of First Sex Experience

As previously noted, students were asked '*About how old were you when you first had an experience of sex? (By this we mean sexual intercourse or going all the way)*'. This one question showed the proportion of those students that *have* had sex and the *age* of the first sexual encounter. Of the 189 Sāmoan students who responded to this question, approximately two-thirds, (125/189) of respondents had their first experience before 15 years of age (see Table 16 below).

The age that respondents had their first experience of sexual intercourse is illustrated in Figure 7 (p. 154). These responses are shown by gender and total proportions (n=189). As shown in Table 16 below, two-thirds of respondents reported their first experience of sexual intercourse occurring by the age of 14. It is important to reiterate that the findings for this question derive from a much smaller sample of the total number of Sāmoan students that completed the *Youth '07* survey (189 of the total sample). When compared with female respondents, a higher proportion of males reported their first experience of sex occurring before the age of 11 years (males 7.9%; females 2.6%) (see Figure 7). However, these findings must be interpreted in light of the overall findings that show a larger proportion of males have had an experience of sexual intercourse when compared to females (males 53%; females 36%). It is also important to note the likelihood of reporting bias (Grinnell & Unrau, 2005). In this instance, the possibility exists where males have over-reported sexual activity and female students' under-reported sexual activity.

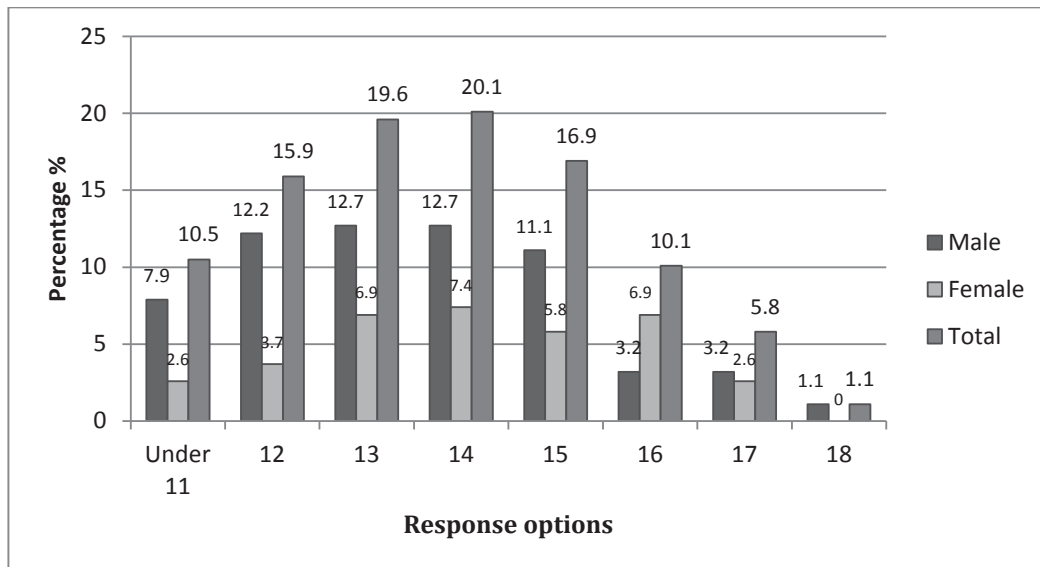


Figure 7: Age at first experience of sexual intercourse

Table 16: Age at first experience of sexual intercourse, by gender

Age	Male Students		Female Students		Male and Female Students			
	Frequency	Percentage	Frequency	Percentage	Frequency	Cumulative Frequency	Total Percentage	Cumulative Percentage
Under 11	15	7.9	5	2.6	20	20	10.5	10.5
12	23	12.2	7	3.7	30	50	15.9	26.4
13	24	12.7	13	6.9	37	87	19.6	46
14	24	12.7	14	7.4	38	125	20.1	66.1
15	21	11.1	11	5.8	32	157	16.9	83
16	6	3.2	13	6.9	19	176	10.1	93.1
17	6	3.2	5	2.6	11	187	5.8	98.9
18	2	1.1	0	0	2	189	1.1	100
Have had sex	121	64.1	68	35.9	189	189	100	100

Gender analyses were presented for the following sexual behaviours: experience of sexual intercourse and age of first experience of first sexual intercourse. From this point onwards there is no data that compares gender responses. As outlined in the limitations (3.6.2), the access to data and specialist statistical personnel ceased before further analysis could be undertaken.

4.2.5 Enjoyment of Sex

The branching system in the *Youth '07* survey enabled students that reported having had an experience of sexual intercourse (189/417) to answer a question in relation to their enjoyment of sex. Students who reported having had sex were asked 'How much do you enjoy having sex?' The responses indicate general enjoyment, with 45 percent of participants reported enjoying sex 'very much', 22 percent reporting 'a lot' and 25 percent reporting 'it's okay' (see Figure 8 below).

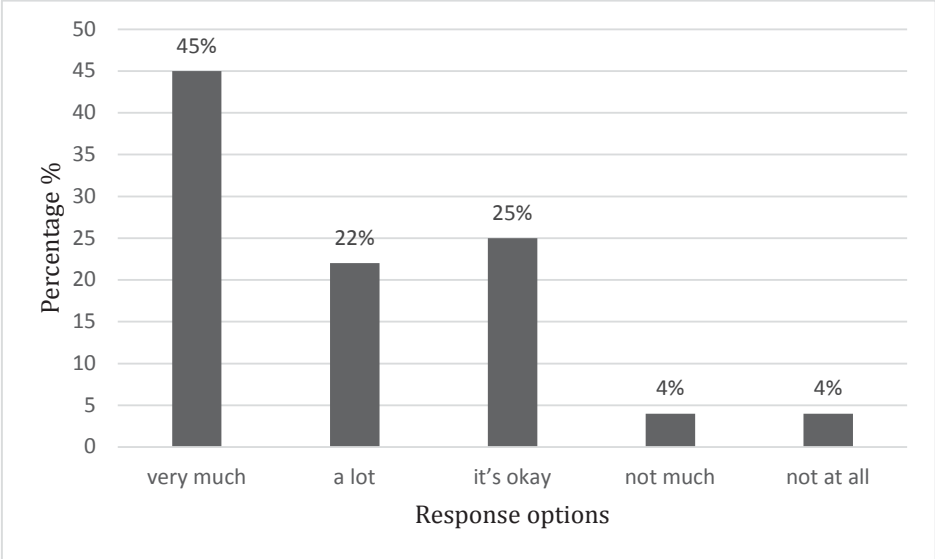


Figure 8: Experience of sex

Table 17: Experience of sex

Response Options	Frequency	Proportion (%)
very much	84	45
a lot	40	22
it's okay	46	25
not much	7	4
not at all	8	4
Total	185	100

4.2.6 Sexual Partners

The branching system in the *Youth '07* survey enabled students that reported having *had* an experience of sexual intercourse (189/417) to answer four questions in relation to sexual partners.

1) *Sexual partners in the last year:*

Students were asked, *'In the last year, who have you had sex with (sexual intercourse or going all the way)?* Students were advised not to include sexual abuse or sex they did not want and could select more than one response option. A total of 186 students responded to this question. As illustrated in Figure 9 below, a range of sexual partners were identified.

The most commonly reported sexual partner was 'girlfriend' (51%) followed by 'boyfriend' (30%). Thirty percent of respondents reported having sex with a person that they didn't know that well or had just met. Some 24 percent of respondents reported having sex with someone that was not their boyfriend or girlfriend.

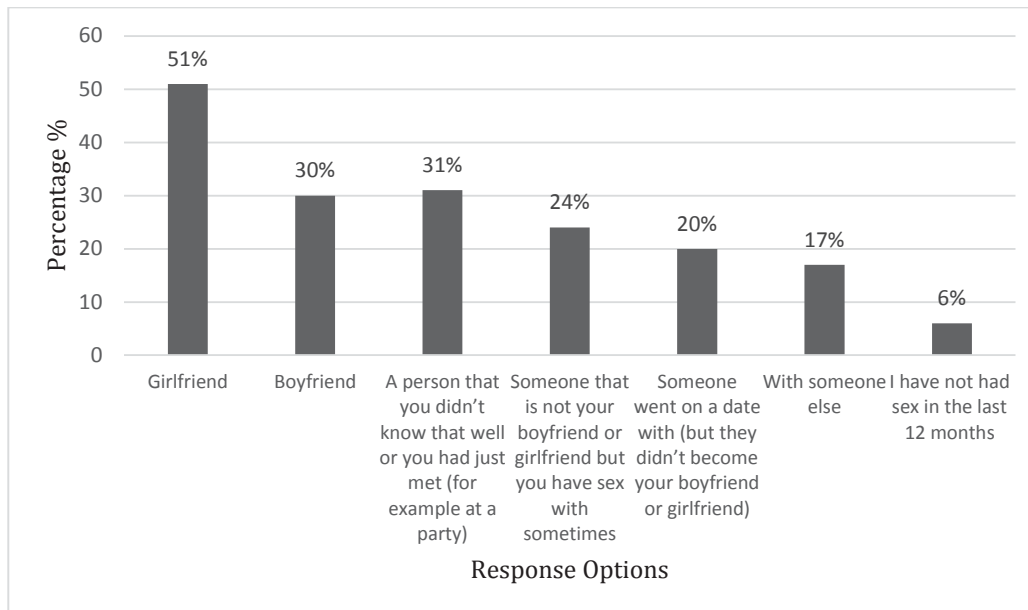


Figure 9: Sexual partners in the last year

Table 18: Sexual partner in the last year

Response Options	Frequency	Proportion (%)
Girlfriend	96	51
Boyfriend	56	30
a person that you didn't know that well or you had just met (for example at a party),	58	31
someone that is not your boyfriend or girlfriend but you have sex with sometimes,	44	24
someone went on a date with (but they didn't become your boyfriend or girlfriend)	38	20
with someone else	31	17
I have not had sex in the last 12 months	12	6

Note: A total of the frequency counts and percentage are not displayed as students could select more than one response option.

2) Number of partners in the last three months:

Students were also asked, 'In the last 3 months, how many partners have you had sex with?' Students were advised not to include sexual abuse or sex that they did not want. 172 students responded to this question. As illustrated in Figure 10 below, a large proportion of students (44%) report having one sexual partner in the last three months. However, 16 percent of respondents report 'four or more partners'. Some 19 percent reported that they had not had sex in the last three months (see Table 19).

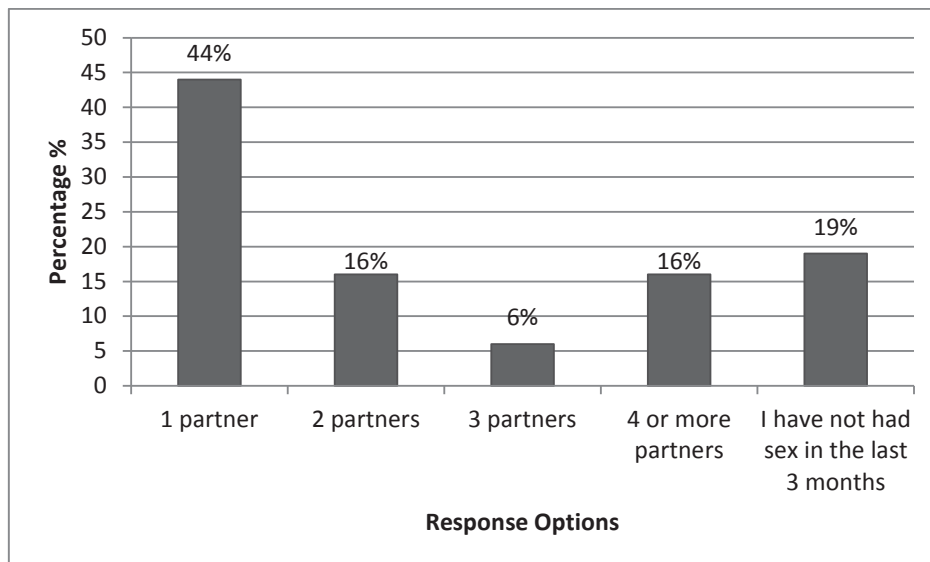


Figure 10: Number of partners in the last three months

Table 19: Number of sexual partners in the last three months

Response Options	Frequency	Proportion (%)
1 partner	75	44
2 partners	27	16
3 partners	10	6
4 or more partners	28	16
I have not had sex in the last 3 months	32	19
Total	172	100

3) Discussed pregnancy prevention with partner:

Students were asked ‘have you ever talked to their partner(s) about preventing pregnancy? As illustrated in Figure 11 below, approximately a quarter of respondents reported always talking to their partner(s) about preventing pregnancy (26%). However, 35 percent reported ‘never’ and over a third (39 percent) reported that ‘it depended on the situation’.

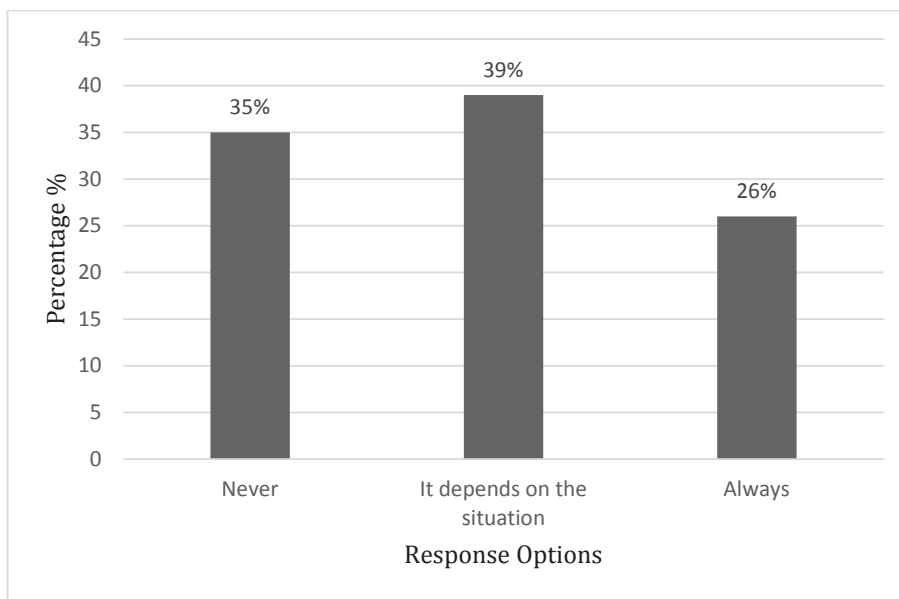


Figure 11: Discussed pregnancy prevention with partner

Table 20: Discussed pregnancy prevention with partner

Response Options	Frequency	Proportion (%)
Never	64	35
It depends on the situation	72	39
Always	48	26
Total	184	100

4) Discussed STI/HIV/AIDS prevention with partner:

When asked ‘have you ever talked to their partner(s) about preventing sexually transmitted infections or HIV/AIDs’, 57 percent of respondents reported ‘yes’, leaving

less than half of respondents (43%) reporting ‘no’ that they had no talked about preventing sexually transmitted infections (see Figure 12).

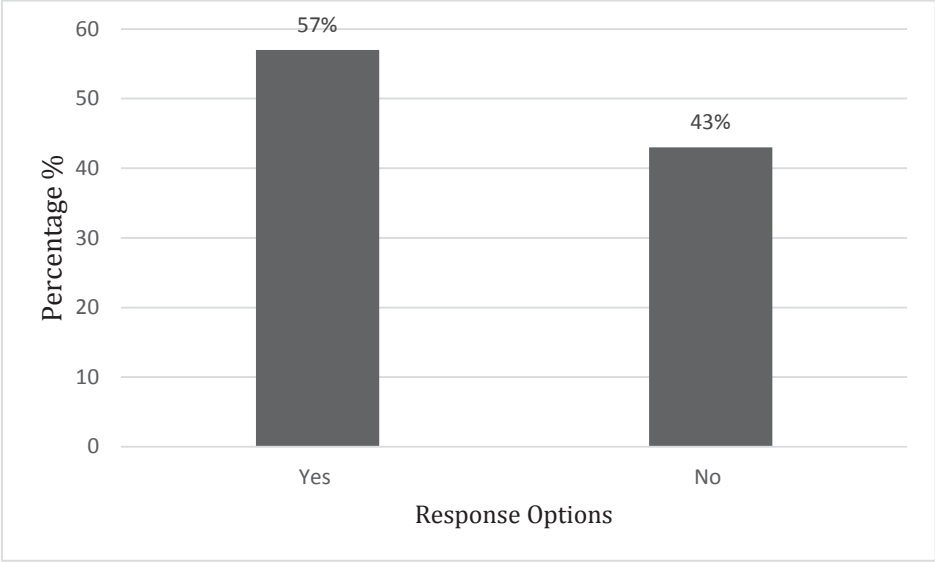


Figure 12: Discussed preventing STIs or HIV/AIDS with partner

Table 21: Discussed preventing STIs or HIV/AIDS with partner

Response Options	Frequency	Proportion (%)
Yes	78	57
No	105	43
Total	183	100

4.2.7 Unwanted Sexual Activity

Students were asked ‘have you ever been touched in a sexual way or made to do sexual things that you didn’t want to do’. As shown in Figure 13 below, almost three-quarters (73%) reported ‘no’ they have never been touched in a sexual way. However, 16 percent of respondents reported yes, that they had been touched in a sexual way that they didn’t want (see Table 22 below).

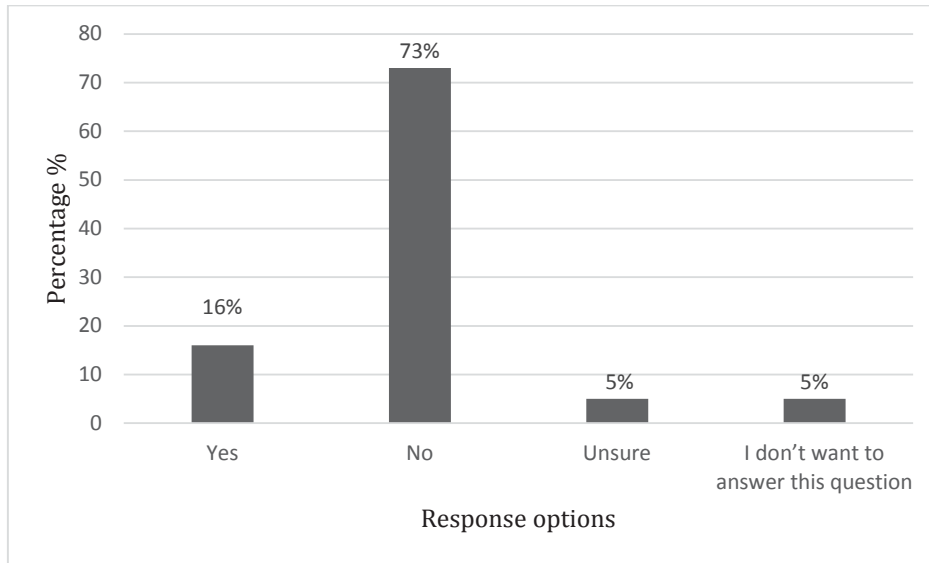


Figure 13: Experience of sexual touching or unwanted sexual activity

Table 22: Experience of sexual touching or unwanted sexual activity

Response Options	Frequency	Proportion (%)
Yes	67	16
No	301	73
Unsure	21	5
I don't want to answer this question	22	5
Total	411	100

Occurrence of sexual touching or unwanted sexual activity in the last year:

A further branching question⁴⁷ enabled students to report the occurrence of unwanted sexual touching and unwanted sexual activity in the last year. Students were asked, *'In the last year, have you been touched in a sexual way that you did not want, or made to do sexual things that you did not want to do?'* Less than half of respondents reported 'not sure' (42%), some 25 percent of respondents reported

⁴⁷ This branching question applied to students responded: 'yes', 'unsure' or 'don't want to answer this question' to the question, *'have you ever been touched in a sexual way or made to do sexual things that you didn't want to do'*.

'once or twice', 14 percent reported 'two or more times' and 19 percent of respondents reported 'not in the last 12 months' (see Figure 14; Table 23 below).

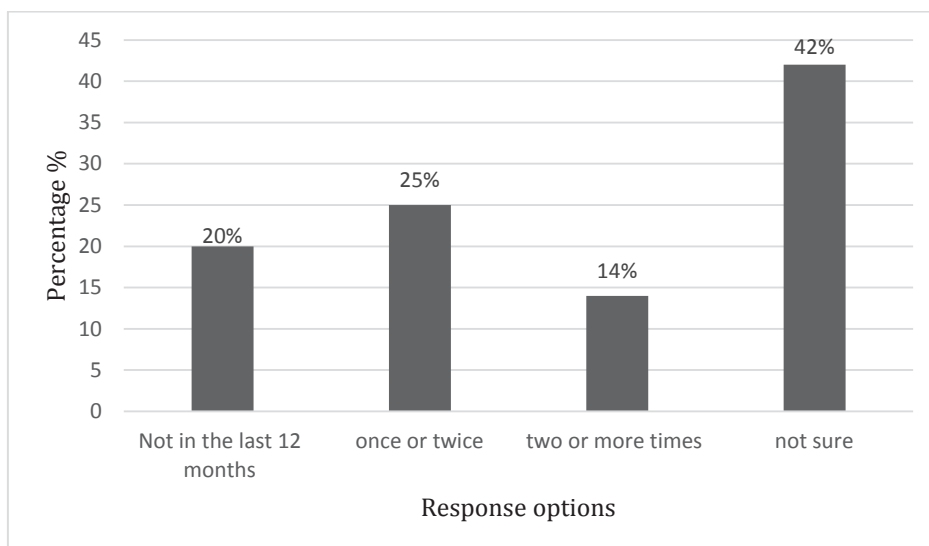


Figure 14: Occurrence of unwanted sexual touching or sexual activity in the last year

Table 23: Occurrence of unwanted sexual touching or sexual activity in the last year

Response Options	Frequency	Proportion (%)
Not in the last 12 months	20	20
once or twice	26	25
two or more times	15	14
not sure	44	42
Total	105	100

Rating of unwanted sexual activity:

A further branching question allowed students to rate their experience of unwanted sexual activity. This branching question applied to students that were asked two

questions. Firstly, *'have you ever been touched in a sexual way or made to do sexual things that you didn't want to do'*. Students that responded: 'yes', 'unsure' or 'don't want to answer this question' were asked a further question, *'In the last year, have you been touched in a sexual way that you did not want, or made to do sexual things that you did not want to do?'* This question relates to students that responded 'once or twice', 'two or more times' and 'not sure'.

Students were asked, *'The last time this happened how bad was it?'* Almost half of respondents (47%) reported that the experience was 'not bad'. However, over half the responses (53%) reported a negative experience (see Figure 15; Table 24 below). Some 27 percent of respondents reported 'a little bad', 11 percent reported 'pretty bad', 1 percent reported 'really bad' and 14 percent reported a 'terrible' experience.

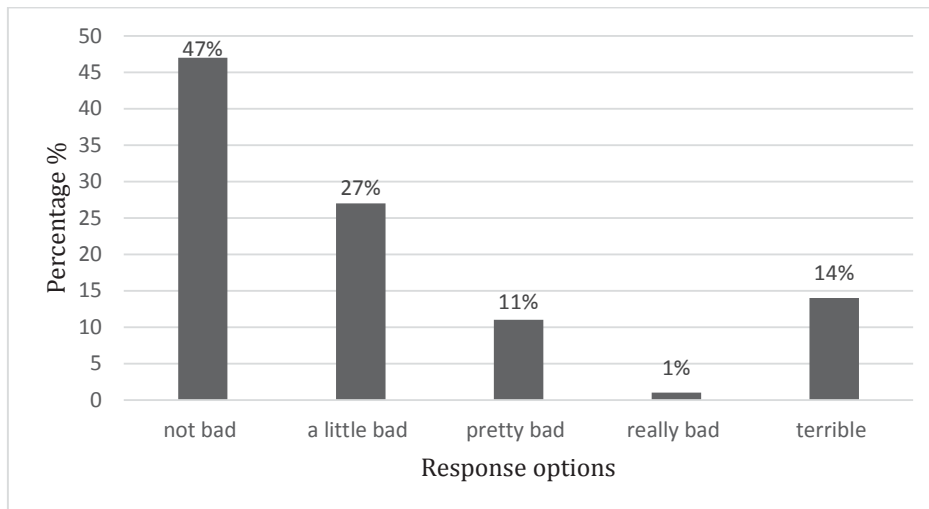


Figure 15: Rating of unwanted sexual activity experience

Table 24: Rating of unwanted sexual activity experience

Response Options	Frequency	Proportion (%)
not bad	37	47
a little bad	21	27
pretty bad	9	11
really bad	1	1
terrible	11	14
Total	79	100

4.2.8 Condom Use

Students that reported having *had* an experience of sexual intercourse (189/417) were asked four questions in relation to condom use.

1) Condom use at first sex:

Students were asked ‘*Did you use a condom the first time you had sex?*’ Half of respondents (93/186) reported ‘yes’ and half reported ‘no’ (see Figure 16; Table 25 below).

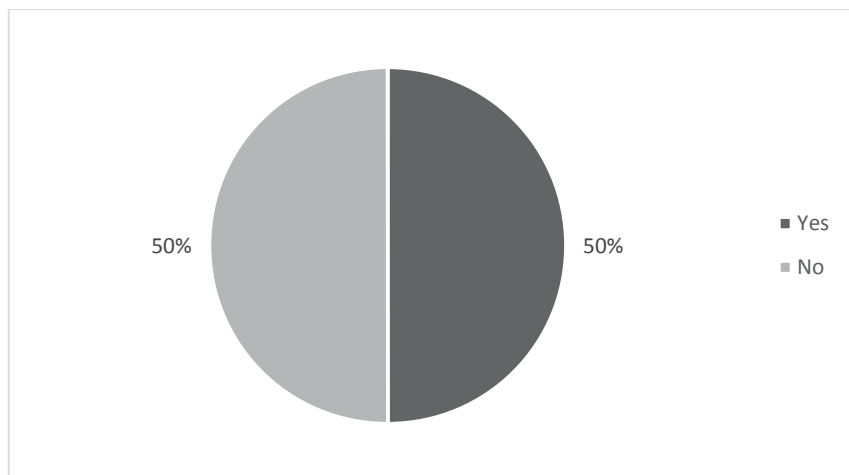


Figure 16: Condom use at first sex

Table 25: Condom use at first sex

Response Options	Frequency	Proportion (%)
Yes	93	50
No	93	50
Total	186	100

2) Frequency of condom use:

Students were asked, 'How often do you use condoms as protection against sexually transmitted disease or infection?' The responses indicate a wide variation in the regular use of condoms. Some 36 percent of respondents reported 'always', 19 percent used condoms 'most of the time', 24 percent used condoms 'sometimes' and 21 percent reported that they never used condoms to protect themselves or others from sexually transmitted infections (see Figure 17; Table 26).

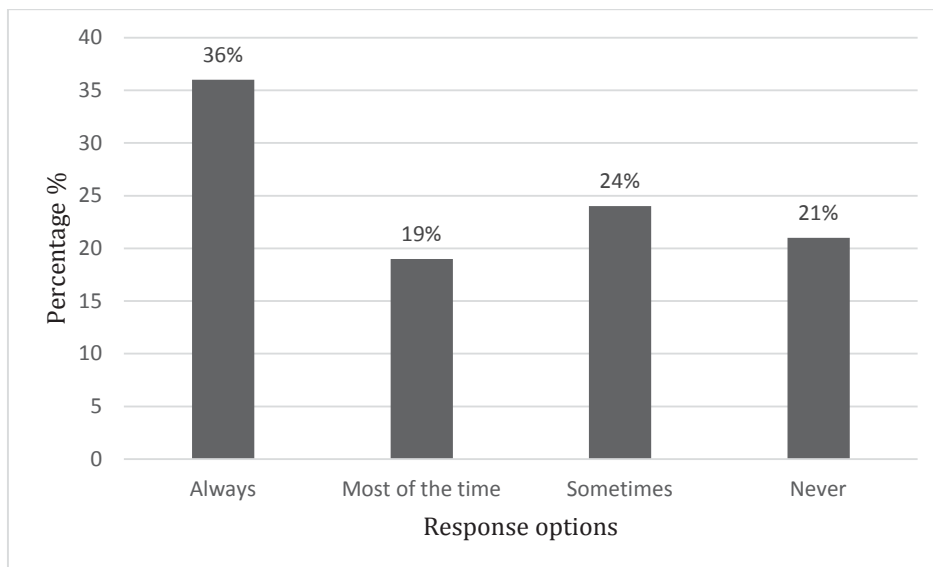


Figure 17: Frequency of Condom use

Table 26: Frequency of Condom use

Response Options	Frequency	Proportion (%)
Always	65	36
Most of the time	34	19
Sometimes	44	24
Never	38	21
Total	181	100

3) Condom use during last sexual intercourse:

Students were asked ‘The last time you had sex did you use condoms as protection against stds or infections?’ As shown in Figure 18; Table 27, almost two-thirds of respondents (65%) reported they used condoms during their last sex experience to protect against sexually transmitted infections.

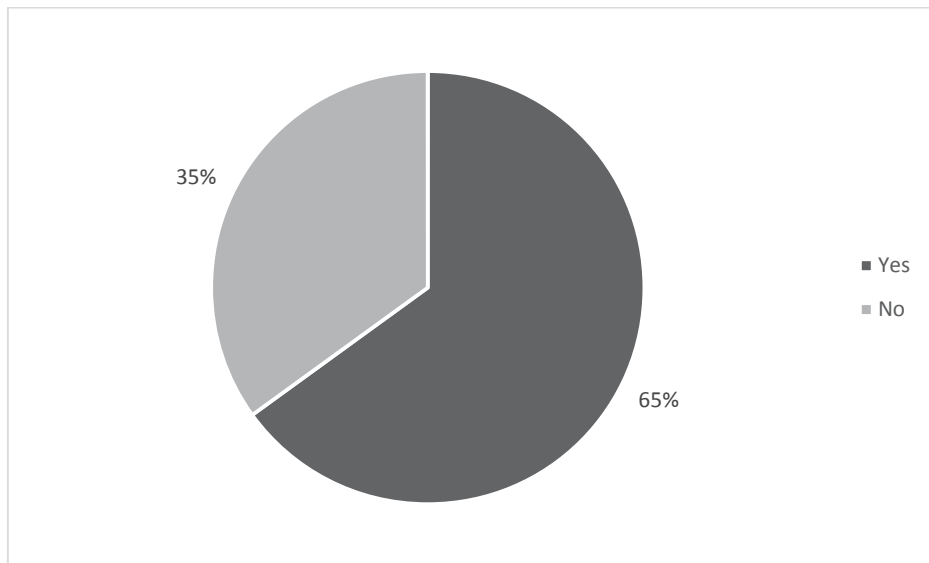


Figure 18: Condom use at last sex

Table 27: Condom use at last sex

Response Options	Frequency	Proportion (%)
Yes	92	65
No	50	35
Total	142	100

Reason for using a condom:

Students were asked 'What is your main reason for using a condom?' As shown in Figure 19; Table 28, approximately half of respondents (72/141) reported 'to prevent pregnancy and prevent sexually transmitted diseases'.

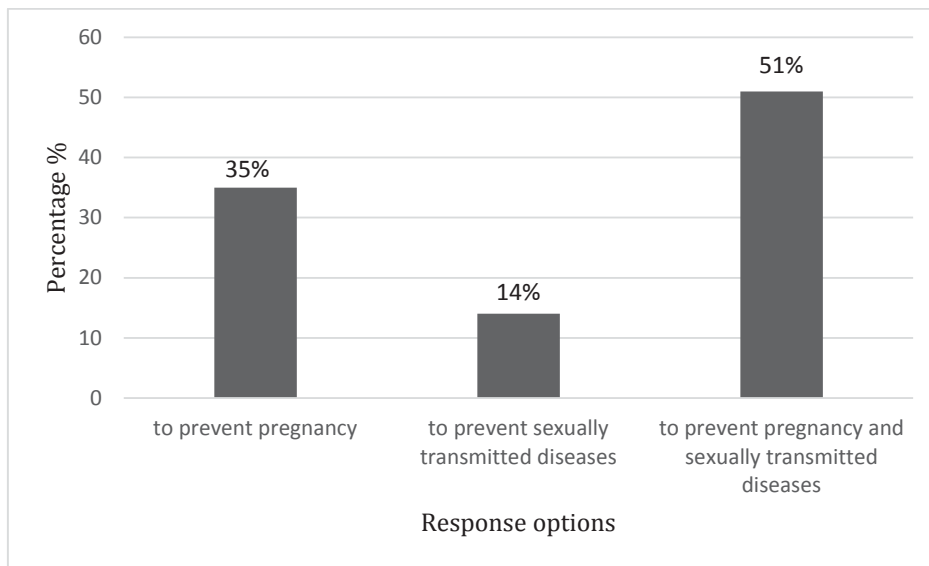


Figure 19: Reasons for using condoms

Table 28: Reasons for using condoms

Response Options	Frequency	Proportion (%)
To prevent pregnancy	50	35
To prevent sexually transmitted diseases	19	14
To prevent pregnancy and sexually transmitted diseases	72	51
Total	141	100

4.2.9 Contraception

Students that reported having *had* an experience of sexual intercourse (189/417) were asked three questions in relation to contraception use. The branching system used in the *Youth '07* survey meant that questions in relation to contraception were asked only to the students that reported having had an experience of sexual activity. Therefore, only the 45 percent of respondents (189/417) that reported having had an experience of sexual intercourse were asked questions in relation to contraception.

1) Frequency of contraceptive use:

Students were asked, '*How often do you or your partner use contraception? (By this we mean protecting against pregnancy?)*' Of the 182 students that answered this question, over a third (36%) of respondents reported 'always'. Similar proportions reported 'most of the time' (17%) and 'sometimes' (14%). However, 16 percent reported that they 'never' used contraception and 16 percent reported 'this doesn't apply to me' (see Figure 20; Table 29 below).

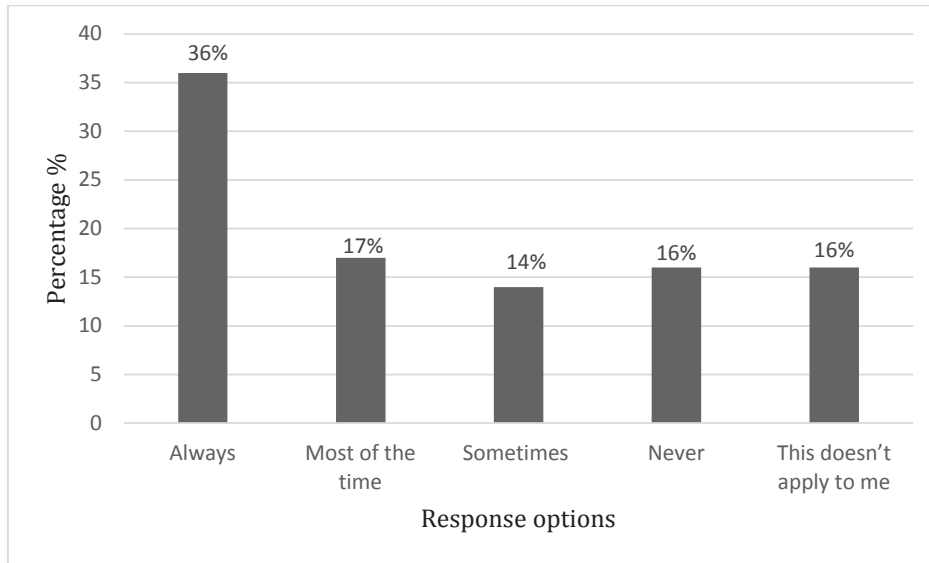


Figure 20: Frequency of Contraceptive use

Table 29: Frequency of Contraceptive use

Response Options	Frequency	Proportion (%)
Always	66	36
Most of the time	31	17
Sometimes	26	14
Never	29	16
This doesn't apply to me	30	16
Total	182	100

2) Use of contraception at last sex:

Students were asked 'The last time you had sex, did you use any form of contraception?' As shown in Figure 21; Table 30 below, just over half of respondents (54%) reported 'yes'. This indicates that 46 percent of respondents did not use any form of contraception at their last experience of sex.

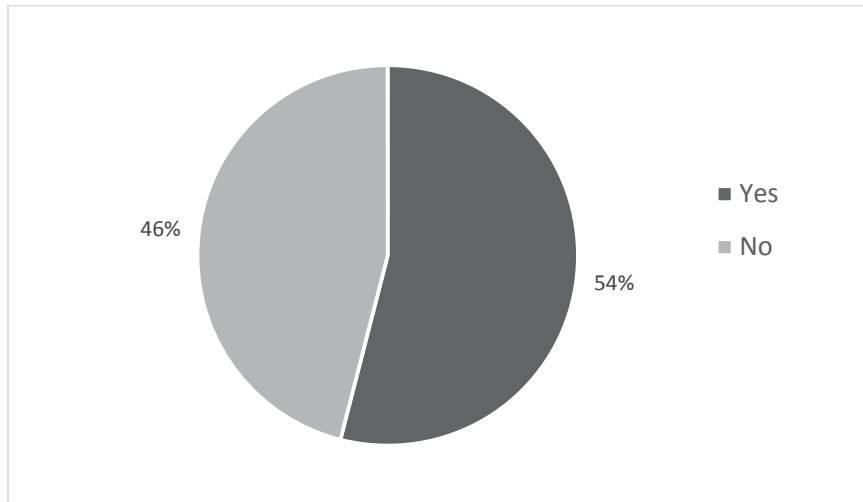


Figure 21: Contraceptive use at last sex

Table 30: Contraceptive use at last sex

Response Options	Frequency	Proportion (%)
Yes	78	54
No	66	46
Total	144	100

3) Types of contraceptives used

Students were asked, ‘*which if any, forms of contraception are you or your partner(s) currently using?*’ A total of 147 students answered this question. The most commonly reported method was condom at 67 percent (see Figure 22; Table 31 below). This was followed by ‘the pill’ (29%). Some 18 percent of respondents reported ‘none’. A range of other contraceptives were identified, including the morning after pill (9%), Depo Provera (the injection) (7%), withdrawal (3%) and the ‘rhythm method’ (e.g. calendar method) (2%).

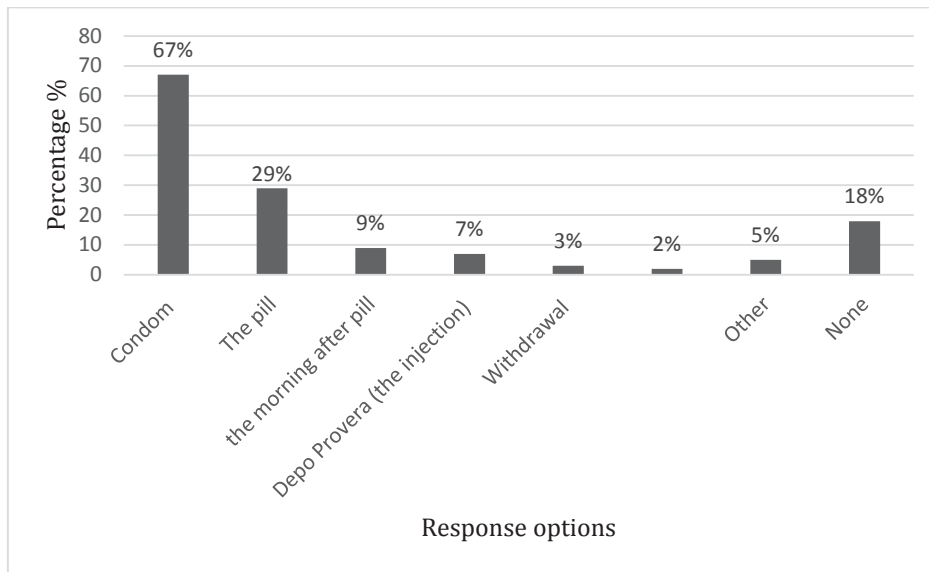


Figure 22: Types of Contraceptive used

Table 31: Types of contraceptive used

Response Options	Frequency	Proportion (%)
The pill	42	29
the morning after pill	13	9
Depo Provera (the injection)	10	7
Withdrawal	5	3
Rhythm method (e.g. calendar method),	3	2
Condom	99	67
Other	8	5
None	27	18

4.2.10 Sexual Health Outcomes: Pregnancy & Sexually Transmitted Infections and Diseases

Pregnancy

The risk of pregnancy is primarily affected by the initiation of sex, the frequency of sex, and the use of contraception (Kirby et al., 2005). Students that reported having *had* an

experience of sexual intercourse (189/417) were asked three questions in relation to pregnancy.

1) ***Ever been pregnant or impregnated another:***

Students were asked, ‘Have you ever been pregnant or got someone pregnant (including miscarriage, abortion or termination)?’ As illustrated in Figure 23 and Table 32 below, two thirds of respondents (117/178) reported ‘no’ they have never been pregnant or got someone pregnant. However, 16 percent of respondents, some 29 students, reported ‘yes’ they had been, or got someone pregnant.

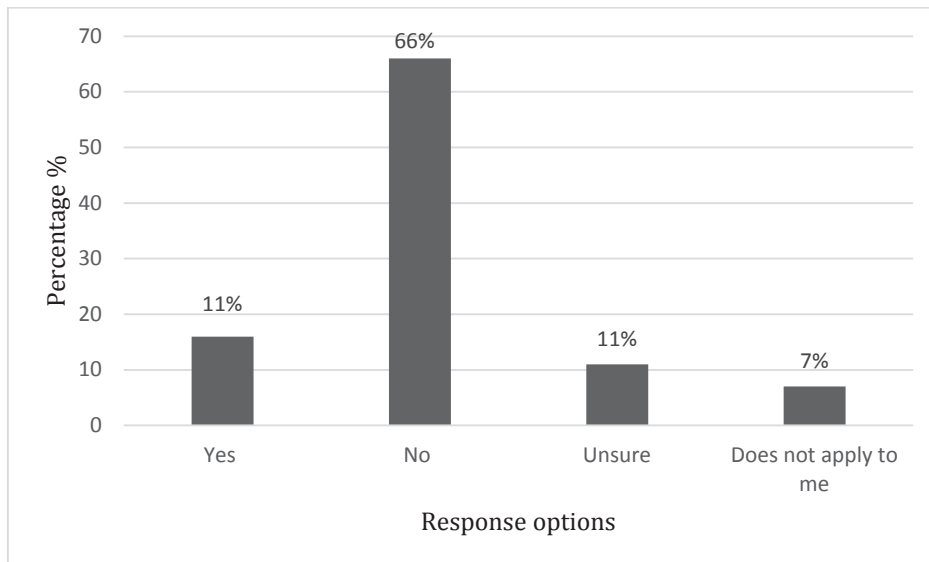


Figure 23: Ever been pregnant or impregnated another

Table 32: Ever been pregnant or impregnated another

Response Options	Frequency	Proportion (%)
Yes	29	16
No	117	66
Unsure	19	11
Does not apply to me	13	7
Total	178	100

2) Number of times become pregnant or impregnated others

The branching system⁴⁸ enabled students to identify the number of times they had become pregnant or impregnated others. Students were asked, ‘how many times have you been pregnant or got someone pregnant?’ 48 students answered this question (see Table 33). Less than half of respondents (42%) reported being unsure. Some 27 percent of respondents stated ‘once’, 10 percent reported ‘twice’ and 21 percent reported ‘three or more times’.

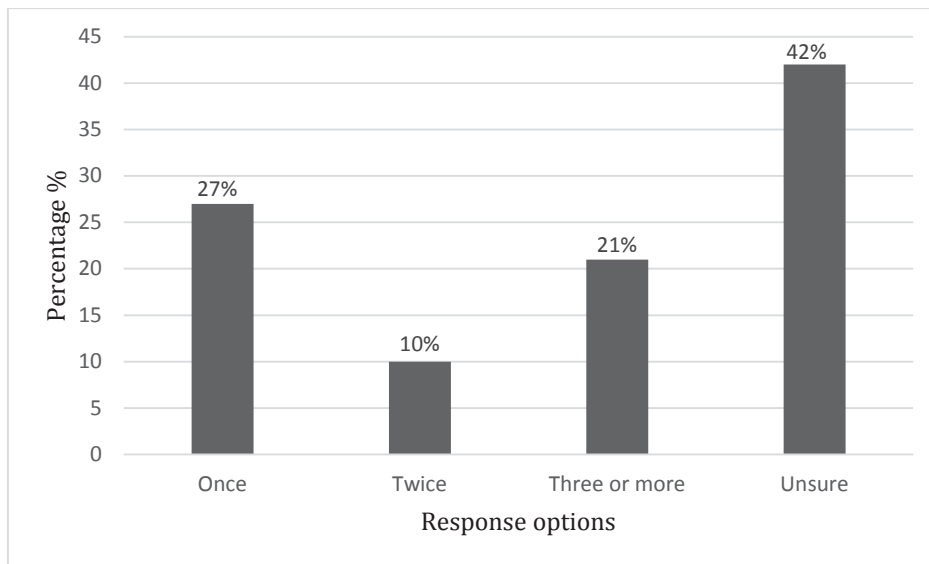


Figure 24: Number of times been pregnant or impregnated others

Table 33: Number of times been pregnant or impregnated others

Response Options	Frequency	Proportion (%)
Once	13	27
Twice	5	10
Three or more	10	21
Unsure	20	42
Total	48	100

⁴⁸ This branching question applied to students that reported ‘yes’, ‘not sure’ to the question ‘Have you ever been pregnant or got someone pregnant?’.

3) *Pregnancy outcome*

The branching system enabled students to report what happened to the pregnancy. This branching question applied to students that were asked two questions. Firstly, students that reported ‘yes’, ‘not sure’ to the question ‘*Have you ever been pregnant or got someone pregnant?*’ were asked a further question: ‘*what happened to this pregnancy?*’ Some 49 students answered this question (see Figure 25; Table 34 below). Over half of respondents, that is 26 students reported ‘I don’t know/unsure’. Twenty-two percent reported ‘I/she had an abortion’, 12 percent reported ‘I/she had a baby’. Similar proportions reported ‘I/she is currently pregnant’ (6%) and that ‘I/she had a miscarriage’ (6%).

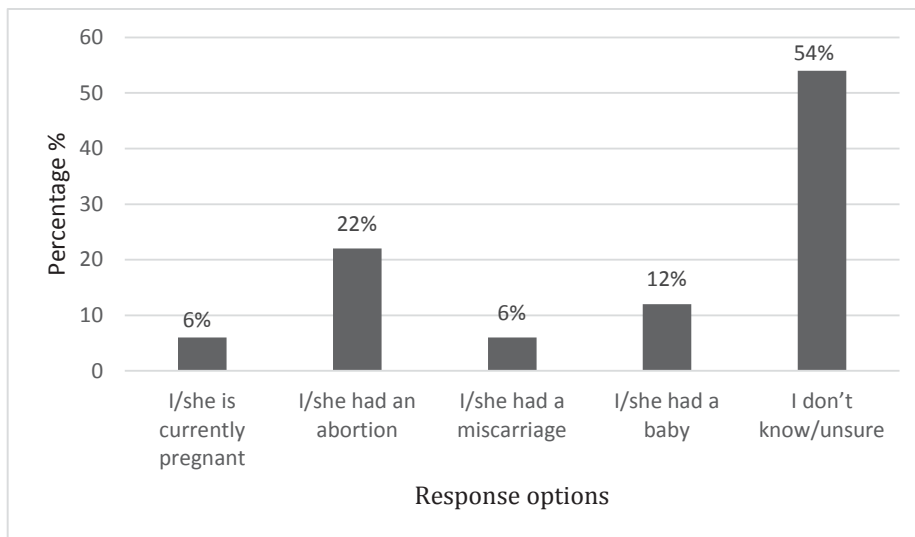


Figure 25: Pregnancy outcome

Table 34: Pregnancy outcome

Response Options	Frequency	Proportion (%)
I/she is currently pregnant	3	6
I/she had an abortion	11	22
I/she had a miscarriage	3	6

I/she had a baby	6	12
I don't know/unsure	26	54
Total	49	100

Sexually Transmitted Infections and Diseases:

Students that reported having *had* an experience of sexual intercourse (189/417) were asked 'Have you ever had a sexually transmitted disease or infection?' As shown in Figure 26; Table 35 below, an overwhelming proportion (87%) reported 'no'. Some seven percent reported 'not sure' and six percent reported 'yes'. However, these findings need to be interpreted with caution. Most STIs are asymptomatic; there are often no symptoms of the infection (World Health Organisation, 2014b). Positive cases of STIs can be confirmed through testing. It is highly likely that students who think they do not have a STI will not seek out testing services. Therefore, these rates may be higher than reported.

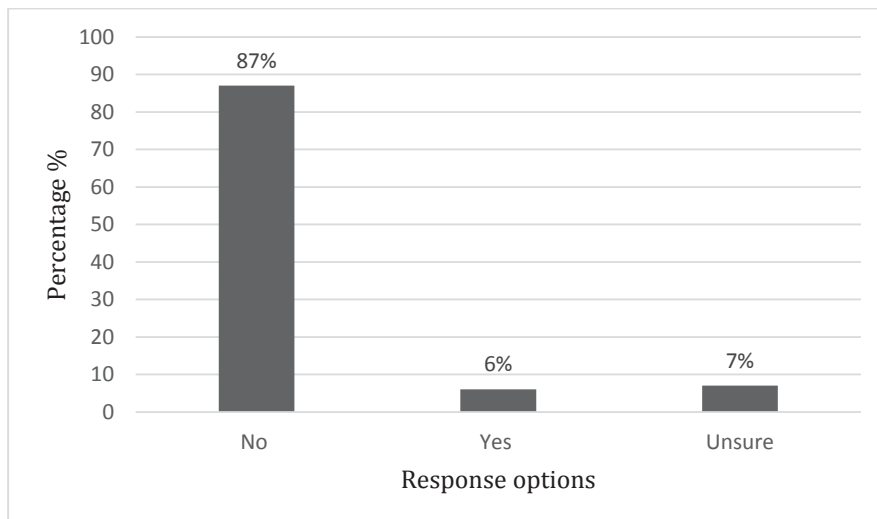


Figure 26: Ever had an STI or STD

Table 35: Ever had an STI or STD:

Response Options	Frequency	Proportion (%)
Yes	11	6
No	157	87
Unsure	13	7
Total	181	100

4.2.12 Section Summary

These results reveal the proportion of Sāmoan secondary school students that have experienced kissing, hugging, sexual touching and sex (sexual intercourse). Additional information relating to students that have had sexual intercourse is presented. This includes: the age of the first sexual experience, the perceived enjoyment of sex, sexual partners, unwanted sexual activity, condom and contraception use, pregnancy and sexually transmitted infections and diseases. The following section 4.3 outlines risk and protective factors associated with three sexual health behaviours.

4.3 Risk and Protective Factors

An objective of this study is to:

- ❖ Identifying and explore factors that are associated with the sexual behaviours of Sāmoan secondary school students in New Zealand.

In this section, the results of the multivariate analysis shed light on the significant associations found between potential factors and three sexual health behaviours: ever had sex, use of condom at last sex and use of contraception at last sex. These three behaviours are important, as they have a significant effect on the risk of pregnancy and sexually transmitted infections and diseases (Kirby, et al., 2005).

For each of the associations discussed, a discussion and description (in the form of odds ratios and confidence intervals) are included. An explanation of confidence intervals and odds ratios presented in a *Youth 2000* report (Fleming, et al., 2007) is included here in its entirety:

Where differences between groups are being compared, the 'confidence interval' or CI indicates the precision of the estimates. For example, a 95 percent CI indicates the range of numbers within which it is 95 percent sure the true value lies. For odds ratios, if the 95 percent confidence interval includes 1 (i.e. 1 lies between the lower and upper limits for the odds ratio given), there is little statistical support for any true difference between the two groups compared. Odds ratios (OR) compare the odds or likelihood of an event between groups. An odds ratio of 1 means that the likelihood is equal; an odds ratio of less than 1 shows a lower likelihood and an odds ratio of higher than 1 shows a higher likelihood. (Fleming, et al., 2007, p.12)

For example, the results of multivariate test that identify whether suicide attempts are significantly associated with ever having sex revealed an odds ratio (OR) of 6.723 and confidence intervals (CI) of 3.234-13.974 [OR=6.723, 95 percent CI (3.234-13.974)]. The findings show that suicide attempts were significantly associated with ever having sex (as the confidence intervals do not include 1). Students who report that in the last 12 months they had tried to kill themselves, once, or more than once were 6 times [note an odds ratio of 6.723] more likely to have ever had sex compared to students who reported no suicide attempts or no attempts in the last 12 months.

It is important to recall that for the purposes of this analysis, the terms 'risk factors' and 'protective factors' will be used to explain the associated effects. 'Risk factors' are factors that encourage one or more behaviours that might lead to a pregnancy or STI (e.g., initiating sex at a young age,) or, discourage behaviours that might prevent

pregnancy or STIs (e.g. using contraception or condoms at last sex). Similarly, 'protective factors' are those that do the opposite – they discourage one or more behaviours that might lead to pregnancy or STI or, encourage behaviours that behaviours that might prevent them (Kirby, et al., 2005).

4.3.1 Factors Associated with Ever Having Sex

For Sāmoan students, five factors were found to be significantly associated with ever having sex. These factors are: the age of Sāmoan students (p-value 0.0046); having moved home (p-value 0.0027); suicide attempts (p-value <0.0001); driving dangerously (p-value 0.0050); and having worked in a paid job) (p-value 0.0170). Students in the *Youth '07* survey sample identified their age from the following response options: less than 12 years, 12, 13, 14, 15, 16, 17, 18, over 19 years of age. Due to sampling size and analysis requirements the response categories for 'moving home' that is: I haven't moved, I have moved once, I have moved two times, I have moved 3 or more times, were reorganized into two groups: 1) students that moved home two or more times in the last year.2) students that have moved fewer than twice in the last year.

Age

Students who were less than 13 years old were less likely to have ever had sex compared to students aged over 17 years old.
[1 vs 5 OR 0.168; 95 percent CI (0.051-0.555)]

Students who were aged 14 years old were less likely to have ever had sex compared to students aged over 17 years old.
[2 vs 5 OR 0.297; 95 percent CI (0.140-0.630)]

Moved home

Students who reported that they had moved less than twice in the last year were about 3 times more likely to have ever had sex compared to those students who had moved two or more times in the last year.
[OR 2.999; 95 percent CI (1.463-<6.148)]

Suicide

Students who report that in the last 12 months they had tried to kill themselves, once, or more than once were 6 times more likely to have ever had sex compared to students who reported no suicide attempts/not in the last 12 months.

[OR 6.723; 95 percent CI (3.234-13.974)]

Driving dangerously

Students who had reporting driving a car or other vehicle dangerously were 4 times more likely to have ever had sex compared to students who had reported not driving a car dangerously.

[OR 4.193; 95 percent CI (1.543-11.394)]

Working

Students who reported working for money or a job were 47 percent less likely to have ever had sex compared to students who had not worked or had a job.

[OR 0.525; 95 percent CI (0.310-0.891)]

4.3.2 Factors Associated with Condom Use at the Last Experience of Sexual Intercourse

For Sāmoan students who reported having had sex, four factors were found to be significantly associated with the use of a condom at their last experience of sexual intercourse. These factors are: age (p-value 0.0018); having moved home (p-value 0.0438); parents who care (p-value 0.0103); and witnessing violence (p-value 0.0002). Due to sampling size, age response categories (i.e. less than 12 years, 12, 13, 14, 15, 16, 17, 18, over 19 years of age) were reorganized into two response options: students that were aged 14 years and younger, and students that were 15 years and over. Due to sampling size and analysis requirements the response categories for 'moving home' that is: I haven't moved, I have moved once, I have moved two times, I have moved 3 or more times, were reorganized into two groups: 1) students that moved home two or more times in the last year.2) students that have moved fewer than twice in the last year.

Age

Students that were aged 15 years and older were less likely compared with students aged 14 years and younger to have used a condom at last sex. [OR 0.059; 95 percent CI (0.010-0.349)]

Moved home

Students who reported that they had moved home less than twice in the last year were less likely to have used a condom at last sex, than those students who had moved home two or more times in the last year. [OR 0.266; 95 percent CI (0.073-0.964)]

Parents care

Students who reported that their parents did not care were less likely to have used a condom at last sex compared to those students report that their parents cared. [OR 0.062; 95 percent CI (0.007-0.519)]

Witnessing violence in the home

Students who reported that they had seen adults in your home yelling, swearing, hitting, physically hurting a child/each other were less likely to have used a condom at last sex compared to those students report never witnessing violence in the home. [OR 0.040; 95 percent CI (0.007-0.221)]

4.3.3 Factors Associated with Contraceptive Use at the Last Experience of Sexual Intercourse

For Sāmoan students who reported having had sex, three factors were found to be significantly associated with the use of contraception at their last experience of sexual intercourse. These factors are: age (p-value 0.0214); understanding of the Sāmoan spoken language (p-value 0.0363); and having parents that care (p-value 0.0251). Due to sampling size, data relating to 'age' response categories (i.e. less than 12 years, 12, 13, 14, 15, 16, 17, 18, over 19 years of age) were reorganized into two groups, students that were aged 14 years and younger, and students that were 15 years and over.

Age

Students that were aged 15 years or older were less likely compared to students aged 14 years or younger to have used contraception at last sex.
[OR 0.288; 95 percent CI (0.100-0.832)]

Understanding of Sāmoan spoken language

Students who reported that they did not have a good understanding of the Sāmoan language were 3 times more likely to have used a contraception at last sex compared to those students reported having a good understanding.
[OR 3.239; 95 percent CI (1.078-9.732)]

Parents care

Students who reported that their parents did not care were less likely to have used contraception at last sex compared to those students report that their parents cared.
[OR 0.062; 95 percent CI (0.007-0.519)]

4.3.4 Section Summary

In this section (4.3), the results of the multivariate analysis reveal seven factors that operate in a risk manner and three factors that operate in a protective manner. The protective factors are: age (being younger), working in a paid job and not having a good understanding of the Sāmoan spoken language. Whilst these results are discussed in further detail in Chapter Six, it is important to highlight that the finding of '*not having a good understanding of the Sāmoan spoken language*' is most likely a proxy for other factors, such as proficiency in the English language and ability to access health care services. The risk factors are: age (being older), having never moved home or moved home once, suicide attempts, driving dangerously, parents that do not care and witnessing violence in the home.

4.4 Chapter Summary

In this chapter the results from the analysis of *Youth '07* survey data provides some answers for two of the four study objectives:

1. Determine the prevalence of sexual health behaviours of Sāmoan secondary school students in New Zealand;
2. Explore and describe factors (risk and protective) associated with sexual behaviours among Sāmoan secondary school students in New Zealand.

As revealed in Section 4.2, the results show a diversity of sexual behaviour and practices for Sāmoan secondary students. There are many Sāmoan students that have not had sexual intercourse. Over half of respondents in the survey have *never* had an experience of sexual intercourse (228/417). However, the results also show a group of young people that are engaging in sexual activities. For example, 62 percent of respondents reported that they had spent a long time kissing, hugging and touching someone (261/420) and 45 percent of respondents *have* had an experience of sex (189/417).

Of the sexual activities identified the results also reveal varying levels of risk. For example:

- ❖ 66 percent of respondents who have had sex had their first experience before 15 years of age (125/189);
- ❖ The most commonly reported sexual partner was 'girlfriend' (51%) followed by 'boyfriend' (30%). However, 31 percent of sexually experienced students had sex with a person that they didn't know that well or had just met (58/186);
- ❖ 44 percent of sexually experienced respondents had one sexual partner in the last three months (75/172) whereas 16 percent reported having four or more sexual partners in the last three months (28/172);
- ❖ 35 percent of sexually experienced respondents *never* talked to their partner(s) about preventing pregnancy (64/184);
- ❖ 16 percent of respondents reported that they had been touched in a sexual way or made to do sexual things that they didn't want to do (67/411);
- ❖ 50 percent of sexually experienced respondents used a condom the first time they had sex (93/186);

- ❖ There was variation in how often students used condoms. Some 36 percent of sexually experienced respondents reported 'always' (65/181), 19 percent used condoms 'most of the time' (34/181), 24 percent used condoms 'sometimes' (44/181) and 21 percent reported that they never used condoms to protect themselves or others from sexually transmitted infections (38/181);
- ❖ 36 percent of sexually experienced respondents always used contraception (66/182) whereas 16 percent reported that they never used contraception (29/182);
- ❖ Two thirds of sexually experienced respondents (117/178) had never been pregnant or got someone pregnant. However, 16 percent of sexually experienced respondents had been pregnant, or got someone pregnant (29/178);
- ❖ 87 percent of sexually experienced respondents have never had an STI/STD (157/181). However, six percent reported that they had had an STI/STD (11/181).

As shown in Section 4.2, the multivariate analysis reveals eight sexual risk and protective factors (as drawn from the three association tests). From the first test, five factors were found to be significantly associated with *ever having sex*. The findings suggest that never having moved home or having moved home once⁴⁹, attempting suicide and driving dangerously are risk factors. Two factors, being younger and working or having a job appear to play a protective feature.

In the second test, four factors were found to be significantly associated with the *use of a condom at the last experience of sexual intercourse*. The findings suggest that age (being older), never having moved home or having moved home once, having parents that do not care and having witnessing violence in their own home were risk factors.

⁴⁹ The term 'moving home' in the *Youth '07* survey refers to the following question: 'In the past year how many times have you moved home?'

The third and final test revealed three factors were found to be significantly associated with *the use of contraception at the last experience of sexual intercourse*. The findings suggest that age (being older) and having parents that do not care not are risk factors. The results also revealed that not having a good understanding of the Sāmoan spoken language was a protective factor. However, as reported earlier, the finding in relation to the understanding of the Sāmoan spoken language is most likely a proxy for other factors.

In the following chapter (Chapter Five: Qualitative Results) the findings from the focus group discussions and key informant interviews are highlighted. Some of the information gleaned from these interviews shed light on the attitudes and perceptions that may underlie some of these sexual patterns. The discussion chapter (Chapter Six) reviews the main findings from these quantitative results and the qualitative component.

CHAPTER FIVE: QUALITATIVE RESULTS

5.1 Chapter Overview

An objective of this study is to explore the perceptions of Sāmoan secondary school students and key informants on sexual and reproductive health issues. This chapter presents the results from the analysis of information from the focus group discussions with Sāmoan secondary school students and the interviews undertaken with key informants. As reported in section 3.5.3 (Qualitative component: Data Analysis) the analysis of the focus group discussions and key informant interviews were combined as the purpose is to identify key themes (thematic analysis) raised by study participants. Throughout this commentary these themes are described and summarised. Direct quotations have been included to supplement the summaries and give voice to the insights shared by participants. In most cases these quotes illustrate common beliefs and experiences, and where specified, reflect divergent opinions.

Section 5.2 introduces three factors – individual, family and environment – that participants reported as influencing the sexual health knowledge, attitudes and behaviours of Sāmoan secondary school students in Aotearoa, New Zealand. These factors do not operate in isolation from each other; instead they act in an inter-related manner. The section begins by summarizing individual factors, starting with Sāmoan secondary understandings of sexual health terminology, adolescent and sexual development and desire for more information. Perceived gender differences and youth suicide are highlighted. The discussion then shifts with an exploration of family factors, that include: family dreams, sacrifices and expectations; communication about relationships and sexual activity; and family pride and shame. The section concludes with a review of key environmental influences, such as socio-economic position; school; the influence of church and wider societal influences.

Section 5.3 highlights suggestions offered by study participants for public health interventions. In this section, audiences to whom public health interventions warrant direction are identified. A summary of components deemed necessary for intervention efforts directed at Pacific young people and their families is provided.

5.2 Factors influencing Sexual Health Knowledge, Attitudes and Behaviour

The primary aim of this study is to:

- ❖ Identify factors that influence the sexual health knowledge, attitudes and behaviours of Sāmoan secondary school students in Aotearoa, New Zealand.

I propose three overarching factors influence the sexual health knowledge, attitudes and behaviours of Sāmoan young people. These are: 1) individual factors, 2) family factors and 3) environmental factors. These three broad factors provide a framework in how the qualitative findings are presented.

For the purposes of this discussion it is important to revisit some key points gleaned from the literature review (Chapter Two) and methodological framework (Chapter Three). International studies show several factors are associated with sexual health outcomes. For example, factors such as age, pornography use, education levels, aspirations for the future, peer influences, relationship with parents, risk-taking behaviours such as drinking alcohol and binge drinking were associated with one or more sexual health outcomes (Ahmad, et al., 2014; Atwood, et al., 2012; Brahmhatt, et al., 2014; Clark, et al., 2006; Mmari & Sabherwal, 2013; Mueller, et al., 2010). The ecological model is often used in the sexual health literature as a way of classifying and describing the relationships between these factors (Clark, et al., 2006; Kirby, 2009; Mmari & Sabherwal, 2013; Paul, et al., 2000). Mmari and Sabherwal (2013) identified three levels: the individual; partner and family level. There are consistent

themes within Pacific health frameworks (Glover, et al., 2010; Pulotu-Endemann, 2009; Tuitahi, 2009) these include family, the importance of relationships, spirituality and the influence of wider contexts.

5.2.1 Individual Factors

Individual factors are features that include: biological factors (age, gender); physical capabilities, knowledge and beliefs; and involvement in sensation-seeking or risk activities (Kirby & Lepore, 2007; Mmari & Blum, 2009; Svaneymyr, et al., 2015).

Understanding of sexual health terms:

Youth participants expressed some level of knowledge with sexual health terminology. When asked what the term sexual health meant, youth participants responded with varying terms such as: actual sex (referring to sexual intercourse), health, babies, aids, crabs, STI's, sex, intercourse, personal, contraceptives, condoms, protection, condoms, Aids, "*HIV and stuff, like the STI's*". A comment that prompted laughter in one female focus group was '*the consequences*' [referring to pregnancy]. Most of the youth participants noted that the term 'sexual health' was one that was often used in the school environment.

When asked what 'safe sex' meant, youth participants in the focus groups presented a variety of views and opinions, for example, 'as long as it's after marriage it's safe', 'being protected' 'protection' 'contraception', 'Safe sex is when both partners agree and both are satisfied' 'not behind parent's back' 'not pressuring anyone'.

Understanding of physical and sexual development:

Key informants commented on the limited knowledge and understanding young people [not exclusive to Sāmoan youth] and their parents had on a range of sexual health issues, including characteristics for good relationships and adolescent development. Some key informants and focus group participants spoke about changes

occurring for young people in adolescence. Although practical messages and information may be given in relation to sexual health education, the following quote identifies the physiological and emotional issues that arise for some young people:

“ah, that depends because like they [sexual health educators] didn’t really teach us, what to do with, in those kinds of situations. They talk about what happens in like when you’re doing sex and how to [pause] but they don’t talk about that emotional feelings that you get when like a girl comes up to you and says, you know?, how to stop that [physical arousal] from happening, like how to like, yeah.” [Male participant]

Some key informants identified the limited knowledge young people had about their physical genitalia and the stereotypes associated with being aware of one’s sexual anatomy. As noted:

“They have very little knowledge gynaecologically of female anatomy and physiology....because I think – I’m staggered at the number of girls that are totally unaware of their own physical genitalia basically and that’s partly because it’s seen to be unhealthy or dirty or smutty to be aware of your own sexual parts for a start.” [Key Informant]

Some key informants identified misconceptions that Sāmoan parents passed on to their children, for example, telling their female daughters that using a tampon equated to a girl losing her virginity:

“Well there’s the whole thing about tampons. I don’t know how they’re ever going to get parents to understand that if you use a tampon you don’t lose your virginity.” [Key Informant]

Desire to have sex or abstain

Youth participants and key informants acknowledged that young people are having sex. An interesting observation was that male focus group participants discussed the legal age of consensual sex. This issue was not mentioned by the female participants. Some of the youth participants noted that while young people desire to have sexual relationships, they do not want to become pregnant:

“like, no one our age wants to have a baby...majority of people our age don’t want to have a baby, so, but they still want to have sex, so if they don’t know how to like, like how, so called, know a lot of contraception, then they’d know how to deal with it, and so they can, they’d not to have a baby but have sex.” [Male participant]

“There’s heaps of underage sex going on. Because it’s against the law first, it’s like teens, their lives [are] down the toilet if they can’t handle the relationship or the children that might result from bad sex.” [Male participant]

However, some youth participants noted that they abstained from sex because of their respect for their parents and their religious beliefs:

“Oh for me it’s like I don’t to disappoint my parents. So like, I wouldn’t do that [be sexually active] or get myself into that kind of situation. For me it’s basically more on religion – my religion and my respect for my parents.” [Male participant]

Desire for knowledge:

Some key informants shared that young people desire more knowledge about relationships and have asked parents for information. However, as expressed in the following quote, some parents have not been able to respond:

“Young people want that knowledge, that’s why they ask their parents. One dad said to me, ‘I asked my parents and they didn’t want to tell me so I had to find it elsewhere’, but as a result he became a dad...so although he can’t just blame it all on the parents, but it just opens up wide this can happen.” [Key Informant]

Self-esteem:

Key informants noted that having good self-esteem during adolescence - a period generally marked by self-doubt - is protective. Key informants and focus group participants claimed that the quality of a relationship a young person has with members in their own family can either be a risk or protective factor:

“And unless you have good self-esteem during that period of self-doubt and unless you’ve got strong supportive people around you....I think there’s a lot of love and I think that the majority of families really want the best for their kids so I think from a welfare perspective it’s very good you know.” [Key Informant]

Gender - treatment of females compared to males:

A common theme expressed by study participants was the attention and treatment towards the females in a Sāmoan family. Many participants noted that Sāmoan parents were very strict with their daughters and attributed this to the fact that it would be females that would end up pregnant as a result of sexual intercourse:

“Cause the guy can run away but you stuck with it [pregnancy].” [Female participant]

“Girls are worse off because we’re not the ones who get pregnant.” [Male participant]

Study participants noted that pregnancy is a result of unprotected sexual activity. However, youth participants highlighted pregnancy as a serious issue when compared with a sexual disease:

“We’re the ones end up with not so bad problem. Either we both end up with sexual disease but she’ll end up with the baby. She’ll be left with the baby.” [Male participant]

The female youth participants had much to share on the differential treatment, sharing that the standards for males and females were unequal. Males seemingly had more freedom and the females felt this was unfair:

“Guys have more freedom”; “it’s annoying”; “it’s so not fair”; “girls on lock down with hours”; “boys allowed to have girlfriends”; “brothers allowed to have girlfriends”; “If girls raise with their parents their brothers are allowed to do more, they are told ‘because he’s a boy’”; “just don’t get smart.” [Female participants]

“easier for the guys to date, have a girlfriend”; “my brother able to have a girlfriend at aged 16, she [sister] was not allowed a boyfriend until 21”; “they are harsher on us [girls versus boys]”; “boys are like the golden child”; “Yeah not even doing feau’s [household chores].” [Female participants]

Many of the female participants noted they wanted to experience the freedom their brothers had. Some participants noted that females rebelled because of the differential treatment, where males had more freedom compared to females:

“My brothers don’t do chores, can come home anytime, allowed to go and meet with whoever and go anywhere to drink”; “Without being lectured about it?”; “Yeah lectured about that or even like sex”; “Boys get away with so much stuff”; “And that’s what makes us rebel cause we haven’t experienced life.” [Female participants]

The treatment of Sāmoan females and the tensions that arise when a child becomes pregnant out of wedlock are highlighted in the literature review. They are also revisited in the following chapter [6: Discussion]

Suicide:

Youth participants and key informants were asked if there were any trends or issues arising in their communities that they were concerned about. Several participants spoke about the increasing number of young people that they were aware of or heard about that had committed suicide, with strained relationships and peer pressure often identified as precipitating factors:

“My close friend just committed suicide a few weeks ago...it was over her boyfriend, and us as her close friends just took it as a slap in the face, that we weren’t enough for her”; “Yeah cause it’s sad how like um, like that one action affects heaps of people so many ways.”; “People don’t know how to reach out like, they feel like they’re trapped”; “bullying”; “lonely”; “they kill themselves over their boyfriends”; “relationships.” [Female participants]

“There has been a lot of teenage suicide, and that, a lot in the Pacific Island and Māori. And all...most of it comes down to peer pressure, and peer pressure normally involves things with sexuality. Sexuality is mostly at the core of those teenage suicide, or teen suicide, and I think that is where the twist has then come about in terms of parents accepting...being more accepting of teenage pregnancies, do you know what I mean?” [Key Informant]

Many of the participants noted that young people were unable to speak to anyone, including their parents, about their relationship woes. In some cases, participants reported that the inability to speak with their parents heightened emotion

“Some Pacific island parents like completely don’t want to go to that whole subject of relationships, so they [young person] go behind their backs so when something has gone wrong in the relationship and when they home, they can’t go and talk to anyone at home about it so they hold on to all this hurt and pain and lead to self harm, suicide, crime rates even.” [Female participant]

“You should extend your research about the whole thing about suicide...because that’s another reason people end up with suicide is because parents are too strict and stuff like that.” [Female participant]

Many of the participants spoke about the link between suicide and the intense level of fear as experienced by some young people when they think about their parents’ reactions to their sexual activity:

“We’ve had a couple of suicides in the last couple of months by young Pacific youth and the rates for suicide are slowly increasing...and for one of our dads that I spoke to actually, he actually said to me prior to coming to the [teen parenting] programme because of the impact that his partner was hapu – he got her pregnant – he was so afraid that if his parents knew um, that he would be abandoned, like rejected. And that thought in his head just made him very depressed to the point that he nearly took his life, nearly took his life.” [Key Informant]

Study participants identified a range of individual factors that influence sexual health knowledge, attitudes and behavior. These include understanding of sexual health terms and adolescent development; desire to have sexual intercourse or abstain; and more knowledge about relationships. The importance of having a positive self esteem was also identified. A key theme that arose was the differential treatment towards females, when compared with males, and the links between relationship issues, sexuality and suicide. The exploration of family factors in the following discussion sheds further contextual light on some of these dynamics.

5.2.3 Family Factors

A significant theme identified by participants and the *Youth '07* survey analysis was the importance of family in the life of a young person. There are qualities and values within Sāmoan families as well as patterns of relating that may serve as either a protective or risk factor for sexual activities. This theme is consistent with findings in the sexual health literature (Kirby & Lepore, 2007; Mmari & Blum, 2009; Ohene, et al., 2015). Key informants and focus group participants discussed family relationships at great length.

Family dreams, sacrifices and expectations:

Many key informants and youth participants spoke about the expectations and dreams that parents have for their children. Common expectations include succeeding at school, achieving well and securing good employment. A common theme expressed by the focus group participants and key informants was the desire by many Pacific parents that their children would have a better life than their parents had in the Pacific islands:

“They just want like us to have a good life cause my parents...from Sāmoa and then they brought their parents over and like they struggled when they got here...our parents just want us to have like a better life than they had in Sāmoa.” [Female participant]

“I reckon another one is education, definitely, like, Sāmoan people, families, they only want the best for you, like, they want you to be like, top scholar, like and all that, like, they want nothing less.” [Female participant]

In addition, participants shared that most parents do not want or expect that their child is sexually active while in school:

“My dad wouldn’t even think twice about it. He still thinks of me as a 5 year old. I think that’s another big thing is like Pacific island dads they see their little girl still a little girl regardless her age.” [Female participant]

“Parents don’t think you at that stage where you having sexual relations, they don’t speak about it.” [Male participant]

Many youth participants shared that their parents thought that the right age to be sexually active was either after marriage, finishing high school or University or once having a job:

“When you’re married”; “21”; “30”; “when you have a job”; “not allowed a boyfriend until 30”; “after finish school and graduate with something.”
[Female participants]

“My mum always says it, I wouldn’t mind if you get pregnant but will get angry if you get pregnant at the wrong time.” *[Female participant]*

Many key informants and youth participants noted the expectations parents had for their children to do well at school, and the difficulties that arise when a child may fail to meet their parents’ standards:

“I’m seeing a lot of the guilt; that parents have had promises for them or they’ve had like high expectations of them to achieve with their education. I came here, I’m working so hard for you [young person] not to muck around, so it’s a big let-down [teen pregnancy]...and with that a lot of anxieties with these young guys.” *[Key Informant]*

However, key informants offered useful insights as to the reason parents may be resistant to encouraging sexual activity at a young age. A significant reason for discouraging sexual activity is the negative social and health outcomes that result from a teen pregnancy:

“I think because any parent who sees their daughter get pregnant knows that it’s going to change the trajectory of their life and that life is going to

be a lot harder and a lot tougher and so therefore, I think every parent wishes to avoid that situation.” [Key Informant]

Communication about relationships and sexual activity:

Key informants and youth participants consistently noted an overall lack of discussion between Sāmoan parents and their children in respect of sexual health matters, such as relationships, using protection and sexual activity. Some youth participants identified the differences between Pacific and New Zealand European parents:

Interviewer: *“Like your mum and dad talk about it? [sexual activity],*
Participants’ responses: *“the ‘no sex’ part”; “islanders - their parents don’t talk about it, it’s usually those palagi ones [palagi parents of NZ European students that talk about sex].” [Male participants]*

“Never had my parents said anything close to sex.” [Female participant]

Some of the key informants and youth participants highlighted cultural sensitivities that may explain why sexual health is not openly discussed. The following quote reflects the taboo nature and unique relationships within some Sāmoan families. These sensitivities may be present in many Sāmoan families:

*“It hugely is still a taboo subject. Don’t even go there, or don’t even talk about it. Because we have this what we call an *ava fatafata* [respecting boundaries, respecting hierarchical relationships], you know, with our brothers or our dads, you know, that the girls are not to talk about sex or any part of your body in front of your brother or in front of your dad, you know, it’s a form of disrespect. And so when the subject comes up it’s like you just do not go there, and so it’s never been there with our people.” [Key Informant]*

Some study participants noted that parents were ignorant of the fact that young people are sexually active, expecting their children to behave as they did back in the islands:

“PI parents neglect the whole situation [teen sex and pregnancy]; they just don’t want to think about it because they think we aren’t doing it, but really... (laughter).” [Female participant]

“Parents ignore the fact that it’s out there [sex], want kids to be like how they were back in the islands”. [Male participant]

However, all the participants identified that this is an important topic that needs to be discussed:

“Sex has always been a taboo subject but we’ve got to talk about it.” [Key Informant]

Study participants acknowledged varying levels of communication within Sāmoan families. Some participants discussed how being brought up in a Pacific family influences the way a young person communicates, particularly when children are brought up to listen and not speak. These practices reflect obedience to their parents:

“Mhm. And it’s not easy particularly with Pacific, they’ve [young person’ been told throughout their life no, no, no – you listen – no – you wait till I talk....So that’s always been asked as Pacific, someone has to talk for you, and we’ve sort of lost that responsibility, that I can do this for myself.” [Key Informant]

Some of the factors that influence conversations include parents' confidence in discussing sexual health matters, and the length of time being exposed to New Zealand culture:

"Ah it depends on your family aye, if they've been here for long they've adapted to like the New Zealand life and that they'd be more open to their kids [talking about sex and relationships]." [Male participant]

Some of the youth participants commented on their parents' disapproval of teenage relationships, as expressed in the following quote:

"Some parents they're like, they, oh like, sexuality is a negative thing, like, like if you ask them a question, they're like, oh, fia faitoalua [you want to be in a relationship] and all that stuff (laughter from the girls), yeah, don't mention anything, yeah, anything about sexuality to them." [Female participant]

However, some youth participants and key informants raised that while discussions may not be occurring between parents and their children, young people are talking to their other family members:

"But if you know some of them, they have someone whose that open minded about those things, those are the ones they always go to, you see, it's more like, um, do you talk to your parents' bout anything? Then, they would say, not everything, so, you know your sort of, but if, I talk to my aunty about these things, but not to my mum or my dad." [Key informant]

Some key informants noted that the level of communication within Sāmoan families is a matter of concern. Particularly in cases where children are not allowed to have their

own opinion, or voice their opinions publicly as this is viewed as showing disrespect to ones parents. One key informant shared that the communication between parents and their children in some Pacific families appear to focus on tasks, rather than relationships:

“So it’s about what [task] has to be done, when it needs to be done, who needs to do it.” [Key Informant]

The idea that communication between parents and their children is task-oriented is reflected in the following quote:

“I think communication with parents is a big issue especially for islanders like even talking about school could be a mission like how was your day?” “I never get asked that question I would love to be asked that question like how was school blah blah blah. But no, It’s always can you do the feau? [household chores] Do the dishes?” [Female participant]

Key informants noted that young Pacific youth, including Sāmoan youth, are raised not to talk about sex. The message that many youths receive from their parents is that they are ‘not allowed to do it’. However, some key informants noted this concept of it being forbidden and the secrecy surrounded with sex may raise a young person’s curiosity. This curiosity leads some young people want to find out about sex. This was confirmed on more than one occasion by young people that participated in the youth focus groups:

“Cause if they try to keep us away from it the more we’ll want to do it, we’ll be more enticed to do it.” [Female participant]

Some key informants and youth participants noted that in some cases, young people rebel against the restrictions their parents have set, thereby going ahead and having sexual intercourse:

“I reckon – I think it’s because they’re [parents] holding us back. Because they’re more strict on us they don’t like allow us to go out or experience life and they want us to learn from their mistakes...most Sāmoan kids - cause they’re pretty much one of the worst - like when they get out they just go for everything for that one night or whatever time they have out because they know that when they get home – lock down straight away. So I reckon the more parents hold us back the more we want to get out and like the more bad decisions we’ll make.” [Male participant]

The lack of openly discussing sexual health matters does not just apply to parents, but to some young people. As shared by key informants and youth participants, some young people do not seek help or information about sexual health out of fear. Some young people are uncertain if they are in the right place where it is safe to talk about matters such as sexual activity, contraception, boyfriends and sexually transmitted infections:

“Yeah cause some guys are too afraid to ask for condoms.” [Male participant]

Key informants noted that there is a risk for young people, who feel unable to ask questions out of fear that someone else (such as parents) will find out and past experiences of being laughed at when they’ve asked sexual questions. Some informants shared that if people do speak out about sexual health issues, they are told to be quiet:

“Yeah, yeah actually that’s another big one, the confidence, most of the Pacific Islanders they’ll just hide in the corner and even though I know what they say is quite valuable, but they don’t want to talk and say it, they don’t want to be wrong, say it and be shamed, that’s a really big thing...well it depends, some kids are quite open and out there, but other kids, fear of being mocked, fear of being (laughs) told, ‘aw that’s a stupid answer’, and it’s quite hard sometimes.” [Key Informant]

Family pride and shame:

A common theme raised by youth participants and key informants was how important the family name and pride is within Sāmoan families. When it is publicly known that a young person becomes pregnant there is a significant blow to the young person and the family’s social standing:

“Our culture, it’s like”; “Yeah” (x3) “like, if you like get pregnant and disgrace to the family”; “Yeah”(x3); “Yeah disgrace”; “It always blows up our parents”; “It’s a culture thing”; “It goes back to your family, it doesn’t just fall on you it falls on your family as well” (Laughter); “It goes back to our parents, not us.”; “Just like in that movie The orator, the mum she fell pregnant how she was young and she was banished from the village because she was [pregnant].” [Female participants]

Many of the participants commented on the intense feelings of shame experienced within Sāmoan families when it becomes known that a young person is pregnant:

“They say the same stuff [the term pride] but they mean different things. Like with Islanders it’s more of an intense feeling of shame and judgment, but with palagi’s it seems like it’s from peers, judgment from peers that you get, from people their age and at school. But with islanders it’s more like,

um, the family shame, or um, putting your family name in the mud, kind of, yeah.” [Key Informant]

Some of the participants noted that parents have strong reactions when they become aware that their young person is pregnant, in some cases publicly disowning their child out of the anger and embarrassment caused:

“So, it’s always like they just found out from the school nurse that my daughter is pregnant and then they go through that whole thing of disowning, you know, we don’t want her, because e ta’u valea ai le āiga [The family name has been defiled; tarnished; shamed; made foolish].” [Key Informant]

Some of the youth participants expressed insights in relation to how their actions can affect their wider family:

“Cause with my Dad’s family, we’re related to the Sa’o [senior chief of a village or family] of our village, and for us, we’ve always had to make sure that we’ve had to stay away from that because if we get someone pregnant or one of my sisters get pregnant, then they just bring shame to the Sa’o of our family.” [Male participant]

The conversations with secondary school students and key informants revealed that family are important to Sāmoan young people and have a significant influence on the sexual health knowledge, attitudes and behaviours. A consistent theme that participants noted was the sacrifices that Sāmoan parents made, migrating to a new country to ensure their children and family had a better life. Both youth participants and key informants revealed that many Sāmoan parents did not directly discuss sexual health issues, such as using contraception or family planning methods with their

children. The discussions with youth participants and key informants suggest this lack of communication between parents and their children were due to a range of reasons. Many parents believe their children are not sexually active, in other cases some parents are uncomfortable having these discussions with their children. Parents' cultural beliefs, such as their beliefs about gender roles and relationships may influence the way in which parents and young people discuss sexual health issues.

The following chapter [6: Discussion] provides insights that help explain the cultural context of Sāmoan parents' views. This discussion has highlighted individual and family factors that influence the sexual health knowledge, attitudes and experiences of Sāmoan young people. At this point a final third factor is introduced and discussed: the wider environment.

5.2.4 Wider Environmental Influences

Environmental factors refer to natural and built elements such as physical, economic, political and technological features that may affect one's health (Kirby & Lepore, 2007; Mmari & Blum, 2009; Svanemyr, et al., 2015). The following factors: socio-economic position; school; the influence of church; societal influences - peers, media, alcohol, and pornography; and living in 'two worlds' were identified by participants.

Socio-economic status:

Key informants commented that some issues such as sexual health cannot be seen in isolation – there are complex social issues that young people and their families are dealing with:

“yeah parents, they feel, it's hard work, it is, it's hard work, poverty and community disadvantage just compound those issues, you know, those social issues, just compound that stuff even more, you know and that's hard because most of our Pacific kids are growing up in low

socioeconomic areas, you know, and that's the, that's the, yeah, that's a concern." [Key Informant]

Examples of compounding issues, such as communication, lack of supports, not actively involved in school or work were identified by participants. This is captured in the following comment:

"Often with these kids it wasn't necessarily sexual deviance, there were other areas in their life that were missing stuff, that we had to work around that and build, build up those supports. Communication with their parents, not being able to have an outlet at home, boredom, sitting at home, nothing to do..." [Key Informant].

Schools:

Youth participants and key informants noted the vital role schools played in the transmission of information and knowledge. Youth participants shared that they learned about sexual health from school. While secondary schools were a common site, a few students mentioned primary and intermediate schools. Information was either taught or delivered by a range of personnel, these included nurses, science teachers, teaching staff, and outside organizations that came in to deliver sexual health programmes. Some youth participants shared that their schools had specific events such as school health days to promote health messages:

"At school – talk on sexual health covers contraception"; "how to be safe" [sexually safe and being in a safe relationship]; "hygiene"; "STIs, STD's"; "serious"; "more interesting"; "focus on the bad stuff that happens"; "STIs." [Female participants]

Some of the key informants identified the protective and positive influence that school health-based services provided, particularly for students that were confident and able to access these support staff:

“So, the lucky girls are the ones that actually do a lot of this stuff [sexual education classes] while they are at school because they get the support of the nurse, the counsellor, the social worker, they make the mistakes, we start to do that relationship information stuff.” [Key Informant]

Female participants presented a variety of views and opinions on the sexual health material taught. Some students identified healthy relationships, contraception, being safe in a relationship, hygiene. However, some participants noted that some teachers don't want to talk about sex and noted few lessons in a year. Some students found that the sexual health lessons were useful as they could ask questions. However, some found having parents in the lesson was not helpful. An interesting feature was identified in one female focus group. The students reported a mixture of experiences with their health classes. Some students had lessons on how the following were used: condoms, pads, tampons, hygiene lessons. However, some students in the same group reported they never received that information:

Interviewer: “So you guys get lessons?” Female participants: “Yeah”; “health, yeah we did last year”; “only in Year 9 and 10, and then they stopped”; “I had it at primary”; “Yeah me too”; “Oh”; “Yeah at intermediate, Did they give this at primary?”; “Yeah”, “Primary?”; “Yeah, in primary and intermediate”; “Well, the basics stuff”; “they’ll have lessons for girls, how to use a condom, oh I mean” (girls laughing) “How to use, pad or tampon and stuff”; Oh yeah”; “yeah that stuff”; “I never got that in my school”; “I never knew that.” [Female participants]

Some of the participants identified that parents held an expectation that the school would provide the sex education. This is expressed in the following comment:

“Yeah (x3) that’s my dad, was like he didn’t have to give me the talk, yeah, I was getting it at school.” [Female participant]

Church:

A common theme identified by youth participants and key informants was the importance of church in shaping cultural beliefs regarding sexual health values, attitudes and expectations. A large proportion of youth participants in the qualitative focus groups belong to a Christian church. As reported in the Methodology chapter (Chapter Three), 95 percent of participants in the school focus groups reported attending a church (54/57).

A common theme raised by both focus group participants was that Christian churches they attended held teachings in relation to the timing of sexual activity; i.e., that sex is reserved for when one is in a marital relationship:

“The Catholic view on sex – after marriage, purity, not committing adultery.”; “Church teachings – not to get girlfriends.” [Male participants]

“No sex ‘til your married; no sex, after marriage.” [Female participants]

“They [church ministers] tell us to get married first and then have sex.” [Female participants]

Some of the key informants shared that some Christian churches have programmes that teach young people about relationships and dating:

“But as for youth groups, you’ll also have some youth groups, the [name] church out in south Auckland does [name of programme], um and they spend a day talking about sexuality and talking about sex and stuff and about relationships, and you know. I think, but that’s a very, it’s not pacific, it’s not a pacific church.” [Key Informant]

The key informants highlighted some church programmes covered a range of issues, including dating, peer pressure, modest and self-esteem. The informants made the distinction that these interventions are not specifically run by Sāmoan churches:

“Because it’s not a Sāmoan church, it’s the [name] church, so it’s the teaching is the same, regardless of what culture you are, the teaching is the same...So when they’re in the youth, from the age of twelve to eighteen, we teach them a lot about peer pressure, self-esteem, the modesty – dressing modestly, and that type of stuff. Remember, then once you reach that age it’s like then the parents’ responsibility is then kind of handed back to the individual, so we are there, then, in the background as a supporter for them but we encourage them to date. And we don’t push them, but we encourage them to date with that person, group dates, you know, and we show them the different ways of dating.” [Key Informant]

Many key informants spoke of the intertwining relationship of Christian and cultural beliefs and the impact this has on young people’s and their families’ ability to receive sexual health messages. Many key informants and youth participants noted that within their families talking about sex is taboo or not openly discussed:

*“Not spoken about with parents because it’s against our Christian value.”
[Male participant]*

“Dad goes into the whole religious thing, of how like, if you had it [sex] before marriage, you to hell and stuff, he’s pretty strict.” [Female participant]

Some key informants noted that while cultural and spiritual beliefs can be a source of encouragement, they can also pose as a challenge for many young people:

“I know for a fact that our cultural beliefs and our spiritual beliefs is a huge barrier to our young ones opening up about sexuality, and I know that is why we have a lot of teenage pregnancies is because it’s not only forbidden religiously and it’s also forbidden culturally to have sex before marriage, and so our children are going behind their parents’ back or their elders’ back and do the deed and become pregnant in the process....Is it because they think sex is a sin before marriage? It always runs through my head, I’m just thinking that’s maybe what they’re thinking.” [Key Informant]

Societal influences - Peers, media, alcohol and pornography:

Participants noted advertisements, internet and music videos as a source for sexual information, particularly using cellphones to access the internet. Key informants raised concerns that young people are living in an environment and society where the promotion of drugs, alcohol and sex, particularly by the media is not constructive in shaping healthy sexuality:

“What’s coming through the media?”; “Normal to do it [have sexual intercourse], songs all about one thing – sex, can be done whenever and media are showing that people are losing it younger and younger”; “It’s different between now and 5, 10 years ago, they really didn’t have the social medias that we have now.” [Female participants]

Many youth participants spoke about messages and images that they saw on Facebook, with some participants noting the types of statuses posted, such as *'hooked up with blah blah'*.

"Technology that's...it's just like the pressure from all of that kind of sites and stuff, and like from media, they like portray this is how you are supposed to be like; "yeah"; (yeah?) "to live, this is the normal thing to do and like, if you don't fit into this, you're not considered"; "yeah"; "and that's looked upon down upon." [Female participant]

Most of the participants noted the sexual nature of advertising in society. Key informants commented on the importance of teaching young people how to respond:

"This is a sexual society...and everything we look at, it's all about sex, unfortunately but that is the way, so how do we teach our kids to respond to those images." [Key Informant]

Key informants raised the point that having strong support people, such as peers around a young person is protective. Peers can either play a positive or negative influence:

"Peers were where the risk comes in, cause we know that from peers and family, well for a lot of the offending kids, they hold them in the same value, their equal....Make sure they're surrounded by good people, because good mates are a protective factor, to antisocial people that are a risk factor." [Key Informant]

Participants noted that some peers promote the idea that it is okay to have sex and encourage their friends to go to parties where alcohol is freely accessible. Some key informants noted that peers may give inaccurate advice and information:

“So the view that they had, they had, actually first, where did they first learn it from, it was usually peers, they were learning from each other, it was definitely something that they wouldn’t talk to their parents about.” [Key Informant]

“Then they’re getting it from the media, they’re getting it from their friends, and...Who aren’t always you know, who are immature themselves and who are unreliable in terms of the proper, right and positive details, information about sexual health.” [Key Informant]

Key informants and some of the youth participants spoke about the negative influence of alcohol. Participants identified alcohol as a risk factor for unwanted sexual activity. Some key informants spoke of their experience in teaching young people what consensual sex was, and about the inability to make clear decisions when under the influence of alcohol:

“Well consent was she said yes, then yeah, obviously it was okay. But if the person was drunk they still thought, well she still said yes, and actually then when a person is not able to make that decision, regardless of what they say, they’re not competent to do so. You know that sort of stuff, she’s intoxicated, she doesn’t know what’s going on, she may appear that she’s saying yes, does that mean it’s ok, for you to you know like? yeah! no, it’s not! Well it’s really educating them around them that” [Key Informant]

Key informants noted the differences between the learning needs of female and male students. Key informants and some female participants noted the influence of pornography as the primary source of sexual information for males. Participants suggested that males believed relationships should mirror what was shown on pornographic movies. Interestingly, in the male focus groups the word 'pornography' was never mentioned; however, there was often laughter amongst the male participants at references made to internet and movies:

"What I used to do in my puberty classes in primary school was that I do one together and then separate them because the girls were wanting to talk about periods and things like that. But the boys, all they wanted to talk about was what they saw on somebody's blue [pornographic] movie and 'is that real?' 'No it is not'....no-one's really giving them the instruction, and they get mocked in class that's where they're learning about what sexual relationships should be like." [Key Informant]

"Boys and porn – the way they treat girls, then they watch heaps of porn and think that's how you have sex." [Female participant]

Living in 'two worlds':

A consistent theme expressed by participants in the youth focus groups and by key informants is that many Sāmoan and young Pacific people are raised in a New Zealand environment that has competing and contrasting values when compared with their parents and their parents' Sāmoan upbringing. This may make it difficult for positive connections to occur between young people and their families. Many youth participants spoke about the challenges with understanding their parents and the different belief systems:

“I don’t get how Pasifika parents bring to a different country which they know have a different system to how their country works. I don’t get how they want us to go to school at this specific place with different people with different morals and beliefs and expect us not to interact with these other morals, beliefs and other way of thinking and then we get into trouble when we go back to them and ask them, ‘where did you hear that, who told you this?’ Are you kidding me? This is where you put me. I don’t get it.” (Female participant)

One Sāmoan key informant shared her own experience of these ‘two worlds’. She shares how her education including the understanding of adolescent development has shaped her worldview:

“Before I even did my degree as a [health worker] I was following the same pattern that my parents laid out for me, that my grandparents laid out for my parents, you know, and so on. So that pattern is that you do not have sex before you are married....but my education has changed my thoughts, you know, my education has really brought the balance between my culture and religion and the westernised understanding of medicine, and the human development of infant to childhood to adolescent...since then have changed the way I’ve approached my kids.”
[Key Informant]

Youth participants express a desire to bridge these two cultures and adapting to their changing environment, particularly helping their parents understand their realities:

“But cause it’s of two different cultures, we’re New Zealand born and their Sāmoan born, they [parents] have a different view point of what we are

brought up with, so it's like, finding a way to like make the two cultures understand each other." [Female participant]

"I love being a Sāmoan so much I just...I'd never change I don't want to lose my Fa'a Sāmoa [the customs and language of Sāmoa] but I want to adapt to a different world." [Female participant]

Understanding and appreciating the cultural issues and tensions experienced by Sāmoan young people may offer insights into addressing sexual health issues for Sāmoan young people and their families. The following quote from a key informant highlights the need to adapt to the present reality for many young Sāmoans:

"We're not in the pacific way in New Zealand anyway, we are into fifth sixth generation born kids, you know kids that will never go to Sāmoa, they don't see Sāmoa as home, we have to adapt, and that's the reality, and we have to adapt to where our kids are going to....so it's a give and take, about letting our kids be honest about their feelings and about how they feel, balancing that with respect, you know, but knowing that it is changing." [Key Informant]

5.2.5 Section Summary

The information shared by Sāmoan secondary school students and key informants reflect that sexual health knowledge, attitudes and behaviours are derived from a range of sources. These include: the individuals themselves, family, school, church and societal influences. There also appears to be diversity in sexual health knowledge and understanding in relation to sexual health matters. Societal influences such as peers, social media, cultural attitudes and access to alcohol also affect sexual health knowledge and behaviours.

The concept of 'living in two worlds' appears to be an important feature for Sāmoan youth living in Aotearoa, New Zealand in that it was consistently raised as triggering tensions for Sāmoan secondary school students. Whilst this is addressed in the following chapter, it is useful to recall that an increasing number of Pacific parents have been born and educated in New Zealand; therefore, it is likely that some of the cultural issues described will disappear as the next generation of parent adopt different ways of relating and communicating with their children.

A further theme that emerges from the students' focus group discussions and key informant interviews was the emphasis and relative importance associated with maintaining family pride; that a young Sāmoan is to act in a manner that is respectful and upholds the family name. There is deep shame felt by the family if a young person were to become pregnant out of wedlock. Many youth participants expressed that Sāmoan parents expected that they (their children) would become sexually active after marriage. Many youth participants and key informants also shared that there was very little discussion about sex between a Sāmoan young person and their parents. However, there were a few exceptions, with some Sāmoan students sharing that they have had conversations about sex with their parents. This appears to be a relative minority from the overall group of Sāmoan students.

The following section (5.3) explores characteristics that youth participants and key informants felt were important for public health interventions.

5.3 Public Health Interventions

This section highlights characteristics that Sāmoan secondary school students and key informants identified that may assist public health interventions to address sexual health issues for Sāmoan young people. This discussion meets two of the four study objectives:

- ❖ Explore the perceptions of that Sāmoan secondary school students and key informants on sexual and reproductive health issues;
- ❖ Explore the significance of these findings to public health interventions and policy (see Chapter 1.5: Research Objectives).

Audiences – Pacific parents and their families and church settings – to whom public health interventions warrant direction are identified. The section concludes with an outline of components that can assist with intervention efforts.

5.3.1 Audience – Who and Where to Direct Resources Towards

In order to support Sāmoan young people to achieve positive sexual health (Ministry of Health, 2001b) key informants and youth participants were asked where they thought sexual health interventions be directed. Parents and families were the most commonly identified groups that participants felt needed support and investment. Schools were briefly mentioned in the interviews; however, the limited discussion may be attributed to the fact that sexual education (in schools) is already taking place. As outlined in the Literature Review (Chapter Two) sexuality education features in the health and physical education strand of the New Zealand Education Curriculum (Education Review Office - The Ministry of Education NZ, 2007b).

Parents & families:

The most commonly cited initiatives by youth participants and key informants were programmes specifically targeted to Sāmoan parents and families:

Interviewer: “But what I will ask you is in your guys’ minds what would work? What would work to help you guys to make sure that every time the opportunity arose either you would be able to say no or you would be able to make sure that everything was safe? What would work for you guys?”

Male participant: “Parents talk to you”.

Interviewer: "Parents?"

Male participants: "Yeah"; "Parents knowing about what you're doing."

"Parents – teach them that sexuality is important to us, it's not a negative thing."

[Female participant]

"But I think, one of the big things is that we do need our families to talk more about it, and to bring it into the room more and, cause you know, who better to teach our kids than parents." [Key informant]

Targeting Sāmoan Parents & families through Churches:

Most of the key informants identified churches as a primary intervention site to connect and communicate messages to Sāmoan parents. The important and influential role of church ministers was commonly noted by youth participants and key informants:

"Ways forward? yeah family, family, it's got to be with our families, and it's not easy work though, and I think we can hit them all if we get into the churches, you know, there's always that thing oh that our target our youth, actually I don't necessarily think that's where our youth will be targeted, it's I think where our parents can be targeted, you know?" [Key Informant]

"Churches are a point to help shift parents thinking"; "pastors"; "the whole church" [Female youth participants]

Pacific churches are more recently being utilised as a site for health promotion and interventions by government agencies. Many of the key informants mentioned the need to raise issues in ways that respect church teachings. The following quote highlights interventions currently taking place in Pacific churches in Auckland:

“And through those programmes that they have in churches such as ‘The HVAZ [Healthy Village Action Zones] here in ADHB, [Auckland District Health Board] the Lotu Moui programme in Counties and I think they have one out in West as well, they should be going into the churches and talking about sexual health as well and sexuality and friendships, relationships.”
[Key Informant]

5.3.2 Intervention Components

Youth participants and key informants were asked what they felt would assist in the design of sexual health intervention programmes directed at Sāmoan and Pacific youth and their families. Key informants provided a greater depth of information as reflected in this discussion of intervention components. The following components were identified.

Acknowledging Values and Challenges:

Many of the participants commented on the challenges in addressing sexual health issues with parents. Interventions that are delivered in a way that recognizes and are respectful of cultural and Christian values is important. Some key informants and youth participants identified the strong values held by parents and accepted that it may be difficult to change long held attitudes. A key point raised by many key informants is the need to have a good relationship with parents:

“I think it’s important to know that, we go into it with our eyes open and it is a challenge, being in the room I find it challenging with parents and trying to change their attitudes because you’re dealing with attitudes that they’ve been raised in, and that the only beliefs that they know, so the only way that they’re going to think oh maybe it is something worth listening to is if I’ve got a good relationship with them.” *[Key Informant]*

Most of the youth participants and some key informants spoke of the strong cultural and religious values held by parents. The following quote from a key informant highlights the importance of giving Pacific parents an informed choice, and not altering their cultural values:

“It’s trying to help parents understand what – it’s not – people think that it’s mistakenly trying to alter the cultural values. And what it is it’s trying to help parents, give them the best well-informed information so that they can make the best decisions to help their children out because it’s like that nothing or the extreme.” [Key Informant]

Messengers and leaders:

Most key informants and youth participants identified the importance of having the right messenger and leaders to deliver sexual health messages. These individuals (or groups) need to have the skills, experience and ability to understand the issues for different groups, such as teenagers or Pacific parents. Messengers who are professional can keep conversations confidential, and expressing a non-judgmental attitude is important. Some of the youth participants commented upon the age of health promoters. Most participants noted that having a younger person deliver a programme is an advantage as the worker can relate to the youth audience, as well as separating females and males into separate groups. There were also a range of perspectives on the ethnicity of the worker. Some of the youth participants like having Pacific workers as they believe they can relate well, others however, were open to workers of other ethnicities. The following excerpts highlight the value of ethnicity and separating males and females into separate groups:

“Get islanders to inform islanders, get a high educated islander because they do look up they say it’s an educated person we’ll listen okay okay” [Female youth participant.] [Female participant]

“So, I think that connection thing, the colour of your skin, the fact that you can speak Sāmoan does help with our Sāmoan kids. Round sexuality I think it’s important that the girls have their own space, you know a lot of providers do boys and girls together. But I find that it’s better to do them separately. I don’t know if – that’s an approach that I find is better with our Pacific. Because the girls have so many questions that they don’t want the brothers that might be in my next group to hear, or cousins.” [Key Informant]

Female participants commented that having outside organisations come into their school and deliver sexual health interventions was positive especially as these workers used mediums such as humour and drama that depicted real-life issues and stories that they could relate to:

“Yeah cause I think we connect more with the jokes than with more seriousness; cause Sāmoans are all about jokes (laughter).” [Female participants]

Many of the key informants spoke of the importance church had in the lives of Pacific youth and the influence of church leaders on influencing the perspectives of Pacific parents. This is a potential area worthy to explore. Other messengers include the nurses and support staff within schools. A further point raised by key informants was the role of language, where those delivering interventions can speak in the language of the audience, whether they are young people, or older Sāmoan parents and church ministers. The following excerpt exemplifies how a Sāmoan key informant applies some of these components with her work with Sāmoan clients. She shares the importance of establishing rapport and trust with Sāmoan clients. Building relationships are crucial and rephrasing sexual terms into language that conveys respect is also important:

Interviewer: "How was it working with the parents, those first kinds of conversations?"

*Key Informant: "Challenging, it was hard, how do you say in Sāmoan, you know, I'm here to talk about your son's sexual offending behaviour, cause **you can never say it literally** [emphasis mine], it's always rephrasing it in a way that I know that you know what this is, it's inappropriate behaviour, or behaviour that's been, I can't think of a word, amio faaletonu [unrighteous behaviour], amio foi lele, le talafeagai [behaviour that is inappropriate]...You know you're not actually saying the word sexual or offending and the parents will pick that up, I mean, you had to kind of go around the mulberry bush a few times to get their, first their engagement and their ability to trust you, to figure out what you're doing is for these reasons. Otherwise when you launch straight into it, and say ladadadadda, they're not going to come on board."*

Tailoring & targeting information:

As highlighted, some key informants and youth participants shared that developing interventions for Sāmoan parents requires specific targeting of messages. Key informants had much to share about the ways in which Pacific languages were incorporated in their work. This includes tailoring resources or guides in various Pacific languages to help parents deal with the potential discomfort that may arise when discussing sexual health issues. The importance of language was expressed by some of the key informants:

"I don't beat around the bush and try and use the perfect Sāmoan language, I use the day to day language, easier for them [Sāmoan parents] to understand." [Key Informant]

"Well if I was Sāmoan I'd speak in Sāmoan [to Sāmoan clients], with Tongan [clients], it was just trying to make sure that I was

understood....just to make sure that I knew that they were taking home the right message. Different kinds of challenges with Pacific and different kinds of challenges with non-Pacific.” [Key Informant]

Some key informants shared the importance of tailoring messages that target the entire family, not just the young person or Pacific parents. These interventions could target both the young people and their parents in individual forums as well as in a combined forum. An important aspect is to ensure that cultural values, such as respect, are still maintained:

Interviewer – “What other thoughts as to what you reckon might make for good intervention with our families and kids?”

Key Informant – “The fine balancing act I think, is they have to get the hard facts together with a fa’aaloalo [respectful] way to be able to communicate with all people in the family, the parents, the grandparents, the aunties and the uncles, and all the kids....It’s not about like diabetes or sexual health or mental illness, the main thing is around critical thinking and critical awareness. So, if you’re able to question and if you’re able to get the best informed decision – best information to make well-informed decision making processes, the better off you’re going to be.” [Key Informant]

Timing of conversations:

Many of the key informants noted that conversations regarding relationships and sexual health often occur too late, once their child is pregnant. Many key informants noted the importance of prevention programmes. An interesting point raised by a key informant is the increased attention paid by parents once their child is pregnant. Key informants commented on the need to have conversations now:

“but then they [parents] don’t talk about it [sexual health] and they don’t allow anybody else to talk to them about it either, do you know what I mean, and so as soon as a child is pregnant that’s when they start talking about it. Because then our people are more on...they’re not...see, they’re all in the cure, they’re all in the cure but not in the preventative.” [Key Informant]

Comprehensive Interventions:

Most key informants acknowledge that Pacific youth and their families may be experiencing complex social issues. This can in turn influence sexual health issues and choices. Key informants identified various social determinants of health, such as poverty and community disadvantage that impact health:

“yeah parents, they feel, it’s hard work, it is, it’s hard work, poverty and community disadvantage just compound those issues, you know, those social issues, just compound that stuff even more, you know? and that’s hard because most of our pacific kids are growing up in low socioeconomic areas, you know, and that’s the, that’s the, yeah, that’s a concern.” [Key Informant]

Most key informants discussed the need for comprehensive intervention programmes that address the complexities that Sāmoan young people are experiencing. An important point raised by key informants is the need to work collaboratively across sectors:

“But I think when you look at the world that these kids grow up in today which are really complex worlds then I think that we need a more complex approach to managing those. And I don’t believe that it’s any person or any – whether it’s health or education or whatever – I don’t

believe it's any one thing that makes the difference. I think it's the whole wrap around thing that makes the difference and so people working within these environments need to be work collaboratively, to acknowledge each other's skills, to not be patch protective or not be profession protective thinking that I'm the only person that can do this because a lot of it comes down to who the relationship is best with." [Key Informant]

Many key informants identified the need for programmes to have an early intervention focus, teach about good self-esteem and resilience. Key informants noted the importance of interventions that have health promoting messages, which are simple for an audience to understand, and messages that are clear and consistent:

*"I mean I can sit and I can speak for hours and hours but if there's one sentence of one thing – that's why that **safe, happy, healthy** [emphasis mine] thing is a really good thing for me to get through to kids. Because I say to them when you make a choice just think of those three words and if you can tick those boxes then it's going to be okay and if you can't well then think about it you know?" [Key Informant]*

But I'd like to see far more invested in preventing the teen pregnancies, to doing the stuff that I'm talking about – you know the self-esteem - the resilience stuff to get that stuff better so actually we don't have to deal with the teen parent unit stuff you know?" [Key Informant]

Some key informants proposed that programmes normalize sexuality and a positive view of sexual health is fostered. Some key informants spoke about openly naming body parts (for example, vagina, penis) in the same way a person would speak about their ear or eyes. One key informant noted that there are a lot of support groups for

teenage mothers but very rarely were there programmes for teen dads. This is an area that may require further study. Key informants also identified the need for interventions that help young people develop an understanding of what qualities make for healthy relationships. In addition to this understanding, that sexual health programmes empower young people *'to look at things differently'*, such as what respect looks like in a relationship. These programmes can also extend and focus on building healthy relationships between youth and their parents.

Some of the key informants raised the tremendous guilt some young people face over past sexual choices. This unresolved guilt, coupled with strong Christian teachings that discourage sexual activity, can lead to the development of mental health issues for the young person, such as depression. Interventions can also focus on 'choices', assisting young people to understand that although they may make poor choices, it does not make them a 'bad person'. This may include a reflective focus, encouraging young people to reflect on the learnings from failed relationships.

Acknowledge that effective interventions will take time:

Key informants in the study noted that high-quality and effective sexual health interventions take time to design, implement and to show positive or negative effect. There are some sexual health programmes that may last for 12 weeks that are on offer. However, it is important to explore the continuity in sexual health care support beyond 12 weeks, especially for young people who have left secondary schooling and are no longer able to access health support within their schools. A further challenge noted by some key informants was measuring the difference made by their input:

"You know it does take time. And you know the other thing that is how do we measure the difference that we make? At the moment I'm being expected to measure the difference that I've made here and now. But I know that I make

a lot of difference to young people's lives five years after they leave school because I've had feedback from people..." [Key Informant]

Policy and Evaluation

Key informants noted the important role of policy and evaluation. A few of the key informants noted that value of undertaking evaluations in their current work, as this can show if they are doing a good job. However, as previously expressed, there is some difficulty in measuring the difference made, particularly when the impacts may appear years later. Some commented on the need for public policy writers to have some understanding of what is happening at "grass roots" level. Informants noted that while they may be able to directly influence a few young people and their families, well developed policies have the potential to impact a larger audience:

"The change is at policy level, that's where the change. You know where I work, I can possibly make one change of a what a young person's' life. You know all the work that I do, is just one, but do you want to impact on one? or do you want to have the ability to impact on a group of people? And it's at that policy level where we need to be more, that's where we need to be more influential on. And what comes from that is research, research has to inform policy, and it has to be robust research, it has to be efficacious, it has to be effective." [Key Informant]

5.3.3 Section Summary

The findings drawn from interviews with Sāmoan secondary school students and key informants suggest that public health interventions direct their efforts in regards to supporting Sāmoan parents and families. A few programme components (specific to public health interventions) were identified by participants. These included: acknowledging cultural values and the challenges in addressing sexual health with

Sāmoan parents; use of appropriate messengers and leaders; tailoring and targeting information; comprehensive interventions; and policy and evaluation efforts.

5.4 Chapter Summary

The findings drawn from interviews with Sāmoan secondary school students and key informants indicate that there are three factors that influence sexual health knowledge, attitudes and behaviours. These are: 1) individual factors, 2) family factors and 3) environmental factors. This information has enabled a deeper understanding of the issues facing Sāmoan young people and their families – a key strength of qualitative research (Creswell & Plano Clark, 2011). As shown throughout the commentary, there are many inter-related issues that influence sexual attitudes and behaviours, these include: role of gender, suicide attempts, Sāmoan young people living and navigating ‘two worlds’; schools; church and cultural beliefs, peers, media, alcohol and drug use. Study participants (students and key informants) consistently raised the important influence that Sāmoan parents and families had in shaping knowledge and attitudes.

The discussions with Sāmoan students and key informants revealed that directing public health efforts towards supporting Sāmoan parents and families, particularly through church settings, would be a valuable investment. Study participants also identified a few elements for programme delivery.

The previous chapter (Chapter Four: Quantitative Results) show a diversity of sexual behaviour and practices for Sāmoan secondary students. As a result of the multi-variate analysis, eight factors were shown to heighten sexual risk or act as a protective factor. In this chapter the analysis from focus group discussions with Sāmoan secondary school students and key informant interviews responds to the primary aim of this study:

- ❖ Identify factors that influence the sexual health knowledge, attitudes and behaviours of Sāmoan secondary school students in Aotearoa, New Zealand.

These qualitative results also address three of the four study objectives:

- ❖ Explore and describe risk and protective factors associated with sexual behaviours among Sāmoan secondary school students in New Zealand;
- ❖ Explore the perceptions of Sāmoan secondary school students and key informants on sexual and reproductive health issues;
- ❖ Explore the significance of these findings to public health interventions and policy.

In the following chapter (Chapter Six: Discussion) the main findings from both this qualitative component and the quantitative component are reviewed.

CHAPTER SIX: DISCUSSION

6.1 Chapter Overview

This chapter reviews findings from the qualitative and quantitative analysis. The discussion of these findings is comprised into three sections: 6.2; 6.3; and 6.4 (as depicted in Figure 27). This diagram illustrates the alignment of information with the overall study aim and objectives.

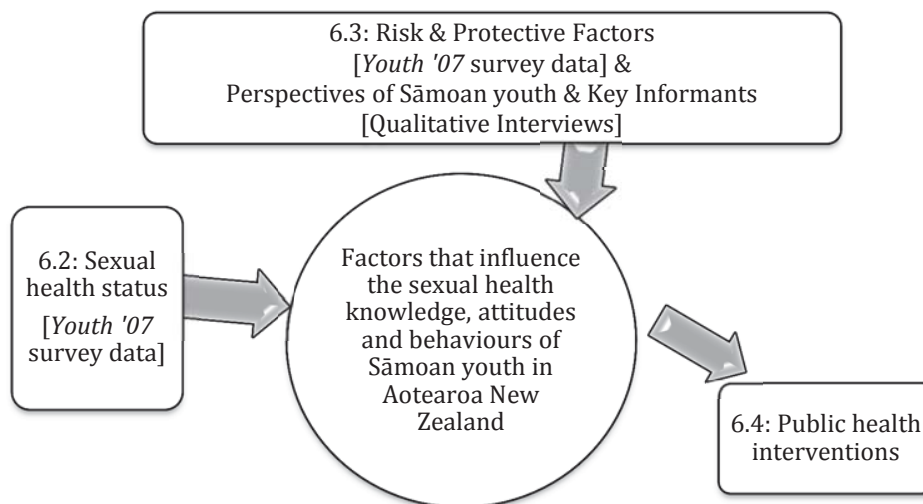


Figure 27: Study objectives

Key aspects of the survey design are revisited (see 6.1.1). In the first section (6.2), an overview of the sexual health status of Sāmoan secondary school students is presented.

In the second section (6.3) three broad factors that influence the sexual health knowledge, attitudes and behaviours of Sāmoan youth are explored. These factors: individual; family and wider environment are reviewed. As a reminder, risk factors are those that encourage behaviours that might lead to pregnancy or sexually

transmitted infections, while protective factors encourage behaviours that may prevent pregnancy or sexually transmitted infections. Within each of the three broad factors, 12 sub-factors are highlighted. These sub-factors were identified from the qualitative and quantitative analysis. In some cases, the sub-factors were only identified from one source, for example, age was identified in the quantitative analysis. In other cases, the same sub-factor was identified from both sources. For example, suicide was identified in both the qualitative and quantitative components. The links between risk and protective factors as identified from the quantitative findings and those identified in the focus group discussions are specified.

While the 12 sub-factors have been assigned to a single broad factor, they may also overlap into the two other factors. For example, where a young person resides or lives is classified as an 'environmental factor' in this study; however, some may argue that this is a 'family factor', that where a person lives may reflect a family's financial and social situation. It is important to clarify that these sub-factors *do* overlap across the broad factors; and that their placement is intended primarily to provide a clearer understanding. Throughout this discussion pertinent issues for policy consideration are highlighted.

In the final section (6.4), the significance of these findings for public health interventions are briefly revisited. The importance of community values and cultural input and the connection with public health interventions is discussed. The relevance and usefulness of these study findings are also highlighted.

6.1.1 Survey Design

It is useful to revisit the key tenets of the survey design before reviewing the study findings and their inherent limitations. Employing a mixed methods study enabled a comprehensive understanding of sexual health issues facing Sāmoan youth living in Aotearoa New Zealand. As noted in the methodology chapter, qualitative and

quantitative findings are merged in this stage of the study. There are clear differences between the two strands which employed different tools of analysis, were conducted at different times (2007 and 2012) and were drawn from different population groups.

535 Sāmoan students participated in the *Youth '07* survey. This correlational research enables the exploration of which variables may be related. The results of the multivariate analysis revealed eight factors that were significantly associated with sexual health behaviours. This means that the results cannot have occurred by chance (Walter, 2013). However, while two things are related, or correlated, does not mean there is a causal relationship. In reviewing the quantitative findings, caution is urged as there is also the possibility of bias. For example, although 189 of students reported sexual activity, the final numbers in the calculations varied, for example, only 90 answered some related questions.

There may be certain important characteristics of those students who were not included in the analysis (i.e. students that did not answer questions) which cannot be considered here. Furthermore, the potential for reporting bias exists in the *Youth '07* survey (Grinnell & Unrau, 2005). For example, males may have over-reported sexual activity and female students may have under-reported sexual activity due to stigma; reporting behaviours that are socially desirable. There is also the possibility that students interpreted questions differently from each other, for example, '*About how old were you when you first had an experience of sex? (By this we mean sexual intercourse or going all the way)*'. Some students may consider touching in the genital region or oral sex as 'going all the way'.

In the qualitative component, the 55 students who participated in focus group sessions were purposively selected to present as close as possible, a cross-section of the Auckland Sāmoan population in the 16 to 19 year age and gender group. In addition, eight key informants with extensive experience in their respective fields

were selected. However, given the small numbers and the recruitment process utilised it is not possible to conclude that the findings represent the experiences of the wider population of Sāmoans living in New Zealand. For example, the sampling method had a greater portion of students from Catholic schools (37/55) when compared with state schools (18/55). Students attending Catholic schools are exposed to theology and education that is vastly different from the experience of Sāmoan students attending state schools. However, the inability to generalize the qualitative findings does not rule out the possibility that the issues and experiences are common to other Sāmoan, and Pacific youth living in New Zealand.

The study design aligns with guidelines proposed by sexual health advocates (Avery & Lazdane, 2010; Kirby, 2007; Ministry of Health, 2001b) whereby the sexual health needs of young people are identified. This includes reviewing survey data on adolescent sexual health behaviour and conducting focus groups or interviews with young people about their reproductive health concerns and interview adults who work with young people (Kirby, 2007). However, it is important to note that this study did not directly compare the experiences and behaviours of Sāmoan youth with other ethnic groups due to the study parameters. While some of the interview participants drew their own comparisons, primarily identifying *Palagi* (a white, non-Sāmoan person) as a reference group, direct comparisons will not be made.

6.2 Sexual Health Status – The Current Picture

To understand the factors that influence the sexual health knowledge, attitudes and behaviours of Sāmoan youth, it is useful to ascertain first what the current sexual health status is. The need for accurate recording of sexual health information in New Zealand has been identified (Clark, et al., 2006; Health Committee, 2013; Ministry of Health, 2001a; New Zealand Government, 2014). Sources of sexual health information are reportedly incomplete and there are no systematic surveillance systems that gather this information regularly and in a reliable way (Clark, et al., 2006).

The review of the literature shows there is very little quantitative data on the sexual health behaviours for Sāmoan youth. Although there are a number of national health studies that identify sexual and reproductive health patterns (Adolescent Health Research Group, 2010; Ministry of Health, 2014b; Morton et al., 2014; Paul, Fitzjohn, Herbison, et al., 2000), there are few that report the sexual patterns by ethnicity. The *Youth 2000* health and wellbeing series is one of the few New Zealand studies that report the health information (including sexual health) for ethnic groups. Information on the health status of Māori (Clark, et al., 2006), Chinese, Indian and Asian (Parackal, Ameratunga, Tin Tin, Wong, & Denny, 2011), and Pacific students (Helu, et al., 2009) are available.

The Ministry of Health (2001) has concluded that accurate and timely information is required in order to design policies and interventions that can assist local communities. Although there is a great deal of research undertaken that captures the health status of the general population, my inference from the literature is the need for direct investment into reporting sexual health information by ethnicity. However, also recognizing that the rates of intermarriage for Pacific groups in New Zealand are high the interpretation of larger amounts of 'ethnic data' may be problematical unless information on the ethnicity of both parents is also provided. (Statistics New Zealand, 2015b). This information may assist in tracking the social change for Pacific groups.

6.2.1 Sexual Activity

In this study, the quantitative findings show that 45 percent of Sāmoan students report an experience of sexual intercourse, with two-thirds of those who have had sex reporting their first experience before the age of 15 years. This is an increase in the proportion of students that have had sex when compared with an earlier survey undertaken in 2000. In the *Youth 2000* survey, 32 percent of Sāmoan students reported an experience of sex (Ulugia-Veukiso, 2010). The Sāmoan findings from the *Youth 2012* survey, the third national health and wellbeing survey of 8,500 secondary

school students in New Zealand, are not yet available (Clark, Fleming, Bullen, Denny, et al., 2013). However, the general survey results show that a quarter of New Zealand secondary school students (25% male and 24% female) reported ever having had sex. A direct comparison of the *Youth '07* survey information with the recent 2012 study results is challenging, as the 2012 survey explicitly told students not to include abuse or unwanted sexual experiences. This question was not stated in the 2007 and 2001 surveys. Therefore, it is likely that the reduction in the number of students who reported ever having sex in 2012 may reflect this question change (Clark, Fleming, Bullen, Crengle, et al., 2013).

Of Sāmoan secondary students that have had sexual intercourse, a considerable proportion (83%) had their first experience of sex before the age of 15. A study with New Zealanders aged 17 to 24 years (Psutkla, et al., 2012) show that 21 percent of respondents reported that they had sex before they were 16 years old. These statistics prompt questions that are outside the scope of this study. This issue of consensual sex for those under the age of 16, particularly those who have had consensual sex between the age of 14 and 16 years, has sparked intense public debate in New Zealand. Targeted measures in education settings, such as secondary school or charter schools, may be effective because of the relatively high level of coverage. An interesting observation from the youth focus group interviews is that only the males that identified the legal age of consent in their discussions. This was not mentioned by the female participants.

6.2.2 Vulnerable At-risk Group

In the analysis of the quantitative findings from the *Youth '07* survey, it appears that there is a group of Sāmoan youth that are most vulnerable to negative sexual health outcomes (unintended pregnancy and sexually transmitted infections). This group includes the 35 percent of sexually active students that do not consistently use contraception (that is, did not use a condom on their last occasion of sex). Similar

research conducted with Māori youth show that report 29 percent do not consistently use contraception (Clark et al., 2006).

Other features of this at-risk group include students reporting high-risk activities. These activities include: students having sex with someone they didn't know that well or had just met (31% of respondents; 58/186); students having four or more sexual partners (16% of respondents; 28/172); students being touched in a way or made to do sexual things that they didn't want to do (16% of respondents); and students who had been pregnant or made someone pregnant (16% of respondents; 29/178). The research scope and design was not conducive to exploring in great depth some of these sensitive issues and others such as abortion, unwanted sexual activity or rape. It is unlikely that these behaviours are unique to Sāmoan students. Similar studies highlight at-risk behaviours of other student groups living in New Zealand (Clark, et al., 2006; Psutkla, et al., 2012). Considering these quantitative findings, further research and programmes that address the needs of vulnerable students, as raised in similar research (see Clark, et al., 2006; Psutkla, et al., 2012), are warranted.

6.2.3 Students Who Have Not Had Sex

The quantitative findings revealed that 55 percent of Sāmoan students have not had sexual intercourse. Exploring the characteristics of this sub-population of students is beyond the scope of this study. However, this finding raises the question, are there unique characteristics in relation to this group of students that have not had sex? Findings from a New Zealand longitudinal study (Paul, Fitzjohn, Eberhart-Phillips, et al., 2000) showed that being first born and being persistently involved in religious activities were significant predictors of abstinence until age 21. While these findings are not generalisable for the Pacific community, as Māori and Pacific peoples were under-represented in this study, they signal the possibility that protective factors are present.

A further question outside the scope of this study is what resources and supports are available for young people who become sexually active when they leave high school? Youth participants and key informants revealed a range of supports available within the secondary school setting. Students can approach staff such as nurses, counsellors, social workers and teachers to discuss sexual health issues. Will students who have left high school have the skills and confidence to access sexual health services? Future research can explore these questions in further depth.

6.2.4 Summary of Sexual Health Status

This study reports on the sexual health status of Sāmoan youth in Aotearoa New Zealand. Some key issues that emerge include the need for improved reporting systems and focused interventions that address a vulnerable group of students that are engaging in at-risk and harmful behaviours. These issues are not unique to the Sāmoan youth population. They have been highlighted in current policy documents and discussions (Bagshaw, 2011; Gluckman & Hayne, 2011; Health Committee, 2013; Ministry of Health, 2001a; New Zealand Government, 2014).

The quantitative findings present an overview of the sexual health status of Sāmoan secondary school students in 2007. This information contributes to the New Zealand and Pacific sexual health literature. Although the data was drawn from a secondary student cohort in 2007, comparisons with current (and future) cross-sectional and longitudinal studies will enable policy agents to track changes in sexual health behaviours for this population group. It is also likely that the results from these surveys will reflect the influence of the internet and social media, and the increased exposure to material on sex and sexuality, as much as it reflects the effects of policy and public health initiatives.

6.3 Factors that Influence the Sexual Health Knowledge, Attitudes and Behaviours of Sāmoan Youth in Aotearoa New Zealand

The analysis of the quantitative and qualitative study findings suggest that three broad factors influence the sexual health knowledge, attitudes and behaviours of Sāmoan youth. These factors are: the individual, family, and wider environment (as depicted in Figure 28 below). Within these broad factors there are 12 sub-factors that play a protective role or heighten sexual-risk taking. It is also important to note that some factors are not exclusive to one domain. For example, violence can be classed as an individual or a family factor. The depiction of broad factors is consistent with existing models in the sexual health literature that incorporate an ecological perspective (Clark, et al., 2006; Kirby, 2009; Mmari & Sabherwal, 2013; Paul, et al., 2000; Svaneymyr, et al., 2015).

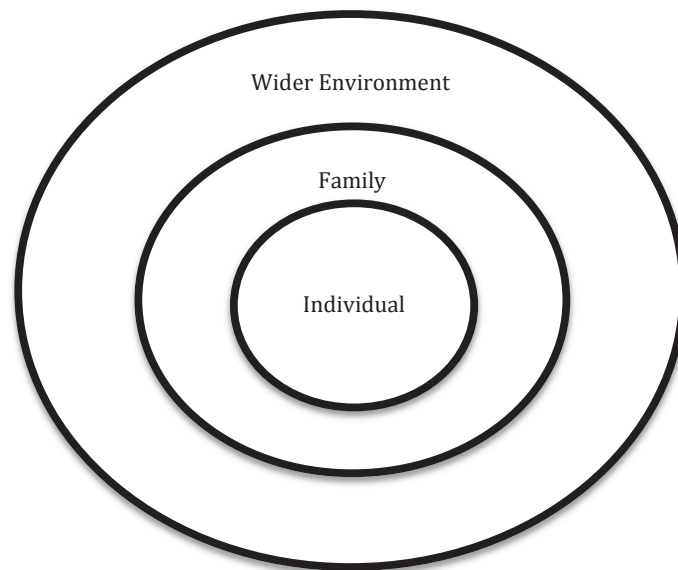


Figure 28: Broad factors which influence the sexual health knowledge, attitudes and behaviours of Sāmoan youth

6.3.1 Individual Factors

Three sub-factors: mental; physical; and spiritual provide a way of explaining key individual factors that influence the sexual health knowledge, attitudes and behaviours for Sāmoan young people (see Table 36 below). These three factors align with a Pacific model of health and wellbeing (Pulotu-Endemann, 2001) and incorporate the extensive range of individual level factors identified in the sexual health literature (Kirby & Lepore, 2007; Mmari & Blum, 2009; Svaneymyr, et al., 2015). The analysis of the *Youth '07* survey data showed six individual factors are significantly associated with one or more of the three sexual health risk behaviours. These six factors are: age, understanding of the Sāmoan spoken language, having worked in a paid job, driving dangerously, witnessing violence and suicide attempts. The qualitative interviews revealed two factors: suicide and gender differences (see Table 36).

Table 36: Individual factors that affect sexual health knowledge, attitudes and behaviours

	Quantitative findings	Qualitative findings
Mental	<ul style="list-style-type: none"> • Sāmoan language comprehension 	
Physical	<ul style="list-style-type: none"> • Age • Having worked in a paid job • Driving dangerously • Witnessing violence 	<ul style="list-style-type: none"> • Gender differences: treatment of females
Spiritual	<ul style="list-style-type: none"> • Suicide attempts 	<ul style="list-style-type: none"> • Suicide - breakdown in romantic relationships

1. Mental

Sāmoan language comprehension

The term 'mental' is used to describe an individual's skill and understanding (Kirby & Lepore, 2007). Language comprehension, in this case the understanding of the

Sāmoan language, is thus described as a mental factor. Although key informants and the youth participants did not discuss the relationship between language comprehension and sexual health in the qualitative interviews, findings from the quantitative study suggest that a lack of understanding of the Sāmoan language is a protective feature. It seems therefore, that students who do not have a good understanding of the Sāmoan language were three times more likely to have used contraception at last sex compared to students who did have a good understanding of the Sāmoan language.

This finding differs from international sexual health studies that explore sexual health, language and culture (Greenman & Xie, 2008; Schuster, Bell, Nakajima, & Kanouse, 1998). Studies have shown that among Asian adolescents, speaking English at home was associated with higher rates of sexual activity, compared to those who did not speak English (Greenman & Xie, 2008; Schuster, et al., 1998) The general theory is that for students who speak a language other than English, presumably a language of their own culture, may keep elements of their original culture. For example, they may hold the more conservative values towards sexual health (Homma, Saewyc, Wong, & Zumbo, 2013).

Caution must therefore be exercised in interpreting this finding as there are a range of possible explanations to explain this phenomenon. It may be the case that language competence may also be indicative of some other social factor that influences sexual conduct; for example, that students are more likely to hold to the values expressed by their more conservative Sāmoan parents. This may explain the correlation with the group of students who had more proficiency in Sāmoan language and were less likely to use contraception. By contrast, students who are less proficient in the Sāmoan language may be less integrated into traditional Sāmoan norms and practices that generally hold conservative sexual health values in relation to contraception.

English may be the primary or first language for this group of students. This is highly likely given these students are attending English speaking schools. Therefore, this group who are competent in the English language may have a better understanding and may have a better ability to negotiate with healthcare services to access contraception. On the other hand, students who are proficient in the Sāmoan language may well lack a comprehensive understanding of the English language and therefore may therefore be less competent in accessing contraceptive services. Moreno, Morrill, and El-Bassel (2011) notes that in sexual health studies, language is often used to identify acculturation patterns, however, language in itself is not a reliable concept. There is difficulty in assessing how much the relationship with risky sexual behaviour can be attributed to language per se (Moreno, Morrill, & El-Bassel, 2011). Ultimately more information is needed to describe the characteristics of the group of students who do not have a good understanding of the Sāmoan language. Further research is needed to explain this linkage.

2. Physical

The term 'physical' relates to biological or physical wellbeing (Pulotu-Endemann, 2001; Svaneymyr, et al., 2015). The quantitative analysis revealed that four factors: age, having worked in a paid job, driving dangerously and witnessing violence is associated with sexual health outcomes. The qualitative analysis highlighted gender, particularly the perceptions of gender differences and the need for parental oversight for Sāmoan teenage females compared to Sāmoan teenage males. As previously noted, sub-factors do not necessarily fit in one category. The issue of gender is not purely a biological phenomenon; instead there are a range of social and cultural factors at play. Sua'alii (2001) provides Sāmoan understandings of these gender roles. For the purposes of this discussion, gender is noted as a physical feature.

Age

Whilst key informants and youth participants did not discuss in detail the relationship between age and sexual health behaviours in the qualitative interviews, findings from the quantitative analysis show a steady increase in the proportion of sexually active students reporting their first experience between the ages of 11 to 14 (see Figure 7). This finding is consistent with international literature that indicates that age as well as physical development influences sexual behavior (Blum & Rinehart, 1997; Dittus & Jaccard, 2000; Manlove, et al., 2011; Mmari & Blum, 2009; Mmari & Sabherwal, 2013). Growing older brings about physical changes including increased sexual maturity and higher testosterone levels. This may lead to a greater desire for intimacy and sex, greater sexual attractiveness, or both. Studies have shown that if teenagers mature physically at an early age, begin menarche⁵⁰ early, appear older than their age, they are more likely to initiate sex early (Bingham, Miller & Adams, 1990; Blum & Rinehart, 1997).

The quantitative findings reveal that sexually active older students (over the age of 15) were less likely to use condoms and contraception at last sex compared to younger students (under the age of 15). While age is not a modifiable construct - there are no measures individuals or organisations can take to change, or prevent the ageing process - public health agents may wish to explore why older Sāmoan adolescents are not using contraceptives (when compared with younger Sāmoan adolescents). Interventions aimed at the youth population may also need to incorporate age-appropriate messages.

Having worked in a paid job

Although key informants and the youth participants did not discuss the relationship between paid work and sexual health in the qualitative interviews, findings from the quantitative analysis revealed that working for money or a job was a protective factor.

⁵⁰ Menarche is the beginning of the menstrual function: the first menstrual period of a female.

Compared to students who had not worked or had a job, students who worked were less likely to have ever had sex. International literature reveals mixed results on the impact of work on sexual health behaviours. Some studies have shown that teens with paying jobs (especially those who work more than 20 hours per week) are more likely to have sex, to have sex more often and to have more sexual partners (Kirby & Lepore, 2007; Ku, Sonnenstein, & Pleck, 1994; Mmari & Sabherwal, 2013; Sonenstein, Pleck & Ku, 1992). It is suggested that paid work may increase teens' sense of independence, their mobility, and their opportunities to have sex. Some studies show no effect on sexual behavior (Barnes, et al., 2007), while other studies (Day 1992; Mueller, et al., 2010; Rich & Kim, 2002) have shown that working is a protective factor. As Mueller, et al., (2010) note, having aspirations for their future, such as work related goals, may likely influence sexual decisions for adolescents. Young people may avoid situations that could negatively alter their plans, for example, sexual activity that may lead to an unwanted pregnancy.

Part-time work for young people is an area that has received research and policy attention (Barnes, et al., 2007; Ministry of Youth Affairs 2002). Meaningful employment is regarded as a protective factor where life opportunities are enhanced for young people (Ministry of Youth Affairs 2002). Part-time work is viewed as a positive transition where young people can engage in responsible adult work roles. A study (Macpherson, 2002) undertaken with Sāmoan communities in New Zealand may offers insights to explain the influence of work on sexual behaviour. In discussing the foundations of migrant social solidarity among Sāmoans in urban Aotearoa, New Zealand, Macpherson (2002) outlines the type of social and recreational activities new Sāmoan migrants participated in. Macpherson acknowledges that work often limited people's freedom and energies for other activities. It is also plausible to infer from this description that work for Sāmoan students limits their freedom to engage in other activities, such as dating, going out with friends and sexual activity. It is also possible that Sāmoan youth are working to support their families, and may be more committed

to traditional and conservative Sāmoan values which would discourage sex. Ultimately, further research is required to explore the reasons why students who worked were less likely to have ever had sex, compared to students who did not work.

Driving dangerously

Driving dangerously was not highlighted as a significant issue by the key informants or youth participants in the qualitative component of the study. However, findings from the quantitative analysis revealed that driving dangerously was a risk factor for sexual activity. Sāmoan students who had reported driving a car or other vehicle dangerously were four times more likely to have ever had sex compared to students who had reported not driving a car dangerously. These findings are consistent with international literature that shows that engaging in ‘problem’ or sensation-seeking behavior is associated with poor sexual health outcomes (Hellerstedt, 2006; Kirby & Lepore, 2007; Melkman, 2015; Michel, Purper-Ouakil, & Mouren-Siméoni, 2002; Voisin, et al., 2013).

As Kirby and Lepore (2007) note, sensation-seeking behaviour, where individuals willingly participate in novel or intense activities such as driving dangerously, can expose teenagers to norms that favor sexual risk-taking, or provide more opportunity or desire to have unprotected sex. Sensation seekers are often predisposed to adventure and frequently seek new and unusual experiences. As Voisin, et al., (2013) write, such individuals may engage in sexual activity as a way of satisfying their need for stimulation and excitement. However, the relationship between problem behavior: driving dangerously and sexual risk-taking may also be reflective of wider characteristics such as poverty, single-parent homes, lack of supervision, or a general tendency to take risks. Broad-based interventions that address sexual health behaviours, for example those with a focus on youth development (Ministry of Youth Affairs, 2002; Ministry of Youth Development, 2009), may wish to explore initiatives that reduce sensation-seeking behaviour, such as driving dangerously.

Witnessing violence

Although witnessing violence was not highlighted as a significant issue from the key informants and youth participants, the analysis of the quantitative data revealed that it was a risk factor in the use of contraception. Students' who reported that they had seen adults in their home yelling, swearing, hitting, physically hurting a child or hitting, or physically hurting each other, were *less likely to have used a condom* at last sex compared to those students report never witnessing violence in the home. Witnessing violence is not exclusive to an individual however; it also features within the context of family and the wider environment. Violence is associated with multiple adverse effects (Ohene, et al., 2015). This finding is consistent with international and New Zealand literature that indicates that exposure to violence has a negative effect on sexual behavior (Blum & Mmari, 2004; East & Hokoda, 2015; Gao, et al., 2008; Manlove, et al., 2011; Ohene, et al., 2015).

Studies show that the greater the level of violence, the lower the likelihood of overall contraceptive use, and in particularly the usage of condoms (Manlove, et al., 2011; McGrane, et al., 2016). McGrane, et al., (2016) identifies three factors associated with relationship violence: relationship power; fear of abuse when negotiating condoms; and partner dependence. Fear of abuse refers to the inability to negotiate safe sex practices due to fear of potentially adverse responses, often resulting in the inability to negotiate condom use. As Kirby and Lepore (2007) note, many sexual risk factors involve some form of disadvantage, disorganization, or dysfunction among the teens' communities, families or friends or within themselves. Broad-based efforts are being made to reduce violence, with programmes focusing on Pacific communities in New Zealand. The *Pasifika Proud Programme of Action Addressing Violence in Pasifika Families and Communities 2014-2017* encourages and supports Pacific communities to ownership of the issues of violence (Ministry of Social Development, 2014). Interventions that address sexual health may wish to target efforts towards young people who may be exposed to violence.

Gender differences in the treatment of females

Although the quantitative analysis did not reveal statistical differences between females and males, the qualitative interviews showed a perceived difference in the treatment of Sāmoan females when compared to Sāmoan males. It appears from the qualitative findings that there are more restrictions placed on Sāmoan females that limit their opportunities for romantic relationships (see Chapter Five). Many participants attributed this to the fact that a female bears the observable consequences of sexual behaviour, which is pregnancy and childrearing. However, the qualitative findings suggest that imposition of these restrictions can also have an opposite effect. Some students stated that the restrictions provided an even greater motivation to break the rules, including seeking romantic partners and engaging in sexual activity.

These restrictions are also acknowledged in Pacific writings (Anae, et al., 2000; Macpherson, 2002; Tiatia, 1998). Authors have commented on the greater freedom allowed to Sāmoan males, when compared to females. Tiatia's study (1998) addresses the part the church plays in helping or hindering in the developmental processes of some New Zealand-born Pacific young people. The following excerpt corresponds with the findings from the qualitative interviews with the Sāmoan secondary school students that the treatment of females differs from males:

Alofa⁵¹ resented the fact that a lot of the responsibility fell upon her, as opposed to the freedom her brothers were given. She expressed a concern that her parents 'never hassled the guys' simply because they were male. Alofa resented this. She had a sense of powerlessness because not only was she under the authority of her parents, but as a female her role had been predestined. (Tiatia, 1998, p. 93)

⁵¹ Alofa is a pseudonym for a Sāmoan female that participated in the study.

In addition, Anae et al., (2000) provides an illuminating quote that demonstrates this example of rebellion against parental restrictions:

The psychological and physical pressures placed on young unmarried girls, particularly by over-protective fathers, against participating in pre-marriage romantic boy-girl relationships created for four participants' situations where they, on reflection, felt they had no choice at the time but to marry and/or have sex with their boyfriends. (Anae, et al., 2000, p. 85)

The differential treatment for females is not unique to Sāmoan youth. International literature highlights a persistent sexual double standard, where boys are permitted greater sexual freedom than girls (Kirby & Lepore, 2007; Madkour, et al., 2014). However, studies with Sāmoan communities (Anae, et al., 2000; Macpherson & Macpherson, 2014; Tiatia, 1998; Tupuola, 2000) highlight cultural understandings of relationships, between males and females, and roles associated with members in an *āiga* (family). Some of these understandings are outlined in the literature review (see Chapter Three). Although these traditional understandings of sexuality may be understood by Sāmoan students, as expressed in the focus group discussions, Sāmoan females find them difficult to accept. Interventions that address sexual health behaviours, particularly with Sāmoan youth, may wish to explore these tensions and provide opportunities where young people, particularly females, can review the potential influence this has on their actions.

3. Spiritual

Suicide

The term 'spiritual' relates to the sense of well-being which stems from a spiritual belief system. There is a Sāmoan belief that only God has the right to give and take away life. Therefore, suicide is viewed as an individual taking on a role that is not

theirs to take (Macpherson & Macpherson, 1987; Suicide Prevention Information New Zealand, 2010). Suicide was a risk factor identified in both the quantitative and qualitative findings. In the quantitative analysis, Sāmoan students who reported that in the last 12 months they had tried to kill themselves, 'once', or 'more than once' were six times more likely to have ever had sex compared to students who reported no suicide attempts and no suicide attempts in the last 12 months. International studies confirm that teens who have thoughts of suicide are more likely to have sex (Kirby & Lepore, 2007; Novilla, et al., 2006; Suicide Prevention Information New Zealand, 2010). Suicide, a form of emotional distress, can reduce a young person's ability to assess risk, or lead them to want to escape through sexual involvement (Kirby & Lepore, 2007; Lammers, et al., 2000). However, there are also other possible explanations for this finding (LeVa, 2015). Living in negative environment, where there is exposure to unhealthy behaviours, such as family violence may cause the sexual risk-taking and suicide attempts.

Interviews with Sāmoan youth participants highlighted their concerns at the large number of Pacific youth suicides that were occurring. The students consistently reported that a relationship breakdown precipitated the suicide attempt. Students were concerned at the inability of the young person in distress to communicate with those around them, including parents, siblings and friends. In New Zealand, proportionally speaking, more Pacific people attempt suicide than the general population (LeVa, 2015). Although there are a number of risk and protective factors associated with suicide (LeVa, 2015), it is interesting to note that the risk factors for Pacific people, as identified by LeVa and the Waka Hourua programme, include: shame, expectations, unachieved expectations, pressure for the oldest child, sexual conduct and generation gaps (LeVa, 2015). These risk factors, as reported by LeVa (2015), are consistent with a findings from a study examining suicide trends in Western Sāmoa (Macpherson & Macpherson, 1987). As noted:

It is no coincidence that suicide is frequently associated with the shame which Sāmoan society holds to be appropriate where a person's conduct has caused serious and lasting damage to his/her kin group. Discovery, or threat of discovery, of offences against sexual morality are prominent as causes and include cases of lost prenuptial virginity, adultery in prominent families, incest, elopement of a village virgin (*taupou*), and an 'inappropriate marriage' contracted without consent. (p. 316)

An important feature suggested by Macpherson and Macpherson (1987) is the possible sense of despair that a young people may experience in their inability to solve a problem:

A number of cases of suicide which we documented occurred during or shortly after a display of rage. While one can only speculate at the connection between the rage and the suicide it seems possible that a sense of despair about solving a problem is involved in some way. (p. 325)

Broad interventions that reduce emotional distress such as stress, depression or suicide risk amongst Sāmoan youth are important, particularly as suicide and mental health are priority areas for the New Zealand government. National policy initiatives such as the New Zealand Suicide Prevention Strategy, New Zealand Suicide Prevention Action Plan 2013–2016 and Rising to the Challenge: The Mental Health and Addiction Service Development Plan 2012–2017 are key government work programmes that address suicide and mental health (Associate Minister of Health, 2006; Ministry of Health, 2012b; Ministry of Health, 2013). The New Zealand Suicide Prevention Action Plan 2013-2016, identifies Māori and Pasifika people as priority groups (Ministry of Health 2012b). Waka Hourua is a Māori and Pacific suicide prevention programme that promotes Māori and Pacific communities to develop and enhance their own capacity to prevent suicide (LeVa, 2015). An understanding of cultural expectations,

particularly the reputational damage to family of having sex or becoming pregnant, is necessary to consider when designing and implementing programmes that target Sāmoan and Pacific youth.

Summary of Individual factors

Three sub-factors: mental, physical and spiritual factors play a role in affecting an individual's knowledge, attitudes and sexual health behaviours. In this discussion of individual factors, a few issues that policy agents may wish to explore in further detail are highlighted. These include, but are not limited to: reasons why older students were less likely to use condoms and contraception than younger students; the impact on sexual health for students that witness violence; and students engaging in high-risk and harmful behaviours such as driving dangerously and attempting suicide. In addition, it would be advantageous to explore the relationship between language comprehension and using contraception. Policy agents may wish to explore the impact of cultural understandings of gender roles and suicide on sexual health knowledge, attitudes and behaviour.

6.3.2 Family Factors

The family or *āiga* plays a central role in shaping sexual health knowledge, attitudes and behaviours. Findings from both the quantitative and qualitative analysis show that the family relationships can positive or negatively affect sexual attitudes and behaviours. As depicted in Table 37 below, a positive association between contraceptive use and non-caring family relationships was revealed in the quantitative findings. The qualitative findings revealed three themes within Sāmoan families that play a role in shaping sexual knowledge and attitudes. These are: parents' dreams and aspirations, family pride, and communication about relationships and sexual issues.

Table 37: Family factors that affect sexual health knowledge, attitudes and behaviours

Quantitative findings	Qualitative findings
<ul style="list-style-type: none"> • Parents that do not care 	<ul style="list-style-type: none"> • Parents dreams and sacrifices • Family pride and shame • Communication about relationships and sexual activity

4. Quality of caring relationships

Family characteristics are very important in determining risk. Although the youth participants did not directly discuss the relationship between contraceptive use and parental relationships in the qualitative interviews, the quantitative results showed that poor family relationships were a risk factor for use of condom and contraception at last sex. Students who reported that their parents *did not care* were *less likely* to have used a condom or contraception at their last experience of sexual intercourse when compared with students who reported that their parents cared for them. This finding are consistent with international literature that indicates that relationships with parents have an effect on sexual behavior (Ahmad, et al., 2014; Kirby & Lepore, 2007; Mmari & Blum, 2009; Mmari & Sabherwal, 2013; Moreno, et al., 2011; Mueller, et al., 2010; Svaneymyr, et al., 2015). DiClemente et al.'s (2001) study showed that lower parental monitoring resulted in noncontraceptive use. Strong positive and caring family connections are a significant protective factor for safer sexual behaviour. Teens who experience considerable parental support and feel connected to their parents, are less likely to initiate sex at an early age, and they have sex less frequently. Teens who live with both parents and enjoy close relationships with them are less likely to have unprotected sex and become pregnant (Clark, et al., 2014; Kirby & Lepore, 2007).

Family plays a fundamental role in the wellbeing of Sāmoan young people (Fa'alau, 2011; Fa'alau & Jensen, 2006; Macpherson & Macpherson, 2009) and can serve as a protective feature (Fa'alau, 2011). The findings from the *Youth '07* survey highlight that a significant proportion of Sāmoan youth experience caring relationships with their parents and reported feeling close to their mum and dad. Some 82 percent of Sāmoan students reported that their mothers cared about them 'a lot' and 70 percent of Sāmoan students reported that their fathers cared about them 'a lot' (see Appendix I). Fa'alau (2011) explored the organisation and dynamics of Sāmoan family relationships and implications for the wellbeing of Sāmoan youth in Aotearoa, New Zealand. The positive and negative effects of various family structures and parenting styles on teenagers was investigated (Fa'alau, 2011). This insightful study shows how Sāmoan families are attempting to meet the needs of their teenage children amid new social and cultural pressures:

The ways in which families are structured and organised influences the levels of wellbeing for Sāmoan young people. In New Zealand and migrant enclaves, Sāmoan families have experienced major transformations that affect family structure and organisation due to social and economic influences. These transformations can have both positive and negative effects on the wellbeing of Sāmoan families....This study extends this notion by stating that positive collective, balanced relationships which consist of mutual understanding, respect, trust and support in families are protective factors for Sāmoan young people. (Fa'alau, 2011, p. ii)

5. *Parents' dreams and sacrifices*

A feature not captured in the *Youth '07* survey questionnaire is the concept of parents' desires for their children. The sacrifices parents had made for their children was a common point raised by Sāmoan secondary school students and key informants. Many youth participants noted their parents came from Sāmoa to live in New Zealand with a

dream that their children would have a better future, evident in increased educational and career opportunities. This migrant story is highlighted in Pacific writings (Fairbairn-Dunlop & Makisi, 2003; Macpherson, et al., 2000). Many of the participants shared how hard their parents worked to provide for their families and the expectations parents held. In respect of relationships, a common view expressed by youth participants is that their parents expected, particularly for their daughters, was that a sexual relationship would occur after either a child was engaged or married. The dreams and desires these parents have for their children (to achieve well academically, to abstain from sexual relationships until in settled and stable relationships) may well be a protective feature. As previously highlighted, the values teenagers have about sexual behaviour are influenced by the values of their parents. Some studies have shown that the chances that teenagers will have sex are reduced where parents display an attitude that disapproves of teenage sexual activity (Greenman & Xie, 2008; Homma, et al., 2013; Schuster, et al., 1998). Intervention efforts may wish to incorporate these values and aspirations into current social marketing messages that promote safer sexual behaviour.

6. Family pride & shame – the impact of teenage pregnancy

A key theme identified in the qualitative interviews is the importance of maintaining family pride for Sāmoan young people. The behavior of a young person can either positively or negatively affect the 'family name'. A strong sense of family pride is associated with upholding the family name (i.e. surname, kinship group). Young people and informants spoke about the negative impacts of a teenage pregnancy, particularly the effect on family and the family name. If a young person was to fall pregnant out of wedlock, many of the Sāmoan youth participants and the key informants acknowledged the shame that it would bring to the young person's family including the extended family.

Two excerpts from studies undertaken with Sāmoans (Anae, et al., 2000; Macpherson & Macpherson, 1987) illustrates these points, showing how the behavior of a young person impacts their family, particularly the shame that arises with a pre-marital pregnancy:

Sāmoan children are taught that their personal identity and status is intimately connected with that of their kin group or *āiga*. The cultural validations of the relationship are drawn from the pre-Christian Sāmoan culture and from Christian scripture....Children are taught that their conduct can enhance or detract from their *āiga's* prestige and power, and there is strong pressure on individuals to consider the consequences of their conduct for their kin group. (Macpherson & Macpherson, 1987, pp. 312-313)

Anae, et. al., (2000) make the following comment:

Children from pre-marital pregnancies are problematic in that they provide obvious and lasting public reminders of the (initial) family shame of having a child out of wedlock; of the inability of the woman's family to keep the young maiden *mamā*, and of her own inability to remain a 'good' Sāmoan (Christian) girl. (p. 89)

The concept of strong family relationships and pride in the family name appear to have cultural importance for Sāmoan young people (Anae, et al., 2000; Macpherson & Macpherson 2009). As highlighted in the earlier discussion of suicide (see 6.3.1), intervention programs that explore emotional distress, such as guilt amongst Sāmoan youth, may be a worthwhile endeavor. Programs that help young people resolve internal tensions that arise from balancing family expectations and an individual's own desires may prove beneficial.

7. Communicating about relationships and sex

The lack of discussion in respect of sexual health issues, such as sexual activity, pregnancy or contraception between children and their parents was a common issue raised by secondary participants and key informants. There were a few exceptions, with some Sāmoan youth participants noting that their parents were more open to discussing relationships. This was attributed to having parents who currently work in New Zealand as a health professional (nurse) and a non-Sāmoan parent that held liberal views on sexual activity. As highlighted by both the youth participants and the key informants who were involved in the qualitative component of the study, the inability or unwillingness of parents to openly discuss sexual issues with their children may be attributed to the parents' beliefs that their children are not sexually active. This may also be due to conservative Christian beliefs that idealise and encourage sexual activity only within the context of a marital relationship. Religious teachings that discourage the use of contraception may also play a role in the lack of discussion of contraceptive practices.

Studies undertaken with Pacific communities in New Zealand suggest that there are a variety of perceptions between generations in relation to sexuality and reproduction (Anae, et al., 2000; Naea, 2008). Distinctions have also been noted between Pacific adults born in New Zealand and those born in 'Island villages'. Those born in the island nations were described as being more resistant to listening or talking about sexuality and reproductive health issues (McClellan & Guttenbeil, 2000). Research undertaken by McClellan and Guttenbeil (2000) of regional sexual health programmes in New Zealand found it difficult to get Pacific adult communities to address sexuality and reproductive health as a health issue and secondly to attract and engage adult audiences. These difficulties were attributed to barriers internal to the services themselves, as well as to adults not wanting to discuss sexuality matters (McClellan & Guttenbeil, 2000). However, the lack of communication between parents and their children about sex is not just an issue for Sāmoan communities. International studies

(Clark, et al., 2006; Guilamo-Ramos, et al., 2012; Kaljee, et al., 2012; Meechamnan, et al., 2014) have highlighted communication issues between parents and their children. The barriers in communicating about sex are attributed to a lack of parental confidence, lack of communication skills, cultural proscriptions, fear that talking about sexuality will encourage sex, and reliance on school teachers. Furthermore, in Sāmoan society, social and cultural conventions dictate how issues are communicated (Macpherson & Macpherson, 2009). For example, anything that is likely to cause offence is communicated in mannered language (Macpherson & Macpherson, 2009), using allusion, allegory and metaphors (Peteru & Percival, 2010b).

In her recent study of the organisation and dynamics of Sāmoan family relationships, Fa'alau (2011) identifies three family types: struggling, adapting or stable. This typology provides a useful explanation for the observed differences in communication levels from the description of Sāmoan parents as told by their children (Sāmoan focus group participants). A description of these family types and levels of relationships across these family types are outlined in Table 38.

Table 38: Describing Family

	Struggling	Adapting	Stable
Loving & Caring	High	High	High
Trust	Low	Medium	High
Supportive	Low	Medium	High
Open-Minded	Low	Medium	High
Understanding	Low	Medium	High
Communication	Low	Medium	High

(Source: Fa'alau, 2011, p. 118)

Comparisons of 'stable' and 'struggling' family types reveal differences in communication patterns (Fa'alau, 2011). A third of the Sāmoan secondary school participants (14/45) described their families as 'stable'. A stable family was linked with having regular routines, well-organised structures, *excellent communication between adults and adolescents*, spending quality time together, and showing high levels of trust and respect towards each other. On the other spectrum, a 'struggling' family was linked with family members struggling to understand and trust each other, *having low levels of communication* and parents not being open-minded. An 'adapting' family indicated loving and caring relationships between parents and adolescents, there are indeed *some levels of communication*, trust, support and understanding between parents and adolescents signifying that the families are slowly working out ways of improving their relationships with their adolescents (Fa'alau, 2011).

Fa'alau (2011) notes that parents in struggling families also have difficulties to accept changes that they may not be familiar with or understand and were less likely to adapt or address these changes. Teenagers interviewed, who identified with a 'struggling' family type, often felt emotionally isolated and not trusted by their parents. Girls felt frustrated because they were not granted the same freedoms as their brothers, because parents felt they needed more protection (Fa'alau, 2011). The findings from Fa'alau's study show that the communication patterns in Sāmoan families differ, that some young people report excellent communication with their parents, other young people report some levels of communication with their parents, and other young people report low levels of communication with their parents. This should alert policy agencies to the risks of assuming that all Sāmoan families are organised in the same way and designing policies based on assumed similarities.

Based on the descriptions provided by the Sāmoan students who participated in the focus groups in this study, there were some similarities observed with the diversity in the patterns of communication between children and their parents. Sāmoan youth

also expressed a range of views in relation to discussing sexual health with their parents. Some Sāmoan students shared they want to have conversations with their parents about relationships. However, others expressed a sense of discomfort and embarrassment if they were to have conversations.

Studies undertaken with Sāmoan communities living in New Zealand highlight the need for better communication within families (Anae, et al., 2000; Naea, 2008; Tupuola, 2000). International studies have shown that when parents have conversations with their children about sex and contraception well before the children become sexually active, the initiation of sex may be delayed, less likely to report an STI, and the use of condoms or other contraceptives increased (Anagurthi, Johnson, & Somers, 2011; Kirby & Lepore, 2007; Svaneymyr, et al., 2015). Studies with Pacific communities (Anae, et al., 2000a; Matenga-Ikihele, 2012) suggest family members play a unique role in providing sexual health knowledge. For example, Matenga-Ikihele (2012) acknowledges for Niuean women, mothers and sisters were commonly identified as key educators in the transmission of sexual health information. Reviewing initiatives that that can strengthen communication patterns within Sāmoan families as well as exploring family members' roles in delivering sexual health information may be an area that policy agents may wish to explore.

Summary of family factors:

Families play an important role in shaping sexual health knowledge, attitudes and behaviours of Sāmoan youth. In using contraceptives, the quantitative findings reveal that non-caring family relationships is a risk factor. As shown in the qualitative interviews with youth participants, the migrant story continues to feature strongly in the lives of many Pacific parents and their children. Parents' expectations for their children to succeed in school and abstain from sexual activity can be a protective feature. However, these expectations can also heighten sexual risk-taking. The guilt

and shame associated with sexual outcomes, particularly, having a child out of wedlock appear to be a significant experience for Sāmoan youth and their families.

The lack of communication within the family in regards to sexuality is an important issue identified in the review of the qualitative findings. However, there also appears to be some degree of diversity and change in the sexual values, attitudes and practices within Sāmoan families. While some Sāmoan families are still averse to openly discussing sexual health issues, some Sāmoan families are encouraging discussions. The following section discusses the influence of the wider environment on the sexual health knowledge, attitudes and behaviours of Sāmoan young people.

6.3.3 Wider Environmental Factors

The wider environment plays a pivotal role in shaping sexual health knowledge, attitudes and behaviours. The analysis of the qualitative and quantitative data led to the development of five sub-factors that help explain environmental characteristics that influence the sexual health knowledge, attitudes and behaviours for Sāmoan young people. These sub-factors, as depicted in Table 39 below are: ‘never moved home’ or ‘having moved home once’;⁵² schools; church; wider societal influences; and living in two worlds.

Table 39: Environmental factors that affect sexual health knowledge, attitudes and behaviours

Quantitative findings	Qualitative findings
<ul style="list-style-type: none"> • Residence: Never moved home or moving home once 	<ul style="list-style-type: none"> • Schools • Church • Societal influences • Living in ‘two worlds’

⁵² When compared with moving home two or more times (see Chapter Three: Methodology).

8. Residence: never having moved home or moved home once

A supportive, safe family and stable living arrangement are essential components that impact the health and wellbeing of young people (Helu, et al., 2009). Whilst moving home was not raised in the qualitative interviews, the quantitative findings revealed that compared with students that had '*moved home two or more times*' - '*not moving home*' or '*having moved once*' was a risk factor for two sexual health outcomes – the likelihood of having sex and using a condom at last sex.

The impact of residence (or moving home) is associated with greater sexual risk. To explain the impact of residence (or moving home) as a risk factor, it is important to recall that original *Youth '07* survey question was re-categorised into two options. Students were asked, 'in the past year how many times have you moved home?' Due to sampling size and analysis requirements the response categories for 'moving home' that is: 'I haven't moved', 'I have moved once', 'I have moved two times', 'I have moved 3 or more times' were reorganized into two groups: firstly, students that moved home 'two or more times in the last year' and secondly, students that have 'moved fewer than twice in the last year'. This categorisation method is a consistent approach used in adolescent sexual health surveys (Helu, et al., 2009; Mmari & Blum, 2009) where moving two more times is a proxy indicator of family adversity.

The findings showed that students who 'never moved home' or had 'moved home once' in the last year were *more likely to have sex*, when compared with students who moved home two or more times, and they were *less likely to have used a condom at last sex* when compared with students who had moved home 'two or more times'. These findings contrast with international studies (Melkman, 2015; Sheeren, Abraham, & Orbell, 1999) that found when adolescents moved more than twice, they were *more likely* to engage in premarital sex. Further research is needed as there are a range of potential explanations that can account for these findings. It is plausible that these findings indicate the presence of other social factors, such as socio-economic position and the influence it has upon sexual conduct. Moving from house to house is a

common occurrence, particularly in Western countries. Moving homes may suggest that families are facing difficulties or reflect an improvement in family circumstances, or (Morton, et al., 2014). It may be argued that in moving home more often (more than twice) students are removed from neighbourhood social contacts that may have influenced their sexual choices. It may also be argued that Sāmoan young people currently live in, or have moved to, a community that is disadvantaged, therefore increasing their health risk.

A range of factors, such as income and poverty, housing, employment and education have a great influence on health. Individuals with fewer economic resources tend to have poorer health outcomes due to a combination of factors, including greater exposure to health risks, reduced access to adequate housing, and difficulty accessing health services (Ministry of Health, 2014d). Most Pacific peoples live in areas with limited economic resources. Some 27 percent of Pacific peoples meet the criteria for living in severe hardship compared to 8 percent of the total population (Ministry of Health, 2014d). Pacific peoples are less likely to own their own homes (26% compared to 55% nationally) and approximately half of all Pacific children and young people live in a crowded house, a higher proportion than other ethnic groups (Statistics New Zealand and Ministry of Pacific Island Affairs, 2011). It is plausible that the sexual health risks for many young people are heightened when they live in areas with fewer economic resources. Ultimately, further investigation is needed to explore the characteristics of this group of students.

9. Schools - sexuality education:

The qualitative findings revealed that schools were the principal location where most participants received formal sexual health education. However, the level and quality of sexual health education appeared to vary amongst the schools, with some students reporting a comprehensive level of teaching and others noting they received very little. The ability to engage and have trusting relationships with health professionals in the school setting is an important characteristic that was raised by participants. The

key characteristics for those working in the area of sexual health are discussed extensively in the sexual health and youth health literature (Bogle, 2006; Department of Health, 2003; Ministry of Health, 2001a; Ministry of Youth Affairs, 2002; Smith 1990). Information from the qualitative interviews suggests the benefits of having health services located within the school. As shared by youth participants as well as key informants, school-based health centers that have nurses, guidance counsellors and social workers were identified as supportive individuals that could help students with their sexual health issues. Issues relating to sexuality education have been identified in recent reviews of sexuality education (Health Committee, 2013) and currently being addressed by the Ministry of Education (New Zealand Government, 2014).

10. Church:

Although the findings from the quantitative survey did not highlight a relationship between spirituality and sexual health behaviour, the importance of the Christian faith and the influence of church teachings were commonly identified by participants in the qualitative interviews. Many of the participants discussed strong Christian values that prescribe guidelines for sexual activity and contraceptive use. Given that a large proportion of Sāmoans and Pacific people identify with a religion (Statistics New Zealand, 2007a) the influence of religious beliefs on sexual behaviour is important to identify.

The relationship between spiritual beliefs, church attendance and sexual health is recognised within the sexual health literature. Studies have shown that teens who have a strong religious affiliation are less likely to initiate sex, and some studies indicate that teens who attend religious services frequently are less likely to have sex (Kirby & Lepore, 2007). A New Zealand study (Paul et al, 2000b) identified that being first born and persistently involved in religious activities showed the strongest relationship with sexual abstinence at age 21 years. In my Master's study, I found that

Sāmoan students were 65 percent less likely to ever have had sex if spiritual beliefs were 'very important' compared to Sāmoan respondents who report that spiritual beliefs were 'not important' (Ulugia-Veukiso, 2010).

Although the message of abstaining from sex until marriage may be universal across Christian churches, there are no universal programmes that teach about romantic relationships and sexual activities across all the Christian churches. Evidence from the qualitative interviews suggests that there are programmes being delivered in churches that address romantic relationships quite deliberately:

"But as for youth groups, you'll also have some youth groups, the Seventh Day Adventist church out in south Auckland does intersections, um and they spend a day talking about sexuality and talking about sex and stuff and about relationships, and you know. I think, but that's a very, it's not Pacific, it's not a Pacific church, but I think that potentially, that could be you know, the workshops happen within the church environment." [Key Informant]

Initiatives such as the *LotuMoui* and *HVAZ* (Healthy Village Action Zones) program are examples of health organisations delivering interventions through Pacific church settings (Channing, Ualika, & Ha'unga, 2012; Counties Manukau District Health Board, 2008; North, Mahony, & Schwalger-Teura, 2012; Pacific Health Branch - Ministry of Health, 2007). Future sexual health intervention programs may wish to explore potential partnerships with churches, given that a large proportion of Pacific peoples, and particularly youth, attend churches.

11. Societal influences: peers, media, alcohol & pornography:

The qualitative findings reveal that wider societal factors, such as peers, media, alcohol, and social networking platforms influence sexual behaviours. However, three of these four influences (peers, media and online platforms) were not specifically

examined within the *Youth '07* survey, and in the case of alcohol, was not found to be significantly associated with sexual behaviours. As highlighted in the literature review (see Chapter Two) peers (Ahmad, et al., 2014; Kirby & Lepore, 2007), alcohol (Ahmad, et al., 2014; Brahmhat, et al., 2014; Mmari & Sabherwal, 2013; Voisin, et al., 2013), and online platforms, such as pornographic websites (Atwood, et al., 2012; Ministry of Health, 2014e; Wright & Randall, 2012) influence sexual knowledge, attitudes and behaviours.

Study participants particularly noted the influence of media, including social technology platforms such as *Facebook* that promote a culture that encourages and normalises sexual activity. Worldwide communications, including the internet, have influenced social norms, where sexual images have now been transported from liberal to conservative societies (Wellings, et al., 2006). Pornography is widely available and is one site that young people, particularly males indicate they consult for information about bodies and sexual pleasure (Allen, 2011). As Allen (2011) notes, pornography is based on fantasy, rather than reality. It depicts sexual activity in a way that does not show the real-life issues, for instance, bodies that look or respond differently than expected. It is fair to presume that young Sāmoans in New Zealand are exposed and able to access this material in ways that their parents may not be aware. Interestingly, in Sāmoa, sanctions have been put in place to limit this access. In one case, a village council has made it an offence to screen pornography in the village (Macpherson & Macpherson, 2009).

Recent New Zealand policy documents (Gluckman & Hayne, 2011; Health Committee; 2013) identify concerns in relation to influences such as media, alcohol, peers and social networking platforms. As noted by the Prime Minister's Chief Science Advisor in the report entitled *Reducing social and psychological morbidity during adolescence* (Gluckman & Hayne, 2011):

Against this background of pubertal mismatch, the impact of widespread marketing aimed directly or indirectly at adolescents is worrisome. Marketing and media targeting young people contain a high content of promotion of risk-taking behaviours, alcohol consumption and sexuality. The celebrity culture, which is unabashedly marketed to the adolescent, creates role models and heroes out of behaviours which are particularly risky for young people with immature impulse control. (p. 28)

12. Living in two worlds

Although the *Youth '07* survey questions were not designed to capture the experience of living in two cultures, that is 'Sāmoan' and 'New Zealand culture', a consistent theme expressed by participants in the youth focus groups and by key informants is that many Sāmoan and young Pacific people are raised in a New Zealand environment that has competing and contrasting values when compared with their Sāmoan upbringing. These tensions and conflicts arise when balancing their *Fa'a Sāmoa* values of respect and obedience with the mainstream New Zealand belief that they should have personal freedom to make choices (Fa'alau & Jensen, 2006). It is feasible to presume that living in these two worlds has an impact on sexual health knowledge and attitudes. As expressed in the discussion of individual and family factors, there are unique traditional understandings of gender relationship and prescribed roles associated with gender.

These tensions of bridging these two cultures are well documented (Anae, et al., 2000; Ministry of Health, 2008c; Naea, 2008; Tiatia, 1998). An earlier paper⁵³ exploring Pacific youth health acknowledges that New Zealand-educated Pacific youth have greater exposure to other value systems and are more likely to question traditional values that are not common or widely accepted in New Zealand society. As noted:

⁵³ This paper is one of a series of papers prepared for the review of the Pacific Health and Disability Action Plan (PHDAP).

Cultural, family, community and church networks can serve as a protective factor for Pacific youth, but the challenges of bridging two cultures can result in the isolation of youth from support structures at vital times. (Ministry of Health, 2008, p. vii)

The changing demographic and social profile of Sāmoan communities in New Zealand (Statistics New Zealand, 2007b; Statistics New Zealand and Ministry of Pacific Island Affairs, 2010) accentuated by the large proportions of children born in New Zealand, and increasing numbers of Sāmoan individuals that are of mixed ethnicities, will have future implications on how Sāmoan identity is viewed, in addition, what values will be considered 'Sāmoan'. However, in the present day, public health agents and Sāmoan communities may wish to explore ways to support Sāmoan youth as well as their families to help these young people navigate their way through adolescence into adulthood.

Summary of environmental factors:

The analysis of the quantitative and qualitative study findings suggests that there are five environmental factors that influence the sexual health knowledge, attitudes and behaviours of Sāmoan youth. These factors include: having never moved home or having moved home once; schools; church; wider societal influences and living in two worlds (two cultures). The wider societal influences include: peers, messages promoted through the media, the availability and attitudes towards alcohol, and the influence of pornography. The following section (6.4) highlights pertinent findings for government interventions.

6.4 Public Health Interventions

This study set out to explore the significance of the research findings for public health interventions and policy. Throughout the discussion of the study findings, several issues for policy consideration have been highlighted. Some of these key issues are

revisited, including the importance of community values and cultural input and the connection with public health interventions.

6.4.1 Study findings

The study reports on the sexual health status of Sāmoan youth in Aotearoa New Zealand. Interventions that directly focus on Sāmoan families, particularly parents, were identified as a priority by key informants and some of the youth participants from the qualitative interviews. Several components necessary for sexual health programmes as well as the role of research and policy were identified by key informants.

The implications that arise from the research findings are not new. In reviewing the literature and the qualitative findings from this study identify the need to improve sexual health reporting systems. These findings strengthen calls to target public health interventions that address the needs of vulnerable students engaging in at-risk and harmful behaviours. These issues have been raised in previous reports (Clark, et al., 2006; Gluckman & Hayne, 2011; Health Committee, 2013; Ministry of Health, 2001b; New Zealand Government, 2014; Psutkla, et al., 2012) and apply not only to the Sāmoan youth community but other communities as well.

The study identifies three broad factors - individual, family, wider environment - and 12 sub-factors that influence sexual health knowledge, attitudes and behaviours. When looking at the quantitative and qualitative findings in relation to the current literature, I propose that public health and sexual health interventions identify and target at-risk young people (for example young people that are: contemplating suicide, driving dangerously and are exposed to violence). Furthermore, I contend that investing in interventions that strengthen family relationships and improve communication will prove a worthwhile endeavor. The relationship between language comprehension and access to health care services is an area that would benefit from

future research. The impact of environmental influences such as Sāmoan young people growing up in two different cultures, place of residence, media, schools and the church are extensively documented in the literature. These findings (qualitative and quantitative) provide a timely reminder of the current context and the influence the environment has in shaping sexual knowledge, attitudes and behaviour.

Community values:

This research, notably the qualitative findings, identified the strong influence of family and cultural values for Sāmoan young people. However, the dissonance between public health attention and community values appears as a striking feature. In order to reduce teen pregnancy and STI rates public health efforts often promote the consistent use of condoms and contraception (Ministry of Health, 2001a). The sexual health literature refers to framing sexual development and behaviour of youth as a developmental process that is normal, and the use of contraception as a behaviour to be learned and mastered (Clark, et al., 2014, Ministry of Health, 2001a). However, as the findings from the qualitative interviews have shown, these values appear at odds with the views held by many Sāmoan parents and families. The interviews with the youth participants and key informants reveal strong values held by Sāmoan parents that may influence the sexual values and actions of their children. These values and expectations include: delaying romantic and sexual relationships until adulthood and opposition to contraceptive use. While some Sāmoan parents and families may have values that are at odds with those of their teenage children, the support and advice from siblings, relatives and peers may contribute to better levels of sexual health knowledge and better sexual health outcomes. It is plausible to assume that these community values influence to some extent the interpretation and understanding of public health messages.

International experts (Kirby & Lepore, 2007) identify practical strategies that can increase the chances that public health interventions will be effective. One of the

strategies includes designing activities that are consistent with community values and available resources. This strategy is consistent with calls from Pacific writers, who have maintained the need for cultural input into the design of sexual health interventions (Anae, et al., 2000; Matenga-Ikihele, 2012; Naea, 2008; Tupuola, 2004)

Cultural input

This study presents a picture of the sexual health issues and experiences for Sāmoan youth in Aotearoa New Zealand. A key question that arises from this research is, is - How do organisations tasked with delivering sexual health programmes receive and implement cultural knowledge into the design of their programmes? Particularly as sexual health is an important issue for the New Zealand government. As highlighted in the literature review, around \$56 million is invested each year to nationwide health promotion and primary care services, \$7.3 million has been invested to enable better support for high priority groups such as young Māori and Pasifika people and \$14.9 million was invested in 2010 for initiatives that provided supports for teenage parents and their children (New Zealand Government, 2014).

Youth participants and key informants identified the need for appropriate messengers that can deliver key sexual health messages in a way that is effective and respectful. The strong cultural values and expectations that many Sāmoan parents had of their children were repeated identified in the qualitative interviews. Designing effective sexual health interventions and programmes requires an understanding of cultural knowledge. As identified by Kirby (2007) designing effective interventions requires the input of individuals with expertise in different areas, including cultural knowledge. The implications that arise from this research, particularly understanding and responding to the diversity in Sāmoan community and family values, serves as a timely reminder of the need for cultural input.

There is a wealth of Pacific resources can support policy agents and sexual health organisations. The Village Collective (Village Collective, 2014) and SWIPIC (New Zealand Sexual Health Society, 2015) are two sexual health promotion services that have experience delivering programmes to Pacific communities. There are several Pacific staff employed across the sexual and reproductive health sector that have experience working with Sāmoan and Pacific communities. The Ministry of Pacific Island Affairs (MPIA) is a key stakeholder – it is the Government’s premier advisor on policies to promote the social, economic and cultural development of Pacific people in New Zealand. Two Pacific programmes that have experience in training the New Zealand public sector workforce is the *Engaging Pasifika* (EP) programme and the *Taha – Well Pacific Mother and Infant Training Service*. Led by LeVa, the *Engaging Pasifika* (EP) programme provides cultural training and focuses on better engagement between public services and Pacific people. The EP programme was awarded an acknowledgement from the Human Rights Commission (LeVa, 2014). Taha⁵⁴ provides Pacific pregnancy and parenting education training programmes for health professionals caring for Pacific pregnant women, infants and their families (Taha: Well Pacific Mother and Infant Service, 2015a). These are but a few examples of the resources available that can assist in bridging culture and health.

6.5 Chapter Summary

In this chapter a picture of the sexual health status of Sāmoan secondary school students is presented. The quantitative findings show that over half (55%) of Sāmoan students have not had sexual intercourse. Conversely, 45 percent of Sāmoan students *have* had sexual intercourse. As previously discussed (see Chapter Four - Quantitative findings) the results show a diversity of sexual behaviour and practices for Sāmoan secondary students. The analysis of the quantitative findings suggests that there is a

⁵⁴ Taha is part of the Pacific Health Unit at the School of Population Health, The University of Auckland.

group of Sāmoan youth that are most vulnerable for negative sexual health outcomes (unintended pregnancy and sexually transmitted infections).

From the analysis of the study findings, I surmise that there are three broad factors influence the sexual health knowledge, attitudes and behaviours of Sāmoan youth. These are: the individual, family and wider environment. Throughout this discussion, 12 sub-factors are highlighted. It is critical that these factors are not read in isolation from each other. Instead a more accurate interpretation involves viewing these factors and sub-factors as interwoven strands. This aligns with literature (Ministry of Health, 2008c; National Advisory Committee on Health and Disability, 1998; Statistics New Zealand and Ministry of Pacific Island Affairs, 2011) that identifies that the determinants of health are complex. These determinants include biology, culture, education, employment, housing; risk factors such as diet, physical inactivity, smoking, alcohol and drug use, sexual activity and poor health outcomes that include chronic disease, injuries, unintended pregnancy, STIs and obesity.

The chapter concludes with a discussion of issues for policy consideration. The acknowledgement of the presence of community and family values as well as specialist cultural input into the design of policy and intervention efforts, are important. In the following chapter (Chapter Seven – Conclusion) an overall summary of the key study findings is presented. Three concepts - *Context*, *Communication* and *Co-ordination* are introduced as essential features to understand as well as positively address sexual health issues for Sāmoan communities.

CHAPTER SEVEN: CONCLUSION

7.1 Chapter Overview

In Chapter One we met Pani, a young woman turning 17. As her social worker, Pani struck me as remarkably resilient and street-smart. This young woman had experienced several challenging events in her life. In our time spent working together, we addressed many issues including her sexual choices. Some of Pani's issues, such as her original reluctance to discuss sexual health issues as well as engaging in high risk activities, reflect some of the experiences that young Pacific people face. In working with Pani several questions were raised in my mind, such as the role of her family and health professionals that were tasked with providing care for her. These questions, and many others that arose from working with Pacific young people and their families, led me on a journey where research provided a tool to seek answers. Research educators (Curtis & Curtis, 2011; Harington & Lunt, 2007; Walter, 2013) acknowledge that there are a number of reasons that drive people to undertake research. For me, I wanted people to hear the stories of Sāmoan young people here in New Zealand, and offer my community some solutions that may help resolve serious issues facing Pacific youth.

In this final chapter, three questions are posed:

1. What did this study set out to find?
2. What did this study find?
3. What implications arise from this research?

The intentions of this study are reviewed and a summary of the research process used to answer these research questions are revisited. In light of the study findings, the concept of “**Three C's – Context, Communication and Co-ordination**” is offered as a

way to understand as well as address sexual health issues, specifically for Sāmoan communities. The chapter concludes with suggestions as to how the study findings may contribute to policy efforts.

7.2 What Did This Study Set Out to Find?

This study aims to identify factors that influence the sexual health knowledge, attitudes and behaviours of Sāmoan secondary school students in Aotearoa, New Zealand.

The four objectives of this study were to:

1. Determine the prevalence of sexual health behaviours of Sāmoan secondary school students in New Zealand;
2. Explore and describe risk and protective factors associated with sexual behaviours among Sāmoan secondary school students in New Zealand;
3. Explore the perceptions of Sāmoan secondary school students and key informants on sexual and reproductive health issues;
4. Explore the significance of these findings to public health interventions and policy.

These questions could have been answered in several ways. The preceding chapters outlined the process used for this study. In the literature review (Chapter Two), a snapshot of sexual health issues facing Pacific populations living in Aotearoa New Zealand were presented. Compelling reasons to undertake sexual health research with Pacific communities in New Zealand were identified. These include: sexual health disparities, which include the high rates of sexually-transmitted infections, high rates of unintended teenage pregnancies and suboptimal levels of contraceptive use that are more evident for Pacific populations when compared with other populations. In addition, public policy agents' desire programmes that are implemented in culturally

appropriate and relevant ways for Pacific communities. These programmes can increase the awareness and understanding of sexual health issues. Furthermore, the review showed that the literature on the sexual health needs of young Pacific people growing up in New Zealand is scarce, although there is sufficient evidence to support the range of sexual health risks that have been identified as the focus of this study.

In the methodology chapter (Chapter Three), Pragmatism and a Pacific Health Research approach were presented as the theoretical frameworks guiding the facilitation of this study. The use of Mixed Methods as the research approach was explained whereby the selection of the *Youth '07* survey (quantitative component), focus group discussions and key informant interviews (qualitative component) was justified. The results from the analysis of the *Youth '07* survey and focus group discussions and key informant interviews were presented in Chapters Four and Five. The previous chapter (Chapter Six) discussed the main findings from this study. Several pertinent issues concerning the sexual health behaviours of Sāmoan young people from this study were highlighted. Central factors influencing the sexual health knowledge, attitudes and behaviours of Sāmoan youth were presented and insights were offered in respect of current public health interventions.

7.3 What Did this Study Find?

The overall aim of the study was to identify factors that influence the sexual health knowledge, attitudes and behaviours of Sāmoan secondary school students in Aotearoa, New Zealand. The study findings can be summed in a single sentence:

Three broad factors: the individual, family and wider environment influence the sexual health knowledge, attitudes and behaviours of Sāmoan youth in Aotearoa, New Zealand.

However, further exploration is required in describing the depth, breadth and the complexities of the realities facing Sāmoan populations living in New Zealand, particularly in the area of sexual health. In reviewing the findings from this study, three areas arise as critical features when attempting to understand as well as address sexual health issues for Sāmoan communities. These three features are: **Context, Communication and Co-ordination.**

7.3.1 Context

In order to assist Sāmoan young people, an understanding of context is important.

This context can relate to both current and historical events as well as particular environments, such as family, school, church and the wider society in which Sāmoan young people live.

This study focuses on sexual health issues of Sāmoan young people, aged 12 to 19 years living in Aotearoa, New Zealand. The study findings show that for Sāmoan young people, sexual health knowledge; attitudes and behaviour are influenced and shaped by the context in which a young person lives. The research findings also revealed diversity in the sexual health knowledge, attitudes and behaviours amongst Sāmoan young people.

Revisiting some of the key tenets offered within Pragmatism and Pacific Health Research approach (the key theoretical frameworks for this study) is pertinent for this discussion. Pragmatism recognises that determining what is 'meaningful' involves a process that is open-ended and continuous. This 'meaning' is based on human experiences that take place in unique historical and cultural settings (Baronov, 2012). Pacific Health Research acknowledges the continuum of Pacific world-views and the need for research to be responsive to changing Pacific contexts (Health Research Council of New Zealand, 2005). In the *Fonofale* model (Pulotu-Endemann, 2009) a

cocoon is depicted as encasing the *fale* (house). This cocoon incorporates three important dimensions: environment, time and context that have direct (or indirect) influence upon a Pacific person (Pulotu-Endemann, 2009).

Historical and cultural change, in particular for Sāmoans who have migrated to New Zealand, is well-documented (Macpherson, 1996; Macpherson, 2002; Macpherson, et al., 2001; Pitt & Macpherson, 1974) (see Chapter Two). The experiences and challenges faced by young Sāmoan and Pacific people born in New Zealand is also extensively reported (Fa'alau & Jensen, 2006; Ministry of Health, 2008b; Tiatia, 1998). The study findings (drawn from both the quantitative and qualitative components) are reflective of existing literature that shows the demographic and social profile of Sāmoan communities living in New Zealand has changed (Macpherson, 2002; Macpherson, et al., 2000; Statistics New Zealand, 2007b, 2014). Many Sāmoan young people are born in New Zealand and increasing numbers have multiple ethnicities, that is, not solely identifying with a single Sāmoan ethnicity. These experiences for Sāmoan young people (born in, or exposed to New Zealand culture), as expressed in the qualitative findings, suggest the experiences between groups of Sāmoan students and the experiences of students and their parents are very different, particularly as their life experiences diverge.

Findings from this study did suggest few changes in the way Sāmoan young people view their families. For many Sāmoan secondary school students, family was regarded as an important unit (reflected in both the qualitative and quantitative components). However, the emphasis on the family may be due to sample bias, as 95 percent of Sāmoan students that participated in the focus groups reported attending church. Church institutions have clear views on the organization of the family. Existing literature, in particular, Karl Pulotu-Endemann's *Fonofale* model (2009) identifies the family as the foundation for all Pacific cultures. Although this study did not set out to identify a typology of family represented in the survey sample, the findings did

suggest that a variety of family types exists. Characteristics and typologies of Sāmoan families and family orientations are reflected in existing writings (Fa'alau, 2011; Fa'alau & Jensen, 2006; Macpherson, 1991, 1996; Pulotu-Endemann, 2009). These typologies reflect the range in cultural interactions for Pacific parents and children born of Pacific parents. There are consistent themes in the Sāmoan literature (Fa'alau, 2011; Naea, 2008). Some Sāmoan families have strong relationships between parents and children, with open and clear communication. These families appear to have adapted to New Zealand society while at the same time maintaining their own Sāmoan values. However, other Pacific families have different experiences. The relationships between parents and their children are strained and communications patterns as not as open. For some Pacific families incorporating Pacific values within New Zealand society is a challenging task (Fa'alau, 2011; Naea, 2008).

The findings from this study also revealed that Sāmoan secondary school students are exposed to a range of values concerning sexual behaviour. The values expressed by parents, siblings, churches, schools, friends, social media and public health agents are at times different and in opposition to each other. For example, technological and marketing platforms, such as music videos, movies, explicit websites (such as pornographic websites) and general advertising appear to promote sexual activity. In this day and age these technological advancements enable young people to have direct (and at times unavoidable) access to sexually explicit and charged material. While public health messages encourage the use of contraception to prevent an unintended pregnancy or contracting sexually transmitted infections.

From the qualitative interviews, it appears that in most cases Sāmoan parents hold sexually conservative values and expectations for their children. Christian religious teachings play a part in shaping some of these cultural values. However, the qualitative study findings suggest intergenerational differences in the levels of sexual conservatism that exist within Sāmoan families. This conservatism may not apply to

all Sāmoan or Pacific young people and their families, therefore supporting existing evidence that Pacific families are changing. It is likely that the exposure to new information has enabled a broadening of perspectives and values governing sexual behaviour.

In this study, particularly in the qualitative interviews, the strong sense of family pride emerged as a notable feature. Therefore, when a young Sāmoan engages in sexual activities that are at odds with the values held by their families or their religious affiliation, this may result in intense feelings of guilt and shame. It is difficult to compare what this experience (i.e., shame and guilt) is like for Sāmoan young people in relation to non-Sāmoan young people. Although this study did not explore these issues in depth, it is plausible to assume linkages exist between sexual health and mental health issues.

A concern raised by many youth participants was suicide by their peers. In New Zealand, an alarming number of Pacific and Māori teenagers are contemplating, attempting and completing suicide (LeVa, 2015). The youth participants in this study highlighted that in many of the suicide cases they were aware of, relationship difficulties were identified as triggering factors. In designing sexual and mental health interventions, it is worthwhile to explore these issues. These issues raise several important questions as well as challenges. Adolescence is a period characterized by heightened physical, mental and emotional changes (Spear, 2000; Zotović, Petrović, & Majstorović, 2012). On top of these changes, how does a young Sāmoan reconcile the disjunction if their own sexual values are very different to their parents, peers, church?

The research findings reveal diversity in sexual health behaviours amongst Sāmoan young people. The quantitative analysis specifically reported and focused on the proportion of students that had an experience of sexual activity (see Chapters Four

and Six). However, it is also important to acknowledge that over half (55%) of Sāmoan secondary school students had not had sexual intercourse. There is little known about the characteristics for this group of students. What are the factors that may have prevented them from having sex? Future research may be able to offer some insights. Given the range of sexual patterns and activities identified in this study, it seems appropriate that sexual health interventions need to be specifically tailored and targeted to the different audiences.

7.3.2 Communication

Communication, particularly communication patterns in families, emerges as a critical area in addressing sexual health issues for Sāmoan communities.

Sāmoan secondary school students learn about sex through several environments, such as schools, peers, social media and family members. Findings from this study identify that schools play an important role as they are the main venue where Sāmoan secondary school students learn about sexual health. This can be attributed to the New Zealand Education Curriculum where sexuality education features within the health and physical education strand (Education Review Office - The Ministry of Education NZ, 2007b). A recent review of sexuality education guidelines has been undertaken, and as a result, schools have received further information that will assist them to deliver sexuality education (New Zealand Government, 2014). However, schools are not the only source where sexual health issues can be communicated and addressed. As identified in the literature review (Chapter Two), addressing key sexual health issues involves a multi-faceted approach. This includes, but is not limited to, the involvement of those who are charged with the care of young people, those who are committed to improving the health outcomes of Pacific communities, and current providers of sexual health interventions.

Existing public health efforts may wish to explore strengthening parent-children communication, particularly as the first strategic direction for the *New Zealand Sexual and Reproductive Health Strategy* identifies the important role families play (Ministry of Health, 2001a). Increasing the ability of families to support their children and young people to make health sexual and reproductive health decisions for themselves is identified within the first strategic direction. There is an acknowledgement that age, ethnicity and the cultural norms within population groups also need to be considered. The study findings support the accepted view that the family is an important and central feature in the life of a young Sāmoan. However, the discussion of sexual issues between young people and their parents remains relatively uncommon. New Zealand studies undertaken with Sāmoans reveal that for parents and their children discussions regarding sexual health issues are generally avoided (Anae, et al., 2000; Naea, 2008). These findings are reiterated in this study. There appears to be a general lack of discussion between young Sāmoan secondary school students and their parents, specifically about sexual health matters.

Communicating about sex is a challenging issue for many communities as well as Sāmoan groups, particularly as it is a largely private activity and subject to various degrees of social, cultural, religious, moral and legal norms and constraints (Fenton, et al., 2001). As identified in the literature review and qualitative findings, the lack of discussion between Sāmoan parents and their children may in large part be due to the conservative and cultural values held by parents (Anae, et al., 2000; McClellan & Guttenbeil, 2000). There are some cultural characteristics that are unique to Sāmoans, such as *Fa'a Sāmoa*, which is underpinned by values such as respect, humility and servitude. There are also unique ways of relating within a Sāmoan *āiga* and *nu'u* (village) that may have some bearing on relationship and communication dynamics between family members (see Chapter Two).

A further feature within *Fa'a Sāmoa* is the appropriate use of the Sāmoan language (Matai'a, 2006). As Matai'a (2006) notes, the formal Sāmoan language is layered with subtlety and exudes protocol, ritual, knowledge and etiquette. Traditionally, forthright discussions pertaining to issues of a sexualized nature are not encouraged as it implies illusory crude behaviour. While exploring sexual communication from a Sāmoan parent's perspective was outside the scope of this study, it is important to acknowledge that cultural mores may influence the ways in which Sāmoan parents identify and address sexual topics with their children, or not.

There are a range of intervention mediums where parent-child communication strategies can feature. As noted in the typology of policy intervention (see Table 2 – Literature Review) media campaigns, community development approaches, and education programs are some examples where key messages – specifically aimed at parents and their adolescent children – can be disseminated. There are several Pacific resources that can support public policy agents in their roles and ensure that the development, design and implementation policy interventions are cognizant of the communication issues within Sāmoan communities (see Chapter Six: Discussion).

Research (Anae, et. al., 2000; Fa'alau, 2011; Matai'a, 2006) undertaken with Sāmoan communities in New Zealand may shed further light on how communication patterns within families may be addressed. For example, Matai'a (2006) identifies effective cultural communication tools when working with Sāmoans. These include the ability to incorporate the contextual use of inferences, narrative metaphors, determining subtleties and reading body language. Integrating these methods allows for a process in which highly sensitive topics, such as sexual behaviour, can be raised and effectively navigated. Anae et. al.'s study (2000) identified the reframing of sexual messages. For example, focusing on messages that promote 'responsible family relationships', rather than 'safe-sex'. Fa'alau's (2001) study is particularly relevant as the findings highlight the presence of excellent communication patterns between

some Sāmoan parents and their children (see Chapter Six: Discussion). Further, the findings of Fa'alau's study reveal that Sāmoan parents in 'struggling' families reportedly had low levels of communication with their adolescent children and had difficulty accepting changes they were not familiar with, and were less likely to adapt or address the changes. A question that arises is, how have 'stable' Sāmoan families navigated the issues surrounding adolescent sexuality? Further research that builds on these studies may provide illuminating tools for public health agents.

The findings of this current study suggest communication differences within and between Sāmoan families. While the overall qualitative findings revealed a lack of discussion between Sāmoan parents and their children, there is some evidence that shows that some Sāmoan parents are starting to have discussions about sex with their children. Not all Sāmoan parents are opposed to discussing sexual health issues with their children. Although this study did not specifically explore the role that wider family members play in providing sexual health information and support, there is evidence to suggest that wider family members, such as older siblings and relatives (such as aunts, uncles, sisters, brothers), play a role in providing sexual health information for Pacific young people (Anae, et. al., 2000; Matenga-Ikihele, 2012). It is unclear how reliable and accurate this information is. Further research that examines the role wider family members' play in conveying sexual information may prove informative.

Finally, it is plausible to presume that communication patterns in Sāmoan families particularly about sexual health issues will change given the changing social and demographic profile. A large proportion of Sāmoans, some 63 percent, are born in New Zealand. This population group is exposed to more information than their parents and may have greater opportunities for discussion and reflection, particularly as it is a subject covered in New Zealand classrooms. Future research that explores

patterns in sexual communication within Sāmoan families may reveal the rate of attitudinal change.

7.3.3 Co-ordinated and Responsive Interventions

Addressing sexual health issues for Sāmoan young people requires coordinated and responsive solutions that recognise the diversity in the sexual health knowledge, attitudes and behaviour within Sāmoan communities.⁵⁵

The findings from this study support the belief that a multifaceted inter-sectoral approach is required to address sexual health issues factors, particularly as the factors that influence sexual wellbeing lie outside the scope of the health sector (Ministry of Health, 2001a). Undertaking this research revealed a wide range of issues. These include:

- ❖ the limitation with sexual health survey data;
- ❖ unique issues for different age groups, such as the inconsistent use of contraception for older adolescents;
- ❖ underage sexual activity;
- ❖ exposure to violence and unwanted sex;
- ❖ the personal and cultural impacts of teenage pregnancy;
- ❖ family expectations and relationships;
- ❖ employment;
- ❖ social disadvantage and poverty;
- ❖ sensation seeking behaviours such as reckless driving;
- ❖ concerning behaviours such as suicide and exposure to pornography; and
- ❖ messages promoted from sources such as schools, peers, church teachings and social media.

⁵⁵ These communities include Sāmoan young people, parents, siblings, relatives, grandparents and churches.

As shown in the literature review, many of these factors are interconnected and operate either positively or negatively across multiple systems that span the individual, family and wider environment. As Kirby and Lepore (2007) state, factors such as community disorganization (social disadvantage) and family values also affect sexual outcomes, in part, because they affect proximal factors such as a young person's knowledge, intentions and skills. No one model or no single method will reduce teen pregnancy or sexually transmitted infection rates (Kirby & Lepore, 2007; Ministry of Health, 2001a). Policy agents and key stakeholders must therefore identify which factors they wish to focus on given the resources at their disposal.

These three concepts of: understanding the **context** in which young Pacific people are situated within, **communication**, and the **coordination** of interventions and services have been identified in the research and policy field (Anae, et al., 2000; Mila-Schaaf, et al., 2008; Ministry of Health, 2001a; Tupuola, 2000). The *New Zealand Sexual Health Strategy* identifies the need for sector development to ensure consistent messages are relayed and that there is an improvement in sexual and reproductive health (Ministry of Health, 2001a).

However, there are claims that despite the increased investment in youth health services in New Zealand, the approaches appear to be standard and do not fit and effectively respond to young Pacific people's needs. As Colin Tukuitonga, the former Chief Executive Officer for the Ministry of Pacific Island Affairs, shares:

There is a need to change the policy orientation so as to meet the unique challenges that are facing the next generation of Pacific peoples. It is my observation that despite much rhetoric about working with young Pacific people, we are not really seeing many appropriate and effective responses to young people's needs. There are, for the most part, very standard approaches to these issues....We need to be especially cognizant of some of

the identity issues facing Pacific youth growing up in New Zealand. We need to adjust service delivery, develop communication strategies and challenge what is being done so that it is responsive to the needs of Pacific young people. It is time for agencies to reflect on where and how we can respond to the issues that is coming through sources such as *Youth 2000*. The issues that face the next generation of Pacific peoples are not just the Ministry of Pacific Island Affairs' issues. They are also justice issues, education issues, social development, health, labour; all of the above. To respond meaningfully we need to work together more effectively. (cited in Mila-Schaaf, et. al., 2008, p. 3)

Whānau Ora presents an opportunity whereby sexual health for Pacific communities can be addressed by the government in partnership with Pacific communities. Whānau Ora is a key cross-government work programme jointly implemented by the Ministry of Health, Te Puni Kōkiri and the Ministry of Social Development (Te Puni Kōkiri, 2016). This approach recognizes that to improve the health and wellbeing of a child or young person, requires a focus on whānau (families). Whānau (families) are placed at the center of service delivery. Community, government and local agencies are expected to work in a coordinated way that is responsive to whānau (families) needs. Whānau Ora is driven by a focus on seven key outcomes. One of these key outcomes includes whānau and families leading healthy lifestyles (Te Puni Kōkiri, 2016).

There is provision for Pacific communities in Whānau Ora, recognising the centrality for *aiga* in Sāmoan communities. *Pasifika Futures* is one of three commissioning agencies that are contracted to fund and support initiatives which deliver the Government's Whānau Ora outcomes. *Pasifika Futures* work with regionally providers to build the capability and capacity of Pacific families (Pasifika Futures, 2016). An inherent philosophy guiding Pacific initiatives is the input of individuals with expertise in cultural knowledge (Pasifika Futures, 2016; Village Collective, 2014). As

noted in sexual health documents, effective intervention programmes require a number of features including community buy-in (Kirby, 2007; McClellan & Guttenbeil, 2000; Ministry of Health, 2001a; Naea, 2008; Tupuola, 2000). Ensuring that the perspectives of Sāmoan communities are incorporated into the design of current interventions would be advantageous. However, it is unclear to what extent current sexual health interventions incorporate cultural input into their delivery.

The investment in Pacific and sexual health in last few decades has given rise to a growing cultural resource (i.e. knowledge and practice). As noted in the discussion chapter (see Chapter Six), examples of Pacific resources include the Ministry of Pacific Island Affairs, key Pacific leaders in health, education and social service organisations (for example the Health Research Council of New Zealand, Taha and the Engaging Pasifika (EP) programme). The investment in Pacific sexual health promotion and intervention efforts have resulted in tailored programmes specifically for Pacific audiences. Much can be learned from these initiatives and from the staff who have had real-life experiences working with different Sāmoan and Pacific communities.

7.4 What Implications Arise From This Research?

The significance of this research and its findings extend to a range of audiences. This includes Sāmoan young people, their parents and families, for schools, health and social service providers and for funders and policy makers. This study offers a better understanding of the sexual health issues facing Sāmoan young people in New Zealand. For those who may not be Sāmoan or have experience working with Sāmoans, this study provides insights that can be valuable in their understanding of Sāmoan perspectives.

As this study is situated in the domain of public policy, some points for funders and policy makers are offered. This research builds on what we know about sexual risk and protective factors, sexual issues for Sāmoan youth, identifies communication

challenges, and highlights potential partnerships to advance sexual health policy initiatives for Pacific communities. This study also supports goals set in several New Zealand strategies, including Strategic Direction One and Four of the *New Zealand Sexual and Reproductive Health Strategy: Societal attitudes, values and behaviour and information and Increasing the evidence base* (Ministry of Health, 2001a). It addresses Priority Three of *Ala Mo'ui: Pathways to Pacific Health and Wellbeing 2014-2018* (Ministry of Health, 2014a) whereby Pacific peoples are supported to be healthy, as well as Goal Four of *Youth Development Strategy* that identifies building knowledge on youth development through information and research (Ministry of Youth Affairs, 2002).

Ensuring that interventions are effective and evidence-based are key priorities for public health agents. Sexual health intervention efforts cut across many funding and policy sectors. In reviewing the findings from this study, Funders and policy makers may wish to:

- ❖ review current intervention programmes and ensure that interventions draw from models and practices that have been proven effective with young Sāmoan/Pacific people and their families;
- ❖ review and develop tailored interventions that may assist Sāmoan and Pacific young people and their families to address sexual health concerns;
- ❖ review and update the *New Zealand Sexual and Reproductive Health Strategy*. Developed in 2001 as this strategy is now over 14 years old. The past decade has seen a growth in the sexual research field as well as technological advancements. The original 2001 strategy identified that a follow up process (Phase 2) would involve the development of population-specific plans for Pacific peoples. This plan would guide specific actions for the management of STIs, address unwanted and unintended pregnancy and review HIV and AIDS initiatives. This follow up plan (Phase 2) has yet to be achieved; and

- ❖ improve the quality and quantity of sexual health data collected for Pacific youth to establish whether these are persistent issues or whether these issues will disappear as a generation of New Zealand raised Pacific people become parents and the tensions between parents and their children's views of and attitudes to sexual behaviour are transformed.

7.5 In Closing

Undertaking this study was a challenging yet rewarding experience. Sexuality is a complex and highly sensitive issue. It affects every single member of society in diverse ways. It spans a range of behaviours, values, beliefs and cuts across age, ethnicity and cultures. When many people, including Sāmoans learn that I, a Sāmoan woman, am conducting sexual health research of this nature, I often receive one of two reactions – either polite yet indirect censure (i.e., that I am behaving in a manner that is unacceptable); or words of encouragement and praise. Many of the key informants in my study expressed these sentiments:

“Oh well I’m just delighted that you’re tackling the hard subject. Because it’s one of my three you know [her three difficult things to tackle in her work: sexual health, homosexuality and suicide] – it’s hard stuff to tackle. And you are Pasifika, you are Catholic, and that gives you the mana to be able to stand up there and say okay this is the research, this is the evidence that shows - how do we now begin to make the change.” [Key Informant]

Many individuals have shared with me that this (sexual health) is an area that Sāmoan families and communities need to openly acknowledge and address. The literature is clear, true and lasting progress in the field of sexual health, requires efforts at various levels (individual, family and society) over a sustained period of time (Ministry of Health, 2001b). This study offers valuable insights regarding the sexual knowledge,

attitudes and experiences of Sāmoan youth in New Zealand. The comprehensive data sources provide a depth and breadth of understanding, shedding light on real-life issues facing Sāmoan secondary school students. Showcasing these issues provides an opportunity to challenge current understandings and explore ways to address these issues, equally recognizing that the issues and experiences of Pacific communities will shift with time.

Understanding the issues facing Pacific young people and their families as well as taking action to address these issues is reflected by key Pacific and Māori health leaders, such as Dr Colin Tukuitonga (Mila-Schaaf, et al., 2008), Dame Tariana Turia (National Health Board, 2010) and Dr Teuila Percival (Helu, et al., 2009). In her foreword address for the *Pacific Youth 2007* report, Dr Percival notes:

Much is said of the need to invest in our young people and of the importance of responding to their needs. Policy and resource commitment do not necessarily follow this well meaning intent. Similarly, within our Pacific communities the needs of adults and elders continue to overshadow those of our young people. For our Pacific communities and country to progress, there is a need for all of us to listen to the views and stories of our young people and to act upon these important research results that they have gifted to us. (in Helu, et al., 2009)

Listening to young Sāmoan students and key informants share their stories was a humbling experience. Their collective experiences spoke of the joys and pains of being a young Sāmoan in New Zealand. Despite the seriousness of the issues, there was also much laughter in these conversations. An unexpected outcome was how the research process – that is the focus group discussions – helped Sāmoan students feel less alone in their experiences. At the conclusion of the focus groups, many of the Sāmoan students shared how much they enjoyed the discussion, particularly being able to

speak openly about sexual health with their peers. These sentiments are reflected in the concluding quote.

This study arose out of a desire to help improve the health and wellbeing of Pacific young people. For me, to learn that the research process helped some young Sāmoans feel understood and not alone in their experiences is a small, but sure indicator of progress:

“I second what [another participant] said, it’s nice to know we’re all the, kind of know each other, we’re all the same, okay, not the same, but we go through the same things with our parents and stuff. Like, we’re not, it’s not only us that are living, say me, that is living this protective life. You know?” “me, it’s like, it’s not, open”; “that’s a good one”; “yeah”; “it’s good to know that we are all going through it,” um”; “Amen!”; “and it’s nice how everyone was open”; “nice”; “that’s what I will say.” [Female participant]

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APPENDICES

Appendix A: Focus Group Participant Consent Form



MASSEY UNIVERSITY
COLLEGE OF HUMANITIES
AND SOCIAL SCIENCES
TE KURA PŪKENGĀ TANGATA

**Te Kunenga
ki Pūrehuroa**

School of People, Environment and
Planning Private Bag 102 904, North Shore, Auckland 0745,
New Zealand. T +64 9 441 8173 F +64 9 441 8162
<http://pep.massey.ac.nz>

*Sexual health knowledge, attitudes and behavior of Sāmoan youth in
Aotearoa/New Zealand: A mixed methods study.*

PARTICIPANT CONSENT FORM

(Focus Group)

I have read the Information Sheet and have had the details of the study explained to me. My questions have been answered to my satisfaction, and I understand that I may ask further questions at any time.

I agree not to disclose anything discussed in the FocusGroup.

I agree to participate in this study under the conditions set out in the Information Sheet.

Signature:

Date:

.....
Full Name - printed

.....
**This project has been reviewed and approved by the Massey University Human Ethics Committee:
Northern, Application 12/037 . If you have any concerns about the conduct of this research, please
contact Dr Ralph Bathurst, Chair, Massey University Human Ethics Committee: Northern,**

Telephone (09) 414 0800 extension 9570, Email humanethicsnorth@massey.ac.nz

Appendix B: Key Informant Consent Form



MASSEY UNIVERSITY
COLLEGE OF HUMANITIES
AND SOCIAL SCIENCES
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ki Pūrehuroa

School of People, Environment and Planning
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441 8173 F +64 9 441 8162 <http://pep.massey.ac.nz>

Sexual health knowledge, attitudes and behavior of Sāmoan youth in Aotearoa/New Zealand: A mixed methods study.

PARTICIPANT CONSENT FORM

(Key Informant)

I have read the Information Sheet and have had the details of the study explained to me. My questions have been answered to my satisfaction, and I understand that I may ask further questions at any time. I understand that I have the right to withdraw from the study at any time and to decline to answer any particular questions.

I agree to provide information to the researcher on the understanding that my name will not be used without my permission. The information will only be used for this research, seminars, and publications arising from this research project.

I agree/do not agree to the interview being sound
recorded. I wish/do not wish to have my recordings
returned to me.

I agree to participate in this study under the conditions set out in the Information Sheet.

Signature:..... **Date:**.....

Full Name – printed

.....

This project has been reviewed and approved by the Massey University Human Ethics Committee: Northern, Application 12/037. If you have any concerns about the conduct of this research, please contact Dr Ralph Bathurst, Chair, Massey University Human Ethics Committee: Northern, Telephone (09) 414 0800 extension 9570, Email humanethicsnorth@massey.ac.nz

Appendix C: Focus Group Participant Information Sheet



Te Kunenga
ki Pūrehuroa
School of People, Environment and Planning
Private Bag 102 904, North Shore, Auckland 0745, New Zealand.
T +64 9 441 8173 F +64 9 441 8162 <http://pep.massey.ac.nz>

Sexual health knowledge, attitudes and behavior of Sāmoan youth in Aotearoa/New Zealand: A mixed methods study.

PARTICIPANT INFORMATION SHEET (Focus Group)

Talofa lava, my name is Analosa Veukiso-Ulugia and I am currently studying towards a Doctor of Philosophy (PhD) at Massey University – Auckland. As part of this degree, I am undertaking a research project that is exploring the sexual health knowledge, attitudes and behaviours of Sāmoan youth in Aotearoa/New Zealand. This study has been funded by the Health Research Council of New Zealand.

Background information

The purpose of this PhD study is to:

- Determine the prevalence of sexual behaviours of Sāmoan secondary school students in New Zealand
- Identify and describe factors (risk & protective) associated with sexual behaviours among Sāmoan secondary school students in New Zealand
- Explore the perceptions of Sāmoan secondary school students and key informants on sexual and reproductive health issues
- Explore the significance of these findings to public health interventions and policy

Improving the health and social wellbeing of Pacific communities is a key priority for the New Zealand Government. Although there is some information out there about the issues facing Pacific youth born and raised in New Zealand, there is very little information on specific ethnic groups such as Sāmoans and on the issues influencing their sexual health. I hope the findings from this study will help health professionals, policy makers, school communities and faith communities to understand the realities of Sāmoan young people's lives and develop activities that can enhance the health and wellbeing of Pacific communities the wider New Zealand society.

Invitation

You are invited to participate in a focus group discussion with up to six other Sāmoan students from your school. You have been selected as a potential participant because you are a young person that identifies with the Sāmoan ethnicity, are aged between 16 and 19 years and at an Auckland secondary school. Your participation is completely voluntary and confidential.

What will happen?

If you agree to participate in this study, you will be discussing the kinds of sexual health messages that young Sāmoans receive in their community. There are no right or wrong answers; I am interested in your honest opinions. It is important to let you know that you will not be asked any personal questions about your own behaviour.

I will lead the discussions with female students and a male Sāmoan will lead the discussions with male students. This discussion will take place either at your school or at a venue near your school and will occur either during school hours or after-school. The discussion will take between an hour to an hour and a half. The groups will discuss a range of open-ended questions. The discussions will be in English but you are most welcome to share your thoughts in the Sāmoan language if you feel more comfortable.

Support processes

If you feel upset during the discussion, you can stop the interview and ask the facilitator for help. You are also welcome to seek help from your school support team or any of the organisations which are listed below should you wish to.

Acknowledgement

I am grateful to you for sharing your time and knowledge and this will be acknowledged with a \$20 Westfield voucher. A light meal will be also provided following the interview. If required, a small contribution can also be made in the form of a transport voucher.

What will happen to the information?

As long as you are comfortable this focus group discussion will be recorded. During the discussion I can turn off the recorder at any time and you can choose not to answer particular questions. The discussion will be transcribed, saved on a secure computer, printed and analysed for use in this study. Your identity will not be connected with the information which you provide. Your information will only be available to me and my supervisors and after five years I will destroy the information.

Research findings

The findings from these interviews may be used as part of a thesis. The research findings from the project may also be shared in conferences, published in journals and will be publicly available. I will ensure that you are not identified in any way in the information that will be publicly available. I will also ensure that you receive a summary of the findings and you may also read the full report in the university library.

Your rights

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

- decline to answer any particular question;
- ask any questions about the study at any time during participation;
- provide information on the understanding that your name will not be used;
- be given access to a summary of the project findings when it is concluded;
- ask for the recorder to be turned off at any time during the interview;
- And to withdraw from the study two weeks after the interview has taken place.

Any Questions?

If you or your parents have any questions regarding this research please feel free to contact myself, my supervisors Associate Professor Grant Duncan, Professor Cluny Macpherson or Mr Ben Taufua, my Sāmoan Advisor whose details are listed below.

PhD Candidate/Researcher	Supervisor	Supervisor	Sāmoan Advisor
Analosa Veukiso-Ulugia	Association Professor Grant Duncan	Professor Cluny Macpherson	Mr Ben Taufua
Ph: (09) 414 0800 Extension: 9173	Ph: (09) 414 0800 Extension: 9086	Ph: (09) 414 0800 Extension: 9057	Ph: (09) 414 0800 Extension: 9795
Email: Analosa.veukiso-ulugia.1@uni.massey.ac.nz	L.G.Duncan@massey.ac.nz	c.macpherson@massey.ac.nz	B.P.Taufua@massey.ac.nz
Address: School of People, Environment & Planning Massey University Private Bag, 102904, North Shore Auckland 0745			Address: Pasifika Directorate Massey University Private Bag, 102904, North Shore Auckland 0745

**This project has been reviewed and approved by the Massey University Human Ethics Committee: Northern, Application 12/037. If you have any concerns about the conduct of this research,
please contact Dr Ralph Bathurst, Chair,
Massey University Human Ethics Committee: Northern,
Telephone (09) 414 0800 extension 9570, Email humanethicsnorth@massey.ac.nz**

Support Organisations

Youthline

Youthline is an organisation for young people and their families in New Zealand to access a wide range of youth development and support services.

Phone: (09) 3766645 or 0800 376 633. Free text: 234

Website: <http://www.youthline.co.nz> Email: talk@youthline.co.nz

Te Puaruruhau

Te Puaruruhau is a health service based at Puawatahi: a multi-agency centre opposite Starship Hospital. They accept referrals for 0-19 year olds for historic, current and acute cases of sexual and physical assault.

Phone: (09) 307 2860.

Auckland Sexual Health Service (ASHS)

The service offers diagnosis and treatment of sexually transmitted infections and HIV. The Auckland Sexual Health Service also offers counselling and education for all matters relating to sexual health.

Phone: (09) 630 9770 or 0800 739 432. Website: <http://www.ashs.org.nz>

Email: akstd@adhb.govt.nz

Appendix D: Key Informant Information Sheet



Te Kunenga
ki Pūrehuroa

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Private Bag 102 904, North Shore, Auckland 0745, New Zealand.
T +64 9 441 8173 F +64 9 441 8162 <http://pep.massey.ac.nz>

Sexual health knowledge, attitudes and behavior of Sāmoan youth in Aotearoa/New Zealand: A mixed methods study.

PARTICIPANT INFORMATION SHEET (Key Informants)

Talofa lava, my name is Analosa Veukiso-Ulugia and I am currently studying towards a Doctor of Philosophy (PhD) at Massey University – Auckland. As part of this degree, I am undertaking a research project that is exploring the sexual health knowledge, attitudes and behaviours of Sāmoan youth in Aotearoa/New Zealand. This study has been funded by the Health Research Council of New Zealand.

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Improving the health and social wellbeing of Pacific communities is a key priority for the New Zealand Government. Although there is some information out there about the issues facing Pacific youth born and raised in New Zealand, there is very little information on specific ethnic groups such as Sāmoans and on the issues influencing their sexual health. I hope the findings from this study will help health professionals, policy makers, school communities and faith communities to understand the realities of Sāmoan young people's lives and develop activities that can enhance the health and wellbeing of Pacific communities the wider New Zealand society.

Invitation

You are invited to participate in this study as a key informant. You have been identified as a potential participant because you are a health professional working

with the Sāmoan youth in the area of sexual and reproductive health. Your participation is completely voluntary and confidential.

What will happen?

If you agree to participate in this study, we will meet at a venue that is convenient to you. The interview is informal and semi-structured and will take between 60 and 90 minutes. The interviews will be conducted in English, but you are most welcome to share your thoughts in Sāmoan if you feel more comfortable doing so.

What are the discomforts and risks?

There should be no discomforts or risks in your participation in the research.

Acknowledgement

Your time and expertise is appreciated and will be acknowledged with a Westfield shopping voucher.

What will happen to the information?

If you are comfortable our interview will be recorded. During the interview I can turn off the recorder at any time and you can choose not to answer particular questions. The interviews will be transcribed, saved on a secure computer, printed and analysed for use in this study. Your identity will not be connected with the information which you provide. Your information will only be available to me and my supervisors and after five years I will destroy the information you provide.

Research findings

The findings from these interviews may be used as part of a thesis. The research findings from the project may also be shared in conferences, published in journals and will be publicly available. I will ensure that you are not identified in any way in the information that will be publicly available. I will also ensure that you receive a summary of the findings and you may also read the full report in the university library.

Your rights

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

- decline to answer any particular question;
- ask any questions about the study at any time during participation;
- provide information on the understanding that your name will not be used;
- be given access to a summary of the project findings when it is concluded;
- ask for the recorder to be turned off at any time during the interview;
- And to withdraw from the study two weeks after the interview has taken place.

Any Questions?

If you have any questions regarding this research please feel free to contact myself, my supervisors Associate Professor Grant Duncan, Professor Cluny Macpherson or Mr Ben Taufua, my Sāmoan Advisor whose details are listed below.

PhD Candidate/Researcher	Supervisor	Supervisor	Sāmoan Advisor
Analosa Veukiso-Ulugia	Association Professor Grant Duncan	Professor Cluny Macpherson	Mr Ben Taufua
Ph: (09) 414 0800 Extension: 9173	Ph: (09) 414 0800 Extension: 9086	Ph: (09) 414 0800 Extension: 9057	Ph: (09) 414 0800 Extension: 9795
Email: Analosa.veukiso- ulugia.1@uni.massey.ac.nz	L.G.Duncan@massey.ac.nz	c.macpherson@massey.ac.n z	B.P.Taufua@massey.ac.nz
Address: School of People, Environment & Planning Massey University Private Bag, 102904, North Shore Auckland 0745			Address: Pasifika Directorate Massey University Private Bag, 102904, North Shore Auckland 0745

This project has been reviewed and approved by the Massey University Human Ethics Committee: Northern, Application 12/037. If you have any concerns about the conduct of this research, please contact Dr Ralph Bathurst, Chair, Massey University Human Ethics Committee: Northern, Telephone (09) 414 0800 extension 9570, Email humanethicsnorth@massey.ac.nz

Appendix E: Focus Group Interview Schedule



MASSEY UNIVERSITY
COLLEGE OF HUMANITIES
AND SOCIAL SCIENCES
TE KURA PŪKENGĀ TANGATA

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School of People, Environment and Planning
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T +64 9 441 8173 F +64 9 441 8162 <http://pep.massey.ac.nz>

Sexual health knowledge, attitudes and behavior of Sāmoan youth in Aotearoa/New Zealand: A mixed methods study.

SEMI-STRUCTURED INTERVIEW SCHEDULE (Focus Group)

Introductions & Focus group process

- Before the focus group begins, members of the group will be invited to introduce themselves (including the researcher). Each informant will be reminded about the project aims and objectives, the reasons they had been selected to be interviewed, the interviewing process and the value of the project findings to communities within New Zealand. Students will be reminded that their information is anonymous and voluntary and that a recorder will be used. Students will be able to raise any questions prior to the discussion proceeding.
- Ice-breaker
- Focus group process explained
 - Ground rules established (respect, confidentiality, safety mechanisms (distress/harm).
 - Discussion will be conducted around themes raised

Discussion themes

Understanding of sexual health terminology

- What do they understand sexual health/sexuality to mean?
- Roles and responsibilities to contraception (differences in Sāmoan males/females; ages?)
- Sources of sexual health knowledge/information for Sāmoan young people

- Roles and messages given by different bodies (i.e. schools/health professionals/ organisations/families/ church communities/ other communities) about

Risk and Protective factors

- Thoughts on potential protective factors within Sāmoan families that may positively influence sexual health knowledge, attitudes and behavior of Sāmoan youth
- Thoughts on potential risk factors within Sāmoan families that may negatively influence sexual health knowledge, attitudes and behavior of Sāmoan youth
- Areas concerning / trends that they are seeing within their community?

Current sexual health interventions

- Do you know of any sexual health interventions in your community?
- What types of interventions are working well? Why?
- What types of interventions are not working well? Why not?

Ways forward

- What strategies to address sexual health issues for Sāmoan youth in Aotearoa/New Zealand might work and why?
- What strategies won't work and why?
- Suggestions on avenues for dissemination of research findings so they would be accessed by all interested in the research.

Conclusion

- Wrap up the group discussion.
- Students invited to complete demographic information sheet
- Provide additional information about the research e.g., time-frame of report, availability of report, ways of finding out how the study is progressing and findings from the study.
- Thank students for participating and present vouchers
- Meal together

This project has been reviewed and approved by the Massey University Human Ethics Committee: Northern, Application 12/037. If you have any concerns about the conduct of this research, please contact Dr Ralph Bathurst, Chair, Massey University Human Ethics Committee: Northern,

Appendix F: Key Informant Interview Schedule



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Sexual health knowledge, attitudes and behavior of Sāmoan youth in Aotearoa/New Zealand: A mixed methods study.

SEMI-STRUCTURED INTERVIEW SCHEDULE (Key Informants)

Before the interview begins, each informant will be reminded about the project aims and objectives, the reasons they had been selected for interview and the interviewing process.

Background Information

Background information will be gathered on each interviewee, profiling their occupation and job description, previous work experiences and positions held and involvement in community networks on the professional and personal level.

Experiences with Sāmoan youth in the area of Sexual health

The key informants will be encouraged to share on the nature of their work with discussions centered on the types of issues they experience in relation to Sāmoan youth (sexual health)

Themed areas

Sexual health knowledge/attitudes and behaviour of Sāmoan young people

- understanding of sexual health/sexuality
- are there differences in ages 13 to 19 year olds/genders
- roles and responsibilities in contraception (differences in Sāmoan males/females; ages?)
- Sources of sexual health knowledge/information for Sāmoan young people
- Roles played by different bodies (i.e. schools/health professionals/ organisations/families/ church communities/ other communities)

Risk and Protective factors

- Thoughts on potential protective factors within Sāmoan families that may positively influence sexual health knowledge, attitudes and behavior of Sāmoan youth
- Thoughts on potential risk factors within Sāmoan families that may have a negative influence on sexual health knowledge, attitudes and behavior of Sāmoan youth
- Areas concerning / trends?

Current sexual health interventions

- What types of interventions are working well? Why?
- What types of interventions are not working well? Why not?

Ways forward

- What could be potential strategies to address sexual health issues for Sāmoan youth in Aotearoa/New Zealand
- Suggestions on avenues for dissemination of research findings so they would be accessed by all interested in the research.

Conclusion

- Wrap up of the interview, thanks to the person for participating and acknowledgement gift given.
- Additional information provided about the research e.g., time-frame of report, availability of report, ways of finding out how the study is progressing and findings from the study.

This project has been reviewed and approved by the Massey University Human Ethics Committee: Northern, Application 12/037. If you have any concerns about the conduct of this research, please contact Dr Ralph Bathurst, Chair, Massey University Human Ethics Committee: Northern,

Appendix G: Focus Group Demographic Questionnaire



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Sexual health knowledge, attitudes and behavior of Sāmoan youth in Aotearoa/New Zealand: A mixed methods study.

FOCUS GROUP DEMOGRAPHIC QUESTIONNAIRE

Interview Code:

Date of Interview:

Please tick the appropriate box

1. How old are you?

16	17	18	19

2. What gender do you identify with? _____

3. Apart from Sāmoan, do you identify with any of the following ethnic groups?
 (You may choose more than one)

I don't identify with any other group	NZ European	Other Pacific	Māori	Chinese	Other

4. Where you born?

New Zealand	Sāmoa	Other

5. Are your parents both Sāmoan?

Yes	No

6. What language do you usually speak at home? (You may choose more than one)

English	Sāmoan	Other

I don't attend

7. What church do you attend?

church

You may write down more than one church or you may select _____

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Appendix H: Male Facilitator (Focus Group) Confidentiality Agreement



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Sexual health knowledge, attitudes and behavior of Sāmoan youth in Aotearoa/New Zealand: A mixed methods study.

CONFIDENTIALITY AGREEMENT (Male Focus Group Facilitator)

I (Full Name - printed)

agree to keep confidential all information concerning the project: Sexual health knowledge, attitudes and behavior of Sāmoan youth in Aotearoa/New Zealand: A mixed methods study.

I will not retain or copy any information involving the project.

Signature: Date:

This project has been reviewed and approved by the Massey University Human Ethics Committee: Northern, Application 12/037. If you have any concerns about the conduct of this research, please contact Dr Ralph Bathurst, Chair, Massey University Human Ethics Committee: Northern,

Telephone (09) 414 0800 extension 9570, Email humanethicsnorth@massey.ac.nz

Appendix I: Sāmoan participant survey responses to cultural and family questions

1. Proud of being Sāmoan

Youth '07 Survey question: *Are you proud of being Sāmoan?*

Response Options	Frequency	Proportion (%)
I'm very proud	406	88
I'm somewhat proud	47	10
I'm not at all proud	7	2
Total	460	100

2. Satisfaction of knowledge of thing Sāmoan

Youth '07 Survey question: *How satisfied are you of your knowledge of things Sāmoan?*

Response Options	Frequency	Proportion (%)
Very satisfied'	103	22
Satisfied	188	41
Somewhat satisfied'	92	20
Not satisfied'	57	12
Not at all satisfied'	21	5
Total	461	100

3. Understanding of the spoken Sāmoan language

Youth '07 Survey question: *How well can you understand spoken Sāmoan language?*

Response Options	Frequency	Proportion (%)
Very well	143	31
Well	106	23
Fairly well	81	17
Not very well	59	13
No more than a few words	74	16
Total	463	100

4. Feeling close to your Mum

Youth '07 Survey question: *How much of the time do you feel close to your Mum? (or someone who acts as your mum)*

Response Options	Frequency	Proportion (%)
Most of the time	322	62,
Sometimes	145	28
Hardly ever	33	6
Does not apply to me	18	3
Total	517	100

5. Feeling close to your Dad

Youth '07 Survey question: *How much of the time do you feel close to your Dad? (or someone who acts as your dad)*

Response Options	Frequency	Proportion (%)
Most of the time	243	47
Sometimes	159	31
Hardly ever	65	13
Does not apply to me	47	9
Total	514	100

6. Family want to know who you are with and where you are

Youth '07 Survey question: *Does your family want to know who you are with and where you are?*

Response Options	Frequency	Proportion (%)
Always	358	69
Usually	102	20
Sometimes	44	8
Almost never	14	3
Total	518	100

7. How much do your parents (or the people who act as your parents) really know about who your friends are

Youth '07 Survey question: *How much do your parents (or the people who act as your parents) really know about who your friends are?*

Response Options	Frequency	Proportion (%)
A lot	176	34
A little	257	50
Not at all	74	14
Does not apply to me	9	2
Total	516	100

8. How much does your Mum care about you

Youth '07 Survey question: *How much do you feel the following people care about you? Mum (or someone who acts as your mum)*

Response Options	Frequency	Proportion (%)
A lot	420	82
Some	48	9
A little	20	4
Not at all	18	3
Does not apply to me	9	2
Total	515	100

9. How much does your Mum care about you

Youth '07 Survey question: *How much do you feel the following people care about you? Dad (or someone who acts as your dad)*

Response Options	Frequency	Proportion (%)
A lot	362	70
Some	65	13
A little	23	4
Not at all	32	6
Does not apply to me	32	6
Total	514	100