

Family Influences on Asian Youth Smoking in the Context of Culture and Migration to New Zealand

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A thesis submitted to Auckland University of Technology in fulfilment of the
requirements for the degree of
Doctor of Philosophy

Nursing
School of Health Care Practice
Faculty of Health and Environmental Sciences
Auckland University of Technology
2013

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List of Abbreviations

| | |
|------|-----------------------------------------|
| AUT | Auckland University of Technology |
| DHB | District Health Board |
| FCTC | Framework Convention on Tobacco Control |
| ETS | environmental tobacco smoke |
| GYTS | Global Youth Tobacco Survey |
| KKS | Keeping Kids Smokefree |
| NRT | nicotine replacement therapy |
| PDA | personal data assistant |
| SES | socioeconomic status |
| TANI | The Asian Network Incorporated |
| WDHB | Waitemata District Health Board |
| WHO | World Health Organization |

The following words and abbreviations are used after the quotes to describe the participant and interview characteristics in Chapter Nine:

| | |
|-------------------------|-------------------------------|
| S Asian | South Asian |
| SE Asian | South East Asian |
| E Asian | East Asian |
| s | smoker |
| ns | nonsmoker |
| I. | interview number (family) |
| FG. | focus group number (student) |
| Interpreted | interpreter used at interview |
| <i>italicised words</i> | words added by author |

Statement of Original Authorship

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

Signature: 

Date: 20th December, 2013

Acknowledgements

Thanks to the study participants, schools, cultural advisors and the Asian Network Incorporated. Thanks also to my supervisors Professor Jane Koziol-McLain and Dr Marewa Glover, the Strategy to Advance Research in Nursing and Allied Health (STAR), Nursing and the Faculty of Health and Environmental Sciences at AUT University. I appreciate the support of Drs Nick Garret and Janine Paynter, the Keeping Kids Smokefree Study Team and the PhD support group members especially Drs Shoba Nayar and Ann Paddy. I would like to thank Lynn Stevenson, Christine Cook, Andrew Lavery, and especially my family for their encouragement and support. I dedicate my work to my late mother and father.

Abstract

The government has an aspirational goal for a smokefree New Zealand by 2025. Low smoking rates among New Zealand Asian youth must be maintained to protect the future health of this growing subpopulation and to contribute to achieving the goal. Family risk and protective factors for smoking among New Zealand Asian youth, and Asian families' perceptions of tobacco control initiatives, have not been investigated. The ecological framework encompasses the influences of culture, migration, family factors and tobacco control on Asian youth smoking.

The aim of the study was to identify family drivers for low smoking rates among New Zealand Asian youth. An ecological perspective and mixed methods research design were used. Findings from an exploratory quantitative descriptive analysis of baseline data from the school-based Keeping Kids Smokefree study were followed up with qualitative descriptive research with Asian students and families. Associations between the key student outcome variable, ever-smoking, and family risk and protective factors were investigated for year seven and eight Asian and non-Asian students. A multivariate analysis was used to explore family factors, acculturation and ever-smoking. The relationship of smoking status and family factors reported by Asian and non-Asian parents was investigated. The processes and beliefs about parenting to protect children from smoking in New Zealand underlying the quantitative results were followed up with in-school Asian student focus groups and home-based qualitative Asian family interviews. The qualitative data was analysed using a general inductive approach.

Asian youth in the Keeping Kids Smokefree sample (n=1093) have low ever-smoking rates. Maternal, but not paternal, smoking was a risk factor for youth ever-smoking. Living in a two parent family, smokefree homes and cars, parental monitoring of pocket money and identifying as Asian versus Asian/non-Asian were protective. Parental monitoring of smoking remained protective in the presence of acculturation measured as strength of identity as Asian. Asian children had lower smoking rates than non-Asian students and were more likely to experience protective family factors. Asian parents who do not smoke (n=858) are less likely to expose their children to smoking related risk factors than those who smoke. Seventeen qualitative interviews were conducted with Fijian Indian, Indian, Chinese, Cambodian, Vietnamese, Thai and Filipino families. The key driver for smokefree Asian children was socialisation into their

families' cultural and religious values. These included the primacy of family, respect for elders and education, and valuing children. Family care included teaching about smoking and control in the form of monitoring whereabouts, friends and money. Migration had a minor influence on Asian family socialisation of young adolescent children about smoking. Families and students supported tobacco control initiatives but quit smoking services in Asian language are needed. There was concern about older Asian adolescents taking up smoking.

Despite the heterogeneous nature of the sample, the Asian families share key factors which influence low youth smoking rates. In general, the participants' religious and cultural backgrounds reflect worldviews which emphasise family and community interdependence, morality and duty. These shape parenting practices which engender behaviours in children which protect them from smoking. The role of families in maintaining low Asian youth smoking rates should be recognised and supported. Maternal smoking and concern about protecting older Asian adolescents from smoking should be followed up. Asian parents who smoke need language appropriate services to support quitting.

Chapter One: Introduction

Introduction

Chapter One includes reasons for the choice of the research topic, information about smoking, a personal perspective of the study and its underpinning theoretical approaches. These are human ecology, ethnotheories, tobacco control and epidemiology. There are overviews of the Keeping Kids Smokefree (KKS) study and of this study.

The focus of the study is the influence of family on Asian youth smoking in the context of culture and migration to New Zealand. There are a number of reasons for this choice. Smoking is dangerous to health. Half of those who smoke die early; many of the people who die do so in middle age, losing 14 years of life each on average (Peto, Lopez, Boreham, Thun, & Heath, 1994). Environmental tobacco smoke (ETS) causes further deaths (Woodward & Laugesen, 2001). The deaths and suffering from diseases caused by smoking are entirely preventable. This study investigates factors that protect New Zealand Asian children from taking up smoking in order to avoid the future excess burden of death and disease caused by smoking among this population.

The Asian sub-population is the fastest growing in New Zealand. It is predicted that it will increase from 400,000 in 2006 to 790,000 by 2026, an increase of 95% (Statistics New Zealand, 2008). It is critical to retain low rates of smoking initiation among Asian youth (Year 10 males 3%; females 2%), to retain low adult Asian female smoking rates (5%), and to reduce adult male rates (18%). Of concern are the rise in smoking rates from 6% among New Zealand Asian 15–19 years olds to 20% among all 20–24 year olds and 34% among males of this age (Ministry of Health, 2007b; Scragg, 2007).

The effects of migration to a Western country on smoking among New Zealand Asian peoples, especially women, warrant investigation. Western social norms around female smoking may threaten protective cultural influences for Asian females while tobacco control policy and social norms in Western countries protect Asian males from smoking. For example, female smoking rates are higher among American born Chinese and Filipino females than for females born in their countries of origin. The opposite is true for men (Maxwell, Bornaards, & McCarthy, 2005). More understanding of the

dynamics of Asian youth smoking uptake will help develop tobacco control strategies for Asian peoples in Western countries.

Asian youngsters consistently report lower smoking rates than children from non-Asian backgrounds in New Zealand and other Western countries. This study focuses on the role of family factors because the relative risk of New Zealand Asian youth smoking if family members, particularly mothers smoke is very high; strong relationships between protective family factors and lower risk of smoking in New Zealand Asian youth are not attenuated in the presence of acculturation; New Zealand Asian parents emphasise parental authority when discussing smoking and parenting; and family influences on smoking significantly outweigh peer influences among Taiwanese youth (Glover et al., 2006; C. P. Wen et al., 2005; G. Wong, Ameratunga, Garrett, Robinson, & Watson, 2008; G. Wong & Garrett, 2004). Family focused tobacco control interventions for Asian peoples are congruent with Asian cultural values (Huff & Kline, 1999) but there is little in-depth research about how Asian families protect their children from smoking in a Western environment.

This research considers the appropriateness of current tobacco control strategies for the New Zealand Asian population. Social marketing and community, family and individually focused interventions to promote smoking cessation and reduce smoking uptake do not include Asian specific services apart from translated resources on the national Quitline website and one localised smoking cessation and smokefree environments service (G. Wong, 2007). Determining how family and cultural factors influence Asian people's health-related behaviours in the context of New Zealand's broader tobacco control strategies can inform community and family focused health promotion interventions aimed at reducing risky behaviours in the growing Asian population. It is vital to understand if and how interventions need to be tailored specifically for the New Zealand Asian population. Knowledge of effective ways to reduce smoking is also important for Asian countries grappling with the effects of the globalisation of the tobacco industry, high male smoking rates and increasing youth initiation (Boyle, Gray, Henningfield, Seffrin, & Zatonski, 2004; Mackay, Eriksen, & Shafey, 2006).

The research promotes the inclusion of Asian peoples in New Zealand society by engaging the Asian community in health promotion, tobacco control and research. It also articulates a positive Asian contribution to New Zealand society. The hope is that the processes, practices and beliefs underpinning low smoking rates in Asian youth will

be supported and shared with other New Zealanders. Asian peoples have lived in New Zealand since the 1860s. Together with Pacific Island, European, Middle Eastern, African and other peoples they form the Crown side of the Treaty of Waitangi partnership with Māori. The adaptability of Asian migrants and the cultural paradigms, norms and practices which lead to positive factors such as high education levels, strong work ethics and low youth and female smoking rates are not understood or normalised into the New Zealand way of life.

Since family influences do not exist in isolation from cultural, social, personal and environmental factors I adopt a socio-ecological approach to this investigation. This approach acknowledges proximal and distal influences on smoking including the interplay among these influences and the passage of time. Thus the theories, frameworks and models I have chosen to underpin the study are multi-factorial. They include the Ottawa Charter for Health Promotion, the Framework Convention Tobacco Control (FCTC) and human-ecological perspectives of culture, migration and family. In keeping with this I consider the impact of the dominant Western paradigm on family influences on Asian youth smoking.

Smoking

Tobacco is the dried product of the plant *Nicotiana tabacum* L. It originates from South America. Tobacco has been used throughout the world for centuries. Its use in the West and Asia followed its discovery in the Americas in the 15th Century (Gilman & Xun, 2004). Currently, manufactured cigarettes are the most commonly used form of tobacco worldwide. They became widely available from the late 19th century with the advent of cigarette rolling machines (Goodman, 2005). Cigarettes and bidis constitute 85% of global tobacco consumption.

Asian migrants to New Zealand may be familiar with a range of tobacco products. Bidis are commonly smoked in India. They are tobacco hand-wrapped in a dried temburni leaf (Jha & Chaloupka, 1999). Chewing tobacco such as pan masala (tobacco, areca nuts and slaked lime wrapped in a betel leaf) and gutkha is also commonly used in India (Reddy & Gupta, 2004). In China people most commonly smoke cigarettes and pipes. Sixty percent (59.8%) of New Zealand tobacco users smoke hand-rolled cigarettes (Ministry of Health, 2010).

Tobacco products are addictive. They contain nicotine, a stimulant which takes 10 to 19 seconds to reach the brain when inhaled as tobacco smoke (Benowitz, 1999; Djordjevic,

2004; Royal College of Physicians of London, 2000). Once it reaches the brain neurotransmitters such as dopamine are released. The person who smokes is rewarded and experiences pleasure and relief from craving quickly (Royal College of Physicians of London, 2000). Addiction to the nicotine in tobacco occurs rapidly. The first symptoms of dependence occur within days of initial use, well before daily use is established (DiFranza et al., 2000). Because of this prevention of youth experimentation with cigarettes is vital.

All forms of tobacco use are harmful (Samet, 2004; World Health Organisation, 2006). Globally, it is predicted that tobacco related deaths will rise from 5.4 million in 2005 to 6.4 million in 2015 and 8.3 million in 2030 (Mathers & Loncar, 2006). In New Zealand, some 5,000 smokers and non-smokers die annually from chronic diseases such as cancer and heart disease caused by smoking tobacco and exposure to ETS (Ministry of Health, 2006b). In India, tobacco deaths are estimated at 638,000 per year (Reddy & Gupta, 2004). In China, 2005, a total of 673,000 deaths were attributed to smoking in 2005 (Gu et al., 2009).

The health consequences of smoking among children and adolescent populations are profound. Addiction at an early age increases the risk of continued smoking and chronic disease through the life course. There are also the immediate health effects of active smoking including reduced lung function, impaired lung growth and asthma. Smoking in adolescence and young adults is causally related to early abdominal aortic atherosclerosis in young adults (United States Department of Health and Human Services, 2012).

Quitting reduces the risk of smoking related cancer, coronary heart disease and chronic obstructive pulmonary disease (IARC Handbooks of Cancer Prevention, 2007). Cessation protects others since ETS is harmful (Samet, 2004). Unfortunately it is very difficult for smokers of any age to quit—a systematic review found the success rate of quitting unaided to be 3–5% (Hughes, Keely, & Naud, 2004).

Personal Perspective and Health Promotion Values

I am a fourth generation New Zealand born Chinese woman. I have a longstanding interest in tobacco control and the health of Asian peoples in New Zealand. I was a researcher and policy analyst for Action on Smoking and Health (ASH) and am a founding member of the Tobacco Control Research Centre. Currently I am an academic in the Faculty of Health and Environmental Sciences at Auckland University of

Technology (AUT). My advocacy focus is tobacco control, smoking and nursing. I am director of Smokefree Nurses Aotearoa/New Zealand and co-ordinator of Tobacco Control Nurses International.

I conducted this research to find out why smoking rates among Asian children in New Zealand are low, to learn how this can be maintained and to share useful findings with others. I believe that all individuals, families and communities in New Zealand should have the opportunity to achieve optimal physical, mental, spiritual and social well-being and that definitions of well-being are diverse. Although I am concerned about racism I am an optimistic person. I believe that more respect for diversity and cross-fertilization of health promoting practices between cultures is feasible.

Dr Shoba Nayar conducted a pre-suppositions interview with me to identify my assumptions and underlying beliefs about the study topic. I hoped to understand if and how they influenced my study, particularly my interpretation of the qualitative research interview data. Dr Nayar asked me the following open-ended questions:

- What are your beliefs about Asian parenting and youth smoking?
- What do you think Asian children and parents will tell you about the KKS study?
- What effect do you think your age, gender and ethnicity will have on the interviews?

I taped, transcribed and analysed the interview. Based on my own experiences, personal knowledge of my extended family and a few others in the New Zealand Chinese community and my prior research, I suggested that respect for elders, parental monitoring and training children would be key parenting factors. I was not sure if parents specifically talked about or instructed their children about smoking especially if they did not smoke. I was also not sure if Asian parents would actively participate in the school-based KKS study interventions because they prioritise work to support the family, because the study was directed at Māori and Pacific Island families, and because the resources are in English. On the other hand I thought that respect for the children's schools might mean that parents supported of the KKS study. I reflect on the potential effect of my gender and ethnicity on interviews with men and women from different Asian ethnic groups to mine in Chapter Five. I compare my beliefs with the study findings in the discussion chapter.

The vision of the Ottawa Charter for Health Promotion encapsulates the perspective and values of the thesis. These are an ecological approach, empowerment, inclusiveness and equity. In common with the Ottawa Charter the thesis focuses on the multiple determinants of health not disease. The Charter is a World Health Organisation document. It was signed in 1986 at the First International Conference on Health Promotion. It is widely regarded as the document that marks a shift from a top down health education and disease prevention approach to a salutogenic approach to public health. The Charter's vision is for public health based on equity and the empowerment of people and communities. Thus the Ottawa Charter defines health as "the process of enabling people to increase control over and to improve their health" (World Health Organization, 1986).

The Charter incorporates "political, economic, social, cultural, environmental, behavioural and biological factors" into a multi-level framework of people-centred strategies to address the determinants ("prerequisites") of health. The strategies range from political action for healthy public policy, empowering communities, supportive environments, and developing individual skills to re-orienting the health sector to public health action. Subsequent meetings reviewed the Charter's relevance to developing countries, incorporated globalisation and added the role of the private sector (Catford, 2007). The Charter's concepts and strategies are relevant to New Zealand where health promotion is a recognised career pathway supported by tertiary education and research (Raeburn, 2007).

The Ottawa Charter is congruent with a pluralistic (versus assimilative) view of race relations and respect for the Treaty of Waitangi. These positions are reflected in the New Zealand Health Strategy (Ministry of Health, 2000). Values in the Charter such as equity and community empowerment support self-definition of health issues and interventions by and for Asian peoples in New Zealand. In common with the vision of the Ottawa Charter, organisations such as the Asian Pacific Islander Coalition Against Tobacco and Professor Grace Ma's extensive Asian American and tobacco control research programme emphasise community empowerment through consultation and partnership to develop culturally appropriate strategies to reduce smoking (Asian Pacific Islander Coalition Against Tobacco, 2010; Center For Asian Health, 2006).

I interpret the Ottawa Charter definition of health as autonomy over health as community and family autonomy rather than as individual autonomy only. I assume that the use of the inclusive term "people" accommodates both individualistic and

collectivistic societies. Methodological difficulties with evaluating the impact of the Charter arise from the visionary scope of the concepts and their complexity (Evans, Hall, Jones, & Neiman, 2007). In this study and elsewhere it is accepted as a document with values to underpin thought and practice rather than a step by step intervention and evaluation tool.

Theoretical Frameworks

This section briefly reviews the theoretical sources of competing and complementary strategies to address smoking. Theoretical perspectives of human behaviour, such as smoking, range from the sub-individual to the population level (Table 1). Interventions addressing smoking at the individual level are generally based on biological and psychological explanations of addiction and behaviour. Examples are pharmacological and behavioural treatments for smoking cessation like nicotine replacement therapy and motivational interviewing.

Interventions addressing factors at the relational level are generally based on psychosocial and sociological theories. For example, psychological theories about smoking uptake in youth include social learning theory (Bandura, 1977). Community psychology examines individuals in the context of community. Sociological explanations for smoking and family may be structural, functionalist, critical/feminist or combinations. The family and school centred KKS research project include examples of strategies based on relational level theories.


Population health interventions addressing factors at the social and cultural level globally, nationally and in communities are based on epidemiological, social and economic theories. Examples are laws limiting tobacco sales to those 18 years and over, smokefree environments acts and tobacco tax (Baum, 2002).

Human Ecology

My research question and health promotion values lend themselves to a theoretical perspective which incorporates influences at different levels. Although it is possible to study explanatory factors independently, for example by controlling for competing explanations, research and action based on one theoretical explanation may ignore influential contextual issues. The main factor I am investigating is family. I have also selected two contextual factors, culture and migration to New Zealand. For this reason, I am using an ecological perspective. Human ecology specifically includes or accommodates these influences as well as providing a comprehensive conceptual

framework for identifying influences at other levels. Wilcox (2003) argues that an ecological approach to understanding youth smoking is supported because of the non-random patterns of youth smoking rates. That is, the explanation for youth smoking does not solely lie with individuals since the distribution of smoking rates among youth is not normal. This is congruent with, for example, research linking neighbourhood, social deprivation indexes and ethnicity with smoking rates in New Zealand (J. R. Barnett, 2000; Crampton, Salmond, Woodward, & Reid, 2000; Paynter, 2010).

Table 1: Conceptual frameworks, discipline perspectives and levels of influence.

| Comprehensive conceptual frameworks | Discipline perspectives | Levels of influence | | |
|-------------------------------------|-----------------------------------------------------------------------------------------|-----------------------------|-------|--------------------------------------------------------------------------------------|
| | | individual | micro | Proximal to individual |
| Health promotion | genetic; biological; psychological | | |  |
| Tobacco control | | | | |
| Kaupapa Māori | psychological; sociological; anthropological | relational | meso | |
| Taha Pasifika | | | exo | |
| Human ecology | sociological; anthropological; political; economic; legal; epidemiological; demographic | social cultural ideological | macro | distal |

The human ecological perspective is an over-arching framework from which middle range theories and testable hypotheses can be derived. It can be used to create qualitative research questions and to interpret qualitative data. The major assumption of human ecology is that humans are interdependent with their environments. It is a systems approach, so change in one part affects others. It assumes that humans adapt to changes in their environment in order to survive and also that humans affect and change their environment. Various authors have summarised the development of human ecology (Bubolz & Sontag, 1993; Herrin & Wright, 1988).

There are many sub-branches of human ecology. They include behavioural-ecology which integrates public health with behavioural science (Hovell, Wahlgren, & Gehrman, 2002), socio-ecological approaches (McMurray, 2007), eco-cultural approaches to human development (Berry, 2003), and ecological approaches to human development (Bronfenbrenner, 1981; C. M. Harkness & Super, 1986), and family (Bubolz & Sontag, 1993; Wright & Herrin, 1988). On a practical note, ecological approaches are used in social, community and regional planning, for example in

creating the START programme for the future of the Auckland region in New Zealand (Auckland Regional Council, 2006, p. 4). The sub-branches of human ecology emphasise different aspects of the influence of physical, social and cultural environments on human social, psychological and physical development, health and wellbeing. They also investigate the effects of humans on their environments.

I specifically use Bronfenbrenner's (1981) ecological framework for human development to guide my thinking in my thesis. Its multi-factorial orientation means it captures the elements of my research question—children, family, culture and migration. He defines human development as:

the scientific study of the progressive, mutual accommodation, throughout the life course, between an active, growing human being, and the changing properties of the immediate settings in which the developing person lives, as this process is affected by the relations between these settings, and by the larger contexts in which the settings are embedded (Bronfenbrenner, 1992, p. 188).

Family is the primary context for child development in the framework. In addition, Bronfenbrenner concentrates on the social and cultural forces shaping human behaviour more than the ecological perspectives of humans as organisms in their physical and biological environments. Bronfenbrenner specifically articulates the contribution of public policy to human behaviour. This is especially relevant to the research question because public policy is a large component of tobacco control and health promotion as well as controlling migration to New Zealand, services to migrants, economic support for families in need and other potential influences on Asian youth smoking.

Bronfenbrenner (1979) conceptualises the ecological environment of human beings as a dynamic system of “nested structures, each inside the next, like a set of Russian dolls” (p. 3). The largest structure is the macrosystem. This is the culture or sub-culture, belief system or ideology underlying patterns and commonalities in the structures and systems inside. These paradigms or world views shape systems of government in different countries, normative beliefs about morality and what humankind should strive for. The macro-system carries the “blueprint” for systems within it. The Smokefree Environments Act is a macrosystem level factor because it is part of New Zealand's democratic Westminster system of government. It has a raft of measures to decrease the uptake of smoking ("Smoke-free Environments Amendment Act," 2003).

The exosystem is contained in the macrosystem. It comprises structures, organisations and processes which influence or are influenced by the developing human being where

that human is not an active participant. The legal ban on the sale of cigarettes to youth is the macro-system blueprint which leads to exosystem processes such as tobacco product retailers checking the ages of people who want to buy cigarettes if they are unsure of their age ("Smoke-free Environments Amendment Act," 2003). However the child is not an active participant in creating these processes.

The mesosystem falls between the exosystem and the microsystem. It is intangible. It consists of the interrelationships among settings in which the developing human is an active participant. For example, the mesosystem reminds us of the exosystem factor which determines the interrelationship between families and local shops which sell cigarettes. Their relationship should include a clear understanding that children cannot purchase cigarettes for family members or others. Other examples of the mesosystem include the child's social networks and the relationships between home and school.

Finally the microsystem is the closest system to an individual human. The family is the primary microsystem setting context for child development. A baby's microsystem settings are her home, her family and, in New Zealand, would likely include the Plunket service and General Practitioner. A New Zealand student's microsystem settings might be her home, family, school, peers, sports group, local shopping centre and music teacher. In the family microsystem it is important that children have smokefree homes and cars and do not participate in activities which normalise smoking such as lighting or fetching cigarettes for smokers.

The chronosystem incorporates time into the framework through life transitions. These may be "normative" and apply to everyone in a particular country, for example starting school or the passage of the Smokefree Environments Act, or "non-normative" – for example migration. Bronfenbrenner relates life course theory to a more complex form of chronosystem which investigates the effects of personal and historic life events on family processes and human development over the lifespan (Bronfenbrenner, 1986). The "chronosystem" is an example of the refinements to the ecological framework of human development that Bronfenbrenner made over time.

The "blueprint" of culture is both internal and external to the exo-, meso-, micro-systems and individual human beings since culture is constantly shaped by and shaping individuals and groups. Bronfenbrenner acknowledges the effects of the individual characteristics of human beings on their environments, settings and systems. Individual influences on Asian youth substance use include age, gender, temperament,

psychopathology, genetics and ethnic differences (J. S. Hong, Huang, Sabri, & Kim, 2011).

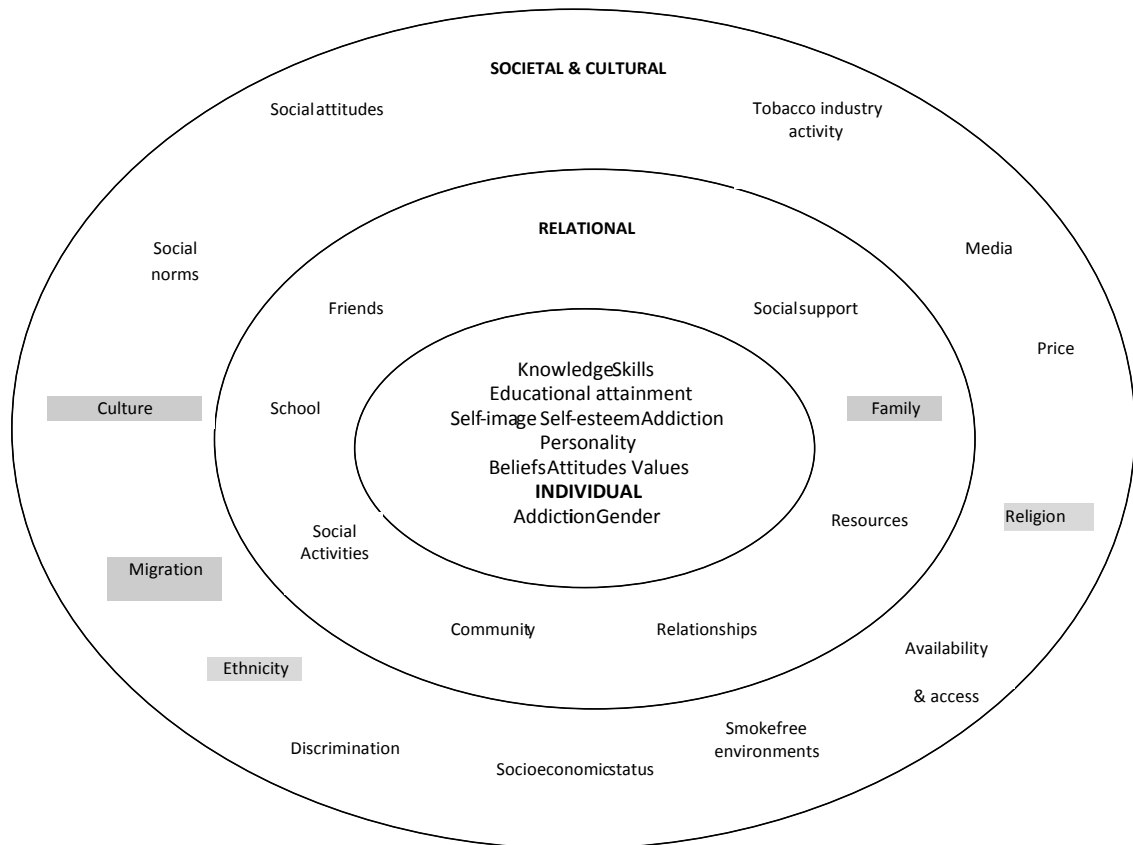
The framework is congruent with the multi-level strategies and salutogenic approach of the Ottawa Charter for Health Promotion, and tobacco control (Table 1). All three have a strong focus on the effect of public policy on maintaining healthy human development. Bronfenbrenner's (1979) analysis of research to support the ecological framework stresses the dearth of salutogenic studies about human development. As stated before, this thesis adopts a salutogenic approach to public health. For tobacco control, the individual behaviour, smoking, occurs in a wider social and cultural context. Factors influencing smoking are grouped into individual, relational and societal/cultural levels in Figure 1, a nested ecological model of factors associated with smoking (Scottish Executive, 2006). This chapter provides background information on factors relevant to the influence of family on Asian youth smoking in New Zealand. They are ethnicity, migration, culture, religion (shaded in Figure 1) and children.

Another reason Bronfenbrenner's approach suits this thesis is because it is not based on any particular cultural context. Macrosystems in societies differ in terms of their cultures, ideologies and world views. This leads to internal consistencies in the micro-, meso- and exo-systems of each society. However these patterns differ from society to society because the macrosystems differ. Other theories and perspectives of family, child socialisation and development are based on Western ideologies. For example most theories of child development assume that autonomy and independence are the normal outcomes of child socialisation. In other cultures the perpetuation of collective structures and processes is paramount. I am interested in how Asian families influence their children with regard to protecting them from smoking in the cultural and social environment of New Zealand smoking. The ecological framework facilitates the comparison of influences arising from different cultural paradigms.

Critiques of Human Ecology

There are a number of critiques of human ecology. Some focus on the plethora of meanings assigned to the word ecological and the consequent lack of precision in the ontological, epistemological, methodological and applied aspects of ecological perspectives in the social sciences. Wright and Herrin (1988, p. 253) found that there was only one element in common in ecological thought when they reviewed literature across a range of disciplines. This was that ecology concerns "the study of the interrelationship among organisms and their environments".

Figure 1: Factors associated with smoking



Adapted from: *Towards a future without tobacco* (Scottish Executive, 2006)

It seems impossible to test ecological frameworks in their entirety. The concepts in an ecological framework are not clear and are difficult to quantify. It is difficult to account for the effects of a multitude of potential influences together. The differences in the levels of the units of analysis are difficult to combine meaningfully. It is difficult to avoid tautologies and to test reciprocal relationships in linear models. These difficulties make it unclear if ecological theory can be used to explain and predict behaviour although structural equation modelling and path analysis are tools for exploring relationships between factors more comprehensively. Evidence for the validity of an ecological approach ranges from:

- Drawing together different studies examining different aspects of the relationships between families or individuals and elements of the meso-, macro-, exo- and chrono-systems, for example Luster and Okagaki (1993).
- Single studies which test the influence of multiple factors on an outcome within one study for example, Wen, Van Duker and Olson (2009). Here the definition of an ecological study becomes an issue. Is it, for example, any study which

includes variables at the individual level as well as the family, community or public policy level?

- Longitudinal case studies using multiple methods which build up information about different aspects of an issue in a sample (which could change and include groups and individuals) over time (Bubolz & Sontag, 1993).
- Other critiques include the risk of focusing on whole systems to the exclusion of its components – hence Bronfenbrenner and others emphasise the use of different research paradigms in order to illuminate processes and meanings behind observed patterns in behaviour (Bronfenbrenner, 1979; Bubolz & Sontag, 1993; Wilcox, 2003). Other critiques relate particularly to the relationship between human ecology and ecology in a general sense. To pursue this see Wilcox (2003).

Ethnotheories

I use an ethnotheoretical perspective to link Bronfenbrenner's macro-, exo- and micro-level systems. Developmental ethnotheories are belief systems about the nature of children (including "normal" child development), the "good" child, child socialisation goals and child socialisation practices which engender "good" children (Goodnow, 1988; Greenfield, Keller, Fuligni, & Maynard, 2003; S. Harkness & Super, 2010). As such they are deeply held and influence general family influences on youth smoking uptake as well as specific actions to protect children from smoking. They are derived from macro-system level religious and philosophical ideologies.

An ethnotheoretical perspective is useful for several reasons. First, ethnotheories provide a "situated" cultural approach, close to the drivers and processes for families protecting their children from smoking. In many quantitative studies, the ideological well-springs of culture and religion are subsumed under psycho-social meta-schema, such as individualism, collectivism and acculturation, with the meaning of "culture" left to the research participants to define and to the readers to somehow infer (Senior & Bhopal, 1994). Qualitative research for public health with people from different cultures mainly deals with the here-and-now of experience, perception and behaviour. It describes cultural practices, attitudes and values but often focuses on surface behaviours and lacks context. Details are often omitted from studies which examine culture and acculturation in relation to tobacco control and/or family, parenting, migration and children. For example, when the question "How often do you participate in traditional

cultural activities?” is asked, the response categories do not include the activities or their underlying drivers. Analyses of focus group data to inform tobacco control interventions with Asian participants in America rarely refer to religious and cultural underpinnings of behaviour (Asian Pacific Tobacco-free Coalition of Minnesota, 2006; Colorado STEPP, 2002; Voinovich Center for Leadership & Public Affairs, 2007).

Second, an ethnotheoretical approach makes the ideological basis of “normal” behaviour overt. For example, parents may or may not say that their child socialisation is based on a particular cultural or religious belief system because they regard what they do as “right”, “ordinary” or “normal”. Families may discard obvious signifiers of adherence to traditional cultural or religious customs while adhering subconsciously to social values, beliefs and practices common to these. Considering ethnotheories may also reduce researcher ethnocentrism. For researchers, there may be an imbalance between taken-for-granted life-long knowledge of their own cultures and understanding of other cultures, making the process of collecting and interpreting data and recommending effective action for both Asian and non-Asian families more difficult.

An ethno-theoretical perspective offers deeper insights to help overcome these problems. It addresses the moral and spiritual bases to different cultural practices, attitudes and values which shape behaviour and its interpretation. More understanding about deeply held drivers of family processes to protect children’s health will improve the acceptability, effectiveness and evaluation of the transferability of recommendations for interventions. These are important because it is easy to make recommendations for behaviour change but difficult to change behaviour.

Finally, understanding an ethnotheoretical perspective helps elucidate the difference between longstanding traditional practices and contemporary cultural practices. Kâğıtçıbaşı (2007) argues that differences and similarities a) between different cultures and b) between the old (traditional) and new (modern) in any given culture should be more clearly articulated. Sometimes it is unclear if cultural practices referred to are traditional (pre-modern) or those of modern Asian societies (contemporary). The key point to note is the fluid nature of culture at all levels.

The limitations of the post-positivist¹ paradigm apply to ethnotheories. Uba (2002) argues that claims of relationships between ancient Confucian precepts and practices by

¹ Post-positivism is discussed in Chapter Four.

Chinese individuals in Western countries are spurious, polarising and orientalising. Indeed ethnotheories are not absolute. They do not account for exo- (for example tobacco control policy and the social determinants of health), meso- and chrono-system influences on family. There is the risk of stereotyping people. While Western and Asian culture and religious and philosophical thought are ancient, diverse, complex and sophisticated, interpretations of texts differ and evolve over time. New material is added. People may be influenced by more than one system of thought. Different principles may be used simultaneously in different areas of everyday life and during different life stages. Belief systems are not immutable, personal belief systems are sometimes contradictory and actions sometimes belie words. Uba herself is an example of this. While she argues against the ascription of Confucian beliefs to modern American Chinese, her education level and career trajectory reflect Confucian precepts about the value of education (Uba, 2002).

Tobacco Control

Tobacco control is part of the context of migration to New Zealand since public health measures such as tobacco tax and smokefree environments affect everyone. The aim of tobacco control is to reduce tobacco related harm by increasing quit attempts, reducing initiation and protecting people from ETS. The aim of this thesis is to contribute to one dimension of tobacco control for Asian peoples in Western countries – that is the role of family in reducing smoking initiation. The need to address global tobacco growing and product manufacture, distribution, marketing, sales and consumption led to the world's first international health treaty, the Framework Convention on Tobacco Control (FCTC). New Zealand and all Asian countries except Indonesia are signatories to the FCTC (World Health Organisation, 2003). They are therefore committed to the 24 Articles covering a range of tobacco control interventions based on reducing the demand for and supply of tobacco products. Most of the reduction of demand side strategies fit the World Health Organisation (WHO) MPOWER strategy package which was created in 2008 (Table 2). In keeping with the multitude of factors associated with tobacco use, tobacco control action is multi-dimensional and multi-disciplinary.

Table 2: WHO MPOWER strategies

| |
|-----------------------------------------------------------------------|
| Monitor tobacco use and prevention policies |
| Protect people from tobacco smoke |
| Offer help to quit tobacco use |
| Warn about the dangers of tobacco |
| Enforce bans on tobacco advertising, promotion and sponsorship |
| Raise taxes on tobacco |

Source: (World Health Organization, 2008)

New Zealand meets the FCTC requirements in almost every respect (Bloomfield, 2007). In 2011 the New Zealand government set an aspirational goal of a smokefree New Zealand by 2025. The aim is for tobacco consumption and smoking prevalence to be halved by 2015 across all demographics, followed by a longer-term goal of making New Zealand a smoke-free nation (with minimal smoking levels) by 2025 (New Zealand Government, 2011). Initiation must decline and quit rates increase dramatically among all ethnic groups, Asian peoples included, to achieve this.

While tobacco control is consistent with an ecological model, the links between each strategy are less explored than the effects of the strategies individually. The role of socio-economic status is often acknowledged and controlled for in multivariate studies but action to address this key determinant of health and smoking status is omitted from tobacco control action plans. The FCTC includes consideration of “local culture” along with social, economic, political and legal factors when transferring technology and knowledge under the Guiding Principles in Article 4 (World Health Organisation, 2003). “Family” is not mentioned. When tobacco control action is coordinated across all levels it is assumed to become comprehensive and mutually reinforcing. However, investment in action is constrained by limited resources and competing interests. It is important to base action on empirical evidence. In this thesis the cultural and family context of smoking among Asian New Zealanders are investigated. This will help ensure that the needs of minority Asian communities and disadvantaged groups, such as Southeast Asian refugees, are fairly evaluated in the competitive funding environment.

Epidemiology

Epidemiological research is essential to tobacco control. Epidemiology is “the study of the distribution of health-related states or events in specified populations, and the application of this study to the control of health problems” (Herrin & Wright, 1988; Last, Abramson, & International Epidemiological Association., 1995). The aetiology of

some health issues can only be identified at the population level. For example, the link between smoking and lung cancer was first established in the 1950s by Sir Richard Doll in epidemiological studies of the effects of smoking among British doctors (Doll, Peto, Boreham, & Sutherland, 2004). Epidemiological studies are used to determine the size and seriousness of the problem of smoking among Asian New Zealanders, track and predict the extent of smoking and smoking related mortality and morbidity of Asian and other peoples and to describe the outcome of population based interventions.

Model of the Tobacco Epidemic

There is a global pandemic of tobacco use (World Health Organization, 2008). Lopez and colleagues (1994) proposed an epidemiological model of the evolving epidemic. The “cigarette epidemic” model is characterised by gender specific transitions in cigarette mortality over time. In the model, cigarette smoking is initially taken up by men. Few women smoke. Male smoking increases rapidly to 50–80 percent. Female rates increase but lag 10–20 years behind. As male prevalence declines, male mortality increases and peaks. Female prevalence declines more slowly than male. Female deaths from smoking rise rapidly as male mortality peaks and declines making a focus on tobacco control among women a priority.

New Zealand and other Western countries such as Western Europe, the United Kingdom, the USA, Canada and Europe are said to be in the last phase of the epidemic. Asian countries are said to be in the phase where male smokers still predominate and female smoking is on the rise. The explanatory power of the cigarette epidemic model and interventions based on predictions that it will play out as it has in Western countries are challenged by, for example, the prevalence of female smoking in Asian women in Asia. This remains low despite high levels of smoking among men for several decades (World Health Organisation, 2010). Shafey and colleagues (2003) cite the example of women in China and note that countries do not always follow the tobacco epidemic model “exactly”. It is not true to claim that the application of tobacco control strategies has been instrumental in retaining low smoking rates among women since most have not been applied in China (T.-W. Hu, 2008; World Health Organization, 2008).

Limitations of Epidemiology and the Tobacco Epidemic Model

Smoking and quitting smoking are distributed differentially by income level and other social variables like gender (Chapter Three). Pearce (1996) points out that the complex nature of causality and implementing interventions to address public health problems means that epidemiologic studies that focus solely on risk factors or molecular

explanations are insufficient to address health issues in the population. Davis (1994) argues that the explanatory power of demographic and epidemiological transition models (like the smoking epidemic model) is limited because they underplay the role of human agency and are based on the experiences of countries with particular historical, social and cultural circumstances. He points out that transition models echo grand schemes of modernist sociobiological evolution with natural pre-ordained laws. He warns us to be mindful of the particular social, cultural and economic circumstances of the numerous subgroups which together institute population change, the need for social consensus for change and the effects of social class, ethnicity, generation and residence on change in subgroups and individuals. Davis does not discount models of structural change – rather he alerts us to “a duality of human agency and structural change” (p. 172).

The use of chaos and complexity theory in epidemiology offers hope for explanations based on analyses accounting for non-linear relationships and feedback loops among the multiple levels characteristic of biological, cultural and social systems (Pearce & Merletti, 2006). These are captured in ecological models further justifying an ecological approach to the study question. The “ecological fallacy” and “reverse ecological fallacy” warns of the problems of extrapolating data gathered at the group level and applying it to individuals and vice versa (Hofstede, 2001; Susser, 1994). Inchingolo (1994) argues that epidemiology itself is an open system and that different theoretical and research approaches to analyse the dynamics of cultural transitions among migrants are informative. Multi-level modelling can be used to examine the effects of individual and group level (for example, family or neighbourhood) data on health outcomes (Cheng & Kelly, 2011).

The study does not use epidemiological methods to test an ecological model of smoking and family and Asian children. The ecological framework is used as a lens for qualitative enquiry and to draw together quantitative and qualitative results.

The Keeping Kids Smokefree Study (KKS)

This study uses KKS study data. The KKS study was a Health Research Council funded, multi-cultural, South Auckland based, family focused health promotion community intervention study aimed at changing parents’ smoking behaviour and attitudes to reduce smoking uptake by their intermediate school children (Glover et al., 2009). The study is outlined in Table 3.

Table 3: Keeping Kids Smokefree Study (KKS).

| | |
|--------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hypothesis | Changing parents' smoking behaviour will reduce the uptake of smoking among their children. |
| Underpinnings | Social learning theory, Kaupapa Māori research methodology, community development principles leading to parallel culturally appropriate research methods such as those used by Pacific peoples (Bandura, 1977; Glover, 2002)(Health Research Council of New Zealand, 2005) |
| Ethical approval | University of Auckland Human Participants' Ethics Committee on 14.12.06 (no 2006/416). The application notes that Grace Wong will be a PhD student and focus on Asian students. |
| Design | Quasi-experimental community-based trial with 2 control and 2 intervention schools |
| School selection criteria | Four low decile year seven and eight schools with large Māori and Pacific Island rolls |
| Sample | Every child enrolled at the schools and one of their parents or caregivers were eligible. |
| Intervention | The intervention activities were based on 2 qualitative studies (Glover et al., 2006; G. Wong et al., 2007) and occurred between annual baseline and follow up data collection in 2007, 2008 and 2009. They were tailored for Māori and Pacific Island students and families. |
| Cessation | Smoking cessation services at school for school staff, teachers and parents of students; parent, teacher and school board quit and win competitions. |
| Parenting | DVD to help guide parents in talking about smoking with their children Art competitions for students Stickers, fridge magnets and a poster using students' art. |
| Student and family involvement | Annual school smokefree whanau fun days with food, activities and prizes. |
| Social supply social environments strategy | Proactive programme of Controlled Purchase Operations in tobacco retail outlets around the schools Information packs for retailers and community groups; poster discouraging tobacco supply by adults to children Increase in Auckland Regional Public Health Service visits to retailers; KKS visits promoting smokefree environments to local sports clubs and marae |
| Questionnaires | <u>Students:</u> Separate paper and electronic questionnaires developed from a review of the Global Youth Tobacco Survey (GYTS), the Health Sponsorship Council's Youth Lifestyle Survey and the ASH New Zealand Year 10 Survey. The reliability and validity of key questions about tobacco use in the GYTS are known (International Agency for Research on Cancer, 2008) (Appendices A,B) <u>Parents:</u> Developed from a review of international and national health behaviour surveys and tobacco questionnaires. (Appendix C). Samoan language version available on request in 2007 only. |
| Data collection (baseline only) | <u>Students:</u> Data collected at school. The electronic questionnaire data was collected on a personal data assistant (PDA) using EpiInfo™ software <u>Parents:</u> Parents completed questionnaire at home. <u>Timeline:</u> 2007: Year 7 and 8 students and parents 2008: Year 7 students and parents 2009: Year 7 students and parents |

PhD Study Overview

Quantitative baseline data for Asian school children and parents at the KKS study control and intervention schools is analysed to describe smoking prevalence, practices and beliefs, and compared with non-Asian data. Then qualitative descriptive research methods (including focus groups and family interviews) are used to explore the results further. There is a focus on the impact of parental ethnotheories and migration on family influences on youth smoking in the context of New Zealand culture and tobacco control environment and the participants' experiences of the KKS study interventions. Finally I examine the ideological frameworks underpinning the parents' ethnotheories and their fit with the theories underpinning the KKS study interventions and tobacco control strategies. I incorporate feedback from an advisory group of Asian health experts into the final recommendations.

I acknowledge the diversity of Asian peoples in New Zealand in terms of country of origin, culture, religion, migration history, generation, education, socioeconomic status and other factors. The study is not representative. Where possible the participants are grouped according to their backgrounds. New Zealand Asian people are grouped together for resourcing, policy and public health purposes. The important thing is to understand the limitations of what is known, to recognise and act on commonalities where they exist, to identify, accept and act on differences and to lay the ground work for further work where it is needed.

With this in mind I reiterate that the aim of the research is to reduce tobacco related harm to New Zealand Asian families. Ultimately, the research will be used to guide further research, policy setting and health promotion practice aimed at reducing the burden of chronic disease in New Zealand.

Chapter Overview

In Chapter Two I analyse and critique concepts which are fundamental to the study. They include ethnicity, culture, acculturation, religion, family, children and child socialisation. The meanings of these concepts are often taken for granted but varies widely. This can lead to misunderstandings and to different approaches to Asian health. In keeping with an ecological perspective, I explore the basis of Asian peoples' tenure in New Zealand in relation to the Treaty of Waitangi, the founding document of New Zealand. I provide a snapshot of the demographics and health status of Asians in New Zealand.

Chapter Three is a literature review describing Asian adult and youth smoking and the influence of family factors on Asian youth smoking in Asian and Western countries, especially New Zealand. I identify the gap in knowledge and thus justify the research questions.

In Chapter Four I describe the methodological underpinnings of this mixed methods study. I examine the ontological and epistemological bases of the post-positivist methods used to investigate families and children from different cultures within an ecological framework. I describe the methods pertaining to the overall mixed methods design and rigour.

This is a cross-cultural study with English and non-English speaking participants. In Chapter Five I consider the methodology and methods used to conduct cross-cultural research. I include the use of interpreters and translators and rigour in cross-cultural research.

Chapter Six comprises the quantitative methods. It is followed by Chapter Seven, the quantitative results. They are presented in two parts. The first is the preliminary analysis of 2007 KKS study baseline data that is used to inform the qualitative research questions. The second is an analysis of the 2007 - 2009 KKS study baseline data sets.

In Chapter Eight I explain the qualitative methods I used to collect data from students and family members. The qualitative sample description is in this chapter. I also describe the steps I used to enhance the trustworthiness of the methods. Chapter Nine covers the results of the qualitative descriptive data analysis. There is a tabular overview of the results followed by a fuller description of the themes and sub-themes supported with quotes.

The discussion is in the last chapter. I summarise the results. Then I answer the research questions by weaving the quantitative and qualitative elements together with the literature. I present the strengths and limitations of the study. I reflect on the results personally. Finally, I make recommendations bearing in mind my conclusions about the transferability of the findings.

Chapter Two: Context

Introduction

Chapter Two comprises definitions, discussions and critiques of key concepts in the study followed by a description of the New Zealand context of the thesis and the New Zealand Asian population. I explore different theoretical perspectives of ethnicity, culture, religion, family, children, parenting and child socialisation because they underlie competing recommendations for action. I discuss migration to New Zealand and acculturation. With regard to the New Zealand context of the study I explore how New Zealand Asians fit into New Zealand's founding document, the Treaty of Waitangi, and provide a demographic description of this sub-population.

Ethnicity

Categorisation by ethnicity is a fundamental component of this research, focused as it is on New Zealand Asian peoples and smoking. This section explores how Asian people are defined and justifies the use of a post-positivist definition of ethnicity.

Differentiation by ethnicity reflects the belief that ethnicity usefully informs choices of interventions to improve health. Different theoretical perspectives shape definitions of ethnicity and consequently personal and community self-perception, the measurement and description of populations, the choice of interventions, resource allocation and evaluation - all points directly relevant to this PhD thesis. The difficulty of defining ethnicity is well known. Attempts to pin down the term "ethnicity" are problematic because they are reductionistic and lead to reification of the concept (Spencer, 2006).

Post-positivist Perspectives of Ethnicity

Post-positivist views of ethnicity perceive it as a personal attribute which can be quantified but which is also a socially and culturally mediated. Self-definition of ethnicity is perceived as valid and may change over time. Statistics New Zealand and KKS study definitions of individual and family ethnicity are post-positivist.

Defining Individual ethnicity

The Statistics New Zealand statistical standards for ethnicity are used in this study (Table 4). Their development clearly reflects the post-positivist perspective. They were developed from the analysis of public submissions and discourse analysis of focus groups with minority groups (Statistics New Zealand, 2004). The central principle of the concept of ethnicity adopted in 2004 is "self-identification with the ethnic group or

groups that one wishes to identify with”, a principle used in this research. Culture is a key component of ethnicity. In the census individuals can self-identify with up to six ethnicities, a limit which still expresses the tension between the need to reduce ethnicity to something measurable and manageable for official statistics, and the desire to allow people to self-identify (Statistics New Zealand, 2005).

Table 4: Statistics New Zealand’s concepts and definitions for ethnicity.

| Concept | Definition |
|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Central concept of ethnicity | Self-identification with the ethnic group or groups that one wishes to identify with |
| Ethnicity | A measure of cultural affiliation to “the ethnic group or groups that people identify with or feel they belong to” (up to six) |
| Cultural affiliation | The social, historical, geographical, linguistic, behavioural, religious, and self-perceived affinity between a person and an ethnic group |
| Ethnic group | People who share some or all of the following: <ul style="list-style-type: none"> • a common proper name • one or more elements of common culture which need not be specified, but may include religion, customs, or language • unique community of interests, feelings and actions • a shared sense of common origins or ancestry, and • a common geographic origin |

Source: Statistics New Zealand (2008)

Statistics New Zealand acknowledges some issues with using self-ascribed ethnicity as a variable. For instance, they note that self-ascribed ethnicity may change, and mean different things at different times and in different contexts (Statistics New Zealand, 2009). Carter et al (2009) concluded that eight percent of respondents changed ethnicity at least once during the three waves of the longitudinal Family, Income and Employment survey.

This research focuses on “Asians” in New Zealand. In addition to self-definition, there is a wide range of definitions of “Asian” in official statistics and the research literature from different countries. The Asian ethnic groups included in the Statistics New Zealand level four “Asian” category are tabulated in Table 5.

Table 5: Asian ethnic groups included in the Statistics New Zealand level four Asian category.

| Ethnic group | | | |
|-----------------------|---------------------|---------------|------------------|
| Asian nfd* | Chinese | Indian nfd | Sri Lankan nfd |
| Southeast Asian nfd | Hong Kong Chinese | Bengali | Sinhalese |
| Filipino | Cambodian Chinese | Fijian Indian | Sri Lankan Tamil |
| Cambodian | Malaysian Chinese | Gujarati | Sri Lankan nec |
| Vietnamese | Singaporean Chinese | Tamil | Japanese |
| Burmese | Vietnamese Chinese | Punjabi | Korean |
| Indonesian | Taiwanese | Sikh | Afghani |
| Laotian | Chinese nec | Anglo Indian | Bangladeshi |
| Malay | | Indian nec | Nepalese |
| Thai | | | Pakistani |
| Southeast Asian nec** | | | Tibetan |
| | | | Eurasian |
| | | | Asian nec |

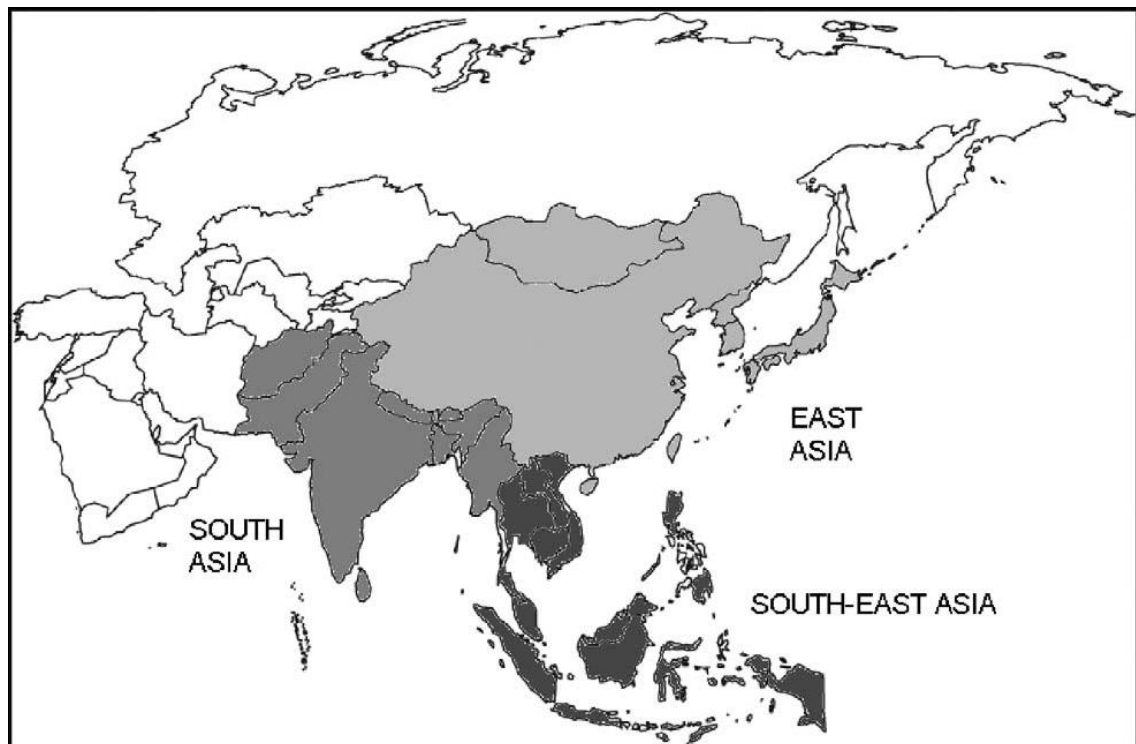
* nfd = not further defined

**nec = not elsewhere classified

(Statistics New Zealand, 2005)

In Western countries, different Asian ethnicities may be grouped together, for example into the “Asian” category of the Statistics New Zealand Level One categories (Māori, Pacific Island, Asian, European, Middle-eastern/Latin American/African/other). They may be separated out, for example, the Statistics New Zealand Levels Two, Three and Four. Rasanathan et al. (2006) critiqued the Statistics NZ definition because it includes peoples who originate from East, South and Southeast Asia but excludes those from central Asia, and because it aggregates a very diverse range of peoples (Figure 2). The benefits of aggregation under a common category include the formation of a critical mass of people for the purposes of data analysis, advocacy and resource allocation. The disadvantages are masking diversity and homogenising diverse ethnic groups who do not view themselves as similar. For instance, Chinese people are unlikely to identify with Indian people and consequently may not respond positively to interventions which are perceived as for all Asians or Indian peoples.

Figure 2: Asia.



Source: (Rasanathan, Ameratunga, & Tse, 2006)

Statistics NZ includes a “New Zealander” category (Statistics New Zealand, 2007b). In the 2006 census 11.6% of the population self-identified as “New Zealander”. They formed the third largest ethnic category after European and Māori. However responses in the “New Zealander” category were mainly from multigenerational New Zealanders who formerly self-identified as Europeans. Few Asian people identified in this category reducing the risk of Census data underestimating their number (Kukutai & Didham, 2009). Despite this it is estimated that the total count of Asian peoples was reduced by between 0.9 and 2% between 2001 and 2006 censuses (Statistics New Zealand, 2009). The Keeping Kids Smokefree study did not include “New Zealander” as an option and neither did I in the ethnicity options in the demographic questions for the qualitative component of this study.

The categorisation of people who self-identify with more than one ethnicity in epidemiological studies is difficult. Including people in every group they name leads to denominators which are greater than the total number of people. This means that some statistical procedures are not able to be used. While prioritisation of ethnic groups means that denominators are the same as the number of people the order of prioritisation must be selected. Prioritisation leads to greater numbers in the priority group and under-representation in lower order groups. For example, comparisons of standard Māori, Asian, Pacific Islander and European/other prioritised data with total responses in the

2001 Census show that the total Asian population was understated by 5.1% (Statistics New Zealand, 2006). Prioritisation conceals diversity and complexity since individuals are assigned one ethnic group only. People wish to have their personal identity preserved in official statistics. Statistics New Zealand used prioritisation from 1991 until 2004. They stopped this practice to alleviate the problems described above (Kukutai, 2008). Prioritisation is still used in health research. For example some analyses of the Keeping Kids Smokefree Study prioritise as follows: Māori, Pacific Island, Asian, and European and other.

The number of people identifying with more than one ethnicity has increased over time. This is particularly the case with younger people. Can children who self-identify for example, as Asian and Māori, self-prioritise a main ethnic group? Kukutai and Callister (2009) found that over 74 percent of youth aged 10 to 14 years in the Youth Connectedness Study who self-identified with two or more ethnic groups could self – prioritise one ethnic group.

Defining Family, Child and Group Ethnicity

This study is focused on Asian families but what is an “Asian” family? Defining the ethnicity of families is problematic since both the meanings of family and ethnicity are contested. Where the family is composed of individuals who self-identify with different ethnicities the choice of the ethnicity of a family with dependent children can be via one of the parents (e.g., one parent Asian; other parent European) or via the children. I do not discuss other ways of categorising the ethnicity of families, for example, fractions or random allocation of ethnicity to families across a population. Attributing ethnicity to a family becomes more complicated as the number of individual family members who self-identify with more ethnicities in a family grows.

In New Zealand, 78% of Asian women have Asian men as partners implying that most Asian families identify Asian only. However family ethnicity varies by subgroup and other variables such as generation. For example in 95% of Korean partnerships both partners are Korean. However, only 19% of Thai women have a Thai partner (Callister et al., 2008). Child ethnicity can be defined in multiple ways (Callister, 2003). Callister and colleagues (2008) recommend that research focused on child outcomes defines family ethnicity via the child’s ethnicity. This is the principle adopted in this research. The exception is the analysis of the Asian parent data set where all parents who self-define as Asian are included.

It is interesting to consider how Asian community groups self-define inclusion and exclusion criteria since this may further understanding of how they define their ethnic identity in New Zealand and assist with delivery of interventions. Unfortunately there is no research about this. The Kwong Cheu family club does not define membership by ethnicity but by relationship to descendants from the original village in China.

Biological Perspectives of Ethnicity

Race is a positivist biologically based theory of difference leading to “objective” categorisation of individuals by fractions of blood (Jones, 1994). Categorisation of populations by “race” rather than ethnicity dominated until recently. The 1936 Census of New Zealand question required respondents to record fractions such as $\frac{1}{4}$ European – $\frac{3}{4}$ Māori (Callister, Didham, & Potter, 2006). A danger of such categorisation is the ascription of false differences in social outcomes to “innate” physical and biological characteristics (Cooper, 2002). Social meanings of moral, intellectual and physical inferiority and superiority have been attached to different races despite the impossibility of distinguishing peoples by biological differences which relate to these outcomes (Callister et al., 2006). These social meanings persist today and may lead to stigmatisation, blaming and racism.

Blood ancestry may be part of ideologies about nationhood. For example, beliefs about maintaining bloodlines are an important part of ethnic nationalism in Korea (Shin, 2006). Self-ascription of blood ancestry as part of an individual’s self-definition of ethnicity reflects a post-positivist position because it is subjectively selected.

Social Perspectives of Ethnicity

Social perspectives of ethnicity are important because social discourse influences perceptions of race relations and predicates the social legitimacy and acceptance of research and action focused on specific ethnic groups. I believe that effective practical recommendations from this thesis can only be made if preconceptions underlying attitudes to people who are categorised as Asians are elucidated. The categorisation of national populations by ethnicity is a case in point. It is not universal. Until recently, countries such as France did not collect ethnicity in national statistics because it was perceived as a threat to collective national identity (Rallu, Piche, & Simon, 2006). Others have suggested that articulating and acting on the needs of ethnically defined minority groups results in cultural essentialism, separatism and the loss of the principles of democracy (Rata & Openshaw, 2006).

Functionalist Perspectives of Ethnicity

Assimilation and integration of ethnic groups reflects functionalist approaches to society which smooth out ethnic and racial differences and the threats posed by these differences (Jones, 1994). Assimilation aims to absorb minority groups into the dominant group. From 1847 to 1960 government policy reflected George Grey's assimilation policy to solve race relations issues with Māori (Armitage, 1995). The same policy was applied to Asians. K. Wong, (2003) cites the 1949 example of Chinese teachers who were refused permits to enter New Zealand to teach Chinese language to youth on the grounds that this would hinder assimilation. The Hunn report in 1960 introduced the concept of "integration" for Māori. New Zealand was one nation with distinct but integrated Māori and Pakeha populations. Thus different ethnic groups were recognised as separate but everyone received the same general services regardless of cultural difference (Armitage, 1995).

The implication of assimilation and integration is that tobacco control interventions are directed at "the average New Zealander" with the expectation that those who are different make an effort to fit in and accept these interventions. If cultural practices interfere with the uptake of services then people should change to conform. Health care and health promotion research, policy and practice delivered using a consensus lens may not be effective since there are assumptions that everyone is, should be, or wants to be the same as those in the dominant group. In New Zealand the response of Asian smokers to tobacco control services, such as the national Quitline which has mainstream, Māori and Pacific specific services, has been poor (Li, 2009).

Other population-wide tobacco control strategies, such as tobacco tax and bans on tobacco product advertising, affect people across all ethnicities to varying degrees. This is related to factors such as their socioeconomic status (Wilson & Thomson, 2005). This PhD research investigates the acceptability of the KKS study interventions tailored for Māori and Pacific Island families to Asian family members.

Symbolic Interactionism

Symbolic interactionism is a sociological perspective. It is reflected in the self-determination of ethnicity in this work and by Statistics New Zealand. It recognises the effect of personal constructions and re-constructions of the world in the context of people's lived experience of society (Spencer, 2006). People constantly construct and re-construct their perceptions of the world, ethnicity and their identity through their interactions with and in society. The perceptions of others may differ from personal

perception and affect their treatment in society. Frustration and dissonance may result from always being on the outer – one of “them” rather than one of “us”.

Ethnicity is seen to differ from the categorisation of individuals, families and larger groups solely by either “race, ancestry, nationality or citizenship” (Statistics New Zealand, 2005). It is characterised as a complex and changing phenomenon reflecting personal and group perceptions of both social and physical difference (Spencer, 2006). It does not focus on the effect of the macro-system factors but more on the perspectives of the “players” themselves.

Critical Perspectives on Ethnicity

The critical lens on society reflects the conflict theorists’ perspective in which issues related to race and ethnicity are elements of the struggle between dominant and subordinate groups for power and control over resources (Jones, 1994). A subordinate disadvantaged underclass is produced by historical and economic forces and deterministic belief systems (for example, about the innate characteristics of different races) which justify discrimination. The conflict theorist perspective raises awareness of issues such as institutional racism and the role of systematic forces perpetuating socioeconomic divides in society. Although Asian peoples have been able to access health care and education services provided for the general population, Chinese and Indian peoples in New Zealand have been subject to racist legislative processes from the earliest days of settlement (Ip & Pang, 2005; Leckie, 2007).

There is evidence that racism is detrimental to health (Harris et al., 2006; Hyman, 2009; LaVeist, 2002). In New Zealand, Harris and colleagues found that self-reported experiences of racial discrimination were significantly associated with smoking; poor or fair self-rated health; lower physical functioning; lower mental health; and cardiovascular disease among Asian, Māori and Pacific Island peoples. According to the nationally representative New Zealand Youth07 study, youth (aged 13 to 17 years) who experienced discrimination were more likely to smoke tobacco and marijuana and drink alcohol weekly (Di Cosmo et al., 2011). Experiences of unfair treatment and racial/ethnic discrimination are risk factors for smoking among Asian Americans (Chae et al., 2008).

There is no New Zealand Asian tobacco control strategy in contrast to Maori and Pacific peoples who have ethnic specific tobacco control strategies. While exclusion is ostensibly based on the healthy state of Asians and, in the case of tobacco control, low

smoking rates, Asians, the third largest population group, are rendered invisible. This is unfortunate given the importance of recognition and a sense of identity and belonging to maintaining mental health. Actions which may counteract racism include the recent development of Asian categories in health services and research. Initiatives to improve Asian people's mental and cardiovascular health have been developed as a result of finding out where disparities exist. Yet Asians are not included in overarching health policy such as the New Zealand Health Strategy (Ministry of Health, 2000; Rasanathan, Ameratunga, & Tse, 2006).

This thesis is significant because it contributes to a place for New Zealand Asian peoples in tobacco control as well as identifying and exploring their tobacco control needs. The persistence of ethnicity as a marker of difference in societies, independent of socio-economic status, and shifting perceptions of culture and identity is important. Awareness of the common use of the term "ethnicity" (instead of "race") to disguise prejudice and personal and systemic discrimination arising from ethnocentrism is important for this thesis.

Pluralistic Perspectives and Ethnicity

Pluralistic perspectives stem from the liberal tradition of tolerance of religious and ethnic diversity and observations of societies in which different ethnic groups co-exist while keeping their cultural identity and religious and economic governance structures intact (Banton, 1983; Goulbourne, 1991). Multiculturalism is said to arise from pluralism. The terms are sometimes used interchangeably. In addition to protecting the first relationship of Māori and the British Crown, the purpose of the Office of Ethnic Affairs is "to contribute to a strong, self-directed ethnic sector, and to promote the advantages of ethnic diversity for New Zealand" (Office of Ethnic Affairs, 2008). There is the vision of a pluralistic society in which:

we all have a right to use our own languages and to practice our own cultures within the bounds of the law and respecting the rights of others. The diversity of our origins, languages and cultures is an important social, economic and cultural asset that shapes our common national identity. (Office of Ethnic Affairs, 2008)

The belief that Asian and other non-European populations can define who they are and what their needs are is respected and leads to the need for their autonomy over research and resources to address these needs. This point of view reflects and is reflected in the Ottawa Charter for Health Promotion. The Ottawa Charter views health primarily as

autonomy over health and resources and posits “strengthening community action” as one of the vital strategies for achieving health (World Health Organization, 1986).

A more pluralistic view of society responds to the feelings, perceptions and desires of members of minority populations. Historically Chinese New Zealanders fitted into mainstream society (Yee, 2003). My Chinese mother told us to work hard, be unassuming and not to rock the boat. Her parents were born in New Zealand in 1900. At the same time Chinese people maintained a strong cultural self-identity. For example, clubs and associations set up by Chinese for Chinese in New Zealand date back to early last century. I attended the 85th anniversary of the Kwong Cheu ancestral village club in 2010. There is currently a proliferation of Chinese print media and Asian community groups. A pluralistic view of society acknowledges the value and positive contribution of Asian led and focused approaches like this doctoral thesis to New Zealand society, Asian New Zealanders and the New Zealand population overall. As previously discussed, the ecological framework accommodates a pluralistic view of ethnicity.

There are two main critiques of pluralism. Some authors argue that pluralism results in separatism and threaten democratic ideals (Rata & Openshaw, 2006). This viewpoint opposes the liberal traditions of religious and cultural freedom and equity. Pluralism may perpetuate cultural essentialism, separatism and the loss of the principles of democracy by stereotyping different ethnic groups and cultures, for example, as “collectivistic” or “individualistic”. Stereotyping Asian peoples as a “model minority” is also a risk. In a grounded theory study, Yee (2003) found that “placating” (showing commitment; blending in; distancing; role play) is the normative coping strategy for Chinese New Zealanders. They use “placating” to preserve an “unwritten contract” whereby Asians are tolerated so long as they adhere to a “model minority” stereotype. Yee concluded that the benefits to the host society are a “compliant minority, which it can use to uphold the myths of egalitarianism and meritocracy” (p. 232). In addition a “model minority” is unlikely to need resourcing.

A second critique is that the rhetoric of tolerance, diversity, pluralism and multiculturalism disguises individual, institutional and ideological racism. This is known as “democratic racism” (Henry & Tator, 2005; Malhi & Boon, 2007).

“Democratic racism” occurs in democratic societies where the belief of the dominant group is that racism is non-existent despite contrary evidence. At the same time that fairness and tolerance are espoused, negative attitudes and behaviours towards non-whites are perpetuated. While some cultural differences are acceptable, adherence to the

norms and values of the dominant culture is assumed to be essential for the regulation and advancement of society. The dominant discourse is so powerful and racism perpetuated so subtly that people discriminated against because of their ethnicity reframe, deny and rationalise racist incidents (Henry & Tator, 2005; Malhi & Boon, 2007).

The experiences of Asian New Zealanders belie the espoused beliefs of many that New Zealand is a fair and just society in which everyone is treated fairly and according to merit. In New Zealand, Asian peoples struggle to be identified as New Zealanders. Sibley & Liu (2007) found that Māori and Pakeha (white) faces are far more associated with national symbols (for example, kiwis and the New Zealand flag) than Asian faces. Thus a recent immigrant from Eastern Europe or white South Africa will be perceived as a New Zealander before a New Zealand Chinese citizen. I am generally greeted as a foreigner in interactions with strangers. Promoting belonging to a host country is also important to society and the economy since those who feel valued are more likely to stay and contribute – for example to achieving the goal of a smokefree New Zealand by 2025 (A. D. Smith, 1991).

New Zealand Asian peoples certainly experience democratic racism. The discourses of democratic racism include that of denial; political correctness; colour blindness or colour evasion; equal opportunity; blame the victim or white victimisation; “otherness”; national identity; moral panic and tolerance. Articles such one titled “Asian Angst: Is it time to send some back?” written in *North and South* contain these elements (Coddington, 2006). In recent times, discrimination and prejudice, not qualifications, have become barriers to employment for skilled Asian immigrants barriers (Henderson, 2003). Requirements for English language proficiency discriminated against Asian children at Epsom Normal Primary School in Auckland (Pang, 2003). Whereas many said that a series of three murders in 2008 (Navtej Singh in his dairy, Yan Ping Yang in her home and Joanne Wang in a shopping mall carpark) was not racially based, 15,000 Chinese, Koreans, Japanese and Indians marched on July 5th of that year in East Auckland to protest against anti-Asian violence (P. Mao & Lewis, 2008). Democratic racism may act effectively as a glass ceiling in terms of promotion to higher offices and positions of power.

Post-modern (Post-structuralist) Perspectives

The pluralistic approach to ethnicity described above is related to postmodernism perspectives since pluralism suggests that there are multiple legitimate viewpoints and

multiple interpretations of truth and history. This is essentially a moral and cultural relativism. However post-modernism is very different from religious and cultural pluralism. If pluralism is a result of the separation of religion and state, religion and minority group culture are relegated to the private arena. Difference is accepted so long as it does not disrupt dominant ethnical thought or practices. Thus the religious freedom in the Treaty of Waitangi did not extend to action regarding acceptance and power sharing with Māori according to their frame of reference. Neither did the British democratic vision of egalitarianism prevent the concentration of power and resources in the hands of a few. Although education and healthcare were universally provided, and some did well, it was on the terms of the British colonisers who believed they were bringing the benefits of civilisation to inferior peoples. Māori, Chinese and Indians experienced racism which obviated their efforts under the British system of law and politics. My mother always said Chinese people had to be twice as good as Europeans to get anywhere (i.e., achieve a good comfortable life) and that this entailed working twice as hard.

Post-modernism goes beyond religious pluralism. It rejects the acceptance of the existence of different universalistic explanations. It reflects the ambivalence, uncertainty and fragmentation of a pluralistic world in which our perceptions, aspirations and behaviour are shaped by images and discourse more powerful than the products they represent. These perspectives alert us to the transient and illusory nature of the modernist “grand narrative” of ethnicity which is reconstructed as personal “identity” powerfully shaped by the mass media and the internet. Postmodern perspectives do not lend themselves to the population focus of public health but they offer new ways to interpret power, process, structure and construction of perceptions of ethnicity, culture, family, the child and tobacco use in society.

Post-modernism is relevant to this thesis because it has affected the practice of professionals. Assessment and treatment in the positivist tradition focuses on information gathering, analysis and treatment options in partnership with but directed by the professional. Post-modern influenced assessment focuses on eliciting clients’ unique perceptions and understandings of the issues at hand. Treatment aims to empower clients of any ethnicity by adopting a non-pathological position, collaborating to draw out competing scenarios experienced and imagined by clients and working with them to formulate new meanings and understandings. The goal is for clients to identify and

reconstruct the personal or family narratives which prevent them from adopting health protecting behaviours (Greene, 2008).

Postmodernism is also relevant to the research because the acceptance of multiple realities and beliefs means that there are no absolute truths. Everything is relative and transient. When this is combined with life in an individualistic Western or post-modern society people (especially youth) must create an identity and define what they believe in from a multitude of confusing and sometimes conflicting world views (Zeitlin et al., 1995). This includes the personal meaning smoking has in terms of the social identity of Asian youth in New Zealand

Culture

Culture is a key concept in this work because differences among ethnic groups are commonly ascribed to culture; there is concern about the effects of exposure to Western culture on smoking among migrant women and youth; and calls for “culturally appropriate” tobacco control interventions are common. This section examines broad perspectives of culture, relates tobacco control and smoking to culture, and reviews the limitations of culture as an explanatory variable.

Like ethnicity, the study of culture spans many disciplines and theoretical perspectives. Vinken, Soeters, & Ester (2004) categorised theory and research about culture into three dominant cross-discipline perspectives. They are postmodern, “dimensionalist” and “particularist”. I have included this categorisation for two reasons. First, the postmodern perspective is commonly alluded to but excluded from many categorisations of culture. Second the “dimensionalist” perspective corresponds with Bronfenbrenner’s macro-system while the “particularist” perspective corresponds with the exo-, meso- and micro-systems.

The postmodern perspective is implied in Baldwin and colleagues’ (2006) conclusion on the definition of culture. They summarised and updated Kroeber and Kluckhohn’s (1952) exhaustive critical review which clustered 164 definitions into six groups:

1. Lists of the content of the culture (eg sets of behaviours);
2. Emphasises heritage and tradition;
3. Focuses on ideals and norms;
4. Comprises psychological aspects of culture eg learning, managing problems;
5. Comprises structural definitions;
6. Encompasses the origins of culture.

(Baldwin et al., 2006)

The six groups were summarised concisely and synthesised into one influential definition as follows:

Culture consists of patterns, explicit and implicit, of and for behavior acquired and transmitted by symbols, constituting the distinctive achievements of human groups, including their embodiments in artefacts; the essential core of culture consists of traditional (i.e. historically derived and selected) ideas and especially their attached values; culture systems may, on the one hand, be considered as products of action, and on the other as conditioning elements of further action (Baldwin et al., 2006 p.181).

Baldwin and colleagues' update included functional, process, critical, post-modern and other definitions. They did not create a single definition of culture but cite O'Sullivan's (1983) explanation in lieu of this:

The term culture is multi-discursive; it can be mobilized in a number of different discourses. This means you cannot import a fixed definition into any and every context and expect it to make sense. What you have to do is to identify the discursive context itself (O'Sullivan, 1983, p. 57).

The "multi-discursive" nature of culture and reference to different discourses in O'Sullivan's explanation implies a post-modern perspective. This perspective goes beyond the essentialist leanings of "pluralism" and "multi-culturalism". It reflects the idea that change is constant and that the meaning of culture and shifts continually. It reflects self-definition as renewable hybrid forms. Examples of hybrid forms are "Kowi" (Korean New Zealander) or "Chiwi" (Chinese New Zealander). The normalisation of the post-modern perspective is implicit in the phrases the "post-modern family" and "family is anything you want it to be". A post-modern perspective of culture as shifting and constantly created is not pursued in the qualitative and quantitative elements of this post-positivist study. Rather cultural change is explored through the positivist and post-positivist concept "acculturation".

The dimensionalist category focuses on empirically validating the most parsimonious model of culture possible. This is a positivist nomothetic/etic view rather than an idiographic/emic view of culture. It is less concerned with individuals' experiences and more with the way the essential axes in the most reductionistic model of culture shape structures, processes, and behavioural and belief patterns. For example, dimensionalist theorists created the concepts "individualist" and "collectivist" to explain cross-cultural differences globally. Interestingly Inglehart, a theorist and researcher who falls into the dimensionalist category, subsumes post-modernism into a progressive universal evolutionary model of cultural change. Based on data from the World Values Survey, he

argues that post-modern culture reaches groups via modernisation and prosperity. Post-modern perspectives are part of globalisation. However he also notes that the persistence of the broad cultural heritage of a society (Protestant, Roman Catholic, Orthodox, Confucian, or Communist) leaves an imprint on values that endures despite modernisation (Inglehart & Baker, 2000).

Vinken, Soeters and Esters' (2004) particularist category is associated with studies about cultural structures, processes, and behavioural and belief patterns in relation to topics such as education and health among particular units of analysis (for example, families). The topics themselves are stressed rather than the co-creation of an overarching cultural cosmology or the contribution of the study to an overarching model of culture. The particularist category fits with positivist, post-positivist and interpretive views of culture. It is congruent with the definition of culture used in many health studies, for example, Nichter (2003), an anthropologist and tobacco control researcher:

culture is commonly thought of as an enduring set of social norms and institutions that organize the life of members of particular ethnic groups giving them a sense of continuity and community (Nichter, 2003).

The following view of culture is congruent with the post-positivist perspective of the thesis and encapsulates the meaning of culture underlying the research questions in this study. It incorporates Vinken and colleagues' dimensionalist and particularist categories. Culture is:

a socially interactive process of construction comprising two main components: shared meaning (cultural interpretation) and shared activity (cultural practices). Shared meaning runs from the macro-level understandings of culture through to micro-level meanings and shapes exo-, meso- and micro-level activities. Both components of cultural processes are cumulative in nature since they occur between, as well as within, generations. Meanings and activities not only accumulate but also transform over both developmental time - across a single life cycle, and historical time – between generations (Greenfield, Keller, Fuligni and Maynard's (2003 p. 462).

Culture and tobacco use

Unger and colleagues (2003) argue that understanding the cultural context of tobacco control is vital to reducing tobacco use. They created a multi-level, multi-dimensional, multi-disciplinary model of culture and tobacco control. Their model relates culture to tobacco control at three nested interdependent levels of investigation: macro (global- and society-level influences), meso (community-level influences) and micro (intra- and inter-personal influences). The cultural context they describe excludes the post-modern concept of culture. I will relate Unger and colleague's levels to Bronfenbrenner's

macro-, exo-, meso- and micro- systems, Vinken and colleague's (2004) particularist and dimensionalist categories and the PhD question in the following discussion.

Macro-level and Culture

At the macro level anthropologists conceptualise culture as the man-made part of the environment, or as a diffuse overarching phenomenon which perfuses, shapes and is shaped by all human behaviour (Herskovits, 1948). This is so general it covers all theoretical and disciplinary approaches except post-modernism. It corresponds with Unger's (2003) perception of the economic and social determinants of tobacco production, consumption and control as macro level cultural phenomena and the macro system in Bronfenbrenner's ecological theory. The dimensionalist perspective that essential cultural constructs such as individualism and collectivism shape exo-, meso- and microsystem influences on Asian families, smoking and their children fits here. I have outlined macro-level tobacco control strategies previously and will briefly discuss cultural ideologies later. The very broad macro- level conceptualisation of culture above is problematic in one-directional linear quantitative research since variables cannot be both independent and dependent in a single study. Narrower definitions of culture address the tautological problem of a diffuse definition of culture which simultaneously creates and is created by itself.

Meso-level and Culture

Unger and colleagues' meso-level is directly relevant to the study. It reflects a particularist cultural perspective and is similar to both the relational level in the model of smoking (p.12) and aspects of Bronfennbrenner's exo-, meso- and micro-systems. Unger and colleagues' meso-level focuses on beliefs and practices related to health among groups of people and institutions at a local level. Cultural beliefs and behaviour used to explain differences in health and health risk factors among ethnic groups include traditional factors related to perceptions of smoking, health and staying healthy, the causes of ill-health, screening, treatment and socialisation about these factors (Helman, 2000). Meso-level influences include stigmatisation of smoking, social pressure on families in collectivist societies to have smokefree children and the local effects of macro-level smokefree ordinances such as banning sales to minors and religious doctrines about smoking (Unger et al., 2003).

Meso level inquiry about the topic of culture and smoking is directly relevant to the qualitative phase of the study. Tobacco control interventions are generally based on community psychology, psychosocial and sociological theories about group and family

behaviour. There is interest in changing norms to decrease smoking in families, peer groups and community groups. Efforts to make programmes “culturally appropriate” are resourced. Community development and community action projects to reduce smoking, may be given over to cultural groups.

Micro-level and Culture

Unger and colleagues’ micro-level view of the influence of culture on smoking is partially relevant to this research. The micro-level reflects a particularist approach. It focuses on the individual. The individual is at the heart of the micro-system in Bronfenbrenner’s model and in the centre of the model of smoking (p.12). Explanations at the micro level focus on identifying discrete elements of cultural information such as beliefs or behaviour. Then the relationship between these units and individual tobacco use is investigated. Alternatively the effect of culture on the individuals’ biological or genetic propensity to smoke may be investigated since cultural factors may be needed to prompt smoking initiation and the consequent expression of genes related to smoking (Unger et al., 2003).

Benowitz et al (2002) suggest that genetic differences in nicotine metabolism for Chinese Americans compared to Caucasians explain, in part, ethnic differences in cigarette consumption, nicotine intake per cigarette and resultant lower tobacco-related cancer risk. However, genetic and biological explanations cannot account for wider ethnic patterning of health related variables. For instance, the nicotine metabolic characteristics of Chinese people does not explain why Singapore’s male smoking prevalence (22%) is much lower than China’s (57%), two countries with mainly Chinese populations (Shafey, Eriksen, Ross, & Mackay, 2009). Biological explanations are still useful. In this case they could contribute to recommendations for dosing of nicotine replacement therapy for Asian men. Biological and genetic influences on Asian youth smoking are not discussed further.

Hofstede (2001) argues that values, not cultures, are compared at the individual level. He notes that culture is a sociological concept and that cross-cultural studies are used to compare cultures. Micro-level explanations focusing on separate cultural elements at the individual level reflect psychological perspectives. Since psychology is chiefly concerned with the study of mental processes and behaviour, definitions of culture in the psychological literature include the mind. An example is Hofstede (2001), a cross-cultural or ethno-psychologist’s definition:

the collective programming of the mind that distinguishes the members of one group or category from the other (2001, pp. 9-10).

He goes on to say that:

the 'mind' stands for the head, heart and hands – that is for beliefs, attitudes and skills.....culture in this sense includes values; systems of values are a core element of culture.

“Programming of the mind” includes elements which are operationalised and measured at the individual (micro-) level to represent culture. Culture is an antecedent or intermediary independent variable (Lonner & Adamopoulos, 1997; Unger et al., 2003). In tobacco control research the micro-level elements are often individual level risk or protective factors for smoking. For example, personal levels of filial piety may be correlated with the risk of smoking (Unger et al., 2006). Filial piety could be a protective or risk factor for youth smoking. For example male sons may respect their parents' wish for them not to smoke as children but traditionally they would have difficulty refusing cigarettes if their male elders offered them when they were older. Filial piety often represents an important aspect of Confucianism-based cultures.

Micro-level inquiry is directly relevant to this thesis. Although Helman (2000) argues that cultural factors are often difficult to identify and quantify, and therefore less attractive to epidemiologists and statisticians, a range of cultural factors are related to smoking at the individual level in the literature about Asian people and smoking. As yet there is almost no New Zealand based research about this in the area

As discussed previously I use an ethnotheoretical approach to link the macro-system with the other systems, especially the microsystem. For example, a key question is how parenting with regard to child smoking is influenced by cultural norms in the context of Asian migration to New Zealand (Nichter, 2003). Macro-level cultural ideologies of family, family socialisation, the child and child development are the “blueprint” for norms and values. They trickle down to micro-level theories about factors such as parenting style; communication in families about smoking; gender expectations; smoking and life transitions, for example from youth to adulthood; and the role of smoking in ethnic and personal identity. In addition, although the intention of the KKS study intervention is to reach families the outcomes are measured at the micro or individual level.

Limitations and Critique of Culture as an Explanatory Variable

Although I am not investigating culture as a direct influence on youth uptake of smoking a key assumption is that culture and migration affect family influences, parenting and child socialisation with regard to youth uptake of smoking. This is in keeping with Kâğıtçıbaşı's (1994) argument that culture is too diffuse to be used as an explanatory variable by itself. It needs mediating variables, in this case, family. More critiques of the concept of culture and its use as an explanatory variable are outlined below.

Culture, nationality and ethnicity are not interchangeable terms even though they have much in common. To provide an intuitive understanding of this consider "youth culture". It is a recognisable phenomenon. However there is no such thing as "youth ethnicity". The use of ethnicity as a proxy for culture is problematic for several reasons. It assumes that people who share the same ethnicity have the same values, health beliefs and cultural health practices (Unger et al., 2003). Yet people vary in terms of their acceptance and expression of the cultural practices they are exposed to.

When biological definitions of ethnicity are used as a proxy for culture, the deterministic and racist limitations of these definitions described previously apply (Nichter, 2003). Ethnicity can be seen as something experienced within the context of culture. The standards for ethnicity used in this thesis incorporate culture (p.23).

Levine (2005) cautions against using culture and ethnicity to characterise differences between ethnic groups as well as explain them. As mentioned previously, one problem with using culture as an explanation for behaviour is that the argument becomes tautological (Kâğıtçıbaşı, 2007). For example, she smokes because this is common among people from her culture; her cultural background means she smokes.

Prior to the 1970s the Western discipline of psychology is characterised as modernist. Culture was not defined because it was irrelevant to the search for grand theories which would apply to everyone. Cross-cultural psychology is a comparatively new field. It purports to recognise ethnocentrism. Despite this, there are the problems of determining what traditional values are, of reducing culture to rigid prescriptive boundaries and of turning cultural values and norms into templates for ideal behaviour. An example of this stereotyping is Asians as a "model minority" previously discussed in the section about ethnicity. There is enormous variation among families and individuals who share a common national ancestry or ethnicity. Their culture, values, health beliefs cannot be

assumed to be the same since Asian communities, families and individuals differ by length of stay and generation in their current country of residence and their country of birth may differ from their country of cultural origin (Uba, 2002).

There are other arguments for and against attributing the behaviour of individuals and groups of people to cultural difference. In a postmodern perspective of Chinese Americans, Uba (2002) argues that differences between Asian Americans and white Americans are wrongly attributed to Confucianism versus Western values. Other scholars argue that Confucian and Taoist ideology shapes behaviour among Chinese people resident in Western countries including New Zealand (Liu, Ng, Weatherall, & Loong, 2000; M. Sun, Cornforth, & Claiborne, 2008). Blaming difference on culture and ethnicity and attempting to address health issues by changing cultural practice via cultural channels is counterproductive when ethnicity is confounded with factors such as socio-economic status, barriers to access to healthcare or policy decisions. Instead the issues that must also be addressed include racism, education levels, employment, family violence and improving access to health care.

Individualism and Collectivism

Culture is an integral part of the ecological perspective and, as described before, the blueprint in the macrosystem for the exo-, meso-, and micro- systems. This section examines individualism and collectivism, two dimensionalist macro-level constructs commonly used to characterise, differentiate and compare the cultures of people from different societies.

The constructs individualism and collectivism have a long history in philosophy and anthropology (Hofstede, 2001; Triandis, 1995). In 1980 they were revived by Hofstede in a multi-country study of over 117,000 IBM employees (Hofstede, 2001). He summarised the employees' individual responses to a selection of the questions by country. He conducted factor analyses based on the correlations among the summed responses. Hofstede originally proposed four dichotomous dimensions which he used to characterize the cultures of different countries (Table 6). He warned that his concepts were not applicable to individuals but across societies and that they would change over time.

Table 6: Hofstede's Cultural Dimensions

| Dimension | Characteristic |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Power distance | “Power distance is the extent to which the less powerful members of organizations and institutions (like the family) accept a hierarchical order and expect that power is distributed unequally.” |
| Individualism/collectivism | <p><i>Individualism</i> - pertains to societies in which the ties between individuals are loose: everyone is expected to look after himself or herself and his or her immediate family</p> <p><i>Collectivism</i> - pertains to societies in which people from birth onwards are integrated into strong, cohesive in-groups, which throughout people's lifetime continue to protect them in exchange for unquestioning loyalty</p> |
| Uncertainty avoidance | “a society's tolerance for uncertainty and ambiguity”. It reflects the extent to which members of a society attempt to cope with anxiety by minimizing uncertainty |
| Masculinity/femininity | “The distribution of emotional roles between the genders”. Masculine cultures' values are assertiveness, ambition and power, whereas feminine cultures place more value on quality of life and relationships |

Individualism and collectivism resonated powerfully with cross-cultural psychologists. An extensive and influential body of theoretical and empirical work followed. Kim et al. (1994) argue that individualism and collectivism provide a coherent theoretical framework for the comparison of cultures. The social aspects of the term culture are operationalised mainly at the individual level and empirically tested. As well as providing a focus for cross-cultural psychology, individualism and collectivism offer a bridge between psychology and other social sciences (eg sociology and anthropology) and quantitative and qualitative research methodologies. Kim et al. (1994) created a useful integrated framework for a macro-level understanding of the differences between individualism and collectivism (U. Kim et al., 1994, p. 7) (Figure 3).

Figure 3: Individualism and Collectivism.

| Individualism | | | Collectivism | | |
|---------------------------------|------|-------------------|-------------------------------|------|-----------------|
| | | | | | |
| <u>Fundamental assumption/s</u> | | | <u>Fundamental assumption</u> | | |
| Rationality, Reason | | | Relatedness | | |
| | | | | | |
| Principles | ———— | Regulations, | Collective welfare | ———— | Roles |
| | | Rules, | Harmony | | Duties |
| | | Laws | | | Obligations |
| Individuation | ———— | Autonomy | Self-cultivation | ———— | Interdependency |
| Self-fulfilment | ———— | Freedom of choice | Succorance | ———— | Nurturance |
| Uniqueness | ———— | Assertiveness | Common fate | ———— | Compliance |

Individualism and collectivism are assumed to be based on different world views. Generally speaking the individualistic Western world view arises from the work of scientists in the 17th century and philosophers in the 18th century. The “Enlightenment” questioned and rejected medieval values. Both Christianity and the monarchy were challenged and replaced with scientific thinking to explain our origins and existence as humans. This new “Age of Reason” gave primacy to rational thought. Western philosophers developed the ideas of human rights, separation of the church and state, freedom of choice including religious freedom, and the equal moral worth of individuals. The moral-political philosophic tenets of liberalism are assumed to underpin individualism. Here the notion that individual rights should only be limited by the harm caused to others support the primacy of the individual. The individual is viewed as rational, autonomous and private. The goal of the individual is the achievement of personal potential and self-fulfilment. Status is gained by achievement rather than being ascribed, for example by birth or gender. Monarchies are therefore a hang-over from the past.

The Industrial Revolution was based on liberalism, the economic philosophy of the free market and technology enabled by the advances in scientific thought (Johnson, 2006). These streams of thought and events are the basis of the modern dominant culture, law, economy, welfare system and education system since New Zealand was colonized by

the British in the 1800s (Johnson, 2006). The reader is referred to Ratner (2003) for challenges to this aetiology of individualism.

New Zealand is considered an individualistic society (Hofstede, 2003; Oyserman, Coon, & Kimmelmeier, 2002). Asians in New Zealand live in an increasingly secular and fragmented Western culture – termed “modern” or “post-modern” (Hofstede, 2001, p. 221; Inglehart, 1997). Values include democracy, equity, individual freedom, human rights, autonomy and individual responsibility. Current dominant views of the family and children in New Zealand are discussed later.

Collectivism is assumed to be based on different ideologies in different cultures. It is a diverse construct drawing together a wider range of cultures and societies than individualism (Triandis, 1995). The individual is viewed as interdependent and primarily a component of the family and in some cultures the community group. Personal achievements are for the family and group. Decision making is contextual. It is important to maintain group harmony and balance by respecting hierarchical relationships and maintaining social roles.

Individualism and collectivism are important to this thesis. The constructs are applied as cultural explanations to understand smoking and quitting in different societies and cultural groups (Corona, Turf, Corneille, Belgrave, & Nasim, 2009; Hosking et al., 2009), in marketing by tobacco and other companies to increase sales (Fellows & Rubin, 2006; Han & Shavitt, 1994) and in health promotion to reduce consumption (Miller, Foubert, Reardon, & Vida, 2007). Various aspects of parenting (for example child socialization goals) are associated with individualism and collectivism (Keshavarz & Baharudin, 2009; Maiter & George, 2003; Tamis-LeMonda et al., 2007). In addition, training for cross-cultural work with clients in New Zealand including material and activities in courses provided by Asian Health Services incorporate the constructs (Asian Health Support Services, 2010). Below is an example of the use of the term “collectivism”. It is in the Te Pou practice guide for Asian mental health and addiction services. The values below “collectivism” are often viewed as arising from the concept.

Table 7: Common values in Asian communities.

| Value | Explanation |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Collectivism | In many Asian cultures individual needs are placed secondary to the needs of the community and their family. Collectivism often involves a shared sense of honour and shame in the behaviour of others in the family and the community. It often also focuses on acceptance of social order, and a responsibility to follow those in positions of authority to facilitate pleasant and courteous relationships. |
| Family focus or duty | Family is a core part of the lives of many Asian people. Families are often highly-involved in life and health decisions. Particularly in Indian and South-Asian cultures family relationships are often highly structured and formal, with specific gender roles. |
| Education and wealth focus | Many Asian cultures value education and wealth, and a person's self-worth may be defined in terms of the material and occupational status they achieve, as part of their duty to their family. |
| Tolerance of hardship | Many Asian philosophies put high value in letting things take their own course, and emphasise that life events are part of fate and that people should learn to accept their circumstances. |
| Conflict avoidance and humility | Particularly in East Asian cultures, there is a strong focus on avoiding conflict with others, and on modesty in communication and in discussing one's achievements. |
| Emotional regulation | Particularly in East Asian cultures, strong feelings and emotions are avoided. For example Chinese and Japanese people favour reservation and subtle means of communication, whereas Indian people may be more expressive. |

Source: (Te Pou, 2010)

Critique of Individualism and Collectivism

Empirical research and theoretical critiques of individualism and collectivism have resulted in many refinements and suggestions (Fiske, 2002; Kâğitçibaşı, 1994; U. Kim et al., 1994; Oyserman, Coon, et al., 2002; Triandis, 1995). Hofstede's work itself is challenged on the basis of its sample (IBM employees), and the questionnaire items which the construct individualism is based on - see in particular Fiske (2002). Other concerns include inferences about culture at the societal level from personal level indicators and vice versa (ecological fallacy); the analysis of cultural practices which show that individualism and collectivism is likely not one dichotomous but two separate constructs co-existing in varying degrees in cultures, societies, communities and individuals; and the conflation of "progress" and modernisation of societies with a shift from collectivism (poor, agrarian and traditional) to individualism (wealthy, industrial and modern) (Hofstede, 2003; Inglehart, 1997; Kâğitçibaşı, 2007; Oyserman, Coon, et al., 2002; Sinha & Tripathi, 1994 ; Tatsuo, 1999). Kâğitçibaşı (1994) proposed an additional construct to individualism and collectivism, a synthesis of both, termed "interdependence" at the family level, and the "autonomous-related self" at the individual level. This last captures characteristics of social groups and individuals such as those who live "modern" urban lifestyles in countries like India.

Oyserman, Kimmelmeier and Coon (2002) evaluated the theoretical assumptions underpinning individualism and collectivism and conducted meta-analyses of the empirical literature at the individual level for individualism and collectivism separately. They found major limitations with the literature including a preponderance of studies with undergraduate student participants, single group contrasts (limiting generalisability), extremely heterogeneous measures and conceptualisations of individualism and collectivism and generalising from individual-level data to cross-national conclusions. They particularly criticised attributing any differences found between cultural groups in studies to individualism or collectivism. This is a warning to the researcher in this instance.

Despite these difficulties, Oyserman and colleagues (2002) concluded that core elements for individualism for European Americans are valuing personal independence and personal uniqueness. Core elements for collectivism are a sense of duty or obligation to in-group and in-group harmony (country comparisons only). They found that other values, such as familism, are multiply determined and not necessarily a component of collectivism. Different ethnic groupings are characterised by different combinations of traits rather than those attributed particularly to individualism and collectivism.

Oyserman and colleagues (2002) responded to comments about their comprehensive article by arguing that individualism and collectivism are useful generalised “meta-schema” but not detailed lists of differences or context-rich descriptions of differences. The constructs are limited in their reach in terms of describing how cultures differ systematically and do not preclude differences related to power, economic, political and other factors. The difficulty of applying two universal models to characterise all mankind is evident. Some recent studies separate collectivism from variables such as familism and filial piety (Y. Li, Costanzo, & Putallaz, 2010; Nasim, Corona, Belgrave, Utsey, & Fallah, 2007). Oyserman and colleagues, and others, argue for a “situated culture” approach, one that is closer or local to groups and individuals and their processes Europeans (Broughton, 1993; McLaughlin & Braun, 1998; Nakhid, 2008; K. Tamasese, Peteru, Waldegrave, & Bush, 2005; Tassell, Flett, & Gavala, 2010). This approach is used in this study along with the concepts of individualism, collectivism and interdependent as useful generalised “meta-schema”.

Asians in New Zealand live in the context of Māori and Pacific Island as well as Western European culture. Chinese, Māori and Pacific Islanders are collectivist in

comparison with New Zealand Europeans (Podsiadlowski & Fox, 2011). This quote from Makereti's (1986) account of the history and culture of her iwi, Te Arawa, and poem illustrate collectivism among Māori:

"The Māori did not think of himself, or do anything for his own gain. He thought only of his people, and was absorbed in his whanau (*family*), just as the whanau was absorbed in the hapu (*extended family*), and the hapu in the Iwi (*tribe*)" (Makereti, 1986, p. 38)

Te Māori: "My World"

As I walk as an individual in the Pakeha world,
I walk with my Māori world in my spiritual realm.
Wherever I go I take my Māori world with me.
I am never alone!
I walk with my wairua (*spirit*), my iwi, my hapu and my whanau.
Being Māori is having a deep bond with my people whether it be
physically or spiritually they will always be there, especially in times of
sickness, unhappiness, at times of death or even happy times of
celebration.
For me, being Māori is being here for one another in our Māori
world and in our Pakeha world also, I am never alone.

Kelly Te Heuheu, 2000. Reprinted with permission from the author.

The following poem expresses the collectivist orientation of Samoan people. It is written by Tui Atua Tupua Tamasese Taisi Efi, head of state of Western Samoa.

I am not an individual,
I am an integral part of the cosmos.
I share divinity with my ancestors, the land, the seas and the skies.
I am not an individual because
I share a tofi with my family, my village, and my nation.
I belong to my family and my family belongs to me.
I belong to a village and my village belongs to me.
I belong to my nation and my nation belongs to me.
This is the essence of my sense of belonging.

Tui Atua Tupua Tamasese (2003)

Acculturation

In this section I explore acculturation in the context of migration to New Zealand. Migration from one society to another inevitably involves contact with other cultures. The process and outcomes of inter-cultural contact have been of interest to the sciences, arts (for example literature, language studies, history, political science, religious studies, the visual and performing arts) and other disciplines (for example, architecture) for centuries. Various terms are used to describe the processes and outcomes of contact.

Examples are acculturation, cultural hybridity, bricolage, syncretism, creolisation and “going native” (Stewart, 1999).

Tobacco control researchers most commonly use the construct “acculturation” to describe and investigate the effects of migration and cross-cultural contact on smoking. The word “cross-cultural” is used instead of “inter-cultural” even though inter-cultural implies some prior contact, mingling or commonalities between cultures whereas “cross-cultural” implies distinct bounded entities. Acculturation is originally an anthropological term (Rudmin, 2003a). It is famously defined as:

those phenomena which result when groups of individuals having different cultures come into continuous first-hand contact, with subsequent changes in the original cultural patterns of either or both groups. (Redfield, Linton, & Herskovits, 1936)

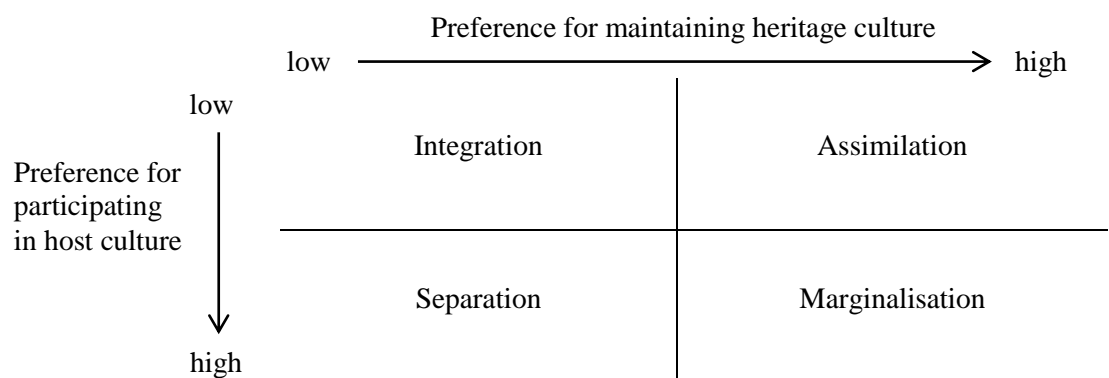
This thesis focuses mainly on the effects of cross-cultural contact on Asians in New Zealand rather than the effects of Asians on New Zealand society. I am interested in how Asian New Zealand families evolve and retain elements of their own cultural attitudes, values and practices related to youth smoking when they are immersed in New Zealand society.

Cross-cultural contact occurs all over the world through globalisation, the media and the activities of tobacco companies who use Western imagery to market their products (Knight & Chapman, 2004). Health outcomes may be related to these changes. For example, Westernised youth in India are at greater risk of smoking (Stigler et al., 2010). Asian migrants come from societies where heritage values and practices are changing. Acculturation is not the same as modernisation in heritage countries. Modernisation occurs in the context of societies’ unique existing dominant cultural, political, educational and economic systems. It is specific to those societies and does not necessarily reject their basic tenets (Kâğıtçıbaşı, 2007). In contrast, Asian migrants to New Zealand are immersed in a Western individualistic culture where they are not the dominant group, where English is the lingua franca and where the political, legal, educational and health systems do not reflect Asian philosophical and/or religious world views. In addition, migration includes adjusting to the Treaty of Waitangi and Māori and Pacific Island cultures (Nayar, 2009). This may particularly apply to Asian participants in the KKS study since the overall sample is predominantly Māori and Pacific Island.

Acculturation may be viewed as part of Bronfenbrenner's chronosystem since migration is a major non-normative life transition (J. S. Hong et al., 2011). Change as a result of inter-cultural contact occurs at the macro, meso and micro cultural levels referred to previously. Bronfenbrenner refers to adaption and cites examples of the effect of migration and intercultural contact on youth development. At the meso- and micro-levels, researchers in migrant studies, cross-cultural psychology and public health propose and test different theories and models of acculturation. These models and theories must account for the complexity of acculturation. Acculturation is affected by migrant-centred factors such as country of origin, ethnic group, length of residence, socioeconomic status, education level, migration status, religion and language proficiency. It is affected by the similarity of the heritage country with the host and the receptivity of the host country including factors such as job opportunities and tolerance of diversity.

An annotated bibliography of acculturation constructs from 1918 to 2003 describes 126 taxonomies of acculturation (Rudmin, 2003a). Rudmin selected John Berry's commonly used model of acculturation to categorise the taxonomies. Berry's model of acculturation has two dimensions – (a) preference for maintaining one's own culture and (b) desire to participate in the wider society – and four acculturation strategies (Figure 4).

Figure 4: Berry's acculturation model.



Source (Berry, 2002)

Some models treat acculturation as a uni-directional linear movement from the old to the new. Others are more complex. Berry's model proposes that the heritage culture and the host culture are orthogonal dimensions (Berry, 2002). Rudmin describes models with elements of acculturation in the taxonomies which do not fit Berry's strategies individually. For example, some attempt to capture the fluid back and forth nature of change or adaptation. This is similar to Nayar's (2009) dynamic model of the

process of settlement in Indian women in New Zealand. Others accommodate more than two cultures; propose additional and different dimensions; and different processes, for example, individuals may simultaneously be more or less acculturated on multiple facets of acculturation.

In New Zealand, there are variations in acculturation status and attitudes among migrant youth (including Indian, Chinese and Korean) according to generation (1st, 1.5 and 2nd) in New Zealand. The acculturation strategy “integration” is endorsed over the different generations while assimilation is more accepted by second generation youth (Cheung, 1995). New Zealand Cambodian refugees also preferred the “integration” acculturation strategy (Ward, 2008). For a summary of acculturation research in New Zealand, see Sang and Ward (2006).

Acculturation is related to many outcomes in the empirical literature. They include education, health (including psychological and socio-cultural adaptation) and parenting (discussed later). In the psychological literature, the acculturation strategy “integration” is most often associated with a positive outcome (Berry, Phinney, Sam, & Vedder, 2006; Berry & Sabatier, 2010). New Zealand is no exception. Asian students who were “integrated” had higher self-esteem than those who were “separated” or “marginalized” (Eyou, Adair, & Dixon, 2000). Cambodian refugees who were less acculturated had higher psychiatric morbidity (Cheung, 1995).

In tobacco control research full models of acculturation are rarely used. For example there are no studies examining Asian youth smoking using all dimensions of Berry’s model. Rather single or various combinations of measures provide indicators of acculturation. They include:

- “structural” variables (for example, country of birth and length of residency),
- variables related to active cultural retention (for example, language use), and
- psychological variables (for example, self-identification of ethnic identity and comfort levels in the new settings)

According to a comprehensive review of acculturation studies about Asian-American adults, acculturation is protective for Asian male smoking and a risk factor for Asian female smoking. Smoking prevalence is higher for men with low acculturation than among their counterparts, but the reverse is observed for Asian women (Zane & Mak, 2002). Later studies of Asian migrants confirm the risk of acculturation to women with

regard to smoking (An, Cochran, Mays, & McCarthy, 2008; Constantine et al., 2010; S. S. Kim, Ziedonis, & Chen, 2007; Sussman & Truong, 2011).

It is assumed that Asian youth who have lived in New Zealand longer will be more acculturated since they will have been exposed to the dominant culture for longer. The influence of structural acculturation variables on Asian youth smoking is illustrated here. Students who have lived in New Zealand longer smoke proportionally more than those who have resided there for fewer years (G. Wong et al., 2008) (Rasanathan, Ameratunga, Chen, et al., 2006). In overseas studies of Asian student smoking in other Western countries, country of birth and length of residency, are related similarly to smoking rates (Chen et al, 1999; Ma et al, 2004). Country of birth had an interesting gendered impact on smoking rates. New Zealand born Asian girls are more likely to smoke than those who are born overseas (4.1%), whereas New Zealand born boys smoke at the same rate as their overseas born counterparts (G. Wong et al., 2008, unpublished data). Like adults, Asian boys in Western countries may be protected from smoking by acculturation, but Asian girls may be at risk from higher non-Asian youth female smoking rates in Western societies.

The relationship of variables related to active cultural retention on Asian youth smoking is illustrated here. English and other language use is used independently, as well as together with other variables, to determine acculturation levels (Zane & Mak, 2002). In New Zealand, students whose main language at home is not English have lower smoking rates (G. Wong et al., 2008). Similarly, greater use of traditional languages have been associated with less smoking, whereas higher levels of English use by Asian youth have been associated with more smoking in America (G. X. Ma, Tan, et al., 2004; Rosario-Sim & O'Connell, 2009). However, in another study the association became non-significant after controlling for access, perceived consequences, friends' smoking, and offers (Unger, Cruz, et al.). In addition, English use does not necessarily account for smoking rates independently. Smoking initiation in a sample of Asian-American youth remained lower than in white adolescents even though 70% of the Asian sample reported speaking English only at home (X. Chen, Unger, & Johnson, 1999). This suggests that factors additional to language use protect Asian youth from smoking.

The relationship of psychological measures of acculturation and Asian youth smoking is illustrated here. Ethnic self-identity implies a subjective feeling of belonging to an ethnic group although, over time, acculturation may reduce allegiance to traditional

cultural values and practices (Phinney, 2002). Students in the Youth2000 study selected as many ethnic groups as they identified with. Students who identified as Asian/non-Asian smoked more than those who identified as Asian in New Zealand. Multi-ethnic students in America also smoke at a higher rate than those who select one ethnicity only (Unger, Palmer, Dent, Rohrbach, & Johnson, 2000). Asian/non-Asian youth may be more acculturated. Their smoking rates may reflect either those of the non-Asian groups they identify with, or rates in a new culture of multi-ethnic young people.

The complexity of acculturation is illustrated further with regard to the above. Thai, Connell and Tebes (2010) used path analysis to explore relationships between peer substance use, ethnic self-identity, acculturation and academic achievement on substance use (tobacco, alcohol and marijuana) among Asian American adolescents. They found that acculturation and ethnic self-identity predict substance use. However this is no longer the case when peer use and academic achievement are taken into account. Like other studies, they include peer influences but exclude family (Le, Goebert, & Wallen, 2009).

Critiques of Acculturation

Acculturation is popular in public health research because it is measurable and can be statistically associated with other variables (as seen above). However there are many critiques. Some are the same as, or similar to, the limitations of quantitative research, epidemiology, culture as an explanatory variable, collectivism and individualism that I have already covered. They include issues with the concept and definitions, with operationalisation and level of measurement, confounding by other variables and applying findings.

With regard to the concept itself, positivist approaches to acculturation assume a universal process. There is an expectation that successive immigrant generations move towards a limited number of set outcomes via set strategies. Acculturation varies with the multiple nuances making up cultural and structural factors in different migrants and their host countries (Chirkov, 2009; Schwartz, Unger, Zamboanga, & Szapocznik, 2011; Uba, 2002). A positivist approach promotes stereotyping, cultural essentialism and a one size fits all approach. Acculturation and the choice of acculturation strategies are not individual choices since they occur in the context of structural enablers and constraints.

Rudmin's (2003b) analysis of acculturation theories challenged acculturation theories on several grounds including inconsistency and illogical operationalisation of acculturation categories. A priori classification assumes that categories exist and are valid. Cut points for classifying and judging high and low acculturation levels are arbitrary. The validity of "marginalisation" as a strategy or category of acculturation is also questioned on empirical grounds – see Schwartz (2011) for a discussion. It is difficult to imagine how people can draw on neither the host or heritage culture for their cultural frames of reference.

Acculturation may be confounded by socio-economic status and experiences of racism (Uba, 2002). In children, acculturation and child development may be confounded. By this I mean that Asian youth autonomy and independence from family could either be a result of acculturation or viewed as a normal part of child development depending on the model of child development that is taken.

The lack of "culture" in studies of cultural difference has already been noted. This issue is particularly marked in tobacco control and acculturation research where values and attitudes underpinning behaviour and practices are rarely measured. Operationalising culture is difficult. Proxies such as language use, food preferences, years in the host country, self-identified ethnicity and country of birth present misleading pictures if used alone. I have described the limitations of language use as a measure of acculturation in a study of American Asian youth and smoking. Unger, Ritt-Olson, Wagner, Soto, & Baezconde-Garbanati (2007) correlated acculturation scales for Hispanic/Latino youth. They found that language use explained less than 20 percent of the variability in indices of acculturation. Food preference has been described as a superficial measure of culture (Uba, 2002).

As discussed before, tobacco control research about acculturation generally reduces acculturation to uni-dimensional measures. At one end migrants are assimilated, at the other they are separated. It is not clear whether significant results are because participants have acquired the host culture practices, lost their heritage culture practices or both (Salant & Lauderdale, 2003). In addition, it is not clear how language acquisition changes acculturation. It is difficult to create interventions which address many aspects of acculturation although Ward and Kâğitçibaşı (2010) argue that knowledge about acculturation has practical implications.

These limitations mean that recommendations that traditional cultural identity, values, norms and practices be used to counter Western and traditional influences on cigarette use must be treated with caution. Traditions can protect or be risk factors for health and wellbeing. Influenced by postmodernism, the emphasis recently is more on cultural hybridity or the creation of new identities “influenced by multiple influences and interpretations of equal validity” including tradition, the dominant culture, globalisation (which is argued is the same as individualism or modernism) and the media (Karakayali, 2005; Schwartz et al., 2011).

Although the research is not specifically about acculturation, it is an important construct since I am investigating Asian family influences on youth smoking in the context of culture and migration to New Zealand. The quantitative variables in this PhD study include structural variables (born in New Zealand or not; length of residency) and self-identified ethnicity. The qualitative research will be used to address some of the issues raised above. I will investigate the cultural elements which protect or predispose Asian youth to smoking including participants’ values, attitudes and beliefs in the context in which they and their families live, work and participate in education and the wider society.

Religion

In this section I sketch brief descriptions of Asian ideologies in so far as they are relevant to smoking. I do not discuss the philosophical roots of Māori or Pacific Island thought. Asian peoples originate from cultures based on Confucianism, Taoism, Buddhism, Hinduism, Sikhism, Islam, Communism, Shamanism and Christianity (Camplin-Welch, 2007). Western thought has influenced traditional ideologies through evangelism, conquest, colonisation and globalisation. Some of these systems of thought are religions, there is debate about the status of others such as Buddhism, and some are secular. For example, Western democracy and individual rights are not religious precepts and Confucianism is a philosophical system of governance, not a religion. However westernisation and colonisation by the English are heavily influenced by Christian principles. Similarly Indian culture is influenced by Hinduism and Islam (as well as many other forces such as caste and British colonisation). In contrast Confucianism exists alongside different religions in countries like China where some take a pragmatic view of religion by subscribing to the religion that suits their circumstances and life stage.

Most religions predate the common use of tobacco. Religions such as Christianity, Hinduism, Islam and Buddhism enjoin devotees to avoid smoking along with other harmful and mind altering substances but do not forbid it (Garrushi, 2012; WHO, 1999). Devout Seventh Day Adventists and Sikhs are protected from adult and youth smoking by prohibitions on tobacco use. Reviews of the studies about the effects of religiousness on adult and youth smoking rates in New Zealand and elsewhere suggest that they are negatively associated with smoking regardless of the religion subscribed to (Guo, Reeder, McGee, & Darling, 2011; Weaver, Flannelly, & Strock, 2005). This means that the more religious are less likely to smoke. Studies about religion and smoking, however, are limited in that they are mainly cross-sectional and use different measures of religiousness making them difficult to compare. In addition, religious and cultural influences may be confounded.

Bradbury and Williams (2006) sought to differentiate between religion and culture in their cohort study. Fourteen and fifteen year old Muslim, Hindu/Sikh and Christian predominantly British born Punjabi Indian youth (n=824) had low smoking rates mainly because of cultural factors common to religious groups. At follow up four years later (n=492) religion was still protective but worryingly cultural influences on abstinence declined, particularly among males.

A number of explanations are proposed for the relationship between religiousness and low youth smoking rates. They include values transmitted through worship and child socialisation by family to uphold religious precepts and values (United States Department of Health and Human Services, 2012; Weaver et al., 2005). The substantial general literature on child socialisation and religion is not covered here. There is one study only about the effect of Asian family religiousness on youth smoking. Increased Buddhist spirituality among Bangkok Thai parents (n=420) has an inverse relationship with ever-smoking among their 13 to 14 year old children. Interestingly the effect is not direct, but mediated through increased parental monitoring (Chamratrithirong et al., 2010).

The evidence linking religiousness and protection from smoking leads to considerations about the feasibility of delivering tobacco control interventions via religious institutions (Jabbour & Fouad, 2004). These include possible co-option of public health by religious authorities who may have limited understanding of population health and who understandably prioritise religious principles, the risk of seeming to prefer one religion or religious sect over others, potential difficulties with evaluating such interventions

because of the role of religion in the stakeholders' lives, and the lack of evidence of effectiveness.

In New Zealand, locally based health promotion "community development" interventions are delivered in religious settings in partnership with community groups. For example in 2011 and 2012 community members themselves elected to have "Healthy Eating, Healthy Living" programmes at a mosque, a Buddhist temple, a Hindu temple and a church (Personal communication, Pritika Sharma, 11.1.13). The New Zealand interventions above appear to avert most of Jabbour and Fouad's (2004) concerns apart from the lack of evidence of effectiveness. The New Zealand interventions to date are in keeping with the notion of health as empowerment and community control, with the Ottawa Charter strategy "Strengthening Local Communities" and with the New Zealand Primary Health Care Strategy which emphasises promoting health and working with communities. New Zealand projects are instigated by community members themselves. On the surface, reducing smoking does not seem to be controversial as a public health measure for religious groups in contrast, for example, with birth control, or to contradict any religious edicts.

Family

Family is a central concept in this study. I have previously described how the ethnicity of families is defined for statistical purposes. In this thesis it is accepted that definitions of family and family processes are not universal. They are informed by the ideologies of the macro-system/s that shape the family (Bronfenbrenner, 1979; Tyyskä, 2007). In this section I will discuss definitions of family; the ecological framework and family; family and families in New Zealand; and families in different societies.

Everyone knows what "family" means personally and would agree that families differ from other human collectives such as clubs or classrooms of students (Quah, 2008).

While family is common to all societies a common definition is elusive. Nevertheless it is a key reference point for humans throughout their lives. Family is the primary source of socialisation and health care for children. As such, families have a major role to play in promoting children's health by discouraging smoking and protecting them from ETS. Governments, non-governmental organisations and the private sector target families for policy development and services. Implicit and explicit assumptions about family form and function reflect culturally based theories, values and norms. These have a key role

in determining policies, resource distribution, media portrayals and attitudes of different cultural groups to one another in everyday life.

Families and Theory

The history of social theory about family shows that theories about family in the past have been essentially modernist, teleological and normative to Western views in a quest to discover one grand universal narrative of family. As well as this they have been mainly concerned with the internal workings of the family (Doherty, Boss, LaRossa, Schumm, & Steinmetz, 1993). Western structural-functionalists espouse a universal theory of family. They view the ideal modern normal family as nuclear. It is seen as arising from an inevitable process of natural development from the extended family in pre-industrial society to a modern model of heterosexual married partners and their children in a single household. The role of the father is to work and provide income for the family. The role of the mother is to stay home and raise the children. A theoretical approach which emphasises the “normal” family as a nuclear family leads to assumptions that this form of family is best for child-rearing, maintaining social values, protecting public safety and upholding civil society. This leads to political, policy and economic support for the nuclear family.

Families in individualistic and collectivist families are said to differ systematically (Table 8). Familism is considered to share characteristics with collectivism but the concepts are complex and difficult to operationalise, measure and define exactly as discussed previously. Modernists view family forms such as extended families or joint families present in collectivist cultures as pre-industrial or pre-modern and a step on the path to realising the ideal nuclear family form, which is assumed to be necessary for modern economic development. However, Kâğıtçıbaşı (2007) argues that extended and joint families persist in economically successful societies such as Hong Kong, Japan and Singapore. Further, the joint family in India is a successful business model which is enshrined in law.

Ecological perspectives of the family consistently relate the family to the contexts they are affected by (Bronfenbrenner, 1986; Bubolz & Sontag, 1993; Wright & Herrin, 1988). Ecological theory is essentially relativist and accommodates pluralism. Family is part of the micro-system in Bronfenbrenner’s ecological framework. It is not tied to any particular race or culture and it matches with ideologies which see the individual and the family in the context of interrelated interdependent layers in which elements of the outermost layer can permeate the innermost layer. The child is also influenced by

these multiple forces. This contrasts with structural-functional theory which is deterministic and universal.

Table 8: Key differences between collectivism and individualist societies: Family.

| Low IDV* | High IDV |
|------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|
| <i>In the family</i> | |
| Horizontal integration: People live with or close to relatives or clan members | People live in nuclear or one-parent families |
| Other classified as in-groups or out-group | Others classified as individuals |
| Family provides protection in exchange for lifelong loyalty | Children are supposed to take care of themselves as soon as possible |
| Strong family ties, frequent contacts | Weak family ties, rare contacts |
| Fewer divorces | More divorces |
| Children learn to think in terms of “we” | Child learns to think in terms of “I” |
| Nonfamily, unrelated persons can be adopted into family | Family versus nonfamily distinction irrelevant |
| Vertical integration: care for aged relatives and worship of ancestors. | Aged relatives should care for themselves; ancestors unknown, irrelevant |
| A marriage without children is not complete | Choosing to have no children in a marriage is a socially acceptable option |
| Mothers expect to live with children | Mothers expect to live apart in their old age |
| Business persons live with parents | Business persons live separately |
| Nobody is ever alone | Privacy is normal |
| Harmony should always be maintained and direct confrontation avoided | Speaking one’s mind is a characteristic of an honest person |
| Opinions predetermined | Personal opinions expected |
| Financial and ritual obligations to relatives | Financial independence of relatives; few family rituals |
| Togetherness does not demand speaking | Visits are filled with talking |
| Friendships predetermined by in-groups | Need for specific friendships |
| Family relationships can be oppressive | Lasting relationships |
| Trespassing leads to shame and loss of face for self and in-group | Trespassing leads to guilt and loss of self-respect |
| Criteria for marriage partner: right age, wealth, industriousness, and chastity of bride | Criteria for marriage partner not predetermined |
| Living with in-laws and shared income and religion normal | Living with in-laws undesirable; independence in income and religion |

*IDV = Individualism

Source: (Hofstede, 2001 p.236)

Definition of Family

The definition of family shapes who is included in research and services. Because “family” is a social construct definitions reflect different disciplines (for example law, statistics, economics, biology, psychology, sociology and anthropology); theoretical positions or ontologies (for example feminist, modernist and post-modernist, positivist

and interpretive) and cultures. Definitions are based on aspects of family structure, function and history.

Structural definitions variously include family membership (for example - a family is a mother, father and their children; or a family is a child and everyone related to him/her); family form (for example nuclear, extended, joint, blended, one parent); place of residence (for example a family is everyone living in one household); and biological/genetic descriptors (for example – a family is a group of people related by marriage, blood, adoption or consensual union).

Functional definitions include those which describe the role of families. For example, families are defined as social units essential for maintaining human society. They are responsible for procreation and child rearing. They transmit social and cultural norms. They allocate resources available to them to feed, shelter and protect their members. Families are a significant source of beliefs about and practices to maintain and promote health and to treat ill-health.

Definitions incorporating a historical or time dimension cover the enduring nature of families and change in response to environmental events. Cheal's sociological definition captures the continuity of families and is wide-ranging in terms of family membership. However it does not cover family function. He defines a family as "any group which consists of people in intimate relationships which are believed to endure over time and across generations" (Cheal, 2002).

New Zealand based statistical, legal and social policy definitions of family are important because they reflect and create dominant social mores and policy, legal processes and resource allocation. Statistics New Zealand reviewed family statistics in 1978 and thirty years later in 2007. Their definition of family is based on co-residence, family structure and family form (the nuclear family with or without children and single parent families) but not family function:

Family nucleus: "A couple, with or without child(ren), or one parent with child(ren), usually living together in a household. Related people, such as siblings, who are not in a couple or parent-child relationship, are therefore excluded from this definition.

Census information about families refers to three kinds of relationships among families living in a single household (couple with child(ren), couple-only and one parent with child(ren)).

The definition in the Children, Young Persons, and Their Families Act (1989) is a child-centred New Zealand legal definition which incorporates structure (membership and form), function (“psychological attachment”), genes (“biological...relationship”) and cultural diversity (“whanau”; “culturally recognised family group”).

a family group, including an extended family, in which there is at least one adult member with whom a child or another adult member has a biological or legal relationship; or to whom the child or other adult member has a significant psychological attachment; or that is the child’s or other adult member’s whanau or other culturally recognised family group (CYP&F Act 1989, s2).

The New Zealand Families Commission Act 2003 definition of family recognises family form (“marriage” “civil union”), place of residence (“living together”), diversity (“civil union”, “whanau”; “culturally recognised family group”) and possibly self-definition (if people are allowed to decide what “living together as a family” means themselves). It does not include family function.

family includes a group of people related by marriage, [civil union,] blood, or adoption, an extended family, two or more persons living together as a family, and a whānau or other culturally recognised family group.

The Families Commission in New Zealand has a long definition of family. It is reproduced below. The exclusion criteria are interesting. “Gangs” are excluded although the gang members frequently refer to one another as “Bros” (short for brother).

“We have a broad and inclusive approach to families that ensures we consider the full range of families and their roles and functions. These include:

Groups of people who are related by marriage, blood or adoption

Extended families

Two or more people living together as a family

Whānau or other culturally recognised groups.

These groups have a wide range of living arrangements including:

Single-household nuclear families

Extended families and wider kinship groupings

Māori whānau

Customary family structures in Pacific and Asian communities and other ethnic groups

Multi-generational groupings

Families dispersed across multiple households

Joint and shared child custody arrangements

‘Blended’ families.

It excludes groups with common purposes such as gangs, flatmates, and professional or social type organisations”. (Families Commission, nd)

Children and adolescents in New Zealand self-define family structure broadly. Most notably they define family affectively as the people who love and care for them.

Chinese adolescents are more conservative than European, Māori and Pacific

adolescents. They are less likely to view non-traditional groupings such as same sex couples with children as family (Anyan & Pryor, 2002; Rigg & Pryor, 2007).

Elliot and Gray (2000) undertook a literature review and key informant interviews with 15 Asian and other peoples who have immigrated to New Zealand to determine their concepts and definitions of family. In keeping with descriptions of family structure in the countries of origin of Asian New Zealanders they found that biological links and paternal descent predominated among those with Confucian, Hindu and Muslim backgrounds (Chinese, Indian, Pakistani, Vietnamese, Japanese, Korean and Taiwanese). Families from the Philippines and Thailand also considered maternal descent. Adoptions were common. Family for immigrants was not defined by household since family members lived overseas. In terms of family function, families were strongly patriarchal.

Children

The term “children” is defined by individuals’ relationships with their parents, age in years and/or developmental stage. For the New Zealand Census household statistics a child is defined either as a person of any age who lives with their biological, step- or adoptive parents, or more narrowly for classification by family type. In the second instance, children are people who usually live with parent(s), and have no partner or child(ren) of their own in the same household (Statistics New Zealand, nd). Age in years is used to signify legal markers of independence from parents and guardians. The legal age for becoming an adult in New Zealand is 20 years (“Age of Majority Act 1970,” 1970). However individual government acts determine the ages that individuals have the rights and responsibilities of adults in a number of areas. Parents stop having guardianship of their children when they become 18 years old (“Care of Children Act 2004,” 2004). This is also the age at which they can buy cigarettes (“Smoke-free Environments Act,” 1990). Traditionally the 21st birthday marked the age when children became adults in New Zealand.

When developmental age is the primary focus, terms such as baby, toddler, pre-schooler, school-child, pre-adolescent, adolescent, youth and young adult are used. Such terms are often matched with an age range. For example, “young adult” often refers to those aged 18 to 24 years. In a series of New Zealand national youth studies, “youth” are aged 13 – 17 years (Adolescent Health Research Group, 2003, 2008). This corresponds with the ages of those in their sample which is drawn from Year 9 to Year

13 schools. In this PhD study the youth participants are aged 11 to 13 years. In Western terms their developmental stage is equivalent to pre- and early adolescence. They are referred to as children and students because the sample is drawn from Intermediate Schools with Year 7 and 8 pupils.

Cultural and religious beliefs about the value and nature of children and child development shape child socialisation values, goals and practices. The Christian concept of original sin leads to the belief that children are born bearing the stain of mankind's original fall from God's grace. Religious life is consequently a quest to redeem mankind through regaining God's grace. In Asian cultures babies are "white paper" (Confucian), divine and pure but with personal innate dispositions (*samskaras*) (Hindu), and inherently good (Buddhist, Indian) (Bisht, 2008; Chao & Tseng, 2002; Kakar, 1981; Saraswathi & Ganapathy, 2002). Children are viewed as ignorant. It is the families' responsibility to train their children and essential to begin early. This assumption of family responsibility is the practical outcome of the belief that the goal of child rearing is to socialise children to learn to think in terms of "we". It explains the responsibility that Asian parents in focus groups in a prior study assumed for protecting their children from smoking rather than expecting schools to do so (Glover et al., 2006).

Children in interdependent societies are an essential element of the integrity and worth of the family – "a marriage without children is not complete" (Table 8). Children are highly valued for themselves. Parents and grandparents prioritise their children over themselves and their careers. For example they sacrifice their own comfort and opportunities to give their children the chance to better themselves – and in doing so – to better their extended families. When I was young I often heard stories about the sacrifices made by parents to migrate to New Zealand so that their children would have better educational and life chances.

In contrast, Timimi argues that Western societies have an ambivalent attitude to children because their dependence on adults threatens their parents' freedom to develop their autonomy fully (Timimi, 2005a). He argues that children in Western countries are socialised into a system that promotes competitiveness, inequality, rejection of authority and individualism, a system which results in shifting and unstable family structures and poorer child outcomes. He asserts that many non-Western cultures embrace children into enduring stable extended families where "duty and responsibility over-ride individualism as the dominant value system" resulting in happier more controllable children. He cites anthropological studies to support his points.

Timimi points out that the Western view of the nature of the child is reflected in the United Nations Children's Charter (UNROC) and the charter of rights for children in health care since they are based on the belief of the individual rights of the child. The Organisation of African Unity's created a Charter of Children's Welfare and Rights because the Western-based charters do not reflect their world-view. Their charter focuses on the responsibilities of children and families rather than the individual rights of the child. This is more congruent with a collectivist social paradigm. While Timimi's argument is predominantly theoretical and focuses on addressing the increase in mental health problems among children in the West, he provides succinct summary of the different perspectives of children in individualistic and collectivist (interdependent) societies.

Child Development

The ethnotheory underlying Asian families' values and behaviour regarding children is that moral duty is the route to self-fulfilment. A "good" child is first and foremost morally sound. This means respectful, obedient, and, as a consequence, smokefree. This is consistent for Hindu Indian (Saraswathi & Ganapathy, 2002; Seymour, 1999), Muslim (Becher, 2008), and Chinese children (C. M. Lam, 2005; Wu, 1996). Self-fulfilment is desirable – doing well at school, participating in sport and in cultural practices, maximising health, for example by not smoking, and realising self through religious practices – but this contributes to maintaining the family and community. Thus self-maximisation occurs but it is within a framework which emphasises relatedness (Kâğıtçıbaşı, 2007; Sinha & Tripathi, 1994 ; Tamis-LeMonda et al., 2007). It aims to fulfil moral duties and responsibilities to family. This is common in traditional and modern non-Western societies and for Asian families in Western countries. It is supported by a qualitative study with Canadian Chinese adolescents (n=19) and their parents (n=10). They describe child socialisation goals which emphasise morality and self-development to maximise harmony and inter-dependence in a qualitative study about adolescent development. The resulting themes were:

be a good person (self-cultivation); be a good child (filial piety), be a self-reliant person to honour family (Chinese familism), and be a mature person (the quest for harmony and other-related attributes) (C. M. Lam, 2005).

The following examples relate to children and aspects of the macro-system level ideologies of Confucianism and Hinduism largely because the Asian participants in the KKS Study are predominantly South-East Asian, Chinese and Fijian Indian.

Confucianism is the dominant mode of cultural governance in China (where it originated), Vietnam, Japan, Korea, Vietnam and Singapore. In Confucianism identity is determined through one's place in the interdependent family and community hierarchy. Children move through life stages based on their position in the gendered hierarchy of the family. They are subordinate to older siblings, parents, teachers and elders. As they get older they become responsible for those who are younger. The nomenclature of Chinese family titles reflects this. Older and younger siblings have every-day titles which reflect their status and gender. Aunts and uncles have titles which reflect gender and birth order (Tung, 2000). The father is the head of the family.

The relationship between children and older family members and teachers with Confucian backgrounds is distilled into a heightened form of respect, deference and obligation called "filial piety". Children never forget their moral duty to their elders. Filial piety is so important that people express their gratitude and respect via ancestor worship. Even as a fourth generation New Zealander I visit my parents', parents-in-laws' and grandmother's graves and bow. Filial piety persists through generations among the Chinese diaspora in New Zealand (Liu et al., 2000).

Hindu peoples have a "template" for life based on interdependence and interrelatedness. Interdependence binds individuals together across family and other social groups in the present. Interrelatedness refers to the connection of prior, current and future life cycles through the repeated process of rebirth-and-death (*samskara*) until salvation (*moksha*) and release from this cyclical process is attained. The concept of moral cause and effect (*karma*) shapes individuals' destinies. *Karma* comprises the individuals' destiny which can be shaped by actions ("good" and "bad" deeds). These alter the progression and regression through the cycles of rebirth-and-death (Kakar, 1981). Thus actions in one life are affected by actions in previous lives. They also affect future existences. Good deeds now are important for future generations.

In contrast to the examples above, ethnotheories about children in Western society, based on the belief in the freedom of the individual and individual rights, lead to models of child development which assume the goal of child socialisation is self-fulfilment, autonomy and independence. Models of child development are important because they influence policy, and health professional and educational practice in New Zealand. Lerner and Steinburg (2009) divided the history of the study of adolescent development into three phases. The first phase from the early 1900 to the 1960s and 70s normalises the achievement of autonomy in human development. It is characterised by

dichotomised conceptions such as nature versus nurture and independence/autonomy versus interdependence/relatedness; “grand” theories of development” such as those of Piaget, Erikson and McCandless; reductionist models; deficit models; and atheoretical, descriptive research. Lerner and Steinburg argue that the decline of the phase one “grand” theories was for a number of reasons. The ideas of theorists seeking universal models of child development limited thought by focusing on uni-dimensional dichotomized concepts. These were not found to be valid for all children and failed to recognize interrelationships with integrated systems of external factors.

In addition, first phase theorists assume that the stages proposed are universal. This is not the case (Greenfield et al., 2003). For example, studies demonstrate that cultural factors influence biological development. In other cultures, developmental stages emphasise collective rather than individual characteristics. The perpetuation of collective structures and processes is paramount. Children are encouraged to develop their individual potential in order to support their families and countries. Western and non-Western schema of normal human development differ. For example, Kakar (1981) compares Erikson’s scheme of life stages with the ideal Hindu life cycle for Hindu men. Unsurprisingly Erikson’s scheme is focused on the development of the potential of the individual whereas the Hindu scheme focuses on the development of *dharma* or moral duty (Table 9).

The Hindu life cycle reflects stages of the development of *dharma*, a complex concept reduced here to “moral duty”. The practice of *dharma* enables *moksha*. Although the life stages reflect the gendered nature of Hindu culture and are consequently different for males and females, the object of existence and developmental and child socialisation goals all relate to *dharma* -moral duty and social responsibilities - rather than self-fulfilment through self-maximisation. This is reflected in qualitative research with Indian parents by Saraswathi and colleagues (2002).

For Hindu girls, the life stages centre around moral duty and social responsibility as well as marital status and having children. Females are in a pre-marital status, married and ideally mothers, and finally widows. One very critical role of mothers is to protect the spiritual health of their families at home by taking responsibility for *puja* (religious observance or prayer).

Table 9: Erikson and Hindu models of life stages and tasks.

| Erikson's scheme | | Hindu scheme | |
|--------------------|------------------------------------------|------------------------------------------------------|---------------------------------------------------------|
| Stage | Specific task and "virtue" | Stage | Specific task and "virtue" |
| 1. Infancy | Basic trust vs mistrust: Hope | Individual's "pre-history" not explicitly considered | Preparation of the capacity to comprehend <i>dharma</i> |
| 2. Early childhood | Autonomy vs shame Doubt vs willpower | | |
| 3. Play age | Initiative vs guilt: Purpose | | |
| 4. School age | Industry vs inferiority: Competence | 1. Apprenticeship (<i>brahmaharya</i>) | Knowledge of <i>dharma</i> : Love and care |
| 5. Adolescence | Identity vs identity diffusion: Fidelity | | |
| 6. Young adulthood | Intimacy vs isolation: Love | 2. Householder (<i>garhasthya</i>) | Practice of <i>dharma</i> : Love and Care |
| 7. Adulthood | Generativity vs stagnation: Care | 3. Withdrawal (<i>vanaprastha</i>) | Teaching of <i>dharma</i> : Extended care |
| 8. Old age | Integrity vs despair: Wisdom | 4. Renunciation (<i>sannyasa</i>) | Realisation of <i>dharma</i> : Wisdom |

Source: Kakar (1981 p. 43)

According to Lerner and Steinburg (2009), phase two of the study of adolescent development (1960s and 70s), is more inclusive of different cultures. It focuses on plasticity; has a substantive focus on diversity; includes a focus on individual -context relations (for example, Bronfenbrenner's ecology of human development); dynamic developmental systems models; encompasses multivariate longitudinal research; and adolescence as a "sample case" of human development. Phase three introduces applied development science and positive (strength-based) youth development.

New Zealand policy documents and action plans about children (birth to 12 years old) and young people (12–24 years old) reflect Western ethnotheories of child rearing and child development, in particular positive youth development and the rights of children. New Zealand's Agenda for Children and the Youth Development Strategy Aotearoa are examples (Ministry of Social Development, 2002; Ministry of Youth Development, 2002). In the following quote the literature review that underpins the New Zealand Youth Development Strategy states that personal autonomy is one of the three goals of youth development. "In positive youth development, we are interested in what is needed for young people to grow into constructive, autonomous individuals with a high level of well-being..." (McLaren, 2002 p.21).

The strength-based youth approach is taught in post-graduate papers about adolescent health and promoted in New Zealand schools with school nurses adopting it as a frame of reference for their work. In New Zealand the development of autonomy in youth is supported by legislation such as the 1990 repeal of Section 3 of the Contraception, Sterilisation and Abortion Act 1977, and the Ministry of Health guidelines about privacy for young people in health care which are based on the “Gillick Decision” (“Contraception, Sterilisation, and Abortion Act 1977,” 1977; Ministry of Health, 1998). The Act protects the privacy of people less than 16 years old (so long as they are deemed capable of understanding) who wish to access contraceptive services, including abortions and prescriptions, from health providers without their families’ knowledge.

Lerner and Steinburg (Lerner & Steinberg, 2009) include ecological systems theory in phase three contemporary adolescent development relational meta-theories with a post-modern lens. As discussed earlier an ecological perspective is used for the approach to both child development and the thesis overall. Lerner and Steinburg assert that these meta-theories give rise to context dependent middle-range explanatory models. Piaget is thus relegated to perpetuating the exo-system in Western society whereas Kâğıtçıbaşı’s (2007) theory is useful in non-Western contexts. This view connects this thesis with post-modernism although I would argue that accepting the validity of another world-view is not so much post-modern as anthropological (but anthropology has a postmodern turn). According to Harkness and Super (2006), parental ethnotheories link anthropology and psychology.

Parenting and Child Socialisation

In this section theories about parenting and child socialisation are described briefly because studies about the effects of family on youth smoking reflect these theories and because parenting style may be a modifiable factor. The overview is based on an historical account by Eleanor Maccoby (1992) who covers the major theoretical approaches and evaluates their empirical support. I focus on Baumrind’s influential typology of parenting styles because the New Zealand Youth Development Strategy literature review strongly recommends “authoritative parenting”, one of the Baumrind’s three parenting styles (Baumrind, 1971; Ministry of Youth Development, 2002). In addition Baumrind’s typology has been related to smoking uptake among youth (Castrucci & Gerlach, 2006).

Maccoby's (1992) interest lies in the parents' role in child socialisation. She describes child socialisation as "the cluster of processes that enable adults being able to function adequately within the requirements of the social group or groups among whom they live". Although the focus of this thesis is not "adequate functioning" the processes which she refers to are those used by parents to prevent their children from smoking. Maccoby notes that family is the major arena for human socialisation and that parents are instrumental in this. She points out that recommendations for training children based on theories about the aetiology of youth outcomes are as old as mankind. However empirical testing of theories is comparatively recent.

In common with other conceptual overviews in this chapter the history of modern theory about parenting begins with the creation of overarching universal ("grand") theories. These are behavioural learning theory and psychoanalytical theory. Maccoby (1992) found that the separate and combined theories with regard to parenting and child outcomes are not supported by empirical testing. Further theoretical development focused on middle range theories about specific areas of child socialisation. Of interest here, is social learning theory which the KKS study is based on. Bandura's (1977) contribution was about the nature of imitative learning. He noted that reinforcement of behaviour was not required for learning since children learn not only by experience but also by observation. This principle underpins the KKS study which focuses on helping parents quit smoking to prevent children from imitating them. Maccoby also discusses theories about optimal parenting processes, especially Baumrind's typology.

Baumrind's typology characterised parenting as authoritarian (autocratic), authoritative, or permissive (Baumrind, 1971). Authoritarian parenting aims to make children obedient to parents and an external code of conduct. It has its roots in the idea that training children is carrying out the Christian God's will. Permissive parenting avoids repressing the freedom of the child and is rooted in psychoanalytical thought. Authoritative parenting encompasses parental control and child autonomy. Maccoby notes the success of Baumrind's typology for determining effective and ineffective parenting. Authoritative parenting has been linked to positive child outcomes in a number of studies in the West. However this and the use of other Western constructs to explain child socialisation have been challenged for Asian peoples, for example those from Confucian heritages (Chao, 1994; C. Lam, 1997).

Chao's (1994) study investigated the notion that the characterisation of parenting in Confucian based cultures as authoritarian (repressive, restrictive and controlling) is

misleading. This was in response to the paradox Asian children reported experiencing authoritarian parenting styles but had positive academic outcomes, unlike other students. Chao concluded that Baumrind's typology is ethnocentric and does not capture important elements of Asian parenting, in particular "chao shun" and "guan", which have evolved from Confucian thought. Chao shun is training to fulfil ideals of socially acceptable, culturally appropriate behaviour (see prior overview of Confucian expectations of children). It involves continuous monitoring from parents. "Guan" amplifies the intensity of chao shun with loving governance and care. Facets of authoritarian parenting overlap with chao shun and guan but do not include many important features. In addition the ideological wells-springs of the concepts and parenting goals differ markedly. In subsequent studies Chao and others conclude that aspects of parental control (authoritarian parenting) are positive for Chinese and Indian youth whereas they are perceived negatively or have a negative effect (on anxiety levels) among Caucasian youth (Albert, Trommsdorff, & Mishra, 2004; Chao & Aque, 2009)

The New Zealand Context

The Treaty of Waitangi

Asian New Zealanders live in the context of the Treaty of Waitangi (the Treaty), the founding document of New Zealand today. KKS, the study this PhD coincides with, addresses the health of Māori under the articles of the Treaty. Māori as tangata whenua (people of the land) hold a unique place in New Zealand. The Treaty established a bi-cultural relationship between two sovereign signatories Māori, the indigenous people of New Zealand, and the Crown. In Article 1 of the Treaty, Māori gave the British a right of governance. In Article 2 the authority that tribes had always had over their lands and taonga (all that is precious to them) was upheld. In Article 3, the Crown promised Māori the benefits of royal protection and full citizenship (Waitangi Tribunal, 2009).

Recognition of the bi-cultural relationship between tangata whenua and the Crown is fundamental to health related research, policy and practice in New Zealand. However it sometimes stimulates arguments about New Zealand as a "multi-cultural" society.

Some adherents to the idea of an equitable multi-cultural society argue that Māori should be viewed as a cultural group equivalent to other minority cultural groups. However non-Māori enter New Zealand under the auspices of the Crown. This includes Asian peoples despite the Treaty referring only to immigration from Europe and Australia. Because of this, non-Māori communities cannot have separate relationships to

the Crown equivalent to that of Māori or stand outside the Treaty unless sovereign agreements between these communities, Māori and the Crown are negotiated.

Some New Zealand Asian commentators have expressed discomfort with being subsumed under the Crown. This is partly because of differential treatment of Asians compared with non-Asians in New Zealand (Ip, 2005; Rasanathan, 2005). For example, immigration policy for Asian peoples differed from policy for non-Asians in the past despite India being part of the British empire and Indian people therefore subjects of the British Crown (Leckie, 2007). Chinese people had to pay a poll tax unlike immigrants from Britain (Ip, 2003). Differential treatment does not applied to Asian New Zealanders with regard to health policy. The New Zealand Health Strategy does not discriminate against Asian peoples (Ministry of Health, 2000). All New Zealanders, regardless of ethnicity, have an equal right to recognition and health promotion and care *relevant to their needs*.

While the KKS study interventions were primarily focused on Māori and Pacific Island populations (in response to their high smoking rates) the minority Asian population was specifically included because of the growing number of Asian children in New Zealand schools. The KKS study also allowed for parallel culturally appropriate research, in this case an Asian led and focused PhD.

The New Zealand Asian Population

Migration

Like all ethnic groups in New Zealand apart from Māori, the Asian population is an immigrant population. Migration is the movement of individuals, families and groups from one location to another. People can migrate from one region to another inside a country or internationally. Migration is centuries old. It can be voluntary or involuntary. Involuntary migration occurs when people are forced to relocate for example through slavery, war or ethnic cleansing. Migrants are also known as immigrants or settlers. Refugees are migrants who are escaping persecution in their country of origin.

Chinese and Indian peoples have a migration history reaching back to the 1800s. They left their homelands because of poverty and lack of opportunity. The “old settlers” came from limited areas in their traditional homelands. Thus they were to some extent homogeneous groups given the great diversity of languages, religions and social groups in their countries of origin. There were few women. Chinese men came from the Cantonese countryside to mine gold. Indian men came from Punjabi and Gujarati and

worked as scrub cutters. There were traders, merchants, market gardeners and hawkers among both groups. Chinese and Indians retained close ties with their homelands. Chinese were sojourners. They aimed to support their families in China and to return. As time passed wives came from the areas of China and India the men originated from although there was some intermarriage with Māori and Europeans (Ip, 2003; Leckie, 2007).

The Asian population grew very slowly until the late 1980s because immigration policy discriminated against Asians migration. After immigration policy changes in 1987 and 1991 based selection of immigrants on merit rather than country of origin the population grew rapidly and became more diverse (Bedford, Ho, & Lidgard, 2001). In 2006, eighty percent of the New Zealand Asian population was born overseas (Statistics New Zealand, 2007). Asians now immigrate to New Zealand from all over the world. Indian peoples come from all over India as well as other countries. For example, a substantial number came from Fiji to escape the effects of military coups in 1987 and 2000. Chinese people now come from many areas of China as well as Taiwan, Hong Kong, Malaysia and other countries (Ip, 2003; Leckie, 2007). Immigrants come from Korea and the Philippines. Refugees came from Vietnam, Cambodia, Laos and Burma (Verbitsky, 2006).

The phenomenon called “circular migration” may be relevant. This label applies to people who immigrate to New Zealand, leave and return again. This can happen several times. It makes acculturation measured as “years in New Zealand” more difficult to calculate and interpret.

Asian tertiary education students constitute a group of transitory migrants. While they are not included in this study their highly visible smoking in public places causes public concern (Thompson, 2004). Smoking among international students is a topic worthy of study because of the hazards of smoking to their health and because they normalise smoking for other young Asian adults. The number of Asian people and rate of the Asian population growth in New Zealand make attention to maintaining and improving their health status vital in order to reduce the excess burden of chronic disease.

Demographic Description

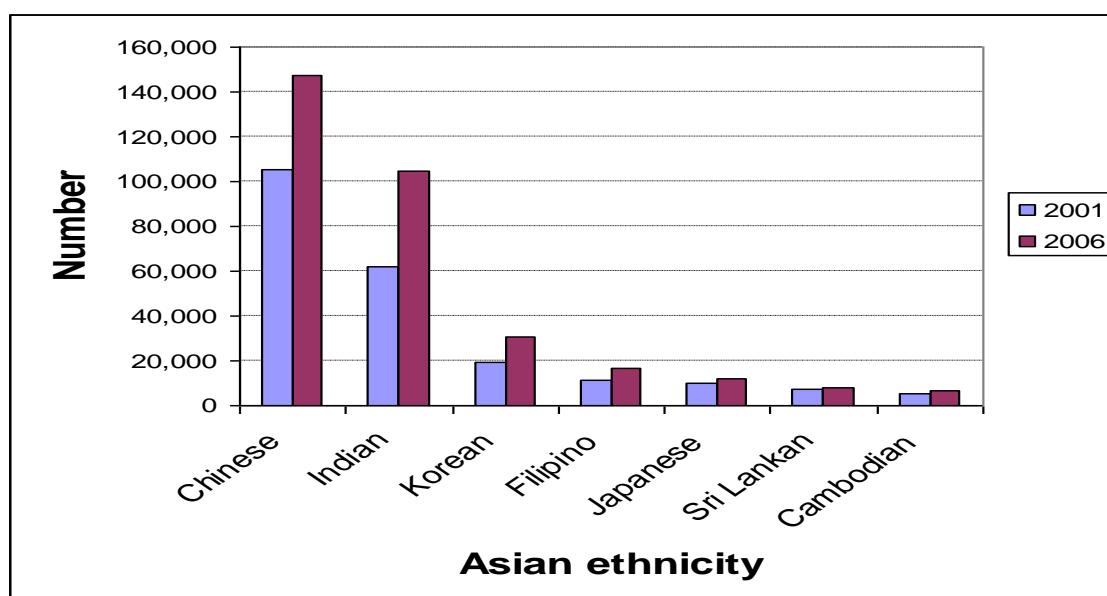
The proportion of New Zealanders who identify as Asian increased rapidly from 4.8 percent in 1996 to 9.2 percent in 2006. It is projected that Asian peoples will comprise

16 percent of the total population by 2026 and the number of Asian children is projected to roughly double from 84,000 in 2006 to 165,000 (Statistics New Zealand, 2008)

The median age of the Asian population is 28.5 years making the population young in comparison with the New Zealand European population (median age 38 years) (Statistics New Zealand, 2008). However there are marked differences in age distribution by Asian ethnic subgroup. It is essential to consider this when making policy or planning interventions. For example, the Chinese sub-population age structure (highest proportion aged 20–24) is skewed in comparison to the Indian age sub-population structure (highest proportion mid 20s to early 40s) (Goodyear, 2009).

The Chinese sub-population is the largest followed by Indian and Korean sub-populations (Figure 5). The Fijian Indian population is difficult to enumerate. There was a 33 percent drop from 1996 to 2001 attributed to a questionnaire change from “Tick as many boxes as you need to show which ethnic group you belong to” to “Which ethnic group do you belong to?”. It is thought the Fijian Indian population selected Indian and did not write in Fijian Indian or Indo Fijian in 2001 as well (Lang, 2002). Chinese and Indian people who identify with more than one ethnic group are most likely to identify with Māori and European Māori European than another Asian ethnicity (Lang, 2002).

Figure 5: Top seven Asian ethnicities, 2001 and 2006 New Zealand Census.



Source: (Statistics New Zealand, 2007c)

Not only are there substantial numbers of each ethnic sub-group and diversity within the sub-groups in terms of countries of origin (Figure 2) and generation in New Zealand, but there is also diversity in terms of language, religion, and pre-migration experience.

For example, Indian and Chinese New Zealanders speak English and different Chinese or Indian languages and dialects. Their spiritual beliefs include Hinduism, Islam, Buddhism, Christianity, Taoism, Shamanism and Sikhism. Some do not identify with any religion (Camplin-Welch, 2007). Refugees from war torn areas are pushed to live away from their heritage countries whereas other migrants come by choice as described previously. Migration history is reflected in different socioeconomic status and health and social needs (Camplin-Welch, 2007).

The diversity of the Asian ethnic sub-groups means they do not identify closely with one another although they share the migration experience and some share experiences of racism. New Asian immigrants have common priorities and stresses such as finding employment, housing, transport, language and education (Ministry of Health, 2006a). Although their education level is higher than the New Zealand average, their average income is lower than the total population, they have a higher unemployment rate than the New Zealand average and are less likely to own their own homes (Table 10) (Stuart, 2000). In Table 10, socio-economic variation by Asian sub-group is evident.

Table 10: Socio-economic status and New Zealand Asian sub-groups.

| Indicators | Chinese | | Indian | | Other Asian | | Total NZ population | |
|----------------------------------------------------|---------|--------|--------|--------|-------------|--------|---------------------|--------|
| | Male | Female | Male | Female | Male | Female | Male | Female |
| English language, %, 2001 | 79.3 | 76.8 | 91.2 | 88.0 | 79.9 | 79.2 | 93.5 | 93.6 |
| Income \$20,000 or less, 15+ years, %, 2001 | 59.8 | 65.8 | 42.8 | 56.6 | 52.9 | 61.1 | 37.9 | 55.2 |
| Unemployment, 15+ years, %, 2001 | 7.4 | 6.2 | 7.9 | 7.9 | 8.6 | 7.2 | 5.0 | 4.7 |
| 6th form certificate or higher, 15+ years, %, 2001 | 73.6 | 73.0 | 70.1 | 65.3 | 69.9 | 70.4 | 49.3 | 48.1 |
| Home ownership, 15+ years, %, 2001 | 36.8 | 39.4 | 37.9 | 37.7 | 25.7 | 32.0 | 49.9 | 52.2 |

Source: (Ministry of Health, 2006a)

The Health of Asian New Zealanders

It has been suggested that ethnic categories in epidemiological research are only useful when they differentiate people in some way relevant to health (Senior & Bhopal, 1994). The health status of Asian peoples is described to determine the significance of these issues in New Zealand.

As mentioned previously, Asian New Zealanders were rarely included as a separate category in health research or health statistics until the 1990s when they began to be included in reports such as the annual ASH Year 10 smoking survey. Major Asian focused public health reports have been produced since 2002 (Asian Public Health Project Team, 2003; Ho, Au, Bedford, & Cooper, 2003; Ministry of Health, 2006a; Rasanathan, Ameratunga, Chen, et al., 2006; Scragg & Maitra, 2005). Asians are now included in national tobacco control reports (Parackal, Ameratunga, Tin Tin, Wong, & Denny, 2011; Scragg, 2010).

When taken as a group, the health of Asian New Zealander adults and youth is good. Blakely et al (2007) found that Asian mortality rates were lower than, and decreased faster than European/Other rates from 1981 – 2004 in the New Zealand census mortality study. Avoidable mortality is significantly lower for the Asian category than for the total population (Blakeley, Tobias, Atkinson, Yeh, & Huang, 2007). The prevalence of heart disease is lower than for any other ethnic category for women and second lowest for men (Ministry of Health, 2006a).

However, aggregation masks diversity within the Asian category. For example, the health status of refugees versus free migrants is poor. Indian males and females have significantly higher cardiovascular disease hospitalisation and mortality rates than the total population (Ministry of Health, 2006a). This is an example of how stating that the major health issue for the Asian population is heart disease is misleading.

Cardiovascular disease rates are low among Chinese, the largest Asian sub-population.

Among youth, many Asian New Zealanders report low levels of physical activity.

Mental health is a health issue for young Asian New Zealanders. Many report significant depressive symptoms. This proportion did not change from 2001 to 2007 (Parackal et al., 2011).

A New Zealand Chinese health promoter summarised the need for attention to strategies which maintain the current mainly healthy status of the Asian population:

The Asian community has actually reached a critical mass and we can't ignore their needs any longer... Even though their health status is reasonably good, if we don't promote health now to tackle potential problems... and wait till disease surfaces...it's far too late. (G. Wong, 2007)

Factors related to migration may explain differences in health status. Blakeley (2007) suggests that a "healthy migrant effect" explains results in the New Zealand census mortality study where Asian rates were lower than, and decreased faster than, European/Other rates. The "healthy immigrant effect" describes the trajectory whereby the health of immigrants immediately after migration is better than that of comparable native born population but worsens as length of residency increases. The differences have been attributed to self-selection whereby potential migrants are physically and financially more able to migrate or possibly to the under-reporting of health problems since immigrants are less likely to use health services. It has been suggested that the worsening of immigrants' health over time is because of acculturation, exposure to the same conditions as native born peoples, barriers to the use of health services such as language and culture and/or better diagnosis of existing but undiagnosed health conditions when screening and healthcare services are more available than in their countries of origin (McDonald & Kennedy, 2004).

Low smoking rates in the New Zealand Asian community may reflect a healthy immigrant effect with non-smokers and ex-smokers more likely to migrate to New Zealand. If this explanation is correct, these differences may reduce over time for the reasons described above. Scragg (2010) found that longer residence in New Zealand is

associated with less likelihood of being a non-smoker. Overall there is evidence of a worsening mortality rate for Chinese New Zealanders who were born in New Zealand or have lived in New Zealand for longer periods compared with newer immigrants (Ministry of Health, 2006a).

Many Asian people migrate to improve their children's prospects. Because of this they may put their children's education before their own health needs. As a group they do not access health services as much as non-Asians (Stuart, 2000). Quitting smoking may not be a high priority. Young men may perceive smoking as an acceptable way to cope with migration and study stress since smoking is normalised for adult males in Asia. Issues related to migration, family and smoking will be explored in the qualitative research in the thesis.

Summary

In this chapter I have reviewed different perspectives of the key concepts in the research question. I have discussed their relationship to the research question and outlined the wider ramifications of adopting different views on policy and practice. I have provided a short background about Asian migration to New Zealand and the health of Asian New Zealanders. The next chapter covers the empirical literature about smoking and Asian adults and youth.

Chapter Three: Literature Review

Introduction

Chapter Three describes smoking rates and quit smoking services for New Zealand Asian peoples. This is followed by a synthesis of studies about the influence of family factors on Asian youth smoking. The joint effects of family and peer factors, and family and acculturation factors, on Asian youth smoking are described. The gaps in the literature are identified through this process and the research questions and hypotheses arising from these gaps are listed.

Search Strategy

Words relevant to the study, for example smoking, Asian, youth, culture, family, Chinese, Indian, Vietnamese and Thai were entered into Scopus from 2007 - 2013. In addition the search engine Google was used to locate information about tobacco control in New Zealand and relevant reports and studies on the Ministry of Health, Health Sponsorship Council, Quit Group, Action on Smoking and Health New Zealand and Youth2000 websites.

Smoking and New Zealand Asian Peoples

Data Sources for Smoking

National data sources about smoking among Asian adults include the Census, the New Zealand Health Survey, the New Zealand Tobacco Use Survey (2006, 2008 and 2009), the New Zealand Smoking Monitor, and the Quit group service data. Ponniah (Ministry of Health, 2008b) concluded that the Census, New Zealand Health Survey and Tobacco Use Surveys produce reliable and compatible prevalence data in terms of their definitions of the product smoked (tobacco via cigarettes or loose tobacco), definition of smoking status and representativeness. Because the Census questions only measure daily smoking, analyses using census data are only comparable with those which report smoking similarly. Data about Asian youth smoking is collected in national youth surveys (Youth2000 and Youth07), the Year 10 Snapshot Survey and the Youth Insights Surveys. Table 11 lists relevant details of these studies including how smoking status and ethnicity are measured.

Table 11: Sources of national smoking and ethnicity data cited in this study.

| Data source | Smoking status measures | Sample | Comments |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Adult smoking | | | |
| Census 1996, 2006, | Do you smoke cigarettes regularly (that is, one or more a day)? DON'T count pipes, cigars or cigarillos. Count only tobacco cigarettes. Yes No Have you ever been a regular smoker of one or more cigarettes a day? Yes No | Whole population But aged 15 + used for smoking statistics | The inclusive nature of the Census means data can be collected about every ethnic group in New Zealand. Asians and smoking analysis (J. Li, 2009) |
| New Zealand Health Survey 2002/03, 2006/07 | How often do you now smoke? 1 You don't smoke now 2 At least once a day 3 At least once a week 4 At least once a month 5 Less often than once a month | Asian sample n=500 | Face-to-face Incorporates International Tobacco Control studies – a few analyses include Asians separately otherwise included with European or non-Māori. Two Asian specific analyses (Scragg, 2010; Scragg & Maitra, 2005). |
| Quit Group data | | Smokers aged 18 + who contact Quitline | Data collected from service users. One Asian specific analysis (J. Li, 2009). |
| Youth smoking | | | |
| Youth2000 Youth07 | Have you ever smoked a whole cigarette? Yes/No/Don't want to answer About how often do you smoke cigarettes now? 1 Never - I don't smoke now 2 Occasionally 3 Once or twice a month 4 Once or twice a week 5 Several times a week 6 Most days | Approx. 1,000 Asian youth aged 13-18yrs | In schools using PDAs or similar. Three Asian specific analyses which include smoking (Parackal et al., 2011; Rasanathan, Ameratunga, Chen, et al., 2006; G. Wong et al., 2008) |
| <u>ASH Year 10 Snapshot Survey</u> Now part of the NZ Youth Tobacco Monitor. | Have you ever smoked a cigarette, even just a few puffs? Yes No How often do you smoke now? 1 I have never smoked/I am not a smoker now 2 At least once a day 3 At least once a week 4 At least once a month | All schools with Year 10 students invited to participate. Approx. 30,000 each year | Annual. Written self-report. Focused solely on smoking. Many analyses which include Asian students especially by Scragg and Paynter. |

| Data source | Smoking status measures | Sample | Comments |
|----------------------------------------------------------------------------------------------------------------|--------------------------------|----------------|--------------------------------------------------------------|
| | 5 Less often than once a month | | |
| <u>Youth Insights Survey</u> Formerly Year 10 In-depth Survey. Now part of the NZ Youth Tobacco Monitor. | Wide range of measures. | 3,000 annually | Biennial. Incorporates Global Youth Tobacco Survey (GYTS) |

The Year 10 study reports count non-smokers as students who have never smoked a cigarette, even just a few puffs and regular smokers as those who smoke daily, weekly or monthly. Students self-identify ethnicity choosing as many as apply. The resulting analyses either prioritise ethnicity (Māori, Pacific Island, Asian, European) or divide students into Māori and non-Māori (Health Sponsorship Council Research & Evaluation Unit, 2009). In the Year 10 Snapshot studies Asian students are categorised as Chinese, Indian and other Asian (Paynter, 2008).

The Prevalence of Smoking among Asian New Zealanders

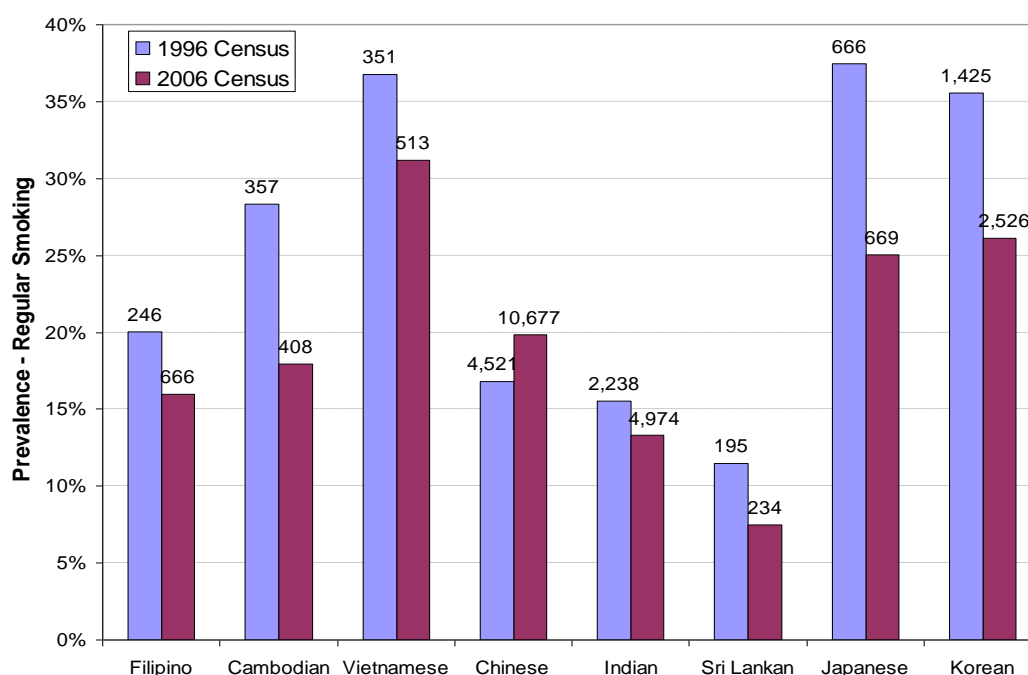
2006 census data show that more Asian men (18.6%) than women (4.7%) smoke daily (Ministry of Health, 2006b p 5). The prevalence of smoking declined between 1996 and 2006 (Figure 6, Figure 7) although a New Zealand Health survey data comparison of 2002/2003 with 2006/2007 found no change in prevalence among Chinese, South Asian and other Asian peoples ($p>0.05$) (Scragg, 2010). Census data show the number of Asian smokers increased from 1996 to 2006 (Figure 6 and 7). The increase in numbers is because of the rapid increase in immigration. The proportion of Indian people using gutkha in New Zealand is not known (Lokhande, 2010). Few pregnant Asian women smoke (0.4%) (Morton et al., 2010).

Smoking and Gender

Asian male smoking rates in New Zealand are nearly as high as European male smoking rates (21.3%) (Ministry of Health, 2006b). It is of concern that smoking rates in Chinese men have increased from 17% in the 1996 census to 20% in 2006 census. Smoking rates in all the other Asian sub-groups have declined from 1996 to 2006. However, Vietnamese (31%) Korean (26%) and Japanese (25%) males have smoking rates higher than the smoking rate in the European/other male population (21%) (Ministry of Health,

2006b; Statistics New Zealand, 2007a). On a positive note, smoking decreased from 1996 to 2006 among women from all Asian ethnic groups.

Figure 6: Smoking prevalence in Asian males aged 15+ years, 1996 and 2006.

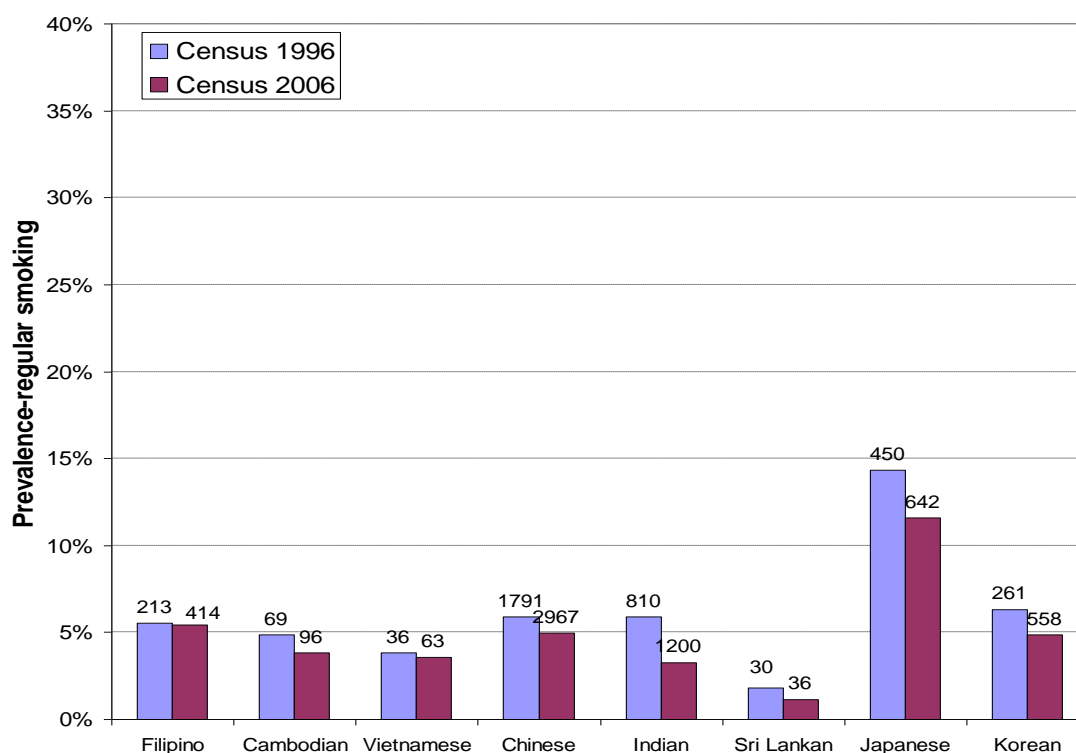


Source: Statistics New Zealand (2007a)

Smoking, Birthplace, Length of Residence in New Zealand and Asian New Zealanders

With the exception of Koreans, one study found that Asian peoples are proportionally more likely to smoke if they are born in New Zealand (J. Li, 2009). Scragg (2010) found a small but significant increase in the proportion of current smokers associated with longer residence (9% of those resident < 5 years smoked, compared with 11% of those resident 5 to 10 years). In contrast, Li (2009) concluded that years of residence are not associated with increased all Asian smoking rates. She found that there was no difference in the smoking rates of Asians resident in New Zealand less than one, and more than five, years (10%). However, there were differences by Asian ethnic group. Southeast Asians resident over five years had higher smoking rates (12%) than those resident < 1 year (9%). Asians from other sub-groups (Chinese, Indian [South Asian], Korean and other Asian) had rates which were the same or lower.

Figure 7: Smoking prevalence in Asian females aged 15+ years, 1996 and 2006.



Source: Statistics New Zealand (2007a)

Smoking and Household Income

Lower socio-economic status (SES) is related to higher smoking rates in New Zealand (J. R. Barnett, 2000). Li (2009) used New Zealand census data to describe household income and smoking among different Asian ethnic groups. Apart from Koreans, Asians with higher incomes smoked proportionally less than those with lower incomes.

Thirteen percent of those with incomes less than \$20,000 smoked, compared with nine percent of those with incomes greater than \$100,000. The proportions of smokers were similar across different income levels for Koreans.

Exposure to Environmental Tobacco Smoke and Asian New Zealanders

Among Asian peoples, 12% report others smoking inside the home and 9% report others smoking in the car (Ministry of Health, 2007b). Data collected in 2002/2003 show that smoking in the home is more common in South-East Asian homes (23%) than Korean (18%), Chinese (17%) or South Asian homes (6%) (Scragg & Maitra, 2005).

Smoking and Asian New Zealand Youth

The data presented in this section show that smoking among Asian students is an issue which must be addressed in order to keep rates low. They show that both Asian girls and boys need to be targeted equally and that Indian youth are at risk because their smoking rates did not decline from 2001 to 2007. Uptake of smoking through to

adulthood is a characteristic of Asian youth smoking. The proportion of Asian students able to buy cigarettes themselves is of concern. The addictive nature of smoking is evident in the proportion of students who currently smoke who have tried to cut down or quit.

Youth smoking uptake is viewed as a process which runs through never smoking, becoming susceptible, trying and experimenting to regular and daily smoking (Mayhew, Flay, & Mott, 2000; United States Department of Health and Human Services, 1994). This is reflected in the wide range of measures of youth smoking. For example, susceptibility is measured with questions such as whether the respondent would smoke a cigarette given by a best friend (Pierce, Choi, Gilpin, Farkas, & Merritt, 1996). The different measures reflect attempts to understand influences on the development of youth smoking and to refine interventions accordingly.

Two main sources of national New Zealand youth smoking define Asian ethnicity differently. In the ASH Year 10 data ethnicity is prioritised (Māori, Pacific Island, Asian, European other) (Paynter, 2010). In the analysis of Youth2000/07 data used in this section all students who identify with any Asian ethnicity are included (Parackal et al., 2011). This means that data for 14 and 15 year old Asian ASH Year 10 survey students are more likely to have a sole Asian ethnicity than the Youth2000/07 students.

Asian student smoking (weekly or more) declined from 2001 (10.4%) to 2007 (4%) among Asian students aged 13–17 (Parackal et al., 2011). Very few Asian youth smoke daily although proportionately more boys smoke daily than girls. From 2001 to 2009, daily smoking among Asian boys (14–15 years) declined from 7.2 to 3.2%. During the same period it declined from 3.2 to 1.4% among girls (Paynter, 2010). In 2009, similar proportions of boys and girls smoked regularly (daily, weekly or monthly).

Youth smoking rates differ by Asian ethnicity. Regular (daily weekly or monthly) smoking prevalence among Chinese boys (2.8%) and girls (2.7%) (14-15 years) is lower than among Indian (boys 5.1%; girls 2.5%) and other Asian youth (boys 5.4%; girls 3.7%) (Paynter, 2010). Parackal and colleagues found that Chinese youth (13-17 years) smoking rates declined significantly from 2001 – 2007 unlike Indian youth where there was no significant difference. Paynter found that the odds of never smoking increased significantly among the Chinese, Indian and other Asian male and female aged 14 and 15 years from 2004 to 2009 when each group was analysed separately (Parackal et al., 2009; Paynter, 2010). Asian youth smoking in overseas countries also varies by Asian

subgroup and gender. In California, Filipino (18.9%), Japanese (16.3%) and Korean (11.0%) students in grades 7 to 12 smoke at higher rates than Chinese (2.8%) youth. Thirty day smoking prevalence is higher for Japanese girls than Japanese boys and other Asians (X. Chen, Unger, Cruz, & Johnson, 1999).

Cross-sectional and longitudinal studies in New Zealand and other Western countries suggest that Asian youth smoking initiation continues into adulthood (Ellickson, Orlando, Tucker, & Klein, 2004; McCool, Cameron, Petrie, & Robinson, 2003; Ministry of Health, 2006b; G. Wong et al., 2008). There is a marked rise in smoking rates from 6% among New Zealand Asian 15-19 years olds to 20% among 20–24 year olds (Ministry of Health, 2007b). It is unclear if immigration or smoking in particular Asian sub-groups drive this rise, making targeting of interventions difficult. Sampling was based on the population usually resident in permanent private dwellings and short-term students and visitors were excluded.

There is a new concern that smoking initiation in youth of all ethnic groups is being displaced to young adulthood. The Year 10 surveys show a drop in regular (daily, weekly and monthly combined) smoking prevalence among all students from 28.6% in 1999 to 17.6% in 2004 (Paynter, 2010). This is not followed through with a similar drop in young adulthood. In 2009, the prevalence of current smoking among females and males aged 20–24 was 30.2% and 30.1% respectively (Ministry of Health, 2010).

In the past, male and female Asian students smoked less than Māori, Pacific Island, or European students. This pattern is also seen in countries such as America (X. Chen & Unger, 1999; Paynter, 2010). Asian boys and girls continue to smoke less than Māori or Pacific Island students. However comparisons with NZ European students have mixed results. While the proportion of Chinese and Indian students (aged 13-17 years) who have ever smoked (14% and 18% respectively) is much lower than New Zealand European students (29%) there is no significant difference between at-least-weekly smoking prevalence in Indian or Chinese youth and NZ European youth (Parackal et al., 2011). The ASH Year 10 survey has similar comparative results for regular smoking for Asian and European boys and girls in 2008 and 2009 (Parackal et al., 2011). Another interesting point is that Māori, Pacific Island and European girls smoke more than their male counterparts. Asian girls used to smoke less than Asian boys. This has changed with regard to regular (daily, weekly or monthly) but not daily smoking (see above).

A large proportion of Chinese and Indian students (13-17 years) who smoke buy their own cigarettes (68% and 48% respectively). Of these over half are not routinely asked to show identification documentation (54% and 64% respectively). Many of those who currently smoke have tried to cut down or quit (58% and 40% respectively) (Parackal et al., 2009).

Quit Smoking Services and Asian New Zealanders

The New Zealand Smoking Cessation Guidelines recommend an ABC approach with direct advice to people who smoke to quit based on evidence supporting West's model of addiction (Ministry of Health, 2007a). This approach has replaced the 5As approach based on Prochaska's Stages of Change model. One of the strongest rationales for the change is the proportion of people who quit without planning. The ABC approach stimulates attempts to quit by **A**sking about smoking status, giving **B**rief advice to quit and offering **C**essation treatment immediately. In contrast the Stages of Change approach calls for progress through an algorithm including assessing readiness to quit and setting quit dates in the future (West & Hardy, 2006).

The New Zealand government has responded to evidence that a combination of behavioural and pharmacological support is the most effective treatment for people who smoke (Ministry of Health, 2008a). The expectation is that every health professional in New Zealand will apply the ABC approach every time they encounter a patient or client who smokes. All health professionals can undertake a 40 minute training which enables them to give people who smoke cessation support in the form of government subsidised nicotine replacement therapy (NRT) (Ministry of Health, 2009a). Other more intensive publicly funded services to support Asian people to quit smoking include the national Quitline, Asian Smokefree Communities and cessation support from primary health care service providers such as general practitioners and practice nurses (J. Li, 2009; G. Wong et al., 2010). These services offer behavioural support and/or NRT. Champix, Bupropion and Varenicline are fully subsidised prescription medications available for those who find NRT ineffective.

The national Quitline has phone, text and online services. There are no Asian language quit advisers. Written material is available in Chinese and Korean. The proportion of Asian smokers who use the Quitline is just below the proportion of Asian smokers in New Zealand. Although the rate of smoking among Indian people is low (8%) proportionately more Indians than other Asians use the Quitline. This may be because

most Indians speak English fluently. Proportionally more Chinese smokers use the web-based Quitline services compared with the telephone services (J. Li, 2009).

Asian Smokefree Communities offers an Asian-centric approach for people living in the Waitemata District Health Board area only. Chinese, Indian, Korean and Burmese smokefree coordinators centre their services on whole families. In addition to services involving all household members in supporting smokers with quitting, they work individually with those who wish to quit privately. They combine smokefree environments with smoking cessation and take smokefree environments referrals from family members. This enables them to approach and offer family members who smoke support to quit. The service is successful. Quit rates are 41 percent at six months (G. Wong et al., 2010).

Private smoking cessation services include 7th Day Adventist quit smoking services, hypnotherapy, Alan Carr's Easyway, Nicobrevin and acupuncture. There is weak evidence to support hypnotherapy. Alan Carr's Easyway, Nicobrevin and acupuncture are not effective (Abbott & Young, 2006; McRobbie, Hajek, Bullen, & Feigin, 2006; Stead & Lancaster, 2006; A. R. White, Rampes, & Campbell, 2006). There are no quit smoking services especially funded for children. Subsidised NRT is available for those 12 years and over.

Family and Youth Smoking

Family influences on youth smoking include genetic, biological, social and cultural factors. Genetic and biological factors are outside the scope of this study. Social and cultural factors include socio-demographic influences (for example, family structure, socio-economic status); modelling of smoking by family members and exposure to ETS at home and in vehicles; child-rearing/parenting practices (smoking specific and general); and family relationships. Despite an extensive international literature there is little consensus on the nature and degree of influence of family factors on youth smoking. The 2012 Surgeon General's report on youth and smoking concluded that the evidence is insufficient to claim a causal relationship between family factors and youth smoking (United States Department of Health and Human Services, 2012). Tyas and Pederson's (1998) and Avenevoli and Merikangas's (2003) reviews found that the complex, multifactorial nature of family aetiology, and methodological issues, contributed largely to inconsistent results.

Avenevoli and Merikangas (2003) categorised the limitations of research studies about the influence of family factors on youth smoking. Although they particularly focused on parent and sibling smoking, their critique pertains to studies of other family factors. The limitations include a lack of the use of standardised measures, failure to include confounding, moderating and mediating variables, predominantly cross-sectional research designs with school-based samples, and inconsistencies with assessment procedures and definitions of tobacco related behaviours. These issues are present in the studies I refer to below.

The current review prioritises New Zealand studies and studies about family factors included in the KKS study. These are family structure, family smoking, smokefree environments, parents' beliefs and attitudes, and parenting (rules about smoking, talking to children about smoking, access to smoking related materials, pocket money and monitoring spending). Socio-economic status is included because it is both a family factor and potentially confounding. The review describes a limited number of studies of youth in Asia as well as studies about Asian migrants. This is because cultural influences on smoking arise from both heritage and resident countries.

Studies about family factors and Asian adolescent smoking are uncommon compared with studies about non-Asian youth. Reviews of Asian youth smoking are restricted by this (Choe et al., 2001; B. Hong, 2001; J. S. Hong et al., 2011). The studies of family factors and Asian youth smoking are mainly cross-sectional, for example, those using ASH Year 10, Youth2000 and Youth07 study survey data. The attribution of causality is accordingly limited. However, many studies control for potentially confounding variables as well as for the effects of clustering due to the study design. Some studies use multivariate analyses or path analyses, to account for the effects of multiple explanatory variables and moderating and mediating factors (Ashbridge, Tanner, & Wortley, 2005; W. Chen, Bottorff, Johnson, Saewyc, & Zumbo, 2008; Ellickson et al., 2004; Shih, Miles, Tucker, Zhou, & D'Amico, 2010). Some American studies combined Asian and Pacific Island youth making interpreting and generalising their results difficult. Data was collected from school-based samples. School-based samples omit non-attenders who may be more likely to smoke. Students self-reported their own, and their family members' smoking and family factors (see Chapter Six). There was very little verification of smoking status, for example, with carbon monoxide testing. The operationalisation of the variables, such as parental smoking and smoking status, varied widely, as is evident below.

Family Socio-demographic Influences

Family structure is related to youth smoking rates. In Western society an “intact” family is traditionally a nuclear family with biological father, mother and children in a single household. This family structure was associated with lower youth smoking rates compared with families with step-parents or single parents in cross-sectional studies (Griesbach, Amos, & Currie, 2003; United States Department of Health and Human Services, 2012). New Zealand Asian secondary school students who did not smoke were more likely to live in two parent households (OR 0.5 [95%CI.32-.79]) (G. Wong et al., 2008). Similarly, Hong Kong nonsmoking secondary school students were more likely to live with both parents (K.-K. Mak et al., 2010).

Socioeconomic status (SES) is measured in a number of ways reflecting the difficulty of asking children about their family income and parents’ educational levels. Examples are measurement by neighbourhood, father’s occupation, school type (for example, public versus private), and in New Zealand, school decile. Public schools are state funded (except for England). Private schools are funded by fees from families. School decile is a commonly used proxy for SES in New Zealand. The Ministry of Education assigns a decile levels to every school based on census mesh block data for household income, occupation, crowding, educational qualifications and income support. Level one is lowest and ten is highest (Ministry of Education, 2011).

There are not many studies of SES and Asian youth. All but one found that lower SES students had higher smoking rates than higher SES students. Asian/Pacific Island adolescents in California (termed “Asian” in the study report); adolescents in Thailand; and sixth-grade students in Beijing, with low SES backgrounds were more likely to smoke than those with higher SES backgrounds (Ruangkanchanasetr, Plitponkarnpim, Hetrakul, & Kongsakon, 2005; Unger, Sun, & Johnson, 2007; B. P. Zhu, Liu, Shelton, Liu, & Giovino, 1996). Hong Kong primary school students whose fathers were jobless were more likely to be ever-smokers (Peters, Hedley, Lam, Betson, & Wong, 1997). In contrast, private school attendance predicted smoking among girls in Pakistan (Ganatra, Kalia, Haque, & Khan, 2007).

Family and Smoking Specific Factors

In this section family factors specifically related to smoking by family members, and to preventing children from smoking, are reviewed. This is followed by general family factors which affect youth smoking but are not especially directed at preventing tobacco use.

Modelling Smoking, Exposure to ETS, and Access to Cigarettes at Home.

It is unclear if parental smoking is related to Asian youth smoking. Parental smoking was significantly associated with youth smoking in large cross-sectional surveys in India, China and Taiwan (Hesketh, Ding, & Tomkins, 2001; Sinha, Gupta, & Pednekar, 2003; C. P. Wen et al., 2005; B. P. Zhu et al., 1996). Analysis of the Global Youth Tobacco Survey data showed that Cambodian, Laotian and Vietnamese non-smoking students were more susceptible to smoking if their parents smoked (Guindon, Georgiades, & Boyle, 2008). In the New Zealand ASH Year 10 survey, the relative risk of adolescent daily smoking associated with both parents smoking was higher in New Zealand Asian children (11.37 [95%CI 7.87-16.42]) than those of other ethnicities (Māori 2.34 [2.21-3.73]; Pasifika 2.87 [2.21-3.73]; European/other 4.92[4.35-5.55]) (Scragg & Laugesen, 2007). In contrast, smoking among American Asian-Indian students was not related to either maternal or paternal smoking (Bhattacharya, Cleland, & Holland, 1999). Parental smoking was not associated with smoking and youth in China in another study (H. Ma et al., 2008).

In qualitative research with New Zealand Asian families, some parents did not believe that parental smoking was related to child uptake (Glover et al., 2006). Analyses of national data sets supported this for paternal smoking. The relative risk for paternal only smoking was 0.99 (95%CI 0.61–1.59) for girls and 1.38 (96%CI 0.95–2.01) for New Zealand Asian boys. In contrast, when mothers were the sole parent who smoked, New Zealand Asian girls (RR8.62 [95%CI 4.96–14.97]) and boys (RR5.90 [95%CI 3.30–10.56]) were at a significant risk of daily smoking. The wide confidence intervals reflect the small proportion of Asian mothers who are the only parent who smokes.

Children whose parents who quit early in their children's lives were more likely to quit smoking compared to those whose parents did not quit early (OR 1.80 [95%CI 1.22–2.64] (Bricker, Rajan, Andersen, & Peterson, 2005). Similar studies about Asian youth were not located. Parental intention-to-quit will be examined in this study. Sibling smoking is related to Asian youth smoking. Asian students in New Zealand (RR 10.14 [7.29-14.1]), America, and primary school students in Beijing, China whose siblings smoke, are more likely to smoke (Rosario-Sim & O'Connell, 2009; Scragg & Laugesen, 2007; B. P. Zhu et al., 1996). Sibling smoking is an example of a factor which can confound the relationship of parental smoking to child smoking. It may mediate the effect of parental smoking on children.

The proportion of Asian Year 10 students who live in a home with smoking inside declined from 20.0% (95%CI 17.7%-22.2%) in 2001 to 12.2% (95%CI 10.7%-13.7%) in 2009. This is significantly lower than for Māori, Pacific Island and European students. An analysis of the association of this with smoking rates was not provided (Paynter, 2010). Youth exposure to ETS from any source in the home was a family risk factor for smoking among New Zealand youth aged 13 - 18 years. Exposure had a dose related effect. The odds ratio for daily smoking for students exposed on 1 to 2 days weekly was 3.02 (95%CI 2.2-4.2); for exposure on 7 days it was 6.71 (95%CI 5.1-8.8) (Darling & Reeder, 2003). Focus groups with Arabic and Vietnamese-speaking participants in Sydney, Australia suggested there were knowledge deficits about the dangers of ETS in these communities (Jochelson, Hua, & Rissel, 2003)

Exposure to ETS in vehicles is of interest since protection of children from the harmful effects of ETS and from taking up smoking are reasons that are given to support bans on smoking in cars. An analysis of the KKS study baseline data found that smoking in vehicles is an independent risk factor for current early adolescent smoking (RR 3.21 [95%CI 1.45-7.08]) (Glover et al., 2011). There were no studies about Asian youth exposure to smoking in vehicles. This will be followed up in this research.

Family members provide access to cigarettes by providing them directly and by having smoking related materials accessible so children can steal them (Glover et al., 2006; G. Wong et al., 2007). Year 10 students whose parents both smoke were more likely to access cigarettes from family than students with neither parent who smokes (OR 2.10 [95% CI 1.95–2.26]). Twenty percent of Asian students who currently smoked accessed cigarettes from family members (Nelson, Paynter, & Arroll, 2011). This study will analyse KKS study data about the availability of smoking related materials at home.

Parental Attitudes to Child Smoking, Communicating about Smoking and Rules about Smoking

Permissive parental attitudes to child smoking reflect the gendered nature of smoking in Asia. In Indonesia a national youth survey (15-19years) conducted in 1998 showed that 15% of parents allowed their sons to smoke before they were 15 years old compared with 1% of daughters. There was a similar pattern in the Philippines. Here youth reported that fathers (13%) and mothers (12%) approved of boys smoking whereas only 1% approved of girls smoking. The association of these attitudes with youth smoking rates was not reported (Choe et al., 2001). In China, parents were more likely to disapprove of girls smoking than boys (Shakib et al., 2005).

Parental disapproval of Asian youth smoking is protective in Asia and New Zealand. In China, Grade 7 students were less likely to have smoked in the past 30 days if their parents did not agree with them smoking (Shakib et al., 2005). Students who reported that their parents would be upset if they smoked were protected from smoking in an analysis of the national youth health and wellbeing survey data for Asian Year 9 – Year 13 students (OR0.2 [95%CI 0.12-0.34]) (G. Wong et al., 2008). Parental disapproval protected the American-Asian cohort from smoking in a longitudinal study of some 3,000 Year 10 and 11 youth. The effect of this disapproval was re-measured when they were 23 years old (Ellickson, Perlman, & Klein, 2003). The KKS study variables measuring permissiveness and whether parents would be upset if their children smoke will be followed up in this study.

There are few studies about talking about, and rules about, smoking for Asian families. American Asian-Indian students had lower substance use rates if they reported that parents communicated the harm of tobacco, alcohol and marijuana to them (Bhattacharya, 2002). Parental rules about not smoking had a protective effect on Vietnamese and Arabic youth in Australia (n= 2573) (Rissel, McLellan, & Bauman, 2000). Both these factors will be followed up in this study.

General Family Factors and Youth Smoking

As noted before, the KKS study had some variables measuring general family factors, in particular about the amount of pocket money children are given, and monitoring of youth spending. It did not include family functioning and parenting style.

Pocket Money

The amount of disposable income children have is largely determined by their parents who also influence how this money is used (Furnham, 1999). Qualitative research with Asian and parents in Auckland, New Zealand, shows that parents do not believe their children use their pocket money to buy cigarettes (Glover et al., 2006). In contrast, children report buying cigarettes from commercial sources and other students (Darling, Reeder, McGee, & Williams, 2005; G. Wong et al., 2007). Higher levels of pocket money are associated with higher smoking rates among Asian youth in New Zealand, India and China (J. Ma et al., 2013; Mohan, Sankara Sarma, & Thankappan, 2005; Scragg, Laugesen, & Robinson, 2002).

In qualitative research New Zealand students reported that parents monitor youth spending of large amounts of money more than smaller amounts which may be accumulated to buy cigarettes (Glover et al., 2006, unpublished data). Asian students

report being closely monitored with regard to handling any amounts of money (G. Wong et al., 2007, unpublished data). Absence of parental monitoring of New Zealand Year 10 student (all ethnicities) pocket money expenditure was associated with current smoking (OR1.90 [95%CI 1.40-2.58]) and susceptibility to smoking among current nonsmokers (OR1.39 [95%CI 1.12-1.73]) (Waa et al., 2011). This study further investigates associations between the amount of pocket money children receive and student and parent smoking rates. Asian family processes related to pocket money and youth spending will be followed up in the qualitative phase of the research.

Parenting, Filial Piety, Obedience, Control and Monitoring

Baumrind's authoritative parenting style was protective against smoking in youth (Castrucci & Gerlach, 2006; Jackson, Bee-Gates, & Henriksen, 1994). However, disengaged, rather than authoritative, autocratic or permissive, parenting was significantly related to youth smoking in an ethnically diverse group of American students (including Asians) (Radziszewska, Richardson, Dent, & Flay, 1996).

Filial piety (respect for elders) and obedience to parents have never been investigated in a New Zealand study about youth smoking. Asian students in qualitative studies in America and Australia gave expectations of filial piety and obedience as a reason for not smoking (Hsia & Spruijt-Metz, 2003; Rissel, McLellan, Bauman, & Tang, 2001; Spigner & Gran-Donnell, 2001). Obedience ("Do you think that you obey what your parents ask?") was associated with less smoking among Chinese students in Wuhan, China (Trinidad, Chou, Unger, Anderson Johnson, & Li, 2003). Filial piety (respect for adults) was related to lower ever-smoking rates among predominantly Asian and Hispanic students in California (Unger et al., 2006). This will be followed up in the qualitative research.

Family monitoring, reflected in the variable "family wants to know who you are with and where you are", was protective against smoking in New Zealand for Asian children (G. Wong et al., 2008). Vietnamese/Asian youth in Australia were similarly protected by parental supervision of leisure time (Rissel et al., 2000). In qualitative research British South Asian youth, aged 16 to 26 years, reported monitoring by older family members from their communities. This restricted experimentation with smoking, especially for girls who were more constrained from the threat to their reputations by gossip about them smoking than boys (Bradby, 2007). In contrast, parental monitoring was not significantly related to Californian Asian youth smoking prevalence (Shakib et al., 2003).

Family functioning and family relationships

Factors included under family functioning include children's perceptions of how much their family cares about them and their families' expectations of them. In a Youth2000 study analysis Asian children who felt that either "way too much" or "not much" was expected of them generally were at risk of smoking (G. Wong et al., 2008). In contrast, "some" or "a lot" of family expectations were protective. It is unknown what students thought that these family expectations were. They may have been expectations of help with domestic chores or in family businesses, of looking after younger siblings and other relations, and/ or of high levels of academic achievement.

The Youth2000 study included questions measuring how much students perceived their families cared about their feelings, understood them, and how much time their parents had for them. These variables were protective against smoking and the most significant, caring about feelings, remained a factor in the multivariate model which examined the joint effects of family and acculturation on Asian youth smoking (G. Wong et al., 2008). A study of "attachment" to parents using ASH Year 10 survey data investigated the relationship of respect for the child, positive parent-child communication, and alienation from parents, with smoking. Low parent attachment score was associated with increased smoking prevalence regardless of ethnicity (Asian, Maori, Pacific Island and European) (Scragg, Reeder, Wong, Glover, & Nosa, 2008). The results above are similar to findings in studies of youth in Asian countries, and for Australian Korean adolescent girls (S. Hong & Faedda, 1996; Shakib et al., 2005; Trinidad et al., 2003; C. P. Wen et al., 2005). Among Californian Chinese grade nine and twelve students, higher (versus lower) levels of family involvement with school activities was associated with decreased smoking rates (S. S. Wong, 2000).

Weiss (2004) used the "Family Functioning in Adolescence Questionnaire" to measure the relationship of variables reflecting six dimensions of family function (structure, affect, communication, behaviour control, value transmission, and external system) to ever- and 30 day smoking among 1139 Chinese-, Korean-, Vietnamese- and Filipino-American adolescents. High levels of family functioning protected Chinese- and Korean-American, but not Vietnamese- or Filipino-American students, from smoking. This demonstrates the importance of appreciating the diversity of different Asian ethnic groups.

Harmonious relationships in the family were protective against smoking in the New Zealand Youth2000 study (OR0.35 [95%CI 0.16–0.80]) as it was Chinese families in

Wuhan, China (Trinidad et al., 2003; G. Wong et al., 2008). In the New Zealand study family relationships were measured from the individual's point of view "How do you view your relationships with your family?" For the study in China, a set of three variables incorporating filial piety, family relationships and parental caring, was developed specifically to measure family harmony. The family relationships question was "How well do your family members get along with each other?" This study was the only one where a collectivist view of family relationships was reflected in the measures. There are a number of factors related to family functioning and family relationships which have not been addressed in the literature. They include questions about culture. They will be addressed in interviews with adult family members in the qualitative phase of the study because the KKS study variables do not include family functioning.

Family, Peers and Asian Youth Smoking

Peer smoking is a primary determinant of youth smoking. The 2012 Surgeon-General's report on youth smoking concluded that there is enough evidence to determine that there is a causal relationship between peer influences and youth smoking uptake and continued smoking (United States Department of Health and Human Services, 2012). Asian youth are more likely to smoke if their peers smoke (Guindon et al., 2008; Scragg & Laugesen, 2007). In qualitative research, Asian –American college students said they smoked with peers because they did not want their friends to smoke alone (Hsia & Spruijt-Metz, 2007).

For Asian students, it is unclear whether family influences outweigh peer influences. A small sample of American Asian-Indian youth (n=200) had lower substance use rates (tobacco, alcohol and marijuana) if parents approved peer networks (Bhattacharya et al., 1999). In the New Zealand Year 10 national survey 2001, combined exposure to the following parent related factors– parental smoking, pocket money >\$5.00/week and smoking in the house resulted in a population attributable risk of 62% for Asian youth smoking. In comparison the population attributable risk for best friend smoking was 70% (Scragg & Laugesen, 2007). Family influences on smoking significantly outweighed peer influences among Taiwanese school children in a large cross sectional survey (OR 2.8 v 1.8 for boys and OR 3.9 v 1.3 for girls) (C. P. Wen et al., 2005).

This study focuses on family factors because the evidence is unclear in terms of the relative influence of family and peers on youth smoking. In addition, family is paramount in Asian cultures. Family influences, such as filial piety, begin at birth and

continue throughout the life course whereas peer influences do not begin until later in children's lives. Peers are also subject to parental and family influences from birth. The relationship of peer influence to youth smoking may be the result of peer selection.

Acculturation, Family and Youth Smoking

The effects of family factors on the smoking behaviours of Asian young immigrants is likely to be complex since acculturation may affect both traditional authoritative Asian family socialisation and parenting practices as well as smoking among parents and youth (C. P. Wen et al., 2005). The first generation to immigrate are less acculturated than subsequent generations. New Zealand Asian parents and children may have different expectations of family functioning in matters such as decisions about smoking with the influence of traditional cultural values and practices diminishing over time (Crane, Ngai, Larson, & Hafen, 2005). A qualitative study which included recently migrated New Zealand Asian parents revealed they missed sharing the responsibility for preventing children from smoking with their extended families. They said: "*We are very worried about our children being here.*" (Glover et al., 2006 unpublished data). Recently immigrated Chinese-Canadian female college students (ten smokers and ten non-smokers) demonstrated strong "cultural hybridity" to cope with traditional family expectations and life in Canada simultaneously (Shun, 2007).

The relative effects of acculturation and family factors on Asian youth smoking were examined using the Youth2000 data. The protective effects related to youth smoking associated with time with family, having parents who do not smoke, and who disapprove of the student smoking, remained highly significant with minimal attenuation in the effect sizes in the presence of acculturation (self-identified ethnicity, age of arrival in New Zealand and comfort levels in New Zealand European social surroundings) (G. Wong et al., 2008). This finding offers support for further research about family focused tobacco control work to prevent Asian youth smoking.

Interventions to Reduce Asian Youth Smoking

Strategies directed at youth smoking cessation and preventing youth uptake have a limited effect (Grimshaw & Stanton, 2006; R. Thomas & Perera, 2006). Family focused interventions mainly focus on reducing exposure to ETS (Priest et al., 2008). There are almost no intervention studies specifically for Asian youth. Interventions in America (quasi-experimental pilot, n=17), China (single group study, n= 622), and India (experimental design with randomisation by group, n= 14,063) were school based and

focused predominantly on smoking and non-smoking youth directly rather than on family factors (G. X. Ma, Shive, Tan, Thomas, & Man, 2004; Perry, Stigler, Arora, & Reddy, 2009; Stigler et al., 2007; Zheng et al., 2004). While the interventions led to reduced uptake of smoking and/or smoking prevalence and/or consumption, two were comparatively small pilots.

Summary

The literature review about Asian families and youth smoking supports the Surgeon General's conclusion that a causal relationship between family factors and child tobacco use has not yet been established. Internationally, studies are rare, despite the size of the global Asian population and the number of Asian people who smoke. The paucity of research about Asian youth smoking in general, and family factors and Asian youth smoking, in particular, make this research a priority.

There is a lack of clarity with regard to the effects of paternal smoking on Asian youth smoking. In addition the factors underlying the strong association between maternal and youth smoking are unknown. The effects of family factors on child smoking are unclear in almost all the domains although there is a reasonable level of support for the association of "intact" family structure, positive family relationships, disapproval of child smoking, parental monitoring and lower levels of pocket money with lower smoking rates. There is a small amount of support for the positive influence of family factors on youth smoking in the presence of acculturation. I was unable to find any reports of family-centred interventions directed at reducing Asian youth smoking uptake and prevalence in Asian or in Western countries.

A close examination of the social and cultural context of smoking for Asian families who have migrated to a Western country is largely missing from the studies. Knowledge of underlying cultural influences on family factors is important for evaluating the potential efficacy and feasibility of intervention strategies in the current social and political environment.

Research Questions

The following research questions will be addressed to further the protection of New Zealand Asian youth and families from tobacco related harm.

1. What are the family risk and protective factors for smoking among New Zealand Asian youth aged 11–13 years?

2. What are the joint influences of family factors and acculturation on smoking among New Zealand Asian youth aged 11–13 years?
3. What is the influence of ethnicity on family and cultural risk and protective factors for smoking?
4. What cultural and family factors drive smoking and being smokefree from the perspectives of Asian families and youth in the context of migration and tobacco control in New Zealand?
5. How do theories about family and child socialisation fit with Asian families' perspectives about protecting their children from smoking in New Zealand?

Chapter Four: Methodology and Mixed Methods Research

Introduction

In this chapter I justify my choice of a post-positivist mixed methods methodology. I describe methodological issues and mixed methods research, and descriptive quantitative and qualitative research. A description of the mixed methods design and rigour for the study follow.

Methodology

Cresswell defines mixed methods research as follows:

Mixed methods research is a research design with philosophical assumptions as well as methods of inquiry. As a methodology, it involves philosophical assumptions that guide the direction of the collection and analysis of data and the mixture of qualitative and quantitative approaches in the many phases in the research process. As a method, it focuses on collecting, analysing and mixing both quantitative and qualitative data in a single study or series of studies. Its central premise is that the use of quantitative and qualitative approaches in combination provides a better understanding of research problems than either approach alone (Cresswell & Clark, 2007 p 5).

It is proposed that mixed methods provides a better understanding of research problems because it simultaneously answers confirmatory and exploratory questions, provides stronger inferences and allows diverse views to be expressed (Tashakkori & Teddlie, 2003). I combined nomothetic and idiographic approaches in this study by using a mixed methods research design. Mixed methods are essential to answering the PhD research questions. The goal cannot be achieved using a nomothetic or an idiographic approach alone. Together, they provide more comprehensive understanding and a stronger basis for recommendations for policy and practice and future research.

Methodology concerns the assumptions and values underlying the methods used in research. Methods are the tools used for collecting and analysing data. For example questionnaires and focus groups are data collection tools but not methodologies. Methods are atheoretical until they are incorporated into research designs (Giddings & Grant, 2007; Polkinghorne, 1983). Then they become imbued with the methodology used to answer the research question.

Methodologies reflect the ontological and epistemological foundations underpinning different research paradigms. Ontological and epistemological foundations concern views of what constitutes reality and the relationship between the knower and known. Lincoln and Guba (1998) proposed four research paradigms based on different ontological and epistemological positions. They are positivism, post-positivism, interpretivism and critical approaches. Giddings and Grant (2002) combined positivist and post-positivist arguing that post-positivism is a form of positivism. They added the post-modern/post-structuralist paradigm. Different methodologies are underpinned by different research paradigms. For example survey methodology and experimental methodology reflect the positivist paradigm, and grounded theory and phenomenology reflect the interpretive/constructivist paradigm. Like Creswell and Clark in the quote above, some authors argue that mixed methods is a singular methodology rather than a mix of different methodologies (Giddings & Grant, 2007; Tashakkori & Teddlie, 2003).

Cresswell and Clark (2007) and Tashakkori and Teddlie (2003) postulate that pragmatism is the paradigm underpinning mixed methods methodology (Cresswell & Clark, 2007; Tashakkori & Teddlie, 2003). However Giddings and Grant (2007) argue that pragmatism is an ideology rather than a paradigm and can be applied to all methodologies. They point out that most mixed methods studies are underpinned by post-positivism but that mixed methods can be underpinned by other paradigms such as critical/feminist. When a mixed methods study is underpinned by a single research paradigm the internal consistency and inferences from the study are strengthened because the world view underpinning the different methods used is congruent. Giddings and Grant note that it is possible to mix methodologies but if each is supported by different research paradigms, it is more difficult to combine the results and make logical inferences.

There are other methodological cautions about using mixed methods (Cresswell & Clark, 2007; Giddings & Grant, 2007; Tashakkori & Teddlie, 2003). Some argue that quantitative and qualitative methods cannot be mixed because they are underpinned by fundamentally incompatible paradigms. Others say that it is unnecessary to consider philosophical assumptions and that methods can be mixed and useful research produced. Methodological arguments against using mixed methods are belied by the common use and recognition of the practical utility of mixed methods (Tashakkori & Teddlie, 2003). Mixed methods have been used in public health, tobacco control, health promotion and evaluation, topics which draw on a wide range of disciplines for research and to inform

practice (Ulin, Robinson, & Tolley, 2005). Baum (2008) advocates for methodological pluralism in the “new public health” a movement which does not accept the primacy of modernism and the medical model. Delva et al (2010) argue that mixed methods are especially important for cross-cultural research “that bridges the gap between a dominant culture and diverse cultural groups” (p. 16).

In common with much mixed methods research, the research paradigm underpinning this study is post-positivism (Giddings & Grant, 2007). This applies to both quantitative and qualitative components. Therefore methods are mixed rather than methodologies and inferences from this study are based on one set of philosophical assumptions. These reflect a post-positivist world-view. Post-positivism originated from positivism. Both positivism and post-positivism constitute nomothetic approaches to research.

Positivism arose from the work of 16th and 17th century Western scientists and philosophers. Rational, scientific, reasoning replaced shamanism, monotheistic religious doctrine, and the monarchy, as privileged systems of thought and social organisation. (Crotty, 1998). Positivism developed into a dualistic belief system which holds that the physical and mental worlds are separate. In the positivist paradigm objectivity is possible, reality is value free, cause and effect or explanations exist, and reality exists outside human apprehension. Therefore reality is cross cultural and context free. Further, knowledge is discovered rather than being produced, human experience is quantifiable, knowledge advances through accretion and statistical verification of a priori hypothesis are essential to prove that relationships between variables are true. Proponents of this approach believe that scientific knowledge is superior to other forms of knowledge and that impartially applied science can solve social problems. Scientists are regarded as rational, logical, objective and value-free with regard to their work. They produce knowledge but are not responsible for its application or the results of its application (Crotty, 1998).

The positivist world-view underpins a taxonomy which evaluates evidence based on the adherence of research studies to a gold standard. This standard is the true experiment or randomised controlled trial, characterised by random selection and assignment to group, manipulation of independent variables and control of extraneous variables. Random selection ensures statistical generalisability to the population thus protecting the external validity of the findings. Random assignment protects the internal validity of the findings. The weakest form of evidence in the taxonomy is expert opinion. The recommendations of Cochrane and Joanna Briggs reviews of interventions to improve

health are based on the rigorous evaluation of multiple studies on each topic using the taxonomy described.

There have been detractors from positivism since the 19th century (Crotty, 1998). In the 20th century, Sir Karl Popper introduced the principle of falsification which hypothesis testing is based on today. This means that an hypothesis cannot be proven to be true (ie verified) because it is logically possible that there might be an outlying detracting case. If the results of a study show that an hypothesis is non-falsifiable this hypothesis represents a probable, rather than a certain, fact or law (Guba & Lincoln, 1998). Kuhn examined the practice of scientists and challenged claims that they are objective and value-free (Kuhn, 1996). He emphasised the theory laden nature of science and pointed out that it is a self-perpetuating and impermeable world-view. He argued that scientific revolutions are created when world-views insufficiently explain phenomena.

There are a number of critiques of nomothetic approaches. The context of the everyday world may be lost because competing explanations for phenomena need to be eliminated, and factors reduced to quantifiable variables in order to find parsimonious explanations. Because of this it may be difficult to apply research findings in the lived world. The role of human agency and personal meaning may be lost in the process. There is also the difficulty of explaining the origins and creation of new theories and discoveries, the risk of false uniformity through the inaccurate application of models universally, and disjuncture between general grand theories or population based findings and individual, family or community cases (Guba & Lincoln, 1998). Rather than questioning the validity of models or explanations, findings may be interpreted as outliers or deviant (Kâğıtçıbaşı, 2007).

Another problem with the positivist paradigm is the use of empirically unsupported theories to interpret or make inferences from the results of socio-demographic descriptive studies. In this case low smoking rates among Asian youth could be attributed to any number of theories about human behaviour. Erzberger and Kelle (2003) cite examples where researchers' explanations for the distribution of problematic states arise from their personal experience, knowledge and world-views. They call this the "shadow methodology". If we accept that the intentions and beliefs of the participants themselves contribute to shaping their actions (Polkinghorne, 1983), and thus partly underlie low smoking rates, then the integration of qualitative methods with quantitative methods is necessary to understand and create theoretical explanations for behaviour. This is important when knowledge about the participants' intentions and

beliefs is not readily available. It is especially critical in cross-cultural research where researchers may have little knowledge of the world-views of the participants.

It should be noted that the attribution of behaviour to the intentions, beliefs and values of the participants is problematic. It does not take into account factors such as SES and the difference between what people say and what they do. This issue is common to idiographic and nomothetic research about family influences on smoking. It reflects a psychological approach to the issue of smoking among youth and leads to victim blaming and individualistic interventions. It is the reason why an ecological framework was selected to frame this work and why the context of culture and migration to New Zealand is included in the research.

As stated above, this study is not underpinned by positivism even though I am looking for indications of “cause and effect” since I want to understand more about family “influences” on low Asian youth smoking rates. It is underpinned by post-positivism, an attenuated form of positivism (Crotty, 1998). The post-positivist ontological assumption is that reality exists but is, epistemologically, “only imperfectly apprehendable” (Guba & Lincoln, 1998). Reality is viewed as relatively stable but also subjective, plural, contextual, relational and experientially based. Post-positivist research also holds that cause and effect exist and explanations of phenomena derived from the results of statistical analyses are viable. Outcomes are viewed as the result of a complex interacting range of known and unknown factors rather than arising from a linear cause and effect process (Giddings & Grant, 2006).

In post-positivist research, objectivity and control of bias in quantitative research are desirable but uncertainly applied. Complex and fluid concepts such as family, ethnicity and smoking are reduced to variables to determine their public health significance and statistical associations between variables. However, it is understood that there are major limitations in terms of explaining and interpreting the results due to the removal of social and personal context, process and personal.

The emic perspectives of children and family members from the KKS study are sought in the qualitative phase of this research to counteract the problems arising from nomothetic approaches. Because a post-positivist approach is taken, the qualitative research is used to explain the quantitative findings, to generate alternative explanations, and to find and follow up the effects of the KKS study intervention. In the post-positivist paradigm, qualitative data are acknowledged to be affected by the

relationship between researcher and research participant and the analysis, while based on the data, is personally synthesised by the researcher (methodology). Despite the unique constantly evolving nature of every person, group and community, commonalities can be discerned through the qualitative research process, albeit through the lens of both the researchers and consumers of the research. It is these commonalities which make the research findings useful to both individuals making sense of their own experiences and feelings, and to policy makers and practitioners who may be guided by greater understanding of the perspectives of those they serve.

The main challenge to an idiographic approach is rejecting the idea of any uniformity and claiming uniqueness falsely. At the extreme, there is the loss of the ability to compare across cases since each is considered a unique product of a unique context (Kâğıtçıbaşı, 2007). Other issues include the issue of the theory laden-ness of any empirical observation. This leads to the problem of generating generalisations across empirical observations, and the inability to test or explain these generalisations within idiographic approaches. I have already mentioned the limitation of reifying human intention. Consistent with the post-positivist research paradigm, all phases of the research should reflect the subjective nature of the expression of the experiences of the research participants, and the effect of the researcher on the research process. These phases include claims about the credibility and generalisability of the results.

Quantitative and Qualitative Descriptive Research

I am using quantitative and qualitative descriptive research in this study. Quantitative descriptive research is useful in this case because it provides the characteristics of population groups and the dimensions of possible health issues. Examples include the sample size, age, gender and ethnic composition, SES, neighbourhood, and exposure to different factors. The distribution of psychological and social variables is also described. Examples include beliefs, attitudes and parenting practices. Similar to epidemiological research (Chapter One), associations between variables are explored to determine patterns in the distribution of health states and risk and protective factors. It is not possible to determine causal relationships definitively because there is no manipulation of independent variables or randomisation to experimental and control groups (Polit & Hungler, 1997). The KKS quasi-experimental study outcome results were not available within the timeframe of this study and the PhD study research questions reflect this.

Potentially any qualitative methodology could be used in the qualitative research component of a mixed methods study. I am using a descriptive qualitative approach because it is congruent with a post-positivist explanatory mixed methods design. Descriptive qualitative research complements quantitative research in public health because it is suited to finding “answers to questions of special relevance to practitioners and policy makers” (Sandelowski, 2000, p. 337).

Descriptive qualitative research questions look for the factors that facilitate or hinder positive health outcomes, identify participants’ concerns, and the reasons people use or do not use services. There are examples of descriptive qualitative research in public health and many similarities with the naturalistic interpretive qualitative methods in evaluation research (Lincoln & Guba, 1985; Patton, 1987; Robson, 2011). Descriptive qualitative approaches suit public health research because they provide “a comprehensive summary of an event in the everyday terms of those events” (Sandelowski, 2000, p. 336). The results comprise a straight-forward description with minimal transformation of the data by the researcher. This is consistent with the general inductive qualitative data analysis approach (D. R. Thomas, 2006) I use to analyse the qualitative data. Descriptive qualitative research is not atheoretical even though a straight-forward description is the goal (Sandelowski, 2010). I have already described the post-positivist theoretical assumptions underlying the qualitative phase of this study and the ecological framework I use to frame the semi-structured interview schedule.

Mixed Methods

I describe issues related simultaneously to quantitative and qualitative methods; including how the questions, methods and results were mixed, how inferences were drawn from the whole study, cross-cultural research, rigour and ethics. I present methods pertaining solely to the quantitative and qualitative research in Chapters Six and Eight.

Mixed Methods Research Design

Cresswell and Clark (2007) reviewed classifications of mixed methods designs and established four major types: Triangulation Design, Embedded Design, Exploratory Design, and Explanatory Design. I selected the Explanatory Design for this study. The Explanatory Design uses qualitative research to investigate quantitative findings. The quantitative and qualitative research components are designed to be robust enough to stand alone. Creswell and Clark (2007) state that explanatory mixed methods designs

are usually quantitatively weighted. The quantitative results comprise the main focus of the study. My study is qualitatively weighted because of the limited number of KKS study variables about culture, migration and Asian family values.

In this study, a short quantitative analysis of the 2007 KKS study baseline results was followed by qualitative research, and then by an analysis of the complete 2007–2009 KKS study baseline data (Table 12). The quantitative research was conducted in two parts because I had to complete qualitative data collection before all of the KKS study baseline data was available.

Table 12: Mixed methods study design

| Phase One (a) | Phase Two | Phase One (b) |
|----------------------------------------|-------------------------------------------|--------------------------------------------------------|
| Quantitative | Qualitative | Quantitative |
| Analysis of KKS year one baseline data | Student focus groups Family interviews | Analysis of KKS years one, two and three baseline data |

The qualitative research was related to the quantitative research in three ways. First, the sample for the qualitative research was drawn from the intervention arm of the 2008 and 2009 waves of the KKS study. Second, some of the questions for the family interviews were developed from the analysis of the 2007 KKS baseline results. Finally, I drew the results of the quantitative data analysis of the full three year KKS study baseline data set, qualitative data analysis, and literature review together inductively to see if they confirmed, complemented or contradicted one another. Results are supported when they converge and confirm each other. Complementary results may reflect different facets of the research question and provide a more comprehensive understanding of the issue. Divergent and contradictory results lead to new research questions (Erzberger & Kelle, 2003). The relationship of the research questions and quantitative and qualitative research phases is summarised in Table 13.

Quantitative Research Hypotheses

I developed the quantitative research hypotheses from the KKS study student and parent questionnaires, the concept analysis in Chapter Two, and literature review in Chapter Three. I based them on the KKS study questions which measure ethnicity, smoking, and putative family and acculturation influences on smoking. The research questions based on the KKS study variables related to the domains in Table 14.

Table 13: Research questions and mixed methods research phases.

| Research questions | Phase One - Quantitative | Phase Two - Qualitative | Ecological Framework |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-------------------------|---------------------------------|
| What are the family risk and protective factors for smoking among New Zealand Asian and youth aged 11-13 years? | ✓ | ✓ | Microsystem |
| What are the joint influences of family factors and acculturation on smoking among New Zealand Asian youth? | ✓ | | Microsystem |
| What is the influence of ethnicity (Asian and non-Asian) on family risk and protective factors for smoking? | ✓ | | Microsystem |
| What cultural and family factors drive smoking and being smokefree from the perspectives of Asian families and youth in the context of migration and tobacco control in New Zealand? | | ✓ | Exo-, meso-, and chrono-systems |
| How do theories about family and child socialisation fit with Asian families' perspectives about protecting their children from smoking in New Zealand? | | ✓ | Exo- and macro-systems |

Table 14: KKS study data description

| KKS study participant databases | Domains | Variables |
|---------------------------------|-----------------------|----------------------------------------------------|
| Students | Demographic | Gender, ethnicity, year at school, school decile |
| | Smoking status | Ever smoker Intention to smoke |
| | Family | Family structure Family tobacco use |
| | Culture/acculturation | Exposure to environmental tobacco smoke |
| | | Parental attitudes to student smoking |
| | | Parenting practices – rules and pocket money |
| | | Self-identified ethnicity |
| | | Country of birth |
| | | Years in New Zealand |
| Parents/caregivers | Demographic | Relationship to child, ethnicity, school decile |
| | Smoking status | Current smoker Plan to quit (if current smoker) |
| | Family | Beliefs |
| | | Parenting practices |

Qualitative Research Questions

The Phase Two inquiry was qualitative. The question schedules for the family interviews were based on significant, insignificant and unexpected findings from the preliminary quantitative analysis, and literature about migration, acculturation, culture and family influences on Asian youth smoking. Family interview questions about the KKS study interventions were included as part of the tobacco control environment surrounding the participants and to inform future interventions. They included the acceptability, process and perceived impact of the KKS study interventions. The

questions for the student focus groups were about the KKS study intervention only. The reasons for this are described in Chapter Eight.

Mixed Methods Research and Rigour

Rigour refers to strategies and procedures that protect the validity or “truth value” of a research study (DePoy & Gitlin, 1998). Rigorous processes improve the likelihood that consumers can trust the results and the researcher’s inferences from the results and recommendations. Rigour in this study falls into three different fields. They are the rigour of combining the methods and results, the rigour of the procedures for cross-cultural research and the rigour of the individual Phase One and Phase Two methods. In this section I cover the rigour of combining methods and results. Rigour and cross-cultural research follows. Rigour and the individual quantitative and qualitative methods are presented in their respective methods chapters.

I said previously that I chose mixed methods research because it would answer the research questions more comprehensively than using one method. There are specific criteria for rigour in mixed methods studies to support this aim. Criteria to evaluate mixed methods studies include a mixed methods purpose statement, mixed methods research questions and specification and explication of the mixed methods design. The inferences and recommendations from the study should be based on a consideration of all the results. In an explanatory mixed methods study it must be clear how the second phase builds on the first (Cresswell & Clark, 2007). Challenges in the explanatory mixed methods design reflect its emergent nature. For example I had to determine the criteria for participant selection as the study proceeded (Cresswell & Clark, 2007).

First, it must be clear why a mixed methods study is required. The research goals, aims, objectives and questions are essential to evaluating whether or not a mixed methods study is necessary. They must be clearly articulated. The contribution of the quantitative and qualitative research questions to fulfilling the overall mixed methods goal and aims of the study should be logical. In an explanatory mixed methods study it should be clear how the qualitative research questions are derived from the Phase One analysis; that is which results are followed up and why. These points are covered earlier in this chapter.

Second, the type of mixed methods research design chosen should be justified and described clearly. The inferences from the study must be based on a clear articulation of the relationship between the different phases of the research. This was an explanatory design whereby the quantitative and qualitative research was conducted separately. The

results were separate. There was no transformation of data from quantitative to qualitative or vice-versa for analysis as there is in some mixed methods studies. The intention of combining methods was to follow up the quantitative results with explanations from participants in the qualitative research.

Third, the methodology underpinning the methods should be described. It is more difficult to mix methods and make coherent recommendations when the different methods reflect different world views. I have protected the study from this threat by underpinning both quantitative and qualitative elements with one methodology, post-positivism. This maintains a congruent world-view through the different elements of the study.

Fourth, Cresswell and Clarke (2007) outline criteria to enhance the trustworthiness of sampling, data collection and data analysis in mixed methods research. For an explanatory mixed methods study the participants in the qualitative research should be selected from the quantitative research participants. Although this was the original intention it was not exactly the case in this study. However all the participants in the qualitative research were from the same participant pool that the KKS study drew from and they were all exposed to the KKS study interventions. The KKS study intervention was delivered school-wide but the KKS study data used in Phase One was only collected from those who consented to be in the study. Creswell and Clarke also state that large samples should be used for the quantitative research and small ones for the qualitative.

The question schedules used in data collection should reflect the qualitative research questions derived from the quantitative analysis. The criterion for rigour for mixing methods with respect to data analysis is following up the results of Phase One in the analysis of Phase Two qualitative data. In this case the qualitative research questions were developed from a preliminary analysis of the only KKS data available at the time (year one baseline). I conducted a more detailed analysis of the full KKS study baseline data sets when they became available. This was after I collected the qualitative data. I approached the analysis of the qualitative data with the results of the full quantitative analysis (Robson, 2011, p. 494). I determined the results I would follow up the same way that I determined which preliminary quantitative results I would ask the participants. That is, I queried the qualitative data about significant, insignificant and unexpected quantitative results.

Fifth, sound inferences and recommendations from the combined results depend on the quality of each phase. The reader is referred to the sections about rigour in the quantitative and qualitative methods chapters.

Finally criteria to evaluate the inferences from the whole study include consistency of inferences with the results and consistency of inferences with theory and current knowledge in the field. Consistency of inferences with one another and adequate incorporation of the inferences from different phases of the study in the inferences for the study as a whole are also important (Tashakkori & Teddlie, 2003). These points are considered in the discussion.

Summary

The research questions lend themselves to an explanatory mixed methods approach. The methodology of the different phases is congruent with the post-positivist research paradigm. The quantitative and qualitative phases of the research are complementary. The results of exploratory descriptive quantitative research are followed up with qualitative research. Mixed methods and descriptive research are commonly used in public health research. They provide useful information to inform policy, practice and research. Rigorous process must be used to undertake the different components of the research and to develop inferences across the whole study. Part of this rigour is ensuring that the cross- cultural nature of the study is carefully accounted for. This is discussed in Chapter Five.

Chapter Five: Cross-cultural Research

Introduction

This chapter discusses cross-cultural research, methodology, methods, communication and rigour. It is related to both phases of the study. I focus especially on Phase Two which is wholly my work. In addition, the personal nature of the engagement of researchers with participants in qualitative research, and use of interpreters in the family interviews, make an in-depth consideration of the cross-cultural nature of the research useful to protect the rigour of the study. Phase One is based on previously collected KKS study data. The KKS study questionnaires were developed to measure the effects of interventions tailored for Maori and Pacific Island youth and families. They were not piloted separately with Asian families or students.

The term “cross-cultural research” refers variously to research comparing different cultures; researchers investigating cultures which differ from their own; or a combination of these. For example, Ember and Ember’s (2009) book *Cross-Cultural Research Methods* focuses on research processes to compare different cultures. In contrast, Delva et al (2010) and Liamputtong’s (2008) books, titled respectively *Cross-Cultural Research* and *Doing Cross-Cultural Research*, focus on the differences between the researchers’ cultures and research participants’ cultures. The examples in their books are studies of single cultural groups. This PhD study is cross-cultural in both the senses described above. The research participants are culturally and linguistically diverse. Phase One includes comparing cultural groups - Asian and non-Asian (Māori, Pacific Islanders and European/other). Phase Two comprises qualitative research with participants from different Asian ethnic groups. In both cases my ethnicity differs from that of most of the participants.

Methodology and Cross-cultural Research

Research is a hegemonic activity based on the Western philosophical tradition of scholarship and inquiry (L. T. Smith, 1999; Stanfield II, 1998). It is questionable whether the ontological, epistemological, methodological and axiological perspectives of classical formal non-Western scholarship included Western style research traditionally. Nevertheless research theory and methods are taught at universities world-wide. Research attracts funding from international bodies for cross-national studies such

as the International Tobacco Control studies. Research is funded by Asian countries to improve the health of their populations.

Some groups have consciously created research approaches which reflect their world views to overcome ethnocentrism and exploitation. Feminist and kaupapa Māori research are examples (L. T. Smith, 1999). There are papers and books critiquing Western worldviews from Asian perspectives (particularly Confucian) and literature explaining why it is important to take Asian world-views into account when undertaking research and health interventions with Asian peoples (for example, Lee (2007)).

However, there is no formally defined “Asian” research methodology that I am aware of. I reviewed English language literature which used Western methods. Sometimes Confucian or other frameworks are used or suggested to develop question schedules and interpret data (Kwan, Chun, & Chesla, 2011; Park & Chesla, 2007; M. Sun et al., 2008).

Some cross-cultural researchers prefer either idiographic or nomothetic research methods. Idiographic qualitative research designs provide opportunities to understand culturally moderated beliefs and behaviours and give participants the chance to express themselves on their own terms (Liamputtong, 2008). A number of qualitative studies about smoking in Western countries include Asian adult, child and youth participants (Abdullah & Ho, 2006; Bradby, 2007; Brugge et al., 2002; Bush, White, Kai, Rankin, & Bhopal, 2003; Davey & Zhao, 2012; Hsia & Spruijt-Metz, 2003; Kegler et al., 2002; Mishra et al., 2005; M. White, Bush, Kai, Bhopal, & Rankin, 2006). Their results suggest that valuable insights are gained from involving Asian peoples in qualitative research. Liamputtong (2010) describes the shortcomings of nomothetic research:

I contend that cross-cultural research cannot be too rigid and too ‘objective,’ as in positivist (quantitative) science. As Russell Bishop (2008:17) suggests, much positivist research has insisted on using ‘researcher-determined positivist and neo-positivist calculative criteria, internal and external validity, reliability, and objectivity and this has ‘dismissed, marginalised, or maintained control over the voice of others’. It is impossible to ‘measure’ peoples or to ‘generalise’ about people within the context of their own society and culture’

(Liamputtong, 2010 p.11)

In contrast Ember & Ember (2009, p. 183) acknowledge the importance of ethnographic (qualitative) research but assert that “even the most qualitative phenomena can be measured”. They claim that:

It is necessary to test all presumed generalisations or relationships because they may be wrong, and we are entitled (even obliged) to be sceptical about any generalization that

has not been supported by a statistical test. But a test requires a comparison: to understand why a particular community or culture is the way it is we must compare that case with others. Without such a contrast, we have no way of evaluating whether a presumed cause and its apparent effect are associated in a statistically significant way (i.e., that they co-occur more often than you would expect by chance).

“Cross-cultural Research Methods” p. 7

Ember and Ember argue that the difference between ethnographic and quantitative research about humankind lies in the perspectives of human life each takes. Cultural beliefs and practices are unique and distinct when viewed closely. When viewed from a distance, patterns can be discerned and compared statistically.

Delva et al (2010) take the middle road which I use here. Even though they caution against the generalisations which usually arise from nomothetic research, they state “We strongly believe that multiple epistemologies and methodologies are needed to inform the conduct of cross-cultural research” (p.12). They provide several examples of mixing methods in cross-cultural research studies using a variety of designs. These include an explanatory mixed methods study (used in this study), community-based participatory research, and experimental and longitudinal designs incorporating qualitative elements.

Cross cultural Research Methods

This section is about the practical aspects of the cross-cultural research. Quantitative and qualitative cross-cultural researchers share challenges which include reducing ethnocentrism, cultural insensitivity, communication barriers and exploitation of participants (Delva et al., 2010; Hofstede, 2001; Liamputtong, 2008). I address these by discussing ethnocentrism, cultural knowledge, cross-cultural research partnerships, community consultation and cultural advisors, ethics, participant recruitment and family group interviews. I then discuss communication using interpreters.

Ethnocentrism

Researchers who conduct research with people from the same background as their own, share a common social history and language. They share conscious and sub-conscious understandings of body language, humour, allusions to social and religious protocols, strictures, social customs and moral standards. Researchers take much of this knowledge for granted when they share both language and culture with their participants and rarely label conduct as “cultural”. It is easy to share a joke and cope with interruptions or offers of refreshments when you are operating in your own culture. It is also easy to be ethnocentric and apply your world view to others.

One of the key issues in cross-cultural research is reducing ethnocentrism or the imposition of the world-view, values, definitions and practices of the researcher on the research and researched (Delva et al., 2010; Hofstede, 2001; Liamputtong, 2008). Ethnocentrism can reduce the capture of credible information and its interpretation. It threatens the validity and reliability of the study and thus its credibility to the population the study participants are drawn from. Cross-cultural research theorists emphasise the need for cultural sensitivity and cultural knowledge on the part of the researcher (Delva et al., 2010; Liamputtong, 2010).

Cultural Knowledge

Cross-cultural researchers can investigate a topic in more depth if they understand the historical background and cultural, religious, and social practices of the participants in their heritage countries as well as in their current environment. At the simplest level, basic knowledge of customs may mean researchers avoid giving offense through not observing a customary practice. At a more complex level, it means that data collection, analysis and the interpretation of results can be less superficial since they build on an appreciation of cultural differences and contextual issues. For example, in some cultures articulating feelings, experiences and opinions is not normal. Some people come from countries where it is safer not to talk and where there is nothing to be gained by speaking to anyone in authority unnecessarily. Mock described how he had to overcome the deference of research participant for well educated people and those in authority. He had to overcome their anxiety and desire to please by giving the “right” answers (Paknawin-Mock, 2000). It is naïve to rely on participants to articulate their feelings or express discomfort verbally.

What then, constitutes a basic level of contextual understanding for qualitative research with Asian peoples? This is a difficult question to answer. In the literature review I briefly outlined the history of Chinese and Indian migration to New Zealand, legal frameworks around migration, rules around New Zealand citizenship, and the receptivity of New Zealand system and residents. I did not focus on the unique characteristics of different Asian cultures but on commonalities and differences across cultures. Nevertheless, my personal reading and learning included English language fiction by historical and contemporary Asian writers, three online courses on working cross-culturally with New Zealand Asian peoples, visiting India, conversations with elders and friends, and reading a little about Chinese and Indian philosophy, world religions and the histories of the countries of the research participants.

Community Consultation and Advisors

It is important to ensure the cultural competence of research teams at the beginning of studies to protect their rigour (Irvine et al., 2007; Suh, Kagan, & Strumpf, 2009). One way to achieve this is to partner throughout with researchers who are members of the community of interest and fluent in both the investigators' and the participants' languages. Sharing at this level is assumed to reduce language and cultural barriers; facilitate meaningful community input into the research questions and design, since community co-researchers share responsibility for decision making throughout; reduce power differentials between research participants, interpreters and researchers, and thereby enhance understanding of the participants' perspectives and values; facilitate the creation of apposite recommendations; assist the dissemination of the findings; and increase the chance that the academic and commercial benefits of undertaking the research are shared with community members (Laverack & Brown, 2003; Sullivan & Cottone; J. P. H. Wong & Poon, 2010).

Although the KKS study emphasised a cross-cultural community participatory approach (Charlier, Glover, & Robertson, 2009) my PhD is an individual qualification. In the absence of co-researchers, consultation with members, leaders or representatives of the community of interest at the outset, and during a study, serves ethical and methodological purposes. It demonstrates respect for the community concerned. It enables researchers to get feedback on the research question and methods to ensure that the research is relevant to the community and that the methods are culturally safe and appropriate. It may assist with sampling decisions, recruitment, data collection, data analysis and interpretation of results and dissemination of the results (discussed later in this chapter).

I engaged community oversight of my study by working together with the Asian Network Incorporated (TANI). TANI was established in Auckland in 2002 to promote the health and well-being of Asians in New Zealand. It is a pan-Asian organisation with a strong public health and community empowerment focus. TANI combines advocacy with health promotion and commissioning research. I met the TANI Council three times.

At the first meeting I presented an overview of the study to TANI Council members, received feedback, a letter of support to include in my ethics application and an invitation to meet with them twice more. The TANI Council said the topic is important. They approved the study design. They were concerned about making inferences based

on a small number of people from a diverse group. One member said that it is not possible to generalise about “Asians” and asked why I did not focus on one specific Asian sub-population. Council members advised me to ensure that my research questions, analysis, discussion and recommendations reflect this limitation. They advised me to engage ethnically matched advisors for specific cultural groups who had experience with research in their communities. I discussed these points with my supervisor and made the recommended adjustments.

At the second meeting I presented the bar graphs from the preliminary quantitative data analysis and semi-structured question schedules for Phase Two. The TANI Council members approved the schedules. They spontaneously shared examples from their lives to explain the quantitative results. They said this information could be used in my study.

At the third meeting I presented the results of the study. The Council fully supported the findings for the 11 to 13 year old age group including the broad commonalities between the different Asian groups and the different ethnotheoretical processes and values I described. Indian members advised that it should be clearly stated that the majority of the Indian sample are Fijian Indian because they have a different cultural heritage to those whose direct country of origin is India.

I followed up TANI’s recommendation to engage ethnically matched advisors by inviting members of the Asian sub-populations included in the study to act as cultural advisors in Phase Two. The following people agreed:

- Dr Shoba Nayar, Indian. PhD topic Indian women and migration to New Zealand. Senior lecturer, Auckland University of Technology (AUT University).
- Esther U, Chinese. Born in Macau, Masters in International Public Health, Sydney University, Campaign Manager, Action on Smoking and Health, New Zealand (ASH NZ).
- Dr GiGi Lim, Filipino. PhD, Senior Lecturer, Nursing, the University of Auckland.
- Dr Man Hau Liev, Cambodian. PhD topic Adaptation of Cambodians in New Zealand: Achievement, cultural identity and community development. Senior Lecturer, AUT University, Mangere Refugee Centre, AUT Cambodian advisor.

The advisors evaluated my participant recruitment processes and data collection processes. At their suggestion I consulted Ruth De Souza (senior lecturer, Head, Centre for Asian and Migrant Studies, AUT) about conducting family interviews with Indian

families. I also employed interpreters and translators who provided cultural advice about data collection and the data.

Ethics and Cross-cultural Research

Cross-cultural research with children and families raises ethical and moral issues. Participants may be marginalized, have difficulty communicating with the researchers, be mistrustful of authority and sceptical that the research will benefit them and their families. Potential issues arising from these characteristics include exploitation, ethnocentrism and language barriers.

Liamputtong (2010) warns that participants in qualitative cross-cultural research are especially at risk of the effects of researcher ethnocentrism, damage to individuals and the community group, and misreporting of results. This is because of the in-depth, open and personally mediated language-based nature of qualitative research. Individuals in family group interviews may be coerced into participation or inadvertently reveal information that endangers their relationships or physical well-being. Participants may reveal information or cultural practices which cause them to lose face in their communities or in the wider community. One example is the New Zealand law against physical disciplining children ("Crimes (Substituted Section 59) Amendment Act 2007," 2007). This is potentially an issue in any data collection about parenting. None of the participants appeared to be distressed by the interviews. I described how I tried to minimise the risks in the section above about cultural advisors. I recount how I managed threats to the participants' sense of safety in the following sections about participant recruitment and family group interviews.

In addition to participant risks, investigators may be confronted with customs, mores and values which are difficult for them to comprehend or accept and therefore to follow up in interviews. The researchers, interpreters, research assistants and transcribers themselves may need to debrief about their own reactions to the interviews. I debriefed with my PhD supervisor and in my regular PhD student support groups which was attended by one of the cultural advisors. I allowed 30 minutes paid time after the family interviews for interpreters and translators to debrief. No-one reported they were distressed by their work.

Participant Recruitment

There are special considerations for participant recruitment in cross-cultural studies. My cultural advisors warned me that recruitment of participants for qualitative research

from recently migrated refugee populations might be difficult. Some communities are small, the adult family members are very busy and they wish to get on with their lives without official scrutiny. When researchers in Australia recruited for a qualitative study they found that Cambodian women were worried about associations with authorities (Yelland & Gifford, 1995). Participant recruitment via trusted authority figures and key community leaders has been cited as successful in cross-cultural research (Delva et al., 2010; Liamputtong, 2010). My advisors supported recruitment via the schools because Asian families respect education and teachers in general. Despite this the initial wave of 30 English language invitations to parents and students resulted in twelve parents agreeing for their children to attend focus group interviews but no consents for family interviews.

I further consulted my Indian and Chinese cultural advisors and located Filipino and Cambodian advisors. As mentioned above I also consulted Ruth DeSouza. The advisors emphasised the importance of personal relationships and cultural sensitivity on the part of the researcher. With regard to cultural sensitivity, they judged me a suitable person to talk to members of their ethnic groups based on their interactions with me, the questions I asked and the concerns I expressed. This was reassuring. They advised that potential participants would want to meet me in person before deciding whether to participate or not. In consultation with the KKS study lead researcher I altered my recruitment process to fit with the advice I have described.

Firstly, I arranged for the participant information forms to be translated into Hindi, Chinese and Cambodian to reduce language barriers. There are more Hindu Indian, Chinese and Cambodian students than students from other Asian groups. I decided not to have the forms translated into other languages because of the expense and the small number of students in other groups. The translations were checked by the cultural advisors or by some-one recommended by an advisor.

Secondly, I attended a movie that was part of a KKS study intervention strategy. The audience was families and school students from the KKS intervention schools. The attendance lists were available to me. I identified Asian families who were attending and introduced myself to them when they arrived and explained briefly what I hoped to do. I emphasised the voluntary nature of participation. Two of three families expressed interest. I took their phone numbers and said I would call to discuss further if they would like to participate. Both families participated in data collection.

Finally I sent home information about the study with students who attended the focus groups if I had not heard from their families apart from a signed consent form returned to the school for their child (I ran the focus groups before doing the family interviews). The information was in English as well as the language identified by the students. This yielded one more family participant who used a translated consent form.

I followed up forms that were returned to school with phone calls and/or personal visits to meet the families, give them information sheets and consent forms and make arrangements for interviews if they wanted to proceed after meeting me. Sometimes the families wanted to be interviewed on the spot. Others asked me to return. I returned to five families who wanted interpreters. Two families who had indicated interest declined to participate when they were followed up (one was contacted via an interpreting service on the advice of one of my cultural advisors). Some of the families consented for their children to participate in the student focus groups as well.

Family Group Interviews with Asian Participants

There are focus group studies about smoking among Asian adults and youth in Western and Asian countries in the English language literature. This suggests that focus groups are an acceptable and effective way of collecting data from Asian peoples. T. P. Lam, Irwin, Chow, & Chan (2001) reported that Asian medical students found focus groups enjoyable and more meaningful than paper questionnaires in a study about using focus groups for data collection. Oral data collection methods such as interviews and focus groups enable people who do not speak English or read and write to participate in data collection. Indeed, focus groups may be advantageous for peoples whose culture includes an oral heritage. Most of the advantages described above and in the section about focus groups for students apply to family group interviews with Asian families.

In contrast to the above, Yelland and Gifford (1995) found that Cambodian women in Australia were not keen to meet formally in groups because of the association of groups with work camps and the authoritarian Cambodian government. All the women in this study were unconvinced of the value of group discussions emphasising the individual nature of infant care and expressing concern about the possibility of stereotyping. The nature of the topic (sudden infant death syndrome) may have exacerbated the difficulties described. Many women in their recruitment process requested interviews at home citing the difficulties of transport and child-care, of discussing personal issues among strangers and the involvement of other family members. It is not clear how or why the

involvement of other family members was a concern – was it because of transport, child-care or because they felt their involvement was a family matter?

Family group interviews address many of the problems of cross-cultural focus groups noted by authors such as Liamputtong (2010) and Yelland and Gifford (1995).

Interviews with families are congruent with family-centred Asian cultural values – especially when the research is about families (see the discussion on family and Asian culture in the literature review). Family group interviews provide an opportunity to gain a fuller picture of the family. Family dynamics can be observed when more than one family member is present. Cultural values such as respect for parents or attempts to maintain family harmony may be played out in the course of the conversation.

For Asian families with a Confucian heritage, family interviews mean that the risk of loss of face in front of peers in focus group interviews is minimised. Respect for culturally constructed social hierarchies, for example class, are less likely to impede data collection in family group interviews than in focus groups. Mixed gender focus groups are not possible or could be unproductive with members of some Asian cultural groups where open discussion between males and females is uncommon.

It is advised that facilitators for Asian focus groups prepare to manage factors which may impede the expression of people's thoughts (Kwan et al., 2011). These factors include familism, reticence among strangers related to loss of face, conformity, and respect for hierarchical relationships. Examples of hierarchies include social class and caste, gender (deference to men), age (deference of younger to older people) and education (deference to more educated people).

I have conducted interviews about smoking and parenting with mixed groups of adult East and South-east Asian parents before (Glover et al., 2005). The participants were either family groups or very closely connected community members. They were keen to express their opinions and talked openly about their own smoking as well as smoking by others who were present. They expressed different points of view but they did not verbally disagree, confront one another or censor one another's speech. They let people's comments lie quietly and went on to different topics. These actions are respectful, face-saving and preserve the harmony of the group. I only needed to ask the questions and follow-up questions and listen. Similar to the Chinese Americans in Kwan and colleague's (2011) study, participants regulated their personal safety and the safety of the group by using their own cultural communication protocols but still put

their views across. This contrasts with Yelland and Gifford's (1995) study where responses in focus groups with Southeast Asian women reflected a "courtesy bias" or reluctance to express differing opinions.

In this study I wanted to respect the cultural values of the many ethnicities of the families, and to understand subtle nuances of interpersonal communication such as body language, humour, intonations, silences and dynamics, in order to collect high quality data in my interviews. My supervisors suggested that I attend family interviews with a member of the ethnic group of the family whether they were acting as a research assistant or interpreter. Trained members of the KKS team would be used in preference to others because of their established relationships with the schools and children. My cultural advisers said that trained health interpreters would be sufficient with participants who were not confident about their English. Participants who spoke English and consented to participate were likely to have sufficient understanding and confidence to manage cultural differences and express themselves clearly without the support of cultural advisors. I specifically asked for advice about interviewing Indian families. I was advised that Indian families who consented would be happy to talk to me and that gender issues would not arise because I was a researcher. I considered the options and followed the advice of the cultural advisers.

Working with Interpreters

Methodology

I will now discuss methodological considerations for communication in cross-cultural research. Positivist perspectives on interpreting and translating reflect the belief that truth is fixed and attainable. The lens of the translator or interpreter is clear and he/she is considered a neutral conduit or instrument. A translation can be right or wrong and a back translation ensures that, for example, a survey instrument presented in multiple languages captures the same information from different participants in different cultures, ethnic groups and countries. The words "source language" and "target" language reflect a positivist perspective. They imply that languages are fixed and clearly bounded. A positivist perspective also assumes that people have the same understanding of the same words and phrases, in for example, a translated interview schedule.

These viewpoints have been challenged (Temple, 2002). Languages are not immutable. They change constantly. New words are created, words from other languages enter the lexicon and different meanings are ascribed to words. In addition, interpreters are not

machines. Qualitative research with health interpreters resulted in an article with the following title: “ *‘I am not a robot’ Interpreters' views of their roles in health care settings* ” (Hsieh, 2008). There is also a risk that text and culturally meaningful concepts and beliefs will be ignored, transmuted or inappropriately weighted if there are no close equivalents in English. Results may be confounded because it is unclear if differences are due to translations or other factors.

Both quantitative and qualitative studies use interpreters and translators. The perspective on the use of interpreters and translators should be consistent with the research methodology chosen. A study underpinned by a positivist worldview would take a positivist perspective of the use of the interpreters and translators. The criteria for the reliability and validity of the interpreters’ and translators’ work would reflect this. There are numerous works on such matters as the cultural equivalence of surveys and questionnaires. See, for example, Brislin (1970).

In this study, the post-positivist perspective of interpreting and translating acknowledges that the translator or interpreter is not value-free and that the interpreted material is subjectively produced in interaction with the questioner and the participant. The lens of the translator/interpreter is not completely clear. It may also change during the interaction. Different translations and interpretations of the same data are taken as valid expressions of the interpreters’ – but inevitably as inexact representations of the sources. In the sense that no-one can gain a full understanding of what it is to live as another person it has been argued that every interview is “cross-cultural” and that every verbal or written text is “interpreted” (Lampert, 1997).

Methods

The challenges of cross-cultural exchange are amplified when researchers do not speak the same languages as the participants. Researchers can engage trained interpreters and translators to translate letters, information sheets, consent forms and results summaries; collect data; assist with interpreting data and making recommendations; and advise about cultural matters generally (Clark & McGrath, 2009; Yelland & Gifford, 1995).

In the qualitative phase of the research some of the adult participants did not speak or read English and five of fifteen families chose to have interpreters. Researchers sometimes incorporate reflexive elements in their research designs including pre-understandings interviews, disclosures of their own backgrounds and reflections on the impact they have in the research process. A similar sensitivity to translators and

interpreters and their effect on the data they produce is generally missing. In most studies, they are hardly mentioned despite the critical effect they have on the credibility of the research (Squires, 2008; J. P. H. Wong & Poon, 2010) (Temple, 2008) (K. Maclean, 2007). In this section I describe my use of translators and interpreters because data quality is influenced by interpretation.

The qualitative research invitation letters, information sheets and consent forms were translated into Hindi, Chinese and Cambodian. Translation is a considered rendition of written or previously recorded verbal material. It is generally uni-directional – from one language (the source) to another (the target). Translations are not done in real time. A translator can consult sources such as dictionaries and thesaurus and review her work.

Interpreters relay oral information in real time. In this study, I used five different interpreters for the families who asked for interpreters. I could not use the same interpreter because the families spoke different languages. The interpreters worked bi-directionally, back and forth, between the researcher and the participants. The sources paused while their speech was interpreted. This is “consecutive interpreting”. It doubles the length of an interview. In “simultaneous interpreting” the sources are not interrupted. Simultaneous interpreting needs sound equipment so that the recipients cannot hear the sources, just the interpretations a few seconds after they are spoken. It is very intensive. Usually each speaker has an interpreter. They may have two so they can spell each other. Simultaneous interpreting was not practical for my PhD research (Clark & McGrath, 2009). The pros and cons of consecutive and simultaneous interpreting are detailed further in Appendix D.

No qualitative interview method is perfect. There is a risk that the follow up questions reflect the thought processes, values and culture of the interviewer rather than seeking information relevant to the issue from the perspective of the participant. A question as simple as “Can you tell me more about that” means the researcher has chosen a topic to enquire further about. These problems can be exacerbated in interpreted interviews since the thought processes of both the interpreter and the researcher must be considered. There are a number of approaches to data collection to mitigate this effect. They involve the principal researcher to different degrees.

I chose to conduct the data collection interviews with interpreters rather than training or finding interpreters expert in qualitative data collection to run the interviews independently. This is because I had begun a relationship with the families when I

recruited them. I wanted to build on that as well as select and follow up points they raised with questions of my own rather than relying on an interpreter to do this.

I employed certified health interpreters because of the complexity of conveying information, feelings and processes across different languages and cultures. There are no specific training courses for research interpreters in New Zealand. The translators and interpreters I used worked for a highly regarded large local District Health Board interpreting service. Interpreters from this service are often engaged for health research interviewing.

Squires (2008) advises ascertaining and reporting the qualification of the interpreters to enhance credibility. Two of the interpreters had Masters degrees (not in interpreting) and therefore research backgrounds. The others had various undergraduate tertiary qualifications. All were certified interpreters. The District Health Board health interpreting services in Auckland have comprehensive manuals and pamphlets about working with interpreters (Asian Health Support Services, 2008; Auckland District Health Board, 2006). I read these to ensure that I was working within the interpreters' expectations, rules and regulations.

Trained interpreters are expected to adhere to standards and protocols for interpreting. These include being on time, professionally dressed, articulate in both languages and as neutral as possible. They should try to reduce the degree to which their interpretations reflect their personal perspectives. They need to be able to understand dialects and local regional word usages. For example, speakers of different Cantonese dialects have problems understanding one other and may not understand Mandarin, China's official formal language.

For qualitative research interviews interpreters must understand the concepts under investigation; convey questions to participants' and their answers accurately; elicit relevant detailed answers; and ensure that promising leads and unexpected answers are recognized and followed up. Interpreters should understand nuances, tones, expressions, metaphors, jokes, body language and allusions particular to the interviewee and their cultural and linguistic background. Squires (2009) advises setting up translation lexicons for qualitative research to ensure that researchers and interpreters share their understanding of concepts. I did not do this because the research is not about a technical topic. The question schedule was about matters that the interpreters would have experienced themselves.

Interpreters and translators convey the meaning of the source rather than literal word for word renditions of the talk or text. This is because the grammar and sentence construction of languages differs. For example, in Chinese tenses and personal pronouns are not used. In addition, double negatives are often used (Twinn, 1997, 1998). Chinese has no strict sentence structure (subject verb object). In addition there are words, idioms, experiences and concepts in some languages which are not succinctly or easily expressed in another language (Jagosh & Boudreau, 2009; Sechrest, Fay, & Zaidi, 1972). In this research, for example, two bilingual native Chinese speakers interpreted the following words expressed by a man who had taken up smoking since arriving in New Zealand differently. They contain the words “墮落”, an expression for which it is difficult to find a succinct English equivalent. They can be translated literally (“fall down”) as the first interpreter did – but the actual meaning of the speaker is subtle and difficult to convey in English. The second interpreter provided two re-interpretations (Table 15).

Table 15: Three English language interpretations of one participant’s sentence

| | |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Participant: | 「比如有個人好有成就, 有創作發明..... 一下子有成績.....但呢 啲人就會墮落 |
| Interpreter: | “...there is a man who has a bit of achievement who had invented.....he will fall down .” |
| Re-interpretation 1: | “For example, there is one who has many achievements.....suddenly, there is no achievement.....this type of people will fall from virtue (and smoke) .” |
| Re-interpretation 2: | “For example, someone who has succeeded in many ways.....he has no accomplishment suddenly.....he will feel despair and give up on himself .” |

The status and gender of interpreters also needs to be considered. Participants may mistrust certain interpreters or offer stories about different aspects of the topic depending on the status of the interpreter, whether he/she is from their own community or not, and prior encounters with interpreters and researchers. The cultural advisor for one of the ethnic groups in my study advised me to give potential participants a choice of interpreters since some families do not like or trust some of the interpreters. However two families I approached from this ethnic group did not want to participate. Their expression of interest forms may have been completed and returned by children without their parents’ knowledge. The other two families wanted to be interviewed in English. I did not offer other participants a choice of interpreter trusting in the excellent reputation of the service I was using. I asked families if they preferred male or female interpreters. This is important in some cultures. For example, I expected that Muslim women would

prefer a female interpreter and this was the case. None of the interpreters knew the participants.

I sent the interpreters the information sheets, consent forms, demographics form and semi-structured questionnaire schedule with the preliminary KKS quantitative results to familiarise them with the context of the interviews and the topic. I booked them 30 minutes before the interviews and arranged to meet them near the participants' houses to plan the conduct of the interview, answer questions and so they could provide cultural advice and direction in relation to behaviour at the interview. This was our first contact apart from telephone conversations about meeting. In one case we met at the local school. In the other four cases we met in the car further down the street from where the participants lived. Based on the pre-interview discussion, three appeared to have reviewed the information closely. In all but one case the interpreters talked spontaneously about their beliefs about and experiences of the study questions before the interview. They signed confidentiality forms (Appendix E).

All the interpreters were members of the same ethnic groups as the participants but they did not know them. The seating arrangements placed the interpreter equidistant or nearer to the participants than the researcher as far as possible. I tried to follow the instructions in the DHB interpreter guides by looking towards (but not directly at) the participants as I spoke to them, addressing them directly and not engaging in conversation with the interpreter unless the participants knew what was said.

I booked interpreters to stay for up to 30 minutes after the interview to debrief (as mentioned previously), review processes and to get input into cultural issues and interpretations of the interviews. I wrote field notes after the interviews which included interaction with the interpreters.

Transcription of Interpreted Interviews

It is essential that the purpose of the research and methodology are considered when deciding how to transcribe interpreted interviews. The outcomes and application of the findings need to be thought through. The micro-level of analysis must be matched by micro-level detail in accuracy since the words, idioms and examples may be culturally constructed first by the participant, then by the interviewer, then by the transcriber who may or may not be the interviewer or researcher, then the researcher and last by the reader.

Some authors argue that accurate transcriptions of interviews must include breaks, pauses, body language, overlapping speech, expression and tone of voice, in and out breaths and other sounds that are not words since the meaning of the words may be negated or changed by these. In particular, the mimicking of another person's point of view or voice needs to be carefully noted to avoid confusion about whose perspective is being presented. Irony may be difficult to detect. All of these present challenges with interpreted data.

I trusted the interpreters to represent the research participants' points of view and convey this to me as best they could. Advice about transcribing such interviews is scant despite the complexity of representing data from interpreted interviews. I thought through a number of options for transcription (Appendix F). I chose to transcribe the English in all the interview recordings myself, rather than asking the interpreters to transcribe. I did not include pauses or non-verbal utterances since the purpose of the research was to elicit information. This is also advised for interviews where people are not talking in their first language since they may appear inarticulate when they are just searching for words (L. M. MacLean, Meyer, & Estable, 2004).

Trustworthiness of Translations and Interpretations in Qualitative Research

Translation and back translation are considered best practice with written documents, such as information sheets (Brislin, 1970). I have already described how the translated material in Phase Two was checked. When I was transcribing the interpreted interviews I was puzzled by discrepancies in one interview. For example, on one occasion one participant spoke four times longer than the length of the interpretation. In addition, I recognized words in the source language that did not occur in the interpretation and I did not understand what the words "fall down" meant in the context of the interview. I did not follow-up at the time because they were in the middle of a summary the interpreter was making. In another interview the parents spoke directly to the interpreter who asked them further questions in their language. She summarised what the participants said in English and I was then able to ask another question.

I consulted my supervisor and decided to ask people with research backgrounds from the Asian community to review the interpretations. They had post-graduate qualifications ranging from PhD to post-grad papers. I provided them with the recording of the interview and the English language transcript. I asked them to note changes on the transcripts. They signed confidentiality forms. In two cases they said that they needed to re-interpret the whole interview. They did this verbally and recorded their re-

interpretation. I transcribed their re-interpretations and combined the new interpretations with the original transcripts. I re-consulted one of the re-interpreters because I did not understand some of the re-interpreted sentences. She explained this was because she had stayed close to the words of the participants and her language has a different sentence structure to English. She answered my question and I altered the transcript accordingly.

I printed and read all five transcripts comparing the original and re-interpreted material. I made notes about the differences on the transcripts. There were a few minor differences between the original and re-interpretations for two interviews. There were some differences in one interview. Occasionally the original interpreter elaborated on (augmented/developed) what the participant said. Occasionally she provided new different information. The last two re-interpretations were substantially different from the original interpretations (Table 16).

Table 16: Comparison of original interpretations with re-interpretations.

| Level of difference | <i>n</i> | Differences |
|---------------------|----------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Little difference | 2 | Minor differences e.g., information expressed differently |
| Some differences | 1 | Occasionally information supplemented; occasionally different information provided |
| Marked differences | 2 | Extensive summaries; information omitted; information supplemented; different information provided; researcher's question conveyed incorrectly |

Sometimes the issues with interpreting were combined. For example, a summary led to omission of data. Summaries occurred after the interpreter conversed independently with participants and when the interviewer felt the participants were not getting to the point and answering the question. Unfortunately the material omitted from summaries included proverbs and sayings.

Table 17 provides three examples of marked differences between interpreted and re-interpreted data. The first is an example of a summary which omitted information. In addition, this example shows how the interpreter refers to the participant as “he” rather than transmitting the words in the first person as per the interpreters’ protocols. The second example shows how an interpreter supplemented the information provided by a participant, perhaps because I asked for interpreters to explain cultural practices and values. The third example is of summarised data.

Table 17. Examples of differences between interpreted and re-interpreted data

| | |
|--------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Original interpretation omitted data | |
| Participant: |* |
| Original interpretation: | In my view because X is a surgical doctor so he know the anatomy of a person he will tell C why is it not good smoking it's harm to your brain and harm to your lung from his medical qualification |
| Re-interpretation: | To put it in a simple way I have a good understanding about medicines and the human body. From the growth of a child and the human body the different development stage to tell him that at your age smoking will influence your development. For example your brain development. The function of your lung. If your brain does not work normally it will influence your development. This is so simple. Do you prefer to be a silly boy or do prefer to be a clever boy. C really understand that. |
| 2. Original interpretation augmented and omitted data | |
| Participant: | |
| Original interpretation: | You know like women got very important job in their family, they are the base of their whole family children depend on them even the husband because husband go out, if the women smoke it will affect the whole family – it's really bad. |
| Re-interpretation: | You know like women do everything in the house. It's all attached to her. They look after the kids, feed them, so what she does, they will also copy her and start doing. |
| 3. Original interpretation summarised data | |
| Participant: | |
| Original interpretation: | She explain around and around cos you say what you mean good. Good is teaching them ah then they listen to you no smoking no drinking that is good. |
| Re-interpretation: | Of course I talk like this. It is our family perception about life. Like us and for one of my friends family so they live and they don't manage and they don't control so they live a European lifestyle so their children follow the lifestyle living and further than that they don't respect the parents because they just follow up the adults example. But here in our family we go for the traditional customs. I save I manage I look after everything so us an example my children follow it. |

Note: * words in the participant's language

The re-interpretations allowed me to resolve puzzling situations when the participant had not answered the questions asked by the researcher. In fact the questions had not been interpreted exactly but reflected the interpreter's cultural understanding of the participant's prior response.

It should be noted that the original interpreters were working under pressure in real-time. They could see the participants and read their body language. In contrast, the re-interpreters were only working with a recording but they could replay and slow down the material. They provided thoughtful considered re-interpretations of the voices only. To illustrate the difference between a live interview and a re-interpretation, the interviews took between 50 and 100 minutes whereas checking and re-interpreting them took between four and six hours. In addition, one interview, where the participant went deeply into his answers, would have taken much longer if the interpreter had not provided summaries.

It is interesting that the two interpreters who did the most summarising did not have research backgrounds. They both advised me to ask participants to get to the point and be succinct in subsequent interviews. Clearly I did not explain that I wanted detailed descriptions for my qualitative research in my pre-interview briefing with them. I also did not redirect the interviews as I could have. It would have been difficult to do this without breaking the "rules" myself by talking to the interpreters without letting the participants know why or causing the interpreters to lose face.

The interpreters in the interviews where the original and re-interpreted material was very similar used a different interviewing technique to the other interpreters. As recommended in the guidelines for working with interpreters, they established a pattern of interrupting participants after they had spoken for a short time and interpreted these short passages as they occurred. This did not impede the flow of the interview. The participants just waited – they appeared to suspend their train of thought and carried on immediately after the interpreter was finished.

| | |
|--------------|---------------------------------------------------------------------------------------------------|
| Researcher: | So why don't the Indian children smoke? |
| Interpreter: | "....." (<i>Interpretation of question</i>) |
| Participant: | "....." |
| Interpreter: | Because their parents don't smoke cos it's not from their birth |
| Participant: | "....." |
| Interpreter: | They don't get this kind of teaching from their birth |
| Participant: | "....." |
| Interpreter: | Cos these people here the mother when the baby is held the mother smokes so they get this kind of |

Participant: “.....”
 Interpreter: but not Indians – mothers never smoke. They don’t take anything except food
 Participant: “.....”
 Interpreter: Even we don’t go out to eat anything
 Participant: “.....”
 Interpreter: make it at home and then eat

Data Analysis and Interpreted Data

The use of confirmatory interpretations for recorded material is described in the literature, but little is written about deciding which interpretation should be analysed or how such interviews should be represented in writing. Temple (2008) and MacLean (2007) argue that back translations and confirmatory interpretations reflect a positivist perspective since they assume that an accurate “truthful” rendition of a source in another language is possible. They note that the philosophical underpinnings of qualitative research emphasise the contextual, contested nature of reality and language and that this is applicable to interpreted and translated information. How did I choose which interpretation to analyse when there were two? I reflected on the philosophical assumptions above and realised that both the interpretations and re-interpretations were valid data since the participants, interpreters and re-interpreters were from similar cultural backgrounds. The different versions of the participants’ responses meant I had more data and more perspectives. Consequently I worked with the transcripts which showed both versions of the participants’ data.

Temple, Edwards and Alexander (2006) argue that interpreted data is re-constructed. They caution against treating this data like primary data and assert that the analysis of such data resembles secondary qualitative data analysis. Secondary analysis is the term applied to the analysis of data by researchers who did not collect the original data. The critical issue is the loss of context. Loss of context includes the cultural context of the dialogue and the immediate context of the interview. Both these add layers of meaning. Suh, Kagan and Strumpf (2009) suggest that the analysis of interpreted interviews by researchers such as myself means that only surface meanings are available.

Twinn (1998) argues that trustworthiness is enhanced if the interpreter who was present at interview transcribes and analyses data in the language the interview was conducted in. The interpreter can grasp the intended meaning of the participants better because she will have observed body language and physical interactions between participants. In this case I was present at all of the interviews. I asked the interpreters to include cultural meanings in their interpretations and allowed time for discussion after the interview.

When the interviews were re-interpreted the re-interpreters made notes about cultural meanings on the transcripts or discussed the transcripts with me. Despite these efforts, I believe that analysis by researchers in the original language of the participants is more rigorous. The example of the subtle differences between the three interpretations of one Chinese participant's data supports this (Table 15).

Rigour, Reflexivity and Cross-cultural Research

I have discussed processes to protect the participants from harm and the use of community consultation and advisors, cultural knowledge and managing cross-cultural communication to enhance the rigour of the study. Reflexivity is another technique to reduce ethnocentrism. Few cross-cultural researchers explicitly call for reflexivity to counteract ethnocentrism. Reflexivity is part of constructivist/interpretive/naturalistic research where the thinking and value systems of the researcher are accepted as an inherent part of the research. It is used to identify and explicate the researcher's role in creating and transforming data through the co-construction of meaning with the participants and personal lens of the researcher. The pre-suppositions interview I undertook is an example of researcher reflexivity (p.5).

As my research and reading progressed I developed a more mindful understanding about my cultural world-view and its effect on the research. Most books and papers about the effect of culture on research are theoretical, conjectural or explain what researchers have done without linking theory, directions or actions to empirical data and analyses. Kwan, Chun, and Chesla's (2011) paper differs. It is a qualitative analysis of the effect of Chinese cultural norms on twenty group interviews with Chinese American immigrants about family, culture and diabetes management. The data comprised field notes and transcripts. The researchers selected four well documented norms from the literature, coded them in the data under "Group Dynamics" and analysed how they influenced the group processes in the interviews. The four norms were sensitivity to social hierarchy, monitoring public display of emotion, face concerns and emphasis on group harmony. They found that processes between participants and between the focus groups facilitators were heavily influenced by these norms. On reflection, I can see how these norms influenced my qualitative research. This is described in Chapter Eight, Qualitative Methods.

Summary

In this chapter I have described issues for undertaking qualitative cross-cultural research, especially with participants who speak a different language from the researcher. I have recounted how I engaged with Asian community members and worked with interpreters to promote the integrity of the study. The next chapter describes the methods used to analyse the KKS study baseline data.

Chapter Six: Quantitative Research Methods

Quantitative Research Design

This is a cross-sectional, exploratory, descriptive quantitative study which uses the KKS study student and parent baseline datasets. In Phase One (a), bivariate analyses of 2007 data are used to examine associations between student ethnicity and ever-smoking, and parent ethnicity and family factors related to child smoking. Phase One (b) focuses on the 2007-2009 data sets. It comprises bivariate analyses of the student and parent data sets; a multivariate analysis used to determine the relative influence of family factors and acculturation on Asian youth ever-smoking; and an analysis of a combined parent and student data set.

Phase One (a): Preliminary Analysis of 2007 KKS Study Baseline Data

An analysis of the year one KKS study baseline data was undertaken to inform focus group and family interviews since these had to be completed before KKS data collection was complete. It examined similarities and differences in smoking prevalence and family related beliefs and practices between Asian students and their parents and non-Asian students and parents.

Hypotheses

Students

Asian students are less likely to be ever-smokers than non-Asian students

Asian students are less likely to be exposed to smoking at home and in vehicles than non-Asian students

Asian students are less likely to have fathers or mothers who smoke than non-Asian students

Parents

Asian parents are more likely talk to their child about smoking than non-Asian parents

Asian parents are more likely to believe that children will smoke if parents smoke than non-Asian parents

Asian parents are more likely to believe than children will smoke if people smoke in the home than non-Asian parents

Asian parents are more likely to believe that second-hand smoke is harmful to their child's health than non-Asian parents

Asian parents are less likely to believe that schools rather than parents should teach children about smoking than non-Asian parents

Participants

The KKS study biostatistician supplied two datasets. The first was the Year 7 and 8 students who completed PDA and paper baseline surveys in 2007 (n=2,265). The student response rate was 76.8% based on the Ministry of Education July 2007 roll return. The second was for parents who were matched with the students (n=1592).

Variables and Measures

The sources for the measures for the student and parent variables are summarised in Table 18. Where the student and parent questionnaires collected similar data I preferred the students'. For example, family ethnicity was based on the students' self-identified ethnicity, not the parents'. This is recommended when the focus of a study is children (p.27). Similarly the students' responses about smoking at home and in vehicles were preferred over the parents'. This was because the KKS study student participants report higher rates of smoking in these environments than their parents (Glover et al., 2013).

Ever-smoking (students)

Ever-smoking is a measure of experimentation with smoking. It is critical because decreasing the number of ever users will reduce the number of long-standing smokers (Starr et al., 2005). It is thought that the question used in the KKS study "Have you ever smoked a cigarette, even just a few puffs?" yields more affirmative responses than the questions "Have you ever smoked a cigarette?" or "Have you ever smoked part or all of a cigarette?" (United States Department of Health and Human Services, 2012, p. 173). Variations of the KKS study question are used in the WHO Global Youth Tobacco Survey (GYTS), the ASH Year 10 survey, and New Zealand Youth Tobacco Monitor. The GYTS is used in Asian countries including Southeast Asia, China, and India for students aged 13-15 years (Morbidity and Mortality Weekly Report, 2006). These students are slightly older than the students in the KKS study.

Ever-smoking cannot be biochemically validated since there are no measures of smoking in the distant past. The test-retest reliability of self-reported measures of ever-smoking has been assessed in studies which compare adolescent students' responses 14 days apart (Brener, Collins, Kann, Warren, & Williams, 1995) and over ten years (Shillington, Reed, & Clapp, 2010). The sample in the 14 day comparison study included White, Black and Hispanic youth with 4% "other" who were potentially Asian.

The consistency of reporting ever-smoking over a fourteen day period was very high (Kappa =83.8) among Grades 7 to 12 students.

The mean age of adolescents was 11.78 years in wave one of a six wave evaluation of the stability of ever-smoking measures over ten years (Shillington et al., 2010). This is similar to the age of the participants in this study. About one-third in the reliability study recanted use two years later. The proportion of students reporting ever-smoking remained stable in subsequent waves. Agreement was higher in non- Hispanic/non-Black youth (Asian students – if there were any - would be included here) and older adolescents. There is no way of determining if ever-smoking in wave one was actually one third higher than in subsequent waves but the results suggest that children under the age of 13 years over-report ever-smoking.

In a longitudinal mixed methods study in the United Kingdom, inconsistencies in self-reported ever-smoking peaked at ages 5-7 and when participants became adolescents aged 11-13 years, the same age as students in the KKS study. Inconsistencies in youth ever-smoking reports were attributed to reframing and re-interpreting what constitutes smoking. This conclusion was based on qualitative evidence of the participants' changing knowledge and experiences of smoking (Mair et al., 2006). There are no reports in the English language literature of the reliability of ever-smoking measures for Asian children specifically.

Parental Smoking at Home (Student Reports)

The KKS study question used to measure father and mother smoking was “Who was smoking around you in your home during the past 7 days?” It may underestimate family member smoking because it could be interpreted as smoking inside the home only and not in the garden or on a terrace, etc. Evaluation comparing adolescent proxy reports of parental smoking with parents' self-reports suggest they are reliable in children over ten years (as is the case for students in this study) (T. Barnett, O'Loughlin, Paradis, & Renaud, 1997; Harakeh, Engels, de Vries, & Scholte, 2006; Kershaw, 2001; Vasudevan, Etzel, Spitz, & Wilkinson, 2009). Student data may be more accurate than mothers' and older female relatives' self-reported data. In the United States 5.6% of Vietnamese, Cambodian and Laotian females self-reported currently smoking yet their salivary cotinine verified smoking rate was 14.8% (Wewers et al., 2000). Similarly Korean women in Korea's biochemically verified smoking rates (13.9%) were 8% higher than their self-reported smoking rates (Jung-Choi, Khang, & Cho, 2012).

Table 18: KKS study measures used in analyses

| Variables | Analysis | Source Question (Q) | For analysis | Comments |
|--------------------|---------------------------------|------------------------|-----------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Demographic | | | | |
| Ethnicity student | Student Phase 1a | Appendix A Q 8 | Prioritised: Asian, Māori, Pacific, European/other | Data supplied by biostatistician. Modified 2006 Census question. Select as many as wish. Entered at stats NZ Level 2 (Asian nfd, SE Asian, Chinese, Indian, other Asian). Paper questionnaire data used instead of PDA as more complete. |
| | Student Phase 1b | Appendix A Q 8 | Any Asian (Asian prioritised) Asian first choice Asian only Asian/non-Asian Individual sub-ethnicity Non-Asian | See description of creation of variables (p.147). |
| Ethnicity parent | Parent Phase 1a | | Based on student ethnicity from matched parent/student data set provided by KKS study. | All data about parents included even if parent was not Asian to reflect cultural and social markers of student self-identified Asian ethnicity in the home. |
| | Parent Phase 1b | Appendix C 18 | Asian sub-ethnic groups Asian/non-Asian | See description (p.148). |
| School decile | Student Phase 1a Phase 1b | Appendix B Q 1 | 1, 2, 3 | Decile is a proxy for SES (p.89). Names of schools converted to decile levels - 1 = lowest |
| | Parent Phase 1b | | Names of schools converted to decile levels and coded 1 (lowest), 2 and 3 | Provided by KKS study biostatistician. Based on school that child reported attending. |
| Year at school | Student Phase 1b | Appendix C Q 2 | Year 7 or Year 8 | Proxy for age and child development. Year 7 students are younger than Year 8 students. Exposure to KKS interventions differed by year. |
| Sex | Student Phase 1a Phase 1b | Appendix A Q 3 | Male Female | PDA data used rather than paper questionnaire data because it was more complete. |

| | | | | | | | |
|----------------------------------------------|--------------------------------|----------------------|------------------------------------------------------------------------------------------------------------------------|--------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Relationship to child | Parent Phase 1a Phase 1b | Appendix C Q 17 | Father | Mother | Other | Categories apart from mother and father combined to form “other” | |
| Family structure | Student Phase 1b | Appendix B Q 9 | Lives with both parents Lives with parents & grandparents | | | Household composition used as proxy measure of family structure and “intactness” of family. | |
| Smoking status | | | | | | | |
| Smoking status | Student Phase 1a | Appendix B Q 9 | Ever-smoker or not | | | See discussion about choice of ever-smoking (p.136, 146) | |
| | Student Phase 1b | Appendix B Q 9-14 | Ever-smoker or not | | | Current smoker and intention to smoke were considered but the numbers were too small for meaningful analysis. | |
| | Parent Phase 1b | Appendix C 9-16 | Current smoker or not Plan to quit or not | | | See description of attribution of smoking status (p.149). | |
| Family member smoking | | | | | | | |
| Parental smoking in home past 7 days | Student Phase 1a | Appendix A Q 12 | Father and mother selected from list of household members | | | “Who was smoking around you in your home during the last 7 days? Tick all that apply.” List of family members and others was provided. See discussion about reliability of youth proxy reports of parent smoking (p.137). | |
| Household member smoking in home past 7 days | Student Phase 1b | Appendix A Q 12 | Anyone smokes in home Father smokes in home Mother smokes in home Others (not mother or father) smoke in home | | | “Who was smoking around you in your home during the last 7 days? Tick all that apply.” List of family members and others was provided. | |
| People smoking in car or van in past 7 days | Student Phase 1b | Appendix A Q 13 | Anyone | father | mother | other | During the past 7 days which of the following people smoked around you while you were travelling in a car or a van? Tick all that apply. List of family members and others was provided. |
| ETS | | | | | | | |
| Smoking in home | Student Phase 1a | Appendix B Q 32 | Not exposed in home Exposed to smoke in home 1-7 days | | | | |

| | | | | |
|-----------------------------------------------------------|--------------------------------|--------------------|---------------------------------------------------------------------------------|-------------------------------|
| Smoking inside house | Parent Phase 1b | Appendix C Q 2 | Yes | No |
| Smoking in car | Student Phase 1a | Appendix B Q 34 | Exposed on no days or did not travel in car Exposed to smoke in car 1-7 days | |
| Smoking in car | Parent Phase 1b | Appendix C Q 4 | Yes | No |
| Parent attitudes; parenting | | | | |
| Parents upset if child smokes | Student Phase 1b | Appendix B Q 36 | Agree “Disagree” and “Don’t Know” combined | |
| Parents think it is ok if child <16 yrs smokes | Student Phase 1b | Appendix B Q 36 | Disagree “Agree” and “Don’t Know” combined | |
| Parents have rules about smoking | Student Phase 1b | Appendix B Q 36 | Agree “Disagree” and “Don’t Know” combined | |
| Amount of pocket money | Student Phase 1b | Appendix A Q 10 | none | \$1-10 \$11-30 \$31-50+ |
| Parents know how child spends money | Student Phase 1b | Appendix B Q 36 | Agree “Disagree” and “Don’t Know” combined | |
| Children more likely to smoke if parents smoke | Parent Phase 1a Phase 1b | Appendix C Q 7 | Agree “Disagree” and “Don’t Know” combined | |
| Children more likely to smoke if people smoke in the home | Parent Phase 1a Phase 1b | Appendix C Q 7 | Agree “Disagree” and “Don’t Know” combined | |
| 2 nd hand smoke harmful to children’s health | Parent Phase 1a Phase 1b | Appendix C Q 7 | Agree “Disagree” and “Don’t Know” combined | |
| Schools rather than parents should teach | Parent | Appendix C | Disagree | |

| | | | | |
|----------------------------------------------|--------------------------------|-------------------|-----------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| children about smoking | Phase 1a Phase 1b | Q 7 | “Agree” and “Don’t Know” combined | |
| Have you talked to your child about smoking? | Parent Phase 1a Phase 1b | Appendix C Q 5 | Yes “No” and missing values combined | |
| Pocket money | Parent Phase 1b | Appendix C Q 6 | Recoded ≤\$10 >\$11 | |
| Smoking material available in home | Parent Phase 1b | Appendix C Q 3 | No “Yes” and missing values combined | |
| Supply cigarettes to child <18yrs | Parent Phase 1b | Appendix C Q 7 | Disagree “Agree” and “Don’t Know” combined | |
| Student acculturation | | | | |
| Ethnic self-identification | Student Phase 1b | | Same as “Ethnicity student Full set” above in table | Psychological measure of cultural affiliation |
| Born in NZ | Student Phase 1b | Appendix B Q 6 | Yes No | Structural measures of acculturation |
| Years in New Zealand | Student Phase 1b | Appendix B Q 6 | ≤ 5years > 5 years | Same as the categories in the Youth2000 Asian student analysis (Rasanathan, Ameratunga, Chen, et al., 2006). |

Data Analysis

Stata/IC 10 (StataCorp, 2007) was used to test the hypotheses listed on page 135.

Percentages were used to describe the distribution of variables. Odds ratios were used to explore relationships and associations between ethnicity and the outcome variables.

Odds ratios (with 95% confidence intervals) were used because the outcome (smoking) is rare and the outcome is dichotomous.

Phase One (b): Analysis of 2007 -2009 KKS Study Baseline Data

This descriptive analysis of the full KKS study baseline student and parent data sets aimed to examine the impact of family and acculturation factors on Asian student smoking; the relationship of Asian parent smoking behaviour to their beliefs about and attitudes to child smoking and their parenting practices; and to compare Asian with non-Asian students and parents with regard to smoking behaviour, family, acculturation and parenting factors related to smoking. Temporal pathways among the factors could not be examined because of the cross-sectional nature of the data.

Hypotheses

The Phase One (b) research questions and hypotheses are included in Table 19. This table also includes the data sets which were used to test the hypotheses.

Table 19: Relationship of research questions to hypotheses and data sets.

| Research questions | Hypotheses | | |
|----------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Student data set | Parent data set | Matched student & parent data set |
| What are the family risk and protective factors for smoking among New Zealand Asian students aged 11-13 years? | <p><u>Family structure:</u> Asian students who live in intact families (two parent; multi-generational) are less likely to be ever-smokers than those who do not live in intact families.</p> <p><u>Family tobacco use:</u> Asian students are more likely to be ever-smokers if family members (anyone; father; mother; others) smoke at home or in car versus do not smoke in home or in car.</p> <p><u>Parents attitudes:</u> Asian students are less likely to be ever-smokers if parents disapprove of child smoking (upset if children smoke; disagree ok for <16 yrs to smoke) versus do not disapprove.</p> <p><u>Parenting practices:</u> Asian students are less likely to be ever-smokers if parents are more rather than less strict (rules about not smoking; less pocket money; monitor pocket money).</p> | <p><u>Beliefs:</u> Asian parent nonsmokers, and Asian parent smokers who plan to quit (versus smokers and those who do not plan to quit) are more likely to believe</p> <p>a) that children are more likely to smoke if parents smoke or if there is smoking at home</p> <p>b) that ETS harmful to children</p> <p>Asian parent nonsmokers, and Asian parent smokers who plan to quit (versus smokers and those who do not plan to quit), are less likely to believe that schools rather than parents should teach children about smoking.</p> <p><u>Parenting practices:</u> Asian parent nonsmokers, and Asian parent smokers who plan to quit (versus smokers and those who do not plan to quit), are more likely to practice actions which protect against child smoking (talk to children about smoking; give less pocket money; smoking material not available; would not supply cigarettes <18yrs; no smoking house/car),</p> | <p><u>Parent smoking:</u> Asian students are more likely to be ever-smokers if their parents identify as current smokers versus nonsmokers.</p> <p><u>Parent beliefs:</u> Asian students are less likely to be ever-smokers if their parents agree (versus don't agree) that</p> <p>a) children are more likely to smoke if parents smoke</p> <p>b) children are more likely to smoke if there is smoking in the home,</p> <p><u>Parenting practice:</u> Asian students are less likely to be ever-smokers if their parents report talking to them about smoking or giving them <=\$10 pocket money versus do not talk about smoking or give > \$10 pocket money</p> |

| | | |
|-------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| What are the joint influences of family factors and acculturation on smoking among New Zealand Asian youth? | <p><u>Acculturation:</u> Less acculturated Asian students (Asian self-identity; country of birth; years in NZ) are less likely to be ever-smokers than more acculturated students.</p> <p><u>Family and acculturation:</u> Family factors (significant variables from family analysis above) are associated with Asian student ever-smoking in the presence of acculturation.</p> | |
| What is the influence of ethnicity on family and cultural risk and protective factors for smoking? | <p><u>Family risk factors:</u> Asian students are less likely to experience family risk factors (see above) for smoking than non-Asian students.</p> <p><u>Cultural identity:</u> Asian students who identify more strongly as Asian are less likely to smoke than non-Asian students.</p> | <p><u>Ethnicity:</u> Asian parents are less likely to smoke, and more likely to plan to quit, than non-Asian parents.</p> <p><u>Beliefs:</u> Asian parents are more likely to believe</p> <ul style="list-style-type: none"> a) in family risk factors for child smoking (see above) b) that parents rather than schools should teach about smoking, than non-Asian parents. <p><u>Parenting practices:</u> Asian parents are more likely to practice actions which protect against child smoking (see above) than non-Asian parents.</p> |

Participants

There were 4688 students in total. Seventeen did not have PDA data including ever-smoking status and were dropped. The participants were 4671 students and 4144 parents or caregivers (referred to as “parents” from now on) who responded to the KKS study baseline student and parent questionnaires in 2007, 2008 and 2009. Based on school roll figures provided by schools to the KKS study in February and March of each year, the student response rate was 82.6%. The parent response rate of 73% was based on the number of students (Table 20). It did not account for siblings in the same year whose parents responded only once.

Table 20: Student and parent response rates based on rolls supplied by schools Feb/March.

| | School roll (<i>n</i>) | KKS sample (<i>n</i>) | Response rate (%) |
|----------|-------------------------------|------------------------------|--------------------------|
| Students | 5676 | 4671 | 82.2 |
| Parents | 5676 | 4144 | 73.1 |

The February/March school roll data did not include the students’ ethnicity. Response rates by ethnicity were calculated using 2007–2009 July school roll returns supplied by the Ministry of Education (MoE). This data was prioritised by the MoE as follows: Māori, Pacific Island, Asian and European/other. The response rate for Asian students was 84.3% Table 21.

Table 21: Student response rates by ethnicity based on Ministry of Education July 2007-9 roll returns.

| | MoE July roll return | | KKS sample | | Response rate |
|----------------|-----------------------------|----------|-------------------|----------|----------------------|
| | <i>n</i> | % | <i>n</i> | % | % |
| Māori | 1717 | 30.0 | 1281 | 27.2 | 74.8 |
| Pacific Island | 2329 | 40.8 | 2077 | 44.5 | 89.5 |
| Asian | 1166 | 20.4 | 980 | 21.0 | 84.3 |
| European/other | 492 | 8.6 | 333 | 7.1 | 67.9 |
| Total | 5704 | | 4671 | | 82.1 |

Asian Student Participants in Student Baseline Data Analyses

Students and parents who identified with any of the Asian ethnicities at Level 4 in the 2006 census were included in the Asian ethnic category. The impact of different measures of ethnicity on Asian student sample size is shown Table 22.

Table 22: Impact of different definitions on number of Asian students in KKS study.

| Definition | <i>N</i> | <i>n</i> | % |
|--------------------------------|----------|----------|------|
| NZ Standard prioritisation | 4671 | 980 | 21.0 |
| Asian prioritised | 4671 | 1093 | 23.4 |
| Asian only* | 4671 | 963* | 20.9 |
| Asian selected as first choice | 4671 | 992 | 21.2 |

Note. * Includes 27 students who identified with two or more Asian ethnicities, for example Chinese and South-east Asian.

Parent Participants in Parent Baseline Data Analyses

Analyses using the parent baseline data set focused on all parents who self-identified with any Asian ethnicity. The analyses combined Asian parents from different sub-groups for the reasons described previously.

Participants in the Combined Student and Parent Analyses

For the combined student/parent data set, families comprised Asian prioritised children and parents with the same family number (pna). The student and parent data sets were merged using the family number of the respondents as the common link. Students and parents who did not share a family number with any other respondent were dropped because this indicated they did not have a corresponding parent or child in the study. All combinations of students with parents were retained meaning that all possible parent student family exposures were included.

Variables and Measures

The selection of KKS study variables for this study was based on the research questions. Only variables which had data for all three years of the KKS study were considered. The selected variables are listed in Table 18. It is unclear if the KKS measures have all been validated for Asian participants but some are used in global tobacco use surveys. In Phase One (b), the outcome variable values were dichotomized and recoded so that “0” was protective and “1” was risky.

Smoking Status

Ever-smoking was selected as the main student outcome variable. There is a discussion about measuring this earlier in the chapter. Preliminary analysis showed that the number of students was too small to use other outcome variables such as current smoking. There were three current smokers. The measure for this was smoking any number of cigarettes currently. Students who answered “yes” to the ever-smoking question went on to answer questions about how many cigarettes they smoke now or if they did not smoke now.

Small numbers precluded using “susceptibility to smoking” as an outcome measure. Susceptibility to smoking among young never smokers has good predictive validity. Of those with ratings of three (three responses out of a possible three), 20.6% were smoking four years later. In comparison, 6.5% of those with ratings of 0 (not susceptible) were smoking four years later. Overall, Pierce et al (1996) found that 20% of non-smoking adolescents were classified as susceptible, boys (20%) similar to girls (19%). Hispanics had the highest prevalence of susceptibility (24.2%), which was significantly higher than among Blacks (19%), Whites (19%), and Asians (15%) (95% confidence intervals do not overlap). (United States Department of Health and Human Services, 2012, p. 179).

In the KKS study, susceptibility to smoking was measured with variations of two questions of a validated set of three: (1) “If one of your best friends offered you a cigarette, would you smoke it?” and (2) “At any time during the next 12 months, do you think that you will smoke a cigarette?” (Pierce et al., 1996). KKS also added the question “Do you think you will be smoking cigarettes 5 years from now?” In this analysis, data from the 12 month and 5 year questions were combined. Fourteen non-smoking Asian students intended to smoke in the future. Sixteen non-smoking Asian students said they would smoke if offered a cigarette by a friend.

Student Ethnicity

There were several measures of Asian ethnicity. They were used to compare the “Asian only” sample size with sample size when other measures of Asian ethnicity were used, and as an indicator of strength of identification with Asian culture and identity. A “New Zealand standard prioritisation” Asian variable was provided with the data sets. In this, Māori were prioritised followed by Pacific, Asian and European/others.

Four more Asian ethnicity variables were created from the responses to the ethnicity question in the student paper questionnaire (Appendix A). The “Asian prioritised ethnicity” (also called “Any Asian”) variable included students who selected any Asian ethnicity in response to the ethnicity question. The maximum number of ethnicities selected by any student was five. A new variable was created comprised of students who were coded as 40-44 for their first choice of ethnicity (“Ethnic 1”). These students were added to students who were similarly coded for their second and subsequent choices of ethnic group (“Ethnic 2” to “Ethnic 5”). Each student had only one opportunity to be identified as Asian. All missing values were labelled non-Asian.

“Asian as first choice of ethnicity” reflects the belief that the first choice of ethnicity is meaningful in terms of strength of self-identification with culture. For example students who identify as Fijian-Indian may identify strongly with their country of origin (Fiji) and nationality (Fijian). Those who identify as Indo-Fijian may identify more strongly with Indian culture. The variable Ethnic1 recorded the students’ first choice of ethnicity. It was recoded so that all Asian sub-ethnicities in data = 1 (Asian first choice).

The “Asian only” variable was created to facilitate comparison with studies which define Asian as students who identify solely as Asian. Students who identified with more than one Asian ethnicity (for example, Chinese and Southeast Asian) were included here. Students who identified with any non-Asian ethnicity were excluded. The variable was created by first identifying students who were coded as 40-44 in the KKS study variable, Ethnic1, and who did not select any other ethnic groups. These students were added to students who were coded as 40-44 in both Ethnic 1 and Ethnic 2 who did not select any other ethnic groups. These students identified with two Asian ethnic groups only. Students who identified with three or more Asian ethnicities were identified and added to the “Asian only” the same way.

The Asian/non-Asian variable refers to students who identify with both Asian and non-Asian ethnic groups. It was computed by creating an individual variable for each combination of Asian and non-Asian ethnicity across Ethnic 1 to Ethnic 5 and adding the values together. In fact it is easier to measure the number of Asian/non-Asian students by subtracting the Asian only students from the “Any Asian” students. This does not give a picture of the complexity of the definition of ethnicity among the students.

Variables defining students who self-identified as any Indian, Chinese, South-east Asian and other Asian/non-Asian Asian not-further-defined (a combination of 40 and 44) were created in the same way that the “Asian prioritised” variable was created except that individual sub-ethnicities were prioritised. This was used for the demographic description of the Asian sample.

Parent Ethnicity

Parent ethnicity for the analysis of the full student data set was based on the student’s ethnicity. Because of this, and because students were not asked the ethnicity of their parents, some parents of Asian prioritised students may not be Asian. Parent ethnicity for the analysis of the full parent data set was measured using parents’ responses to the 2006 Census ethnicity question. Responses were restricted to up to four choices rather

than the ten in the census question. Data were entered and coded as they were for the students' ethnicity data. Thus Asian parents were coded 40-44 in Ethnic 1-5 variables.

Parent Smoking Status

In this study, parental smoking status was measured by using the current smoking status self-reported by respondents to the KKS study parent questionnaire. The question is a slight variation on one used in national and international surveys (Christophersen, Glover, Wong, Scragg, & Laugesen, 2003). Self-reported current smoking status in population-based surveys is generally more accurate than data collected in studies which are linked with advice to quit or collected by people known to the participants (International Agency for Research on Cancer, 2008). The KKS baseline surveys fell between a population-based survey and pre-intervention data collection. This was because the interventions were provided some time after data collection on school-wide rather than individual bases, and the participants completed their surveys by themselves at home. The reliability of self-reported smoking by Asian women was discussed earlier.

A large multi-ethnic American study compared proxy with self-reported smoking and found that the overall discrepancy between self-reports and proxy reports was 5.4% (Hyland, Cummings, Lynn, Corle, & Giffen, 1997). Proxy reports of current smoking status by Asian parents about their spouses were CO validated in a small study in Hong Kong (Y. W. Mak, Loke, Lam, & Abdullah, 2005). There was 100% agreement between mother's proxy reports of their husbands' smoking and CO validation of their husbands' smoking (ICC =1). The intra-class correlation was also high (0.82) for proxy reports by fathers about mothers' smoking and CO validation. Thus self-reports and proxy reports of smoking in population based studies are reasonably accurate.

The basis for comparison of the smoking status of respondents was a cross-tabulation which showed that answers about self-reported smoking status were inconsistent with answers to subsequent questions about smoking. For example, some respondents reported that they were never or ex-smokers and that they planned to quit smoking. Four Asian respondents had inconsistent responses. As there were only 75 Asian smokers, logic checks were used to establish the smoking status of those with inconsistent data.

The data for the selected variables was copied into an Excel spreadsheet. Filters were used to identify inconsistencies. They were resolved by using logic checks across individuals' responses to the key smoking status questions. There was no discernible

pattern in the inconsistencies so it was not possible to write programmes to establish smoking status. Data for 707 respondents was reviewed.

Data Analysis

Sample sizes were calculated to estimate the numbers needed to determine statistically significant differences between groups. A sample of 450 students with an incidence of ever-smoking = 2% in the unexposed group, has an 80% power of detecting an odds ratios of 5.0 with an alpha level of 0.5 (2-tail) when the exposure to the predictor variable is 1:6. When exposure is 1:3 (33%), a sample of 477 students with an incidence of ever-smoking = 2% in the unexposed group, has an 80% power of detecting an odds ratios of 4.0 with an alpha level of 0.5 (2-tail). When exposure is 1:1 (50%), a sample of 462 students with an incidence of ever-smoking = 2% in the unexposed group, has an 80% power of detecting an odds ratios of 4.0 with an alpha level of 0.5 (2-tail). High odds ratios and relative risks are not unusual in this population. For example, the relative risk of Asian Year 10 students smoking if both parents smoke is 11.37 (7.87-16.42) and if mothers smoke is 8.39 (4.01- 17.54) (Scragg & Laugesen, 2007).

The precision of the smoking prevalence estimates was determined using roll numbers reported in Education Review Office reports and prior reported smoking rates for Year 8 students (Education Review Office, 2005, 2007, 2008a, 2008b; McCool et al., 2003). Based on 513 Year 7 and 8 Asian students across the four schools and assuming an 80% response rate, the amount of error in a 2% student smoking rate is $\pm 1.3\%$ (95% confidence level), in a 5% percent smoking rate $\pm 2\%$ (95% confidence level) and in a 10% smoking rate $\pm 3\%$ (95% confidence level).

Preliminary KKS data supplied in 2008 suggested that the Asian student sample in 2007 was around 400 (Year 7 and 8) and in 2008 was 180 (Year 7 only), making a total of 580. The majority were Indian. The KKS Asian parent sample was approximately 320 (Years 7 and 8) and in 2008 was approximately 230 (Year 7 only), making a total of 550. Since KKS data were prioritised (Māori, Pacific Island, Asian and European /other) the sample size was deemed likely to increase when all participants with any Asian ethnicity were included. Given the results of the power calculations above the available sample size was sufficient. However analyses by Asian sub-group were deemed likely to be limited.

Three baseline KKS student and three parent KKS data sets (2007, 2008 and 2009) were provided electronically by the KKS biostatistician in 2010. Inconsistencies among

selected variable names and value labels across the six data sets were identified and rectified. The data sets were combined into separate student and parent datasets. A further dataset was created which combined the student and parent sets. In common with the Year One data sets Stata/IC 10 was selected for the analysis. Stata/IC 10 enables the researcher to weight analyses for more than one cluster effect resulting from the study design.

Student Data Set

Asian prioritised students (n= 1093) were combined into one category to increase the power of the sample and optimise confidence in the results by reducing the error caused by small sample sizes and rare outcomes. The number of child ever-smokers per sub-group was insufficient to draw reliable conclusions from analyses. The largest subgroup were 740 Indian children of whom 22 (3%) were ever smokers. The number of non-Indian Asian students (n=383; ever-smoking rate 7.6%, n=29; individuals could self-identify with more than one sub-ethnicity) was insufficient for reliable comparative analyses. The second largest sub-group was South East Asian children (n=191; ever - smoking rate 5.5%, n=10). The qualitative component of the study supported combining the sub-groups in the quantitative analysis since there were common themes across a wide range of Asian sub-groups.

The demographic characteristics and smoking behaviour of Asian students were described. Associations between predictor variables related to family and acculturation (for example ethnicity, years in New Zealand), family factors (eg smoking behaviour, talking about smoking, pocket money, parental rules about smoking) and the outcome variables (ever-smoking) were investigated for the Asian participants using odds ratios (95% confidence intervals). The analyses were adjusted for the potentially confounding variables sex, year, and school decile, and the potentially confounding design effects of school and family number clustering. For the Phase One (b) analysis, the variables were coded so that $OR < 1$ was protective consistently. This was to aid interpretation of the results and to be congruent with the salutogenic stance of the study. As a consequence, interpretation of some of the odds ratios in the tables may seem counter-intuitive. However, the proportions are also provided in the tables so the reader has access to the data to facilitate understanding. The terms “risk” and “protective” are used. This is in keeping with the research questions although these words sometimes refer only to results from prospective studies.

Individual family and acculturation factors that were significantly associated with ever-smoking were included in a single model adjusted as described in the previous paragraph. Since the cluster effects for school and family number were insignificant, they were omitted from the model. This omission enabled stepwise model selection to be undertaken using the Akaike Information Criterion (AIC) (Greenland, 1989; Wang, 2000). Both forward and backward AIC methods were used and they produced the same results.

The initial model excluded “father, mother, others smoke in home” as they were included in “anyone smokes in home”. In addition, “anyone smokes in home/car” is significantly related to student ever-smoking and has narrower confidence intervals than other significantly associated variables. This variable offers a practice option since quitting smoking is possible and beneficial to health. “Anyone smokes in car” was excluded because it is similar conceptually to “anyone smokes in the home” and also because it was positively correlated with “anyone smoke in home”. The AIC reached a minimum of 365.18 when the model only included “both parents at home”, “any-one smokes in home”, “parents know what child spends money on”, “Asian vs Asian/non-Asian identity”, “sex” and “year”. These variables were included in the final model and cluster effects added.

Asian and non/Asian comparisons were undertaken on selected variables. The choice of these variables was based on the results of the Asian only analysis. There was a focus on potentially modifiable factors. Odds ratios were used. The analyses were adjusted for gender, age and decile as well as school and family cluster effects. Results were not reported when cells were less than five (Cochran, 1954).

Parent Data Set

The analysis of the parent data set was similar to that of the student data set. Asian prioritised parents were combined into one category. Demographic characteristics and smoking behaviour of parents in the home were described using percentages.

Associations between attitudes to child smoking, parenting about smoking and current smoking were investigated using odds ratios. The analyses were adjusted for relationship to child (also a proxy for gender) and decile; and school cluster effects. Since the same parents or different parents could respond more than once (in different years) the analysis was adjusted for family cluster effects.

Combined Student-Parent Data Set

Each participant was assigned an individual unique identifier. Members of the same family shared the same number in a categorical variable called “pna”. The pna was used to match students and parents. Associations between parent smoking, attitudes to child smoking, parenting about smoking and child ever-smoking were investigated using odds ratios. The variables were dichotomised. The analyses were adjusted for sex of child, year at school of child (proxy for age), school decile and school and family cluster effects. The control for family cluster effects was important because the strategy for combining the student and parent data sets meant there was the potential for the same data for some children and parents to appear more than once.

Variables reported by both students and parents were not compared for three reasons. Firstly, students and parents were asked different questions for example, about exposure to environmental tobacco smoke at home and in the car. Secondly, the results of analyses showing high concordance between Asian student and parents reports were provided to me before publication (Glover et al., 2013). Thirdly, I previously reported that children are likely to report parental smoking more accurately than parents.

Summary

The methods for Phase One of the study comprised a descriptive exploratory study using two KKS study data sets. Bivariate and multivariate statistics were used to test hypotheses about associations between students’ and parents’ smoking, ethnicity, acculturation and family factors. Phase One (a) focused on 2007 data. Phase One (b) focused on the 2007-2009 student and parent data sets. A combined student/parent data set was used to explore the relationships between self-reported parent and student factors. The results are presented in the next chapter.

Chapter Seven: Quantitative Results

Introduction

The quantitative results are presented in two parts. The first is the results of the analysis of the year one KKS study baseline data survey that informed the Phase Two qualitative research question schedules. The second is the results of the analysis of the full 2007 – 2009 baseline student and parent data sets.

Phase One (a): 2007 KKS Study Baseline Data

Student Analysis

Student Sample Description

There were a total of 2,265 students in the sample. Of these 956 were Pacific Islanders, 634 were Māori, 485 were Asian (prioritised) and 181 were European/other. The majority of the Asian students were Indian followed by Southeast Asian, Chinese and other Asian. Asian students could select more than one Asian ethnicity. There were more female respondents than male (Table 23). Most of the students attended decile one schools (42%) followed by deciles three (32%) and two (26%).

Table 23: Description of 2007 KKS study baseline student sample.

| Ethnicity | <i>n</i> | % | Sex | <i>n</i> | % | Asian sub-ethnicity* | <i>n</i> | % |
|------------------|----------|----|---------|----------|-----|----------------------|----------|----|
| Pacific Islander | 965 | 43 | | | | | | |
| | | | Male | 448 | 46 | | | |
| | | | Female | 510 | 53 | | | |
| | | | Missing | 7 | 0.7 | | | |
| Māori | 634 | 28 | | | | | | |
| | | | Male | 295 | 47 | | | |
| | | | Female | 335 | 53 | | | |
| | | | Missing | 14 | 2 | | | |
| European/other | 181 | 8 | | | | | | |
| | | | Male | 87 | 48 | | | |
| | | | Female | 93 | 51 | | | |
| | | | Missing | 1 | 0.5 | | | |
| Asian | 485 | 21 | | | | | | |
| | | | Male | 223 | 46 | | | |
| | | | Female | 258 | 53 | | | |
| | | | Missing | 4 | 0.8 | | | |
| | | | | | | Indian | 310 | 62 |
| | | | | | | Southeast Asian | 92 | 18 |
| | | | | | | Chinese | 81 | 16 |
| | | | | | | Other Asian | 16 | 3 |
| | | | | | | Asian nfd** | 3 | |
| Total | 2265 | | | | | | | |

Notes. * could select more than one
 ** not further defined

PDA questionnaire data was missing for 26 of the 2,265 students meaning that there were 2249 responses for questions from this source. The hypotheses for the students were all supported. Asian students were less likely to be ever smokers than non-Asian students (OR 0.22 [95% CI 0.15-0.32]) (n=2249) (Figure 8). Asian students were less likely to be exposed to people smoking around them in homes and vehicles than non-Asian students (OR 0.3 [95% CI 0.23 - 0.38]; OR 0.3 [95% CI 0.23 - 0.38]) (n=2249). They were also less likely to report that their fathers or mothers smoked at home than non-Asian students (OR 0.35 [95% CI 0.26 - 0.49]; OR 0.09 [95% CI 0.05 - 0.16]) (n=2265) (Figure 9).

Figure 8: Ever-smoking by student ethnicity.

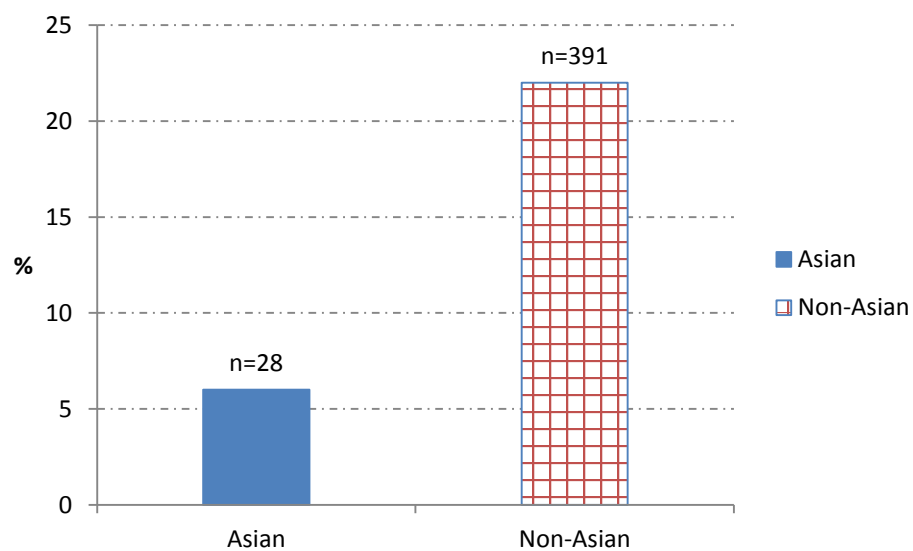
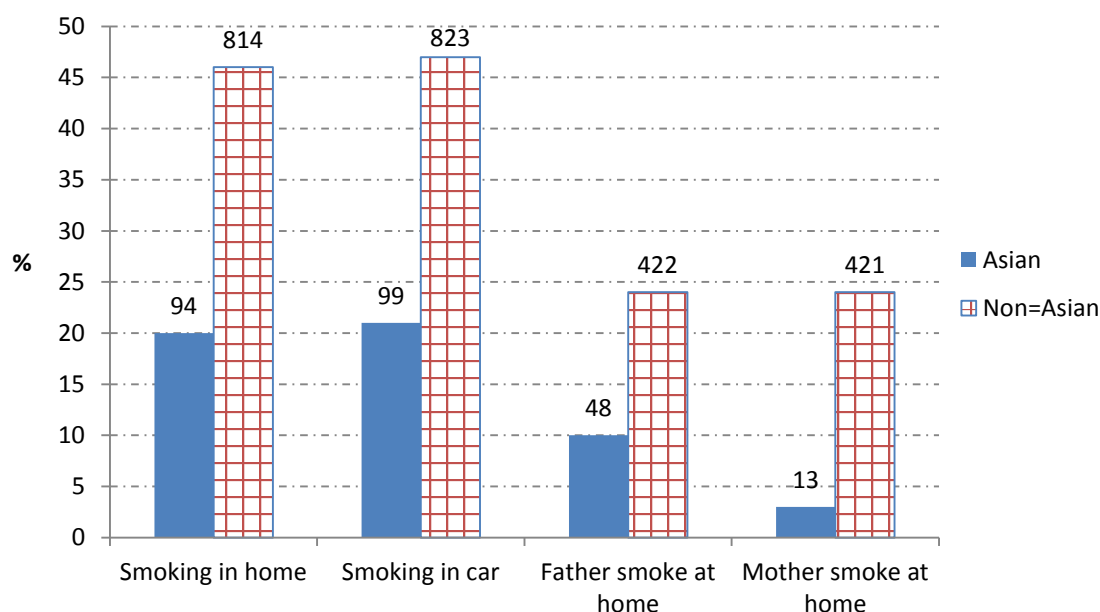


Figure 9: Student exposure to second-hand smoke and parental smoking



Student and Parent Analysis

There were 1,617 matched sets in the student/parent data set. In these sets, 661 parents matched students who identified as Pacific Islanders, followed by Māori (n=451), Asian (prioritised) (n=363) and European/other (n=142). The respondents to the parent questionnaires were predominantly mothers. Proportionally more fathers than mothers completed questionnaires for Asian children compared with other ethnic groups (Table 24). Just under seven percent of the participants did not have data for the “relationship to parent” question (n=108). Most of the parent participants were related to student participants who attended decile one schools (47%), followed by decile three (30%) and decile two (23%) schools.

Table 24: Ethnicity of students related to parent respondents.

| Ethnicity | <i>n</i> | % | Relationship to student | <i>n</i> | % |
|------------------|-----------------|----------|--------------------------------|-----------------|----------|
| Asian | 363 | 23 | | | |
| | | | Mother | 203 | 55.9 |
| | | | Father | 112 | 30.9 |
| | | | Other* | 29 | 8.0 |
| | | | Missing | 19 | 5.2 |
| Pacific Islander | 661 | 41 | | | |
| | | | Mother | 425 | 64.3 |
| | | | Father | 115 | 17.3 |
| | | | Other* | 57 | 8.6 |
| | | | Missing | 64 | 9.7 |
| Māori | 451 | 28 | | | |
| | | | Mother | 331 | 73.4 |
| | | | Father | 54 | 12.0 |
| | | | Other* | 48 | 10.6 |
| | | | Missing | 18 | 4.0 |
| European/other | 142 | 9 | | | |
| | | | Mother | 101 | 71.1 |
| | | | Father | 16 | 11.3 |
| | | | Other* | 18 | 12.7 |
| | | | Missing | 7 | 4.9 |
| Total | 1617 | | | 1617 | |

Note. *Other: both parents, uncle, aunt, sister, brother, grandmother, grandfather, caregiver, step-mother, friend.

Results

The hypothesised association between parent ethnicity (Asian versus non-Asian) and talking to children about smoking was not supported. There was no significant difference between the proportion of Asian parents (81%) and parents who had talked to their children about smoking (85%) (OR 0.79 [95% CI 0.58 - 1.07]). The proposal that Asian parents were less likely to believe that schools rather than parents, should teach children about smoking than non-Asian parents was not supported (OR 2.09 [95% CI 0.164 - 2.66]).

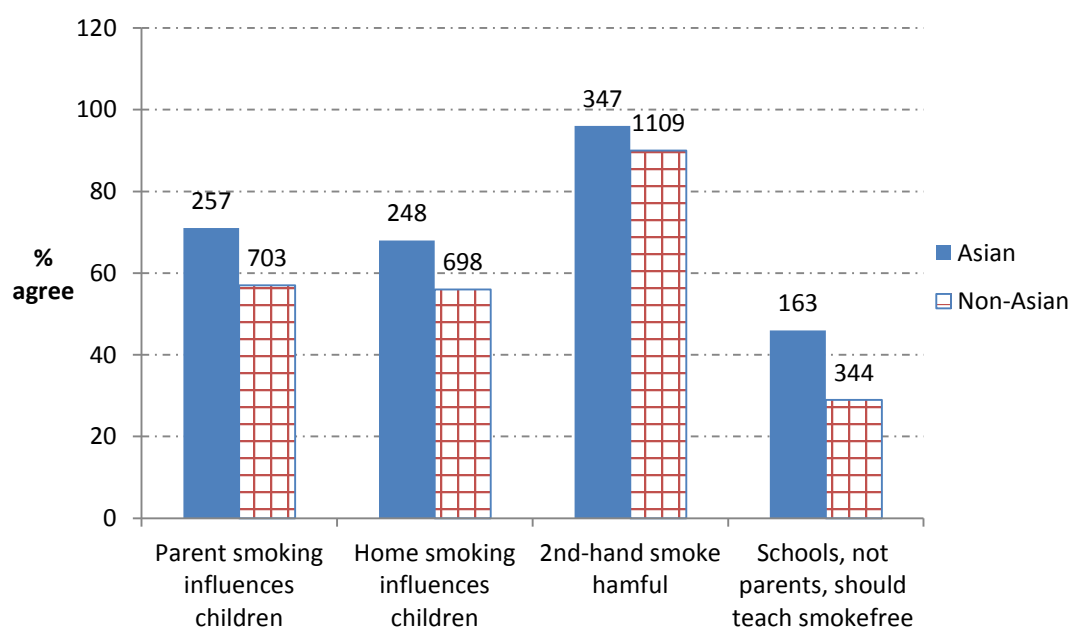
In contrast, hypotheses about modelling of smoking by parents and at home and about the health effects of second-hand smoke were supported. Asian parents were significantly more likely to agree than parents that:

- Children are more likely to smoke if parents smoke (OR 1.83 [95% CI 1.42 - 2.36]);

- Children are more likely to smoke if people smoke in the home (OR 1.63 [95% CI 1.28 - 2.1]); and
- Second hand smoke is harmful to your child's health (OR 2.35 [95% CI 1.37 - 4.01])

Despite the significance of the findings the difference in proportions was not great (Figure 10).

Figure 10: Parents' beliefs about smoking and their children.



Phase One (b): 2007 – 2009 KKS Study Baseline Data

Asian student and parent results are presented followed by Asian and non-Asian student and parent comparisons.

Asian Only Analysis

Asian Student Sample Description

There were 1,093 Asian students in the sample drawn from all four schools. Of these, 1,030 had unique family numbers. The remaining 63 students shared a family number with another student indicating they had two or more relations at the schools.

Table 25: Description of 2007–2009 study baseline Asian student sample; ever-smoking status.

| | Total | Ever-smoking | |
|--------------------------------------------|--------------|---------------------|------|
| | <i>n</i> | <i>n</i> | % |
| Total Asian prioritised (any Asian) | 1093 | 50 | 4.6 |
| Sex | | | |
| Male | 521 | 30 | 5.8 |
| Female | 572 | 20 | 3.5 |
| Asian | | | |
| Asian only | 963 | 33 | 3.4 |
| Asian/non-Asian | 130 | 17 | 13.1 |
| Asian identity | | | |
| Asian 1st choice | 992 | 35 | 3.5 |
| Asian not 1st choice | 101 | 15 | 14.9 |
| Sub-ethnicity* | | | |
| Indian | 740 | 22 | 3.0 |
| Southeast Asian | 191 | 10 | 5.2 |
| Chinese | 162 | 15 | 9.2 |
| Other Asian/non-Asian | 30 | 4 | 13.3 |
| Year | | | |
| Seven | 846 | 29 | 3.4 |
| Eight | 247 | 21 | 8.5 |
| School decile** | | | |
| 1 (2 schools) | 214 | 16 | 7.5 |
| 2 (1 school) | 510 | 20 | 3.9 |
| 3 (1 school) | 369 | 14 | 3.8 |

Notes. * Multiple ethnicities were allowed therefore individuals may be allocated to more than one ethnicity. (One student was counted as an ever-smoker twice)
 ** School decile is a measure of socio-economic status with decile 1 schools having the highest level of disadvantage

Nine hundred and sixty-three (88.1%) were Asian only and 130 (11.8%) identified with Asian and non-Asian ethnicities (Table 25). The Asian only students included 27 students who identified with more than one Asian ethnicity in particular Chinese/Southeast Asian (n=24). Most of the Asian/non-Asian students included Māori and/or Pacific Island nations in their ethnic background (n=117). Thirteen identified as Asian and European only. The Asian/non-Asian students included 23 students who identified as either Indian/Fijian or Fijian/Indian. Ninety-one percent of the students chose an Asian ethnicity as their first choice. Indian students comprised the largest sub-group followed by Southeast Asian, Chinese and others. There were more females than males in the Asian sample, more Year Seven students than Year Eight and more students attended lower decile one and two schools combined (66.2%) than decile three schools (33.8%).

Results

Fifty (4.6%) Asian students reported ever-smoking. There was no significant difference in the proportion of male versus female students who smoked (OR0.54 [95%CI 0.32 - 1.08]). Proportionally more Asian/non-Asian students (13.1%) were ever-smokers than Asian only identified students (3.4%). Smoking rates among Asian subgroups varied from Indian students (3 %) to “other” Asian students (13.3%). Proportionally more Year Eight students were ever-smokers (8.5%) than Year Seven students (3.4%) and this difference was significant (OR2.66 [95%CI 1.43-5.01]). There was no significant difference in ever-smoking by decile (p.169).

There were three current smokers among the Asian students. Two were Asian/non-Asian and one was Asian only. Intention to smoke was a combination of intention to smoke in 12 months and five years. Fourteen non-smoking and 14 ever-smoking Asian students probably or definitely intended to smoke in the future. Out of the 14 non-smokers five probably intended to smoke in 1 year but not in five years. The three current smokers probably or definitely intended to smoke in the future (not in table).

Family Factors and Asian Youth Smoking

While the hypothesis that Asian students who lived with both their parents would be less likely to be ever-smokers than students who did not live with both parents was supported, the proposal that living in an extended family would be similarly associated with smoking status was not (Table 26). Students were more likely to smoke if anyone smoked at home or in the car versus if their homes and cars were smoke-free. The rates of paternal and maternal smoking in the home were 10.8% and 3.6% respectively. Students whose fathers smoke in the home were at twice the risk of students whose fathers do not smoke inside (OR 2.08 [CI 0.83 – 5.20]). While paternal smoking did not have a significant association with student ever-smoking, the numbers were small (ten ever-smoking students reported that their fathers smoke in the home). Although the results were not statistically significant, they could be clinically important. There was a large effect size for maternal smoking despite the small number of mothers who smoke (OR 5.74 [CI 1.25-26.43]). The confidence intervals for maternal smoking in the home and car (OR 8.03 [CI 1.32-48.78]) were wide. The influence of people apart from parents on youth ever-smoking was also significant.

Hypotheses about associations between student beliefs about their parents’ attitudes to their children smoking and student ever-smoking rates were not supported. Student reports that their parents’ would be upset if they smoked, and that parents do not think it

is okay for under 16 year olds to smoke, were not significantly associated with student ever-smoking rates.

There was mixed support for hypotheses about parenting practices and student smoking. Having rules about smoking, and the amount of pocket money students received were not associated with ever-smoking. In contrast, students were significantly less likely to be ever-smokers if they reported that their parents knew what they spent their money on (Table 26).

Acculturation and Asian Youth Smoking

Two of the hypotheses testing the association of acculturation with ever-smoking status were supported, one was not and one was unable to be tested. Students who identified as Asian only were less likely to be ever-smokers than those who identified as Asian non-Asian together (Table 27). The Asian first choice group includes the Asian only students (n=963) and students who selected an Asian sub-ethnicity first, before going on to select non-Asian ethnic groups (n=29). Students who selected “Asian as their first choice of ethnicity” were less likely to be ever-smokers than those who did not. Being born in New Zealand versus born off-shore was not associated with ever-smoking. The association between length of residence in New Zealand with regard to ever-smoking could not be tested. This was because the number of ever-smokers in each cell was very small - only two students who had lived in New Zealand for 1-5 years were ever-smokers.

Table 26: Associations between Asian student family factors and ever-smoking.

| | Total Asian <i>n</i> | Student ever smoke <i>N</i> % | Odds ratio | 95% CI* | Odds ratio_{adj}** | 95% CI | <i>p</i> |
|---------------------------------------|-------------------------------------|-------------------------------------------------|-------------------|----------------|---------------------------------------|---------------|-----------------|
| Total Asian students | 1093 | 50 4.7 | | | | | |
| Family at home | | | | | | | |
| Both parents | | | | | | | |
| Yes | 897 | 33 3.7 | 0.40 | 0.22-0.74 | 0.42 | 0.18-0.97 | 0.04 |
| No | 196 | 17 8.7 | 1.00 | - | 1.00 | - | |
| Mother, father, grandparent | | | | | | | |
| Yes | 201 | 8 4.0 | 0.84 | 0.39-1.82 | 0.99 | 0.42-2.36 | 0.42 |
| No | 892 | 42 4.7 | 1.00 | - | 1.00 | - | |
| Family tobacco use last 7 days | | | | | | | |
| Anyone smokes in home | | | | | | | |
| Yes | 237 | 21 8.7 | 2.77 | 1.55-4.96 | 2.82 | 1.23-6.46 | 0.01 |
| No | 856 | 29 3.4 | 1.00 | - | 1.00 | - | |
| Father smoke in home | | | | | | | |
| Yes | 118 | 10 8.5 | 2.16 | 1.05-4.4 | 2.08 | 0.83-5.2 | 0.11 |
| No | 975 | 40 4.1 | 1.00 | - | 1.00 | - | |
| Mother smoke in home | | | | | | | |
| Yes | 39 | 7 18.0 | 5.14 | 2.15-12.3 | 5.74 | 1.25-26.43 | 0.03 |
| No | 1054 | 43 4.1 | 1.00 | - | 1.00 | - | |
| Others smoke at home*** | | | | | | | |
| Yes | 149 | 15 10.1 | 2.91 | 1.55-5.46 | 2.9 | 1.18-7.11 | 0.02 |
| No | 941 | 35 3.7 | 1.00 | - | 1.00 | - | |
| Anyone smoke in car | | | | | | | |
| Yes | 172 | 16 9.4 | 2.67 | 1.44-4.96 | 2.53 | 1.24-5.16 | 0.01 |

| | Total Asian <i>n</i> | Student ever smoke <i>N</i> % | Odds ratio | 95% CI* | Odds ratio _{adj} ** | 95% CI | <i>p</i> |
|---------------------------------------------|----------------------------|-------------------------------------|------------|-----------|---------------------------------|------------|----------|
| No | 921 | 34 3.7 | 1.00 | - | 1.00 | - | |
| Father smoke in car | | | | | | | |
| Yes | 91 | 8 8.8 | 2.2 | 1.00-4.84 | 2.01 | 0.81-5.01 | 0.14 |
| No | 1002 | 42 4.2 | 1.00 | - | 1.00 | - | |
| Mother smoke in car | | | | | | | |
| Yes | 31 | 7 22.6 | 6.91 | 2.82-16.9 | 8.03 | 1.32-48.78 | 0.02 |
| No | 1062 | 43 4.1 | 1.00 | - | 1.00 | - | |
| Others smoke in car | | | | | | | |
| Yes | 100 | 13 13.0 | 3.86 | 2.97-7.53 | 3.48 | 1.7-7.11 | 0.001 |
| No | 993 | 37 3.7 | 1.00 | - | 1.00 | - | |
| Parent attitudes and beliefs | | | | | | | |
| Parents upset if children smoke | | | | | | | |
| Agree | 1013 | 44 4.3 | 0.56 | 0.23-1.35 | 0.63 | 0.21-1.94 | 0.43 |
| Disagree/don't know | 80 | 6 7.5 | 1.00 | - | 1.00 | - | |
| Parents think ok if people <16yrs old smoke | | | | | | | |
| Disagree | 950 | 12 4.0 | 0.45 | 0.23-0.89 | 0.49 | 0.21-1.17 | 0.11 |
| Agree/don't know | 143 | 38 8.4 | 1.00 | - | 1.00 | - | |
| Parenting | | | | | | | |
| Parents have rules about not smoking | | | | | | | |
| Agree | 905 | 35 3.9 | 0.46 | 0.25-0.87 | 0.53 | 0.24-1.17 | 0.12 |
| Disagree/don't know | 188 | 15 8.0 | 1.00 | - | 1.00 | - | |

Notes. * CI = Confidence Interval

** Adjusted for sex, year, decile; and school and family cluster effects

*** Others = Grandparents, other caregivers (e.g. step mother or father, foster parents), older siblings, others eg visitors, close friends

Part of prior table.

| | Total Asian | Student ever smoke | | Odds ratio | 95% CI* | Odds ratio _{adj} | 95% CI | <i>p</i> |
|-----------------------------------------|-------------|--------------------|------|------------|-----------|---------------------------|-----------|----------|
| | <i>n</i> | <i>N</i> | % | | | | | |
| Amount of pocket money | | | | | | | | |
| None | 203 | 11 | 5.4 | 1.00 | - | 1.00 | - | |
| \$1-10 | 581 | 20 | 3.4 | 0.62 | 0.29-0.32 | 0.6 | 0.24-1.46 | 0.23 |
| \$11-30 | 237 | 12 | 5.1 | 0.93 | 0.40-2.16 | 0.82 | 0.31-2.17 | 0.69 |
| \$31-50+ | 72 | 7 | 9.7 | 1.87 | 0.69-5.05 | 1.37 | 0.41-4.59 | 0.61 |
| Parents know what child spends money on | | | | | | | | |
| Yes | 934 | 31 | 3.3 | 0.25 | 0.14-0.46 | 0.21 | 0.08-0.54 | 0.001 |
| No/don't know | 159 | 19 | 12.0 | 1.00 | - | 1.00 | - | |

Notes. * CI = Confidence Interval

**Adjusted for sex, year, decile; and school and family cluster effects

Table 27: Associations between acculturation factors and ever-smoking among Asian students.

| | Total group | Ever smoke | | Odds ratio | 95% CI* | Odds ratio_{adj}** | 95% CI | p |
|---------------------------------|--------------------|-------------------|----------|-------------------|----------------|-----------------------------------|---------------|----------|
| | N | n | % | | | | | |
| Self-identified ethnicity | | | | | | | | |
| Asian identity only | 963 | 33 | 3.4 | 0.24 | 0.13-0.44 | 0.23 | 0.08-0.65 | 0.01 |
| Asian/non-Asian identity | 130 | 17 | 13.8 | 1.00 | - | 1.00 | - | |
| Asian first choice of ethnicity | | | | | | | | |
| Yes | 992 | 35 | 3.5 | 0.21 | 0.11- 0.40 | 0.2 | 0.07-0.61 | 0.01 |
| No | 101 | 15 | 14.9 | 1.00 | - | 1.00 | - | |
| Born in New Zealand | | | | | | | | |
| No | 609 | 21 | 3.5 | 0.56 | 0.32- 1.00 | 0.57 | 0.31-1.07 | 0.08 |
| Yes | 484 | 29 | 6.0 | 1.00 | - | 1.00 | - | |
| Years in New Zealand | | | | | | | | |
| 1-5 years | 206 | 2 | 0.9 | 0.21 | 0.45-1.02 | NR*** | NR | |
| 6+ years | 233 | 8 | 3.9 | 1.00 | | | | |

Notes. * CI = Confidence Interval

**Adjusted for sex, year, decile; and school and family cluster effects

***NR = Not reported as <5 in cell

Joint effects of family and acculturation factors on Asian youth smoking

In the multiple logistic regression model of family and acculturation factors, two variables were significantly related to Asian youth ever-smoking (Table 28). The protective effect of parental knowledge of what their children spend their money on, on ever-smoking remained significant in the presence of acculturation measured as Asian only ethnic identity.

Table 28: Multiple logistic regression model examining the joint effects of family and acculturation factors on ever-smoking among Asian students.

| | Model 1 | | AIC output | | | Model 2 | |
|---------------------------------------------|-----------------------------|-----------|------------|-----------------------------|-----------|-------------------------------|-----------|
| | Odds ratio _{adj} * | 95% CI** | AIC | Odds ratio _{adj} * | 95% CI** | Odds ratio _{adj} *** | 95% CI |
| Family | | | | | | | |
| Both parents at home | | | 366.46 | | | | |
| Yes | 0.50 | 0.30-1.14 | | 0.52 | 0.27-0.99 | 0.55 | 0.28-1.07 |
| No | 1.00 | - | | 1.00 | - | 1.00 | - |
| Anyone smokes in home | | | 368.12 | | | | |
| Yes | 2.00 | 1.06-3.75 | | 1.20 | 1.08-3.71 | 1.86 | 0.98-3.52 |
| No | 1.00 | - | | 1.00 | - | 1.00 | - |
| Parents upset if children smoke | | | 371.54 | | | | |
| Agree | 0.88 | 0.32-2.44 | | | | | |
| Disagree/don't know | 1.00 | - | | | | | |
| Parents think ok if people <16yrs old smoke | | | 369.54 | | | | |
| Agree/don't know | 1.36 | 0.30-6.28 | | | | | |
| Disagree | 1.00 | - | | | | | |
| Parents have rules about not smoking | | | 367.75 | | | | |
| Agree | 0.85 | 0.40-1.78 | | | | | |
| Disagree/don't know | 1.00 | - | | | | | |
| Amount of pocket money | | | 377.28 | | | | |
| None | 1.00 | - | | | | | |
| \$1-10 | 0.64 | 0.29-1.41 | | | | | |
| \$11-30 | 0.64 | 0.26-1.58 | | | | | |
| \$31-50+ | 1.18 | 0.44-3.43 | | | | | |
| Parents know what child spends money on | | | 378.34 | | | | |

| | Model 1 | | AIC output | | Model 2 | | |
|-----------------------------|-----------------------------|------------|------------|-----------------------------|-----------|-------------------------------|------------|
| | Odds ratio _{adj} * | 95% CI** | AIC | Odds ratio _{adj} * | 95% CI** | Odds ratio _{adj} *** | 95% CI |
| Yes | 0.32 | 0.16-0.63 | | 0.30 | 0.16-0.57 | 0.28 | 0.15-0.53 |
| No/don't know | 1.00 | - | | 1.00 | - | 1.00 | - |
| Acculturation | | | | | | | |
| Self identified ethnicity | | | 392.35 | | | | |
| Asian identity only | 0.34 | 0.17-0.68 | | 0.30 | 0.16-0.06 | 0.33 | 0.17-0.64 |
| Asian/non-Asian identity | 1.00 | - | | 1.00 | - | 1.00 | - |
| Born in New Zealand | | | 366.27 | | | | |
| Yes | 1.33 | 0.70-2.52 | | | | | |
| No | 1.00 | - | | | | | |
| Adjustment variables | | | | | | | |
| Sex | | | 365.18 | | | | |
| | 0.54 | 0.32-1.08 | | 0.58 | 0.32-1.05 | 0.54 | 0.29-1.00 |
| | 1.00 | - | | 1.00 | - | 1.00 | - |
| Year | | | 371.55 | | | | |
| | 2.66 | 1.43- 5.01 | | 2.71 | 1.48-4.97 | 2.66 | 1.43- 4.95 |
| | 1.00 | - | | 1.00 | - | 1.00 | - |
| Decile | | | 373.76 | | | | |
| | 1.00 | - | | | | | |
| | 0.62 | 0.30-1.28 | | | | | |
| | 0.59 | 0.27-1.31 | | | | | |

Notes. * CI = Confidence Interval

**Adjusted for sex, year, decile

***Adjusted for sex, year; and school and family cluster effects. Family and schools cluster effects reported to have no effect.

Asian Parent Sample Description

All respondents to the parent questionnaire are referred to as “parents”. There were 825 Asian adult participants who supplied 858 responses. Seven hundred and ninety parents responded once only, 33 responded twice, and two responded three times. The parents who responded three times had children at KKS schools in 2007, 2008 and 2009. There were no cases where different parents responded from the same family.

Over half the responses were from mothers and nearly a third from fathers (Table 29). Less than 4% of the mothers self-reported that they smoked whereas 18.2% of the fathers smoked. The majority of the parent participants were Indian (n=581) followed by Southeast Asian (n=153) and Chinese (n= 82). The prevalence of smoking was highest among the Southeast Asian participants followed closely by the Chinese participants. Nearly 60 percent of the respondents had children who attended the decile three school in the sample.

Table 29: Description of 2007–2009 baseline Asian parent sample.

| | <i>n</i> | col % | Current smoker | | Ex-smoker | | Never smoker | | Missing | |
|--------------------------------|----------|-------|----------------|-------|-----------|-------|--------------|-------|----------|-------|
| | | | <i>n</i> | row % | <i>n</i> | row % | <i>n</i> | row % | <i>n</i> | row % |
| Total Asian prioritised | 858 | | 75 | 8.7 | 55 | 6.1 | 714 | 83.2 | 14 | 1.6 |
| Relationship to student | | | | | | | | | | |
| Mother | 483 | 56.3 | 19 | 3.9 | 10 | 2.1 | 446 | 92.3 | 8 | 1.7 |
| Father | 263 | 30.7 | 48 | 18.2 | 37 | 14.1 | 174 | 66.7 | 4 | 1.5 |
| Other* | 86 | 11.6 | 6 | 7.0 | 8 | 9.3 | 72 | 83.7 | 0 | 0 |
| Missing | 26 | 3.0 | 2 | 7.7 | 0 | 0 | 22 | 84.6 | 2 | 7.7 |
| Sub-ethnicity** | | | | | | | | | | |
| Indian | 581 | | 42 | 7.2 | 30 | 5.2 | 500 | 86.1 | 9 | 1.6 |
| SoutheastAsian | 153 | | 20 | 13.7 | 15 | 9.8 | 114 | 74.5 | 4 | 2.6 |
| Chinese | 82 | | 10 | 12.2 | 5 | 6.1 | 66 | 80.5 | 1 | 1.2 |
| Other Asian/non-Asian | 51 | | 3 | 5.9 | 6 | 11.7 | 42 | 82.4 | 0 | 0 |
| School decile | | | | | | | | | | |
| One -2 schools | 181 | 21.1 | 26 | 14.4 | 16 | 8.8 | 136 | 75.1 | 3 | 1.7 |
| Two -1 school | 173 | 20.2 | 17 | 9.8 | 12 | 6.9 | 143 | 82.7 | 1 | 0.9 |
| Three-1 school | 504 | 58.7 | 32 | 6.4 | 27 | 5.4 | 435 | 86.3 | 10 | 2.0 |

Notes. *Other = both parents, uncle, aunt, sister, brother, grandmother, grandfather, caregiver, step-mother, friend

** Could select more than one

Results

Non-smoking Asian parent respondents were significantly more likely to believe that children are likely to smoke a) if their parents smoke and b) if there is smoking in the home, than parents who smoke (Table 30). They were also less likely to have cigarettes, lighters and matches available to children when someone in the house smoked. They were not less likely to believe that second-hand smoke is harmful to their child's health, that parents rather than schools should teach children about smoking, to have talked to their child about smoking or to give their children \$10.00 or less for pocket money weekly. Non-smoking parents were significantly less likely to allow smoking in their homes and cars.

Among smokers, there were no significant difference in parenting beliefs and practices with regard to planning to quit or not planning to quit. The confidence intervals were wide (Table 31).

Table 30: Associations between Asian parents' smoking status and beliefs about children, exposure to others smoking, attitudes to parenting and parenting practices with regard to smoking.

| | Total | Agree/yes | | Odds ratio | 95% CI* | Odds ratio_{adj}** | 95% CI |
|--------------------------------------------------------------------|--------------|------------------|------|-------------------|----------------|-----------------------------------|---------------|
| | <i>n</i> | <i>n</i> | % | | | | |
| Children more likely to smoke if parents smoke | | | | | | | |
| Non-smoker | 765 | 576 | 75.3 | 0.16 | 0.10-0.27 | 0.06 | 0.01-0.30 |
| Smoker | 75 | 25 | 33.7 | 1.00 | - | 1.00 | - |
| Children more likely to smoke if people smoke in home | | | | | | | |
| Non-smoker | 764 | 543 | 71.1 | 0.27 | 0.17- 0.44 | 0.22 | 0.15-0.32 |
| Smoker | 75 | 30 | 40.0 | 1.00 | - | 1.00 | - |
| 2 nd -hand smoke harmful to child's health | | | | | | | |
| Non-smoker | 764 | 735 | 96.6 | 0.69 | 0.24- 2.02 | 0.79 | 0.25-2.48 |
| Smoker | 74 | 70 | 94.2 | 1.00 | - | 1.00 | - |
| Schools, rather than parents, should teach children about smoking* | | | | | | | |
| Non-smoker | 757 | 325 | 42.9 | 1.34 | 0.82-2.19 | 0.74 | 0.39-1.38 |
| Smoker | 75 | 27 | 36.0 | 1.00 | - | 1.00 | - |
| Talked to child about smoking | | | | | | | |
| Non-smoker | 749 | 592 | 79.0 | 0.93 | 0.52-1.66 | 0.90 | 0.34-2.38 |
| Smoker | 72 | 56 | 77.8 | 1.00 | - | 1.00 | - |
| Pocket money amount <= \$10 | | | | | | | |
| Non-smoker | 744 | 586 | 78.8 | 0.72 | 0.42-1.26 | 0.72 | 0.33-1.55 |
| Smoker | 70 | 51 | 72.9 | 1.00 | - | 1.00 | - |
| Smoking material not available to children when smoker in house | | | | | | | |
| Non-smoker | 724 | 696 | 96.0 | 0.24 | 0.12-0.05 | 0.16 | 0.07- 0.38 |

| | Total | Agree/yes | | Odds ratio | 95% CI* | Odds ratio_{adj}** | 95% CI |
|---------------------------------------------------------|-----------------|------------------|----------|-------------------|----------------|-----------------------------------|---------------|
| | <i>n</i> | <i>n</i> | % | | | | |
| Smoker | 75 | 64 | 85.3 | 1.00 | - | 1.00 | - |
| Would not supply cigs if child aged <18 took up smoking | | | | | | | |
| Non-smoker | 740 | 723 | 97.70 | - | - | | NR*** |
| Smoker | 71 | 71 | 100.0 | - | - | | |
| People do not smoke in house | | | | | | | |
| Non-smoker | 766 | 737 | 96.2 | 0.14 | 0.07- 0.27 | 0.02 | 0.00-0.10 |
| Smoker | 73 | 57 | 78.1 | 1.00 | - | 1.00 | - |
| People do not smoke in car | | | | | | | |
| Non-smoker | 694 | 671 | 96.7 | 0.11 | 0.05-0.23 | | NR*** |
| Smoker | 64 | 49 | 76.6 | 1.00 | - | | |

Notes. * CI = Confidence Interval

**Adjusted for sex, year, decile; and school and family cluster effects

***NR = Not reported as model would not converge

Table 31: Associations between Asian parent smokers' plans to quit smoking and beliefs about children, exposure to others smoking, attitudes to parenting and parenting practices re smoking.

| | Total smokers <i>n</i> | Agree/yes <i>n</i> % | Odds ratio | 95% CI* | Odds ratio _{adj} ** | 95% CI |
|-------------------------------------------------------------------|---------------------------|-------------------------|---------------|------------|------------------------------|-------------|
| Beliefs | | | | | | |
| Children more likely to smoke if parents smoke | | | | | | |
| Plan to quit | 47 | 18 38.3 | 0.60 | 0.20- 1.83 | 0.55 | 0.16-1.88 |
| Don't plan to quit | 22 | 6 27.3 | 1.00 | - | | |
| Children more likely to smoke if people smoke in home | | | | | | |
| Plan to quit | 47 | 19 40.4 | 1.23 | 0.44- 3.41 | 1.20 | 0.39-3.72 |
| Don't plan to quit | 22 | 10 45.5 | 1.00 | - | | |
| 2 nd hand smoke harmful to child's health | | | | | | |
| Plan to quit | 46 | 43 93.5 | 1.47 | 0.14-14.94 | NR*** | NR*** |
| Don't plan to quit | 22 | 21 95.5 | 1.00 | - | | |
| Schools, rather than parents, should teach children about smoking | | | | | | |
| Plan to quit | 47 | 14 29.8 | 1.96 | 0.69-5.59 | 3.18 | 0.97- 10.47 |
| Don't plan to quit | 22 | 10 45.5 | 1.00 | - | 1.00 | - |
| Parenting practices | | | | | | |
| Talked to child about smoking | | | | | | |
| Plan to quit | 44 | 37 84.1 | 0.34 | 0.12-0.95 | 0.08 | 0.00-14.40 |
| Don't plan to quit | 22 | 14 63.6 | 1.00 | - | 1.00 | - |
| Pocket money amount =< \$10.00 | | | | | | |
| Plan to quit | 42 | 30 71.4 | 1.07 | 0.34 -3.38 | 0.95 | 0.26-3.50 |
| Don't plan to quit | 22 | 16 72.7 | 1.00 | - | 1.00 | - |

| | Total smokers <i>n</i> | Agree/yes <i>n</i> | % | Odds ratio | 95% CI* | Odds ratio _{adj} ** | 95% CI |
|--------------------------------------------------------------|---------------------------|-----------------------|------|---------------|------------|------------------------------|------------|
| Smoking materials available to children when smoker in house | | | | | | | |
| Plan to quit | 47 | 39 | 90.9 | 2.05 | 0.40-10.58 | NR**** | NR**** |
| Don't plan to quit | 22 | 20 | 83.0 | 1.00 | - | | |
| Agree would not supply cigs if child <18yrs took up smoking | | | | | | | |
| Plan to quit | 45 | 45 | 100 | NR | NR | NR*** | NR*** |
| Don't plan to quit | 20 | 20 | 100 | | | | |
| People do not smoke in house | | | | | | | |
| Plan to quit | 52 | 36 | 69.2 | 0.74 | 0.23-2.39 | 0.89 | 0.21-3.69 |
| Don't plan to quit | 16 | 10 | 62.5 | 1.00 | - | 1.00 | - |
| People do not smoke in car | | | | | | | |
| Plan to quit | 43 | 29 | 67.4 | 0.55 | 0.17-1.83 | 0.33 | 0.01-11.45 |
| Don't plan to quit | 15 | 8 | 53.3 | 1.00 | - | 1.00 | - |

Notes. * CI = Confidence Interval

**Adjusted for relationship to child, decile; and school and family cluster effects

***NR = Not reported due to zero cell

****NR = Not reported as data unstable and model would not converge

Asian and non-Asian Analysis

Asian and non-Asian Student Sample Description

There were 4,671 students in the sample. Pacific Island students were the most numerous followed by Māori, Asian and European youth (Table 32). There were more female (n= 1,822, 50.9%) than male students (n= 1,756, 49.1%) in the non-Asian group. This is proportionally similar to the Asian group. The proportions of Asian and non-Asian students in years seven and eight were similar. Proportionally fewer Asian than non-Asian students attended the decile one schools in the sample.

Table 32: Description of 2007–2009 baseline Asian and student sample.

| | | | <i>n</i> | % total |
|------------|-----------|------------------|----------|------------|
| Ethnicity* | Asian | | 1093 | 23.4 |
| | Non-Asian | Pacific Islander | 2003 | 42.9 |
| | | Māori | 1242 | 26.6 |
| | | European/other | 333 | 7.1 |
| | Total | | 4671 | |
| | | | <i>n</i> | % subtotal |
| Sex | Asian | male | 521 | 47.7 |
| | | female | 572 | 52.3 |
| | Sub-total | | 1093 | |
| | Non-Asian | male | 1756 | 49.1 |
| | | female | 1822 | 50.9 |
| | Sub-total | | 3578 | |
| Year | Asian | seven | 846 | 77.4 |
| | | eight | 247 | 22.6 |
| | Sub-total | | 1093 | |
| | Non-Asian | seven | 2,665 | 74.5 |
| | | eight | 913 | 25.5 |
| | Sub-total | | 3578 | |
| Decile | Asian | one | 214 | 19.6 |
| | | two | 510 | 46.7 |
| | | three | 369 | 33.8 |
| | Sub-total | | 1093 | |
| | Non-Asian | one | 1,710 | 47.8 |
| | | two | 926 | 25.9 |
| | | three | 942 | 26.3 |
| | Sub-total | | 3578 | |

Notes. *Asian students are prioritised followed by Māori, Pacific Island and European/other

Results

With regard to family factors, Asian and comparisons were undertaken for factors that were significantly related to Asian student ever-smoking. Asian students were significantly less likely to report that anyone, mothers or people other than parents smoked in their homes compared with non-Asian students (Table 33). They were more likely to report that their parents knew what they spent their money on than non-Asian students although over 75% of both Asian and non-Asian students reported that their parents knew how they spent their money. With regard to culturally identity, Asian prioritised students and Asian students who selected an Asian ethnic group as their first choice of ethnicity were significantly less likely to be ever-smokers than non-Asian students. The Asian prioritised students included 130 Asian/non-Asian children. There was no significant difference between the Asian/non-Asian students' ever-smoking rates and those of the non-Asian students.

Table 33: Associations between Asian student versus non-Asian student ethnicity and family influences and Asian cultural identity on smoking.

| | Total <i>n</i> | Yes <i>n</i> | % | Odds ratio | 95% CI* | Odds ratio _{adj} ** | 95% CI |
|---------------------------------|-------------------|-----------------|-------|------------|------------|------------------------------|------------|
| Family structure | | | | | | | |
| Live both parents | | | | | | | |
| Asian | 1093 | 897 | 82.1 | 0.45 | 0.38-0.53 | 0.24 | 0.16-0.34 |
| Non-Asian | 3578 | 2411 | 67.4 | 1.00 | - | 1.00 | - |
| Family tobacco use | | | | | | | |
| Anyone smoke home | | | | | | | |
| Asian | 1093 | 237 | 21.7 | 0.31 | 0.26- 0.36 | 0.18 | 0.13-0.25 |
| Non-Asian | 3578 | 1699 | 47.5 | 1.00 | - | 1.00 | - |
| Mother smoke in home | | | | | | | |
| Asian | 1093 | 39 | 3.57 | 0.11 | 0.08-0.16 | 0.04 | 0.02-0.07 |
| Non-Asian | 3578 | 878 | 24.54 | 1.00 | - | 1.00 | - |
| Others smoke at home | | | | | | | |
| Asian | 1093 | 149 | 13.63 | 0.33 | 0.28-0.40 | 0.25 | 0.18-0.34 |
| Non-Asian | 3578 | 1150 | 32.14 | 1.00 | - | 1.00 | - |
| Anyone smoke in car | | | | | | | |
| Asian | 1093 | 172 | 15.74 | 0.30 | 0.25-0.35 | 0.18 | 0.12- 0.26 |
| Non-Asian | 3578 | 921 | 38.74 | 1.00 | - | 1.00 | - |
| Mother smoke in car | | | | | | | |
| Asian | 1093 | 31 | 2.84 | 0.13 | 0.09-0.18 | 0.06 | 0.03-0.11 |
| Non-Asian | 3578 | 671 | 18.75 | 1.00 | - | 1.00 | - |
| Others smoke in car | | | | | | | |
| Asian | 1093 | 100 | 9.15 | 0.33 | 0.27- 0.41 | 0.28 | 0.21-0.39 |
| Non-Asian | 3578 | 835 | 23.34 | 1.00 | - | 1.00 | - |
| Parenting | | | | | | | |
| Know what child spends money on | | | | | | | |
| Asian | 1093 | 934 | 85.45 | 0.55 | 0.46-0.66 | 0.54 | 0.43-0.67 |

| | Total <i>n</i> | Yes <i>n</i> | % | Odds ratio | 95% CI* | Odds ratio _{adj} ** | 95% CI |
|--------------------------------|-------------------|-----------------|-------|------------|-----------|------------------------------|-----------|
| Non-Asian | 3573 | 2727 | 76.32 | 1.00 | - | 1.00 | - |
| Asian cultural identity | | | | | | | |
| Asian prioritised | | | | | | | |
| Asian | 1093 | 50 | 4.6 | 0.21 | 0.16-0.28 | 0.18 | 0.12-0.28 |
| Non-Asian | 3578 | 667 | 18.6 | 1.00 | - | 1.00 | - |
| Asian first choice | | | | | | | |
| Asian | 992 | 35 | 3.5 | 0.16 | 0.11-0.23 | 0.14 | 0.08-0.22 |
| Non-Asian | 3578 | 667 | 18.6 | 1.00 | - | 1.00 | - |
| Asian/non-Asian identity | | | | | | | |
| Asian/non-Asian | 130 | 17 | 13.1 | 0.66 | 0.39-1.10 | 0.60 | 0.31-1.15 |
| Non-Asian | 3578 | 667 | 18.6 | 1.00 | - | 1.00 | - |

Notes. * CI = Confidence Interval

**Adjusted for relationship to child, decile; and school and family cluster effects

Asian and non-Asian parent sample description

Ninety-six parents with missing ethnicity data were excluded from the parent analysis. The majority of the parents were Pacific Islanders followed by Māori, Asian and European/other ethnic groups (Table 34). Among non-Asian parent respondents, a greater proportion of mothers rather than fathers participated compared to Asian parent respondents. A higher percentage of Asian parents had children at decile three schools than non-Asian parents.

Table 34: Description of 2007–2009 Asian and non-Asian parent sample.

| | | | n | % total |
|-----------------------|-----------|------------------|----------|-------------------|
| Ethnicity* | Asian | | 858 | 23.53 |
| | Non-Asian | Pacific Islander | 1,616 | 39.86 |
| | | Māori | 1,065 | 26.27 |
| | | European/other | 419 | 10.34 |
| | Total | | 3958 | |
| Relationship to child | | | n | % subtotal |
| | Asian | mother | 483 | 56.3 |
| | | father | 263 | 30.7 |
| | | other | 86 | 11.6 |
| | | missing | 26 | 3.0 |
| | Sub-total | | 858 | |
| | Non-Asian | mother | 2,132 | 68.77 |
| | | father | 533 | 17.19 |
| | | other | 329 | 10.61 |
| | | missing | 106 | 3.42 |
| | Sub-total | | 3,100 | |
| Decile | Asian | one | 181 | 21.1 |
| | | two | 173 | 20.2 |
| | | three | 504 | 58.7 |
| | Sub-total | | 858 | |
| | Non-Asian | one | 1,497 | 48.29 |
| | | two | 864 | 27.87 |
| | | three | 739 | 23.84 |
| | Sub-total | | 3,100 | |

Note. *Asian parents are prioritised followed by Māori, Pacific Island and European/other.

Results

Asian families were significantly less likely to include parents or other family members who smoke than non-Asian families. Asian family members who smoke were more likely to plan to quit than non-Asian family members who smoke (Table 35).

Asian parents were significantly more likely than non-Asian parents to agree that children are more likely to smoke if parents smoke, that children are more likely to smoke if people smoke in the home, to give their children less than \$10.00 weekly for pocket money. They were significantly less likely to have cigarettes, lighters and matches available to children when someone in the house smokes, and to have people smoking inside their cars (Table 36). There was no significant difference between Asian and non-Asian parents in terms of smoking in the house. Asian parents were more likely to believe that schools, rather than non-Asian parents, should teach children about smoking, and less likely to talk to their children about smoking. Nearly 100% of all the parents (Asian 97.9% versus non-Asian 97.2%) agreed they would not supply cigarettes if one of their children aged <18 took up smoking.

Table 35: Associations between Asian versus non-Asian parents and current smoking status and smoking intentions

| | Total group | Yes | | Odds ratio | 95% CI* | Odds ratio _{adj} ** | 95% CI |
|------------------------------------------|-------------|----------|------|------------|-----------|------------------------------|-----------|
| | <i>n</i> | <i>n</i> | % | | | | |
| Current smoking – father, mother, others | | | | | | | |
| Asian | 844 | 75 | 8.9 | 0.18 | 0.14-0.23 | 0.05 | 0.02-0.10 |
| Non-Asian | 2,974 | 1,038 | 34.9 | 1.00 | - | 1.00 | - |
| Current smoking - father | | | | | | | |
| Asian | 259 | 48 | 18.5 | 0.45 | 0.31-0.64 | 0.31 | 0.13-0.72 |
| Non-Asian | 514 | 173 | 33.7 | 1.00 | - | 1.00 | - |
| Current smoking - mother | | | | | | | |
| Asian | 475 | 19 | 4.0 | 0.07 | 0.05-0.12 | 0.02 | 0.01-0.04 |
| Non-Asian | 2,045 | 742 | 36.3 | 1.00 | - | 1.00 | - |
| Plan to quit (smokers only) | | | | | | | |
| Asian | 69 | 47 | 68.1 | 0.51 | 0.31-0.87 | 0.26 | 0.09-0.81 |
| Non-Asian | 907 | 475 | 52.3 | 1.00 | - | 1.00 | - |

Notes. * CI = Confidence Interval

**Adjusted for relationship to child, decile; and school and family cluster effects

Table 36: Associations between Asian versus non-Asian parent ethnicity and family factors

| | Total group | Agree/yes | | Odds ratio | 95% CI* | Odds ratio _{adj} ** | 95% CI |
|-------------------------------------------------------------------|-------------|-----------|-------|------------|-----------|------------------------------|------------|
| | <i>n</i> | <i>n</i> | % | | | | |
| Beliefs | | | | | | | |
| Children more likely to smoke if parents smoke | | | | | | | |
| Asian | 854 | 608 | 71.2 | 0.50 | 0.42-0.59 | 0.38 | 0.27-0.54 |
| Non-Asian | 3053 | 1688 | 55.3 | 1.00 | - | 1.00 | - |
| Children more likely to smoke if people smoke in the home | | | | | | | |
| Asian | 853 | 582 | 68.2 | 0.58 | 0.49-0.68 | 0.50 | 0.37-0.68 |
| Non-Asian | 3054 | 1688 | 55.3 | 1.00 | - | 1.00 | - |
| 2 nd -hand smoke is harmful to child's health | | | | | | | |
| Asian | 852 | 818 | 96.0 | 0.41 | 0.28-0.59 | 0.48 | 0.13- 1.74 |
| Non-Asian | 3051 | 2,768 | 90.72 | 1.00 | - | 1.00 | - |
| Schools, rather than parents, should teach children about smoking | | | | | | | |
| Asian | 846 | 355 | 41.96 | 2.22 | 1.90-2.59 | 3.22 | 2.35-4.41 |
| Non-Asian | 2,984 | 1,838 | 61.60 | 1.00 | - | 1.00 | - |
| Parenting practice | | | | | | | |
| Talked to child about smoking | | | | | | | |
| Asian | 835 | 661 | 79.16 | 1.37 | 1.13-1.67 | 1.39 | 1.00- 1.93 |
| Non-Asian | 2,966 | 2,489 | 83.92 | 1.00 | - | 1.00 | - |
| Pocket money amount <= \$10 | | | | | | | |
| Asian | 828 | 649 | 78.38 | 0.54 | 0.45-0.64 | 0.42 | 0.30-0.58 |
| Non-Asian | 2,892 | 1,911 | 66.08 | 1.00 | - | 1.00 | - |
| Smoking material not available to children | | | | | | | |

| | | | | | | | |
|---------------------------------------------------------|-------|-------|-------|------|-----------|-------|-----------|
| when smoker in house | | | | | | | |
| Asian | 814 | 774 | 95.09 | 0.32 | 0.23-0.45 | 0.15 | 0.08-0.28 |
| Non-Asian | 2,971 | 2,559 | 86.13 | 1.00 | - | 1.00 | - |
| Would not supply cigs if child aged <18 took up smoking | | | | | | | |
| Asian | 824 | 807 | 97.94 | 0.75 | 0.44-1.27 | 0.84 | 0.48-1.47 |
| Non-Asian | 2,918 | 2,838 | 97.26 | 1.00 | - | 1.00 | - |
| People do not smoke inside house | | | | | | | |
| Asian | 853 | 808 | 94.72 | 0.39 | 0.28-0.53 | 0.46 | 0.15-1.40 |
| Non-Asian | 3,065 | 2,679 | 87.41 | 1.00 | - | 1.00 | - |
| People do not smoke inside car | | | | | | | |
| Asian | 768 | 730 | 95.05 | 0.21 | 0.15-0.30 | 0.083 | 0.04-0.16 |
| Non-Asian | 2,677 | 2,151 | 80.35 | 1.00 | - | 1.00 | - |

Notes. * CI = Confidence Interval

**Adjusted for relationship to child, decile; and school and family cluster effects

Matched Asian Student and Parent Analysis

Matched Asian Student and Parent Sample Description

There were 4295 matched student and parent matched observations of which 75.9% (n=3262) were non-Asian and 24.1% (n= 1033) were Asian. The Asian matched paired observations were from members of 891 families. Single student/parent dyads responded from 827 (80.6%) families. The remaining observations (n=206, 19.4%) were from different combinations of one or more students and one or more parents from 64 families. The effects of controlling for decile, students' decile, sex and year at school as well as the cluster design effects of family membership and school can be seen in Table 37 where unadjusted and adjusted odds ratio results are reported. The parents' "relationship to child" was not controlled for because it was not significantly related to student ever-smoking (OR 0.73 [95% CI 0.44-1.21]).

Results

Thirty five students in the matched data set were ever-smokers. Selected hypotheses were tested with regard to associations between parents' reports of their own smoking behaviour, parenting beliefs and practices, and their children's ever-smoking status. Hypotheses with variables with fewer than five student ever-smokers in cells were not tested. These were parent smokers' "plan to quit", parents' belief that "second-hand smoke is harmful to children's health", and parenting practices allowing smoking inside the house and smoking inside the car. None of the hypotheses were supported. No Asian parent variables were significantly associated with their children's ever-smoking status (Table 37). The number of student ever-smokers was very small.

Table 37: Associations between Asian parents' reports of smoking behaviour, parenting beliefs and practices and Asian students' reports of ever-smoking

| | Total group <i>n</i> | Student ever-smoke - yes <i>n</i> % | Odds ratio | 95% CI* | Odds ratio_{adj}** | 95% CI |
|-------------------------------------------------------|-------------------------------------|-------------------------------------------------------------|-----------------------|--------------------|---------------------------------------|---------------|
| Parent smoking | | | | | | |
| Current smoker | | | | | | |
| Yes | 100 | 26 7.0 | 2.58 | 1.09-6.10 | 1.47 | 0.07-31.77 |
| No | 916 | 7 2.8 | 1 | - | 1 | - |
| Parents' beliefs | | | | | | |
| Children more likely to smoke if parents smoke | | | | | | |
| Agree | 721 | 19 2.6 | 0.52 | 0.26-1.04 | 0.65 | 0.04-9.89 |
| Disagree | 304 | 15 4.9 | 1 | - | 1 | - |
| Children more likely to smoke if people smoke in home | | | | | | |
| Agree | 685 | 18 2.6 | 0.54 | 0.27-1.08 | 0.68 | 0.06-8.19 |
| Disagree | 339 | 16 4.7 | 1 | - | 1 | - |
| Parenting practice | | | | | | |
| Have talked to child about smoking | | | | | | |
| Yes | 806 | 24 3.0 | 0.63 | 0.29-1.39 | 0.59 | 0.02-18.15 |
| No | 195 | 9 4.6 | 1 | - | 1 | - |
| Pocket money amount <= \$10 | | | | | | |
| Yes | 788 | 23 2.9 | 0.88 | 0.37-2.09 | 0.99 | 0.02-45.95 |
| No | 213 | 7 3.3 | 1 | - | 1 | - |

Notes. *CI = Confidence Interval

**Adjusted for sex, year, decile; and school and family cluster effects.

Summary

The results of the analyses of the 2007 data (Phase One a) and 2007 – 2009 data (Phase One b) were similar. The ever-smoking prevalence of Asian boys and girls from four low decile schools in South Auckland, New Zealand was low. Hypothesised risky associations between anyone smoking at home or in the car and youth ever-smoking were supported. Specifically, maternal smoking was also associated with youth ever-smoking though the confidence intervals were wide. The hypothesis about the risk of

paternal smoking to youth ever-smoking was not supported. Although the odds ratio was twice that of the reference group, the results were not significant. One hypothesis about the protective effects of parent beliefs and parenting practices on youth ever-smoking - parents knowing what their children spend their pocket money on - was supported (using the students' data). The results for the others were insignificant (Table 38).

Several hypotheses about the protective effects of parents being non-smokers on their beliefs about, attitudes to, and parenting practice relevant to youth smoking were supported. For example, nonsmoking parents were more likely than smokers to believe that a) being smokefree, and b) having a smokefree home, decreases the risk of smoking for children. They were also more likely to have a smokefree home (Table 38). Results for other hypotheses tests were not significant. Hypotheses that planning to quit (versus not planning to quit) among parent smokers is protective across a number of domains were not supported. Hypotheses examining the relationship of parent responses about family factors with student reports of ever-smoking were not supported. This may have been because the number of student smokers in the data set was small.

With regard to student acculturation, hypotheses that stronger Asian identity is related to lower ever-smoking rates were supported. A multivariate analysis testing the proposal that protective family factors remain in the presence of acculturation shows that this is the case.

Asian students and their parents had significantly lower smoking rates than non-Asians. The hypotheses that Asian children would experience higher levels of protective family factors than non-Asian children were supported. There were mixed results for parents. Asians were significantly more likely to believe that schools rather than parents should teach children about smoking, and less likely to talk to their children about smoking, than non-Asians. In contrast, they were significantly more likely to give children \$10.00 or less for pocket money than non-Asians.

In the next chapter, the beliefs, attitudes and processes underlying the quantitative results are explored using qualitative research. This will situate the findings in the participants' cultures and the New Zealand context.

Table 38: Summary of outcomes for family protective and risk factors for Asian youth smoking (2007–2009 data sets)

| Domain | Data | Hypothesis | Outcome |
|------------------------------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| Family structure | Student | Asian students are less likely to be ever-smokers if they live with 2 parents (vs do not live with 2 parents) | protective |
| | | Asian students are less likely to be ever-smokers if they live with 2 parents + grandparent (vs do not live with 2 parents + grandparent) | NS |
| Family tobacco use | Student | Asian students are more likely to be ever-smokers if anyone smokes in the home/car (vs no-one smokes in the home/car). | Home risk |
| | | | Car risk |
| | | Asian students are more likely to be ever-smokers if fathers smoke in the home/car (vs do not smoke in the home/car). | Home NS |
| | | | Car NS |
| | | Asian students are more likely to be ever-smokers if mothers smoke in the home/car (vs do not smoke in the home/car). | Home risk |
| | | | Car risk |
| | | Asian students are more likely to be ever-smokers if others (not fathers or mothers) smoke in the home or car (vs others do not smoke in the home or car). | Home risk |
| | | | Car risk |
| Parent attitudes and beliefs | Student | Asian students are less likely to be ever-smokers if their parents agree (vs disagree) they would be upset if children smoke. | NS |
| | | Asian students are less likely to be ever-smokers if their parents disagree (vs agree) it is ok for <16 yrs to smoke. | NS |
| | Parent | Asian parent nonsmokers (vs smokers) are more likely to agree that children are more likely to smoke if parents smoke. | protective |
| | | Asian parent nonsmokers (vs smokers) are more likely to agree that children are more likely to smoke if people smoke in the home | protective |
| | | Asian parent nonsmokers (vs smokers) are more likely to agree that second-hand smoke is harmful to children's health | NS |
| | | Asian parent nonsmokers (vs smokers) are less likely to agree that schools, rather than parents, should teach children about smoking | NS |
| | | Asian parent nonsmokers (vs smokers) are more likely to believe that ETS harmful to children. | NS |
| | | Asian parent smokers who plan to quit (vs do not plan to quit) are more likely to believe that ETS harmful to children. | NS |
| Parenting | Student | Asian students are less likely to be ever-smokers if their parents have rules about not smoking (vs do not have rules) | NS |
| | | Asian students are less likely to be ever-smokers if their parents give less pocket money (vs give more pocket money) | NS |
| | | Asian students are less likely to be ever-smokers if their parents mostly know what they spend money on (vs do not know) | protective |
| | Parent | Asian parent nonsmokers (vs smokers) are more likely to have talked to their children about smoking | NS |
| | | Asian parent nonsmokers (vs smokers) are more likely to give children less pocket money (<=\$10) | NS |

| | | | | |
|-----------------------------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|------------|
| | | Asian parent nonsmokers (vs smokers) are less likely to have smoking related materials available to children when there is a smoker in the house | protective | |
| | | Asian parent nonsmokers (vs smokers) are less likely to agree they would provide cigarettes if their child aged <18 years took up smoking | NR | |
| | | Asian parent nonsmokers (vs smokers) are less likely to have smoking inside their houses | protective | |
| | | Asian parent nonsmokers (vs smokers) are less likely to have smoking inside their cars | NR | |
| Acculturation | student | Students are less likely to be ever-smokers if they identify as Asian only (vs Asian/non-Asian) | Protective | |
| | | Asian prioritised students are less likely to be ever-smokers if Asian is their 1st choice of identity (vs not their 1st choice) | Protective | |
| | | Asian students are less likely to be ever-smokers if they are born overseas (vs born in New Zealand) | NS | |
| | | Asian students are less likely to be ever-smokers if they have lived in New Zealand 1-5 years (vs 6 + years) | NR | |
| Parenting and acculturation | student | Asian students whose parents mostly know what they spend money on (vs do not know) are less likely to be ever-smokers in the presence of acculturation (measured as identifying being Asian only vs Asian/non-Asian). | Multi-variate | Protective |

Chapter Eight: Qualitative Research Methods

Introduction

As described in Chapter Four, I used a descriptive qualitative approach for Phase Two of this explanatory mixed methods study. Descriptive qualitative research is characterised by “emergent design, purposeful sampling, minimally structured and open-ended modes of data collection, and textual analyses” (Sandelowski, 2010, p. 81). I triangulated qualitative methods, including student focus groups and family interviews, to provide information about family influences on Asian youth smoking.

I describe ethical issues for Phase Two, and sampling and data collection methods for student focus groups and family interviews respectively. This is followed by the data analysis methods for all of the interviews together. The qualitative interview schedules included questions about the KKS study interventions.

Ethics

Phase Two required a separate ethics application since qualitative research was not covered by the ethics approval for the KKS study. The principal and deputy principal of the intervention schools signed Ethics Committee locality forms giving permission for Asian family and student recruitment through the schools and for focus groups to be held on their premises. The human ethics committees of the University of Auckland (Reference 2009/021) and Auckland University of Technology where the PhD is based (Reference 09/127) approved Phase Two (Appendices G, H). Dr Marewa Glover, the lead researcher for the KKS study, and the Asian Network Incorporated supported the application (Appendices I, J). I returned to the committee after recruitment started and received permission to increase the number of potential family member participants (Appendix K).

Potential Risks to Participants

The participants in this study were drawn from a vulnerable population. A vulnerable population is susceptible to harm from factors such as stigmatisation, poverty or inability to consent to participate because the members’ understanding is impaired (Demi & Warren, 1995). I discussed ethics and cross-cultural research in Chapter Five. Poverty makes people vulnerable to agreeing to participate in research. They must not be induced or coerced to participate beyond reimbursements for the cost of

participating. The family participants in this study may be vulnerable in this way because of the decile level of their children's schools.

Processes to Protect Participants

Processes to mitigate risk include community consultation from the outset of a study, involving cultural advisors throughout the study, robust processes to ensure that informed consent is obtained, use of trained interpreters for qualitative data collection, validation of translated data collection instruments, researcher reflexivity and cultural awareness. These processes were covered in Chapter Five.

Phase Two of the research focused solely on Asian participants. I followed the KKS study participant recruitment processes and procedures as far as possible. In common with the KKS study, the first wave of invitations and an expression of interest for families were sent home from school with students and were in English. I subsequently provided invitation letters, information sheets and consent forms for adult family members in English, Hindi, Chinese and Cambodian. The forms for children were in English (Appendix L).

Families could opt out anytime up to data analysis after they had expressed interest in participating or returned signed consent forms. However individuals could not opt out of group interview data analysis. Families could select where they wanted to be interviewed. When I contacted them to arrange an interview I offered an interpreter. I reviewed the information sheets and consent forms with the participants at the beginning of family interviews and student focus groups via an interpreter if necessary.

Adults received Warehouse vouchers for \$20.00 after the interviews. I had information about Asian specific psychological support services for participants if they became distressed in their interviews but it was not needed. I transcribed the interviews myself. Interpreters signed confidentiality forms.

Ethical Issues and Children

Values, Research and Children

Research with children raises specific ethical issues. The relationship of the researcher to child research participant is unlike that of parents, teachers or health care workers. Researchers want to get information about and from children. The inclusion of the points of view of children in research is advocated by a number of authors (Christensen & James, 2000; Lindsay & Lewis, 2000; Powell & Smith, 2009). They invoke moral, theoretical and epistemological arguments. First, the moral argument for the right for

children to participate in research concerns allowing those who are affected to have input into what will happen to them. This point of view is supported by the United Nations Convention on the Rights of the Child (UNROC). New Zealand is a signatory. Article 12 states:

1. States Parties shall assure to the child who is capable of forming his or her own views the right to express those views freely in all matters affecting the child, the views of the child being given due weight in accordance with the age and maturity of the child.
2. For this purpose, the child shall in particular be provided the opportunity to be heard in any judicial and administrative proceedings affecting the child, either directly, or through a representative or an appropriate body, in a manner consistent with the procedural rules of national law (United Nations, 1989).

Second, this study is underpinned by health promotion theory whereby the voice and involvement of the community of interest throughout activities to improve health are essential (Baum, 2002). Thus children are invited to give their perspectives. Finally, children are included in research on epistemological grounds. Rather than basing knowledge of their experiences of matters that concern them on inference and assumption, they are asked to contribute their points of view (Lloyd-Smith & Tarr, 2000).

The view of children in the preceding paragraph reflects a Western view of children as individuals both in need of protection from harm because of their age, and with personal agency and individual rights. Protection and respect for personal agency must be balanced against each other. In New Zealand parents take responsibility for the ultimate decision as to whether or not their children (aged 16 years and under) participate in research. I am not aware of research about Asian parents' views about their children's right to decide whether or not they should take part in research. It is likely that Asian children aged 11 and 12 years would respect their parents' advice.

Social institutions represented by adults drive research about children. Children are not likely to initiate research spontaneously. In general it is an adult activity reflecting an adult agenda (M. Hill, 2006; James & Prout, 1997). In the context of research, children are a vulnerable population and require special consideration in terms of protection and informed consent. Legally, Right 7 of the Code of Health and Disability Services Consumers Rights 1996 applies to child participants in this study (Peart & Holdaway, 2007). Right 7 is the right "to make an informed choice and give informed consent". The following points are relevant:

(1) Services may be provided to a consumer only if that consumer makes an informed choice and gives informed consent, except where any enactment, or the common law, or any other provision of this Code provides otherwise.

(2) Every consumer must be presumed competent to make an informed choice and give informed consent, unless there are reasonable grounds for believing that the consumer is not competent.

(3) Where a consumer has diminished competence, that consumer retains the right to make informed choices and give informed consent, to the extent appropriate to his or her level of competence.

(7) Every consumer has the right to refuse services and to withdraw consent to services.

Since this study does not involve physical risk to the children or any medical surgical or dental procedures, Section 36 of the Care of Children Act 2004 which governs consent in relation to a child does not apply. I was advised to remove the Accident Compensation clause from my information sheet by University of Auckland ethics committee staff who pre-viewed my application.

The Health Research Council Guidelines on conducting research with children reflect the law and six principles mainly derived from the Guidelines of the Royal College of Paediatrics and Child Health 1999 and the European Convention for the Protection of Human Rights and Dignity of the Human Being with Regard to the Application of Biology and Medicine 1996 (Peart & Holdaway, 2007). The guidelines state that children should not be subjected to research if adults can be substituted, that older children should be used where practicable, that children should benefit from the research and that the research should be carried out by people with experience working with children.

Access to children is generally via adults. If they are under 16 years, they may only participate with the permission of their parents or guardians. Informed consent should be gained commensurate with their level of understanding. Parents consented on behalf of their children. The parental consent form for Phase Two of the PhD research asks parents if they have discussed their child's participation with them. In order to provide the option of choice for the students, they were provided with their own information sheet and consent form to sign before each focus group began. The forms for the children were in English.

At the beginning of the focus groups I told the children that they could opt out and invited them to sign their own consent forms even though their parents had given permission for them to attend. I do not believe that this clashes with Asian parents views since the alternative was academic and school activities. Parents value education and would likely support their child's choice in this matter.

As a paediatric, child psychiatric or public health nurse for 11 years, I am experienced in communication with children and managing psychological issues. The research assistant for the youth focus groups was known to the participants as she was a member of the KKS study team engaged in delivering interventions in the schools concerned. The students received a drink, muesli bar and piece of fruit after the focus groups were finished. This was the same process used for students participating in the KKS study.

Student Focus Groups

Question Development

I used the student focus groups to:

- a. explore Asian students' knowledge of, attitudes to and experiences of the KKS study interventions.
- b. assess the reach, acceptability, perceived impact and congruence of the KKS study interventions with family members' actions to protect children from smoking.

I attended KKS study meetings where the interventions were designed and participated in KKS study activities to understand the interventions as follows:

- one school introduction session
- one student recruitment presentation,
- the movie event associated with the KKS DVD about family communication with children about smoking
- two KKS competition prize giving and whanau (family) days,
- one KKS community and whanau feedback session, and
- one regular lunchtime session where KKS staff worked with children on a KKS art competition.

I did not ask student focus group participants about their cultural backgrounds because I did not want to undermine the authority of their families or expose them to feelings of dissonance with their families' values. Participants could talk about their families when they discussed their experiences of the KKS study interventions. Research in Western

countries about children participating in research showed that some felt that questions about family life were intrusive. Others were positive about sharing their private lives (M. Hill, 2006). I was concerned that students would disclose sensitive information about their families and expose themselves to teasing, loss of face and feelings of dissonance with their families' values. I did not want to undermine the authority of the students' families. Students could choose to talk about their families in the interviews in the context of their experience of the family-centred KKS study interventions. Alternatively students could express their feelings and opinions about the KKS study interventions only.

I followed Patton (1987) and Robson (2011) guidelines and wrote the semi-structured interview schedule to guide my questioning (Appendix M). A semi-structured interview schedule has a list of open-ended "base" questions covering general topics of interest. In the interview schedule each question had sub-questions ("probes") to ensure that I covered points I was interested in already and wanted to follow up further. I only used these sub-questions when the participants did not mention the subtopics spontaneously. I followed the direction of participants' discussion bringing them back to the overall topic if necessary. Therefore the order of the questions differed from interview to interview. I also used general requests such as "Tell me more about that" or "Do you have an example" to encourage the participants to talk in more detail. The advantage of this mode of interviewing is that it allows participants to introduce areas that interviewers have not considered themselves. In addition the interviewer can reflect and use language and idioms known to the participants rather than being restricted by a fixed set of questions. The disadvantages are that salient issues may be missed and the data may be less comparable from interview to interview because the interviews may take different directions (Patton, 1987).

Sampling

Sampling for qualitative research is based on the belief that participants are experts about themselves and their lives. I used 'purposeful sampling' to intentionally select participants who had experienced the phenomenon of interest and could share their knowledge (Cresswell & Clark, 2007). I also used 'maximum variation', a sampling technique which aims "to explore the common and unique manifestations of a target phenomenon across a broad range of phenomenally and/or demographically varied cases (Sandelowski, 2000). In this case the criteria were year at school, gender, ever-smoking status, caregiver smoking status, and Asian ethnic group.

Inclusion Criteria

Students were eligible if they self-identified as Asian; attended a KKS study intervention school; and had a parent who was a respondent. In 2009 I identified student participants a) from the KKS study database and b) when I was recruiting adults for the family interviews. The KKS bio-statistician provided the 2008 and 2009 baseline data sets for year seven students and parents. The 2008 students were year eight students in 2009.

I further defined the Southeast Asian category provided in the KKS study student database by retrieving and consulting the students' individual paper-based KKS survey responses. This was to give a more precise picture of the ethnicity of the participant pool. The Southeast Asian students were Cambodian, Vietnamese, Thai or Filipino.

I created two spreadsheets (one per school) with the children's names, parent numbers, ethnicity, dates of birth, gender, addresses, phone, born in NZ, years in NZ, ever-smoking status, and student reports of father and mother smoking at home. I checked parental participation in the KKS study by matching the parent number of the students with this data in the parent data set. This was necessary because I hoped to interview students from the same families as those I conducted family interviews with. Two parent numbers were missing. In two further cases parents had not consented to participate themselves. These students were excluded from the focus group participant selection. I identified three more students who were not enrolled in the KKS study while recruiting adults for the family interviews. They and their families agreed to join the KKS study and thus they became part of the participant pool for this study.

The participant pool comprised 81 boys and girls with Indian, Chinese or Southeast Asian heritage in years seven or eight (aged 11 to 13 years). It included ever-smokers and non-smokers, with smoking and nonsmoking parents (Table 39).

Table 39: Asian students enrolled in KKS study intervention schools in 2009

| | | <i>n</i> |
|----------------------|--------------------|----------|
| Ethnicity* ** | Indian*** | 43 |
| | Southeast Asian*** | 24 |
| | Chinese | 14 |
| Gender | male | 37 |
| | female | 24 |
| Year | seven | 54 |
| | eight | 27 |
| Ever smoked**** | yes | 2 |
| | no | 79 |
| Father smoke at home | yes | 9 |
| | no | 72 |
| Mother smoke at home | yes | 10 |
| | no | 71 |

Notes. * could select more than one Asian ethnicity therefore do not sum to total number
 ** 13 identified as Asian plus one or more ethnicities which are not further defined because of threat to confidentiality
 *** not further defined because of threat to confidentiality
 ****Smoking status was not collected for the three students entered through family participation. Based on their participation in the student and family interviews they are presumed to be non-smokers

I combined students from different Asian ethnic groups rather than running ethnic specific focus groups because the numbers of students from the different Asian ethnicities (except Indian) were small. In addition I wanted to investigate commonalities and differences across the Asian children and families I interviewed. I included both year seven and year eight students because they had varying levels of exposure to the interventions and were different ages. Boys and girls could potentially provide different perspectives given that adult Asian male and female smoking rates vary in the KKS parent sample. The perspectives of both smokers and nonsmokers were of interest. Parental smoking status influences Asian youth smoking initiation (Scragg, Laugesen, & Robinson, 2003) therefore it was important to invite students with smoking and nonsmoking parents.

Exclusion Criteria

Students were excluded from the study if they did not attend a KKS study intervention school or were non-Asian. Each school provided a liaison person for the school focus groups. The liaison teachers provided up-to-date class lists so I could exclude students who had left since KKS study data collection at the beginning of 2008 and 2009.

None of the students in the Phase One 2007 baseline data analysis could participate in the focus groups since they had left the KKS study schools by the time I began qualitative data collection in 2009. I could not select Asian students from all four KKS study schools because those at the control schools had not experienced the interventions and because I was bound to preserve the unexposed status of these schools.

Sample Selection

I wrote a sampling and data collection timeline with the KKS study project manager (Appendix N). I reviewed the Excel spreadsheets described above and selected 30 students aiming for a sample which would include students from all the Asian ethnic sub-groups, equal numbers of males and females, equal numbers in years seven and eight, equal numbers with smoking and nonsmoking mothers and fathers, and students who smoked. I invited students from as few classes as possible to minimise disruption.

The number of participants needed to provide credible evidence in qualitative studies is based on the philosophical underpinnings of the research. I looked for participants' unique perspectives, experiences and examples. I planned to ask open-ended questions to elicit information rather than measuring individual participants' responses on a finite number of variables. I was not aiming for a sample size which would enable a statistically significant result to support internal and external validity. Ideally sampling and data collection finish when the responses become redundant in qualitative research. Because of this and the nature of the data sought, the number of participants is not fixed although it is generally fewer than the number needed in quantitative research.

I hoped to have eight participants in each focus group as recommended by Porcellato, Dughill, and Springett (2002). I sent 30 invitations hoping to receive 20 consents. This is more than 16 but I wanted to have four extra (two per school) because students are sometimes unavailable on the day of the interview.

Participant Recruitment

I used two recruitment strategies. Firstly, the schools distributed invitation packs to the 30 selected students and collected them when they were returned as per the KKS study processes. Initially I sent English language invitations because the participant pool comprised Asian students and families who were on the KKS study already. The KKS study materials were in English or Samoan. The invitation pack included a letter inviting adult family members to participate in family interviews and students to

participate in the school focus groups, information sheet and consent form (Appendix L. I received 12 consent forms for students to participate within two weeks.

Secondly, I used extra strategies to recruit family members (p.118) which resulted in nine more student consents. One extra strategy was sending invitation packs home in Chinese or Cambodian with students identified by KKS study intervention staff. These students were actively participating in KKS study activities. KKS study staff also sent forms home with Asian students they identified while delivering interventions in the schools. The form was created with a KKS study team administrator and the KKS study lead, Dr Marewa Glover. It was congruent with the way the KKS study approached families to participate in KKS study activities. It invited parents to contact me if they were interested in being part of the study (Appendix O). These strategies yielded six more student consent forms possibly because they acted as reminders for families to return the consent forms sent originally. Three families who were not on the KKS study databases returned expression of interest forms. When I followed them up I invited them to join the KKS study and asked if their children would like to participate in the student focus groups. They consented. Recruitment strategies resulted in families of 21 students consenting to interviews. Four were unavailable on the days of the interviews for a final student focus group sample of 17. Characteristics of the 17 participants are provided in Table 40. None of the participants had ever-smoked.

Table 40: Student focus group participants: Ethnicity, gender, school year, smoking status.

| | | <i>n</i> |
|----------------------|--------------------|----------|
| Ethnicity* | Southeast Asian ** | 8 |
| | Indian** | 7 |
| | Chinese | 2 |
| Gender | male | 11 |
| | female | 6 |
| Year | seven | 11 |
| | eight | 6 |
| Ever smoked | yes | 0 |
| | no | 17 |
| Father smoke at home | yes | 3 |
| | no | 14 |
| Mother smoke at home | yes | 3 |
| | no | 14 |

Notes. * two students identified as Asian plus one or more ethnicities (not further defined because of threat to confidentiality)

**not further defined because of threat to confidentiality

Data Collection

Descriptive qualitative researchers “want to collect as much data as they can that will allow them to capture all of the elements of an event that come together to make it the event that it is”. Open-ended data collection methods are used to gather a wide range of information about a phenomenon (Sandelowski, 2000, p. 336). I used one focus group per intervention school to collect student data. A KKS study team member supported the student focus groups.

Focus groups with students

The use of focus groups in academic research follows their successful use in market research from the 1960s (Bloor, 2001). Focus group research for academic purposes differs from focus groups in private market research. Academic researchers emphasise transparency in participant recruitment and analysis. Their studies must be approved by ethics boards. Their processes and results are available for public scrutiny. Both market researchers and academics use focus group methods to investigate people’s reactions to products, concepts or services. In this case I investigated the Asian students’ perceptions of the KKS study activities.

Many of the advantages of focus groups for Asian populations are said to be the same as for non-Asian. Focus groups are used to generate group explanations about behaviour. Interaction with others may trigger insights, new information and ideas. People may express themselves in ways they might not if interviewed individually by an interviewer. Storytelling, jokes, teasing and arguing are all possibilities especially with a homogenous group. A further benefit of focus groups is that less inhibited group members may articulate sensitive issues, some of which may concern more reticent participants (Kitzinger, 1995). This may free them to talk. Different participants can give their version of the same events – a form of credibility checking.

Focus groups are used to investigate different aspects of smoking with Asian and non-Asian children (Milton, Woods, Dugdill, Porcellato, & Springett, 2008; Porcellato et al., 2002; Spruijt-Metz, Gallaher, Unger, & Anderson-Johnson, 2004; G. Wong et al., 2007). Hill (2006) reported that children have mixed views on individual versus group interviews. Some children prefer the support of others in group interviews. Others note that shy children would prefer individual interviews. On balance however, children prefer group interviews. I elected to use focus groups because of this and because I was interested in the range of perspectives generated from group discussion.

I collected qualitative data from adults and youth separately because Asian children are socialized to respect their elders. Respect for parents and fear of their disapproval is an important element of antismoking socialization among Asian youth (Kegler et al., 2002). Young people may not want to articulate their views about smoking or talk about their own smoking in front of their parents or seniors. I have not found any qualitative studies about smoking which combine Asian children or youth with adults in focus group interviews.

Recommendations for focus groups with children account for the developmental age of the participants and concerns about the power and age difference between children and adult facilitators. With regard to developmental age, advice includes limiting group size with smaller groups for younger children, homogeneity in terms of age (no more than a two year age range in each group), developmentally appropriate warm up techniques and appropriate questions with visual prompts, providing food (adolescents), and providing activities for children to do while they listen and talk (Fitzgerald, Thomson, Schafer, & Loose, 2004; Gibson, 2007; Kennedy, Kools, & Krueger, 2001; Morgan, Gibbs, Maxwell, & Britten, 2002). Familiarity with the subtleties of youth jargon is important both during data collection and analysis (Fitzgerald et al., 2004). Krueger (2000) notes that the life experience of youth is less and this aspect of the data will be limited. However this must be offset with the immediacy of the accounts that youth provide. In addition, youth are exposed to different influences and experiences than their elders.

Researchers have noticed that group discussions are more “natural” to girls than boys. It can be hard to get children to discuss and debate with one another versus having one-to-one discussions with the facilitator. Some suggest that it is more difficult to elicit responses when the ages of the facilitator and the participants differ widely. Young adult facilitators can be used – for example young graduate students - or adolescents can be trained to run focus groups. In a prior study, we educated 16 and 17 years olds to run focus groups with ethnically matched 11 - 15 year olds with support from experienced researchers (also ethnically matched) with good results. We found that Asian students were happy to participate in and to contribute to their focus groups (G. Wong et al., 2007). In this PhD study, a young adult (22 years) Indian/Samoan member of the KKS intervention team who was well known to the children supported the focus groups. She was trained to facilitate focus groups.

Communication skills with children include understanding their developmental age, youth group management skills and being open, empathetic, approachable and friendly. It is vital to establish appropriate ground rules about confidentiality and group process (Morgan et al., 2002). In addition, it is important to consider the venue for focus groups with youth since this can affect group process. For example, when focus groups are held at school, children may associate adult facilitators with teachers and other authority figures and respond accordingly. They may be uncertain whether standards for classroom behaviour apply. Because of this, the process was explained carefully to student participants in this study with time for questions and a warm up activity included.

I elected to combine boys and girls in the interviews. Gibson (2007) notes that single sex youth focus groups are often recommended but that both mixed and separate sex focus groups are successful. The choice should depend on the topic. In this case the topic was the family focused KKS study interventions. I did not think this was a subject which Asian students would prefer to talk about in gender specific groups. In my experience as a public health nurse, students in years seven and eight are not split by gender at school for topics except for adolescent development education.

The student focus groups were on consecutive days. I listened to and reflected on the first interview to see if I needed to refine or change the interview questions and processes for the second. This would happen if the students raised unanticipated topics which I wanted to follow up in the next interview or if the students seemed uneasy with the process of the interview. This was not the case. I held the student focus groups at school in school time. I asked for quiet private venues with tables and chairs. I checked the venues provided by the schools ahead of time. One was a classroom and one was a community meeting room. I organized ways to locate the children and to tell them where the interviews would be held. On the days of the interviews I arrived an hour early. I set up the rooms by joining tables and desks together to make one surface we could sit around. This was so students could draw and fill out their consent forms. In addition, Hennessy and Heary (2005) suggest tables reduces self-consciousness among young people. I located the people who would let the children know where to come for the interview. Unfortunately three girls could not come to the first interview (n= 8) because they had a final rehearsal for a cultural performance. This focus group only had one girl in it as a result of this. All but one of the students attended at the other school (n= 9).

We all sat around the “table”. I sat in the middle of one side of the “table” with students either side. The support person also sat with children either side. The students were given paper and felt tip pens to use while they waited for everyone to arrive. They were able to carry on drawing through the course of the interviews if they wished.

Participation in an activity such as drawing or handling a small object does not divert attention from the focus group activity. It can be relaxing, encourage participation when children are ready to contribute and reduce stress especially if the topic under discussion is emotionally demanding (Morgan et al., 2002).

The support person introduced herself although all the children knew her. She introduced me. I described the purpose of the focus group, the information sheet for students and student consent forms emphasising confidentiality. I asked for questions – one student asked who would hear the tapes. The support person reminded the students that their parents had agreed for them participate and that participation was optional. She encouraged the children to speak freely in the interview and to ask any questions they liked. We did a warm-up exercise or “ice breaker” to encourage all the children to participate, put them at ease and set the tone for the ones to follow since the ice breaker questions were open-ended and did not have right or wrong answers (Gibson, 2007; Kennedy et al., 2001). The support person asked two rounds of questions. The first was what would you do if you had a million dollars. The second was to name things you like and dislike. She threw the koosh ball to a student, they said their name and answered the question and then they threw it to someone else. After this activity the support person left because I was asking students about the KKS study interventions she was delivering.

I showed students the recorders and explained why I was using two. They were very interested in the recorders. I invited students to comment on the KKS interventions one at a time, showing them the associated KKS resources. I asked follow-up questions to clarify and expand their answers.

In both groups students who knew one another interacted. However at one school students participated freely despite apparently not knowing one another previously. They laughed and responded to one another’s comments. Sometimes two of the three who were drawing would just look up and contribute something pertinent to the discussion. I watched out for quieter students and asked them specifically if they wanted to say something about the topic at hand. The boys responded collegially. They waited quietly for others to finish speaking before they contributed. The lone girl participant in

this focus group did not join the general conversation, without prompting perhaps because she was the only girl present, perhaps because she was shy. In the past I have found that quiet students often want to contribute but they need an invitation, validation and a space to speak. When invited to comment she responded quietly showing that she was listening and thinking about the issues.

At the second school the students were quieter. The girls spoke at greater length than the boys. It was difficult to get all the students to talk spontaneously to one another although they responded when invited to comment. One possible explanation is my age. Asian children are socialized to be respectful of older people. However this does not explain why the first focus group went well. Another possible explanation is that the school environment inhibited discussion. Hill (2006) discusses the effect of the context of research on children's behaviour. At this school the students clearly perceived me as a person who was in authority - sometimes they put their hands up before they spoke. Another explanation could be that one focus group was virtually single sex and the other was mixed. Perhaps single sex focus groups are more comfortable for Year seven and eight students.

At the end of the interviews I turned off the recorders and gave the students a muesli bar, boxed drink and mandarin each to recompense them for their time. They liked these very much and gave me their pictures if they had drawn them.

Data Analysis

I wrote field notes after each focus group. In these I described the context of the interview and recorded insights into the topics and suggestions for subsequent interviews. The context included the physical surroundings, the seating arrangements, how much the participants participated and any problems with the conduct of the interview. I listened to the recordings the night I ran the interviews. I transcribed the focus group interviews before I started the family interviews. I did not code the student interviews immediately but added points of interest to the field notes. These were particularly about families including what children said their parents told them about smoking, when they did this, how they thought their parents or caregivers would feel if their children started to smoke and what students thought their parents would do if this happened. I also noted what children said happened when they took KKS study materials home. I combined the student and family interview data for the final analysis.

Family Interviews

Question Development

In explanatory mixed methods studies qualitative inquiry questions are based on analyses of quantitative data (Cresswell & Clark, 2007). The descriptive qualitative question schedule for families was based on a preliminary analysis of data from the KKS study baseline data set, the literature review and the KKS study interventions (Appendix P).

In Chapter Seven, I described the prevalence of Asian student smoking and variables related to Asian families and student smoking in the KKS study baseline data set. I compared Asian with non-Asian KKS study participants. In summary, the Asian students were less likely to be ever-smokers than non-Asian students, their mothers and fathers were less likely to smoke, and they were less likely to be exposed to smoking in cars or homes. Similar proportions of Asian parents as non-Asian parents had talked to their children about smoking. More Asian parents agreed than non-Asian parents that children are likely to smoke if parent smoke; that children are more likely to smoke if people smoke at home; and that second hand smoke is harmful to your child's health. While the differences were statistically significant they were not large. Finally, more Asian (46%) than non-Asian parents (29%) agreed that schools rather than parents, should teach children about smoking. In this mixed methods study, the quantitative results confirmed questions that arose from the literature review and posed new questions.

I used some of the quantitative results directly in the family interviews. I aimed to increase the saliency of the qualitative family interviews by showing families the quantitative results from their children's schools (Appendix Q). I showed participants the results of analyses comparing Asian with non-Asian participants to spark discussion about cultural differences and the effects of exposure to New Zealand culture. For example, the differences between Asian youth and Asian mother smoking rates compared with non-Asian were very marked in the KKS study data. They are similarly disparate in national and international data. How, I wondered, did participants account for low Asian school student and maternal smoking rates? Did they consider them protective against future smoking? What did they do to sustain them? While I did not conduct tests relating KKS study maternal smoking with student smoking, the ASH Year 10 survey shows a large excess risk of Asian youth smoking if mothers smoke. How do Asian family members account for this?

At the micro-system level, there were a number of variables where Asian and non-Asian families were similar. These piqued my interest and were particularly suited to qualitative inquiry. For example, similar proportions of Asian and non-Asian parents talk to their children about smoking but Asian youth ever-smoking rates are lower. I was curious about what Asian parents/caregivers actually say to their children and how, when and where they talk to them.

I was very interested in one result which contradicted prior qualitative research findings. In the KKS study significantly more Asian than non-Asian parents thought that schools rather than parents should teach their children about smoking. Yet Asian parents said that protecting their children from smoking was the family's responsibility in interviews for another New Zealand based study (G. Wong et al., 2007). This has an impact on recommendations about service delivery. Interventions directed through families rather than schools have different political, social and practical implications. Therefore I wondered how Asian family members interpreted the KKS study question and what their reasoning behind their responses was.

I have argued that culture and migration are important contextual factors in preventing Asian youth smoking previously. To summarise the areas needing further investigation, the KKS study did not include variables about culture and the variables about migration were restricted to the number of years students had lived on New Zealand. The theoretical and empirical literature about family, migration, culture, acculturation and Asian youth smoking rates suggests that family factors such as parenting, family dynamics, family structure and modelling by family members influence youth smoking uptake. There are few studies focused on the influence of family on Asian youth smoking uptake in the context of culture in either heritage or settlement countries. This is despite suggestions that culture and especially cultural aspects of family life are key factors influencing low Asian youth smoking rates. In addition there are no reports of Asian perspectives of family focused interventions to reduce youth uptake of smoking.

In keeping with a qualitative descriptive research approach I aimed to create research questions which would enable comprehensive summaries of family members' explanations for, and examples of, influences on their beliefs and everyday practices for protecting children from smoking. I was interested in the influence of their heritage culture (macro-system) on families' child rearing beliefs and practices (micro-system). I sought to understand their perceptions of the influence of migration to New Zealand on their strategies to protect their children from smoking (chrono-system). I wanted

insights into the aspects of New Zealand culture Asian families were concerned about and how parents tried to mitigate perceived risks. Conversely I sought to discover what aspects families thought were protective. I particularly wanted to apply the knowledge I gain to assess if and how promoting adherence to traditional family-based Asian cultural values can be used to promote tobacco –free lives in the context of New Zealand’s wider society.

I incorporated participant perspectives of the KKS study interventions into the qualitative research questions because the KKS interventions were family focused and reflect Māori and Pacific Island as well as New Zealand culture and society. I explored Asian student and family members’ attitudes to and experiences of the KKS study interventions to assess their reach, acceptability, perceived impact and congruence with parents and family members’ beliefs and actions around protecting their children from smoking. This also provided an opportunity to further explore the role of parental smoking and family communication, factors the KKS study interventions sought to modify. I had the opportunity to raise the wider social context of smoking since the KKS study was delivered through schools and the tobacco retailer compliance intervention was at the local community (macro) level.

I had already transcribed the student focus group interviews and I brought my understanding of what the students said to the family interviews. I constructed graphs showing the KKS study results and prepared a folder with examples of KKS study intervention resources to stimulate discussion (Liamputtong, 2010). The TANI reference group approved the question schedule. Some members provided their own accounts of smoking and gave me permission to use them in my study.

I revised the interview schedule in response to topics raised as the interviews progressed. The first interview was especially influential. After transcribing and briefly analysing it I retained the basic format of the interview schedule but added questions about religion as follows:

What religion is your family?

How does this influence the way you bring up your children?

Religion was not originally included in my question schedule. After the second interview I reflected about my process and findings with one of my Indian cultural advisors since the interviews were all with Fijian Indian families. She supported the

topics raised including the powerful strategies Asian parents use to influence their children. For example, she knew of a family who cut their daughter out of the family will until she quit. Even though I was reassured about the question schedule I wanted to know more about two cultural aspects of family and community I had heard about previously.

In the first three family groups I was assiduous about not asking families about fear of smoking diminishing marriage prospects for females. This was reported in a qualitative study about British Indian youth (Bradby, 2007). A Chinese member of the TANI reference group told me that her aunties included the argument that no-one would marry her when they were telling her to quit smoking. She said she quit because she could not stand the pressure. I did not want to lead the participants' answers. At the same time they did not raise the topic I was interested in. I consulted experienced qualitative researchers who said I should ask participants what I wanted to know about. I incorporated the following open-ended question:

How might smoking affects a girl's future life chances or prospects?

Sampling

Sample Selection

This study investigated the influence of family on youth smoking. Therefore the definition of family was an important consideration for sampling. I reviewed and critiqued definitions of family in Chapter Two. I sought to interview parents or primary care-givers of students and other adult family members significant to children in order to gain a rounded picture of family influences on Asian youth smoking. This is especially important in cultures where extended family members are an important part of child-rearing. It complements Phase One of the study where only one parent or caregiver filled out the quantitative KKS study questionnaires.

It is difficult to achieve a complete picture of the influence of a family on their children. Donalek (2009) and Åstedt-Kurki and colleagues (2001) argue that one family member cannot represent his/her family. They suggest that two people at least are needed to provide data where the unit of analysis is "the family" since one family member provides one person's perspective only. In contrast I suggest that the choice and number of participants for studies about families are bounded by the research question, research approach or design, culture, family dynamics and availability.

If the research question focuses on child care, then the appropriate family participants are the child's primary family care-givers. If the family is defined as an extended or joint family researchers seek the most influential members of the family as well as family members in close contact with the everyday home-life of the child. Definitions of family as household members are not always applicable (see Chapter Two). Extended and joint families may live in several locations. Children may go to other family members' households regularly, for example, after school. They may go to family businesses in weekends and after school and thus be in close contact with multiple relatives all of whom have valuable perspectives.

Sometimes family members defer to senior family members. In some Asian families the male head of the family's ascribed role is to represent the family especially with regard to contact with authority. Family members may be happy to be represented by others so they can work. There may be conflict between the aim of portraying of family influences in a trustworthy and holistic manner, and respect for cultural norms such as the male head of the family speaking on behalf of the family.

Inclusion Criteria

I did not include non-Asian participants in my qualitative research with families despite the comparisons between Asian and Non-Asians in Phase one. The purpose of the qualitative research was not to compare Asian and non-Asian families but to gain a deeper understanding of Asian families. I invited any adult family members related to the school child to participate. Since individual family members provide insights into families I was happy to interview individuals although I preferred to interview family groups. I sought to interview a mix of male and female adult family members who were smokers, ex-smokers and never smokers, from different Asian ethnic groups who had experienced the KKS study interventions. The inclusion criterion for the family interviews was self-identification of a family relationship with an Asian student from one of the KKS study intervention schools.

The eligibility of the family members was based on the ethnicity of the students. Therefore if students identified as Asian/non-Asian, one or more of their family members could be Asian, Asian/non-Asian or non-Asian. The majority of the families originated from the Indian continent. Fijian Indian families predominated in the sample overall. The other families were Southeast Asian and Chinese.

Unlike the students it was possible for adult family members to have over 18 months exposure to the KKS study interventions. Some parents/caregivers invited to participate in Phase 2 may have entered the study in 2007, the year the data used in the baseline analysis in Phase one was collected. This would have occurred if they had children older than the students available for the student focus groups at the intervention schools in 2007.

Exclusion Criteria

Adults who did not have an Asian family member who was a student at a KKS study intervention school and KKS students' siblings aged 16 years and under were excluded from data collection. However siblings of varying ages were sometimes present during the family interviews.

Sample Description

I conducted 10 group interviews with two or more family members and five individual family member interviews (Table 41). In six cases children of various ages were present for either part of or all of the interviews. In three cases their parents asked them to respond to questions about the KKS study. I have discussed why I aimed to conduct separate adult and youth focus groups previously.

In two cases fathers represented their families because mothers did not want to or could not participate. In another case the father was a solo parent. I individually interviewed one adult brother and one mother whose husband did not want to participate. The other ten family interviews had two or more participants. Most of the families were nuclear.

In summary, the entire sample comprised a self-selected range of Asian family members and Asian year seven and eight students from two low-decile schools in South Auckland, New Zealand (Table 41). The family members were variously related to students in the KKS study sample and of different genders, ages and ethnic groups (Table 42). In every case but one they were directly responsible for the students' care. All family member participants lived in the same households as the students. The majority of the participants in the student focus groups and family interviews (28 of 42) were related to at least one other person in the sample.

Table 41: Characteristics of individual family interviews.

| Number of family members at interviews | Number of interviews |
|------------------------------------------------------------------------|----------------------|
| three | 1 |
| two | 9 |
| one | 5 |
| Total number of families | 15 |
| Adult family members participating in interviews | |
| grandfather, grandmother, father | 1 |
| grandfather, aunt | 1 |
| father and mother | 8 |
| father | 3 |
| mother | 1 |
| adult brother | 1 |
| Additional family members present at interviews (nonparticipating) | |
| grandmother | 1 |
| mother | 1 |
| uncle | 1 |
| children aged 16 and under | 5 |
| Family type | |
| Extended family in one household | 1 |
| Extended family in more than one household | 1 |
| Nuclear family | 11 |
| One-parent family | 2 |
| Total number of families | 15 |
| Ethnicity | |
| Fijian Indian and other families originating from the Indian continent | 9 |
| Southeast Asian | 5 |
| Chinese | 1 |

Table 42: Family interviews: individual characteristics of family members.

| | | |
|-----------------------------------------------------------------------|---------------------|----|
| Smoking status | | n |
| smoker | male | 4 |
| | female | 1 |
| ex-smoker | male | 3 |
| | female | 1 |
| never smoker | male | 8 |
| | female | 9 |
| Ethnicity | | |
| Fijian Indian and others originating from the Indian continent* | male | 9 |
| | female | 8 |
| Southeast Asian** | male | 4 |
| | female | 3 |
| Chinese*** | male | 2 |
| | female | 0 |
| Gender | | |
| | male | 15 |
| | female | 11 |
| Relationship to child | | |
| | Father | 12 |
| | Mother | 9 |
| | Grandfather | 2 |
| | Grandmother | 1 |
| | Aunt | 1 |
| | Adult brother | 1 |
| Religion | | |
| | Hindu | 10 |
| | Buddhist | 5 |
| | Christian | 4 |
| | Sikh | 3 |
| | Muslim | 2 |
| | N/A | 2 |
| Place of birth | | |
| | Outside New Zealand | 25 |
| | New Zealand | 1 |

Notes. *Fijian Indian, Sikh (from India) and Muslim (from India)

** Originating from Cambodia, Vietnam, Thailand, the Philippines

***One participant was Chinese/Southeast Asian

Number of participants

This study was focused on families. Therefore considerations about the number of participants should focus on families as the unit counted rather than individuals.

However ethics procedures ask for the number of individual participants. One family

member, for example the head of the family, cannot consent for others unless they cannot consent for themselves.

I did not limit the number of participants per family interview although I initially aimed to interview up to 20 family members across all the families. This was because I thought that I would be interviewing couples (parents) for the most part (about ten families). I applied to the ethics committee to increase the potential number of family participants to 40 (about 20 families) partway through recruitment because I wanted to accommodate all who responded. I was also aware that I might not reach the point where the responses became redundant because of the range of Asian ethnicities at the schools and because I had a limited time to recruit participants. I was expected to recruit and complete interviewing by the end of 2009, the third and final year of the KKS study interventions.

Data Collection

I used family interviews (n=15) to collect qualitative data to provide more information about the KKS baseline data analysis results from Phase One. I collected a small amount of demographic data about the participants (occupation, country of birth, years in New Zealand). I led all the interviews myself. Five of the family interviews were interpreted (see Chapter Five). In this study the definition of a family interview is a facilitated face-to-face interview with any number of family members. I will discuss family group (two or more family members) interviews followed by family individual (one family member) interviews.

Family Group Interviews

Family group interviews are similar to focus group interviews. Although the minimum number for a focus group seems to be three, an interview with a dyad is more similar to an interview with three people than to an individual interview. This is because there are opportunities for the development or inhibition of discussion through interaction with others. Family group interviews differ from focus groups in that in family group interviews, relationships are pre-established and continue after the interview is finished, the participants generally live together and communication patterns are in place before the interview begins. Focus group participants are unlikely to share the level of ongoing intimacy that participants in family interviews do. These points are both advantageous and disadvantageous for data collection. Family group interviews can include male and female family members together providing opportunities for observation of interaction and joint discussion.

It is often recommended that researchers aim for homogeneous focus groups with participants of similar ages, and the same ethnicity. This is to promote disclosure of information and reduce communication barriers. In the literature most focus groups are run with Asian participants of the same ethnicity. Family group interviews are “homogeneous” by nature. The participants are related to one another. They often share the same cultural background and language. The data from family group interviews provides opportunities to access shared family meanings as well multiple perspectives of family life (Åstedt-Kurki et al., 2001; Eggenberger & Nelms, 2007).

Disadvantages of focus groups include the potential for disclosure of sensitive information, loss of confidentiality, upsetting people through the discussion of disturbing issues and domination by individuals. I discuss this in relation to Asian peoples in the Chapter Five. Care must be taken to facilitate the expression of the points of view of all the family members present despite family norms around communication. At the same time, family interviews can risk disclosure of stories that other family members do not want shared. Family members have to live closely with the consequences of their dialogue. Therefore it is vital to manage conflict in family interviews and to ensure that participants are safe both during the interview and afterwards (Donalek, 2009). Another risk is that family members can smooth over differences and difficulties in order to preserve family harmony and present “happiness facades” (Åstedt-Kurki et al., 2001; Gabb, 1988). Mansfield and Collard (1988) analysed interviews of married couples and found that they produced “consensus accounts”. One person took the lead but sought confirmation from the other.

Family Individual Interviews

I conducted individual interviews with members from five families. Individual interviews give insight into topics of interest through the eyes of one person. He or she is unfettered by the presence of other participants and can express personal thoughts, opinions and versions of events freely without being contradicted or considerate of the presence of other participants (Patton, 1987). Participants can raise issues that are relevant to themselves. Face-to-face individual interviews provide the opportunity to observe non-verbal as well as verbal communication unlike phone interviews. Individual interviews may suit those with English as an additional language. Yelland and Gifford (1995) noted that language skills in individual versus group situations differed markedly among research participants with English as an additional language. They did not expect English language difficulties in focus groups because none were

noted in one-to-one recruitment processes. However some women lost confidence in focus groups hindering data collection.

In some studies interviews with various family members are undertaken individually and aggregated to build up a picture of the family. Sometimes researchers combine group and individual family member interviews. This triangulation of data collection and participants gives different perspectives of family events and processes. Data from different interviews within the same family can be used to reveal hidden consensus and conflict, to confirm accounts provided in other interviews and to clarify data (Åstedt-Kurki et al., 2001; Kwan et al., 2011). In my case, I spoke individually to two women. One moved physically away and no longer participated when two male members of the family arrived. The other woman insisted on speaking to me personally, in English, in the context of an interpreted interview with another family member. The interviews with the women confirmed that individual interviews with women without men present provide different and valuable perspectives. Women-only interviews mean they may be more free to discuss non-traditional ideas and practices. As discussed previously, smoking rates among Asian women are higher than those reported in official statistics, perhaps because female smoking is strongly disapproved of and consequently concealed. Thus it is possible that women who smoked would not mention this in a mixed gender family or focus group interview.

Family Interviews (Group and Individual) - Process

All the family group interview participants chose to be interviewed in their homes. This was convenient for them. The interpreters and I were guests in their homes. We interviewed them when it was convenient for them.

When I arrived I introduced myself and the interpreter if the participants had requested one. We removed our shoes if there were shoes at the front door or asked if we should remove our shoes. We looked for an appropriate place to conduct the interview with the family. We needed a table to put our recorders on and somewhere to sit. We interviewed families in sitting rooms, dining areas and kitchens. In one case we sat on the floor on rugs which were designed for sitting on. I asked families to turn the sound off if televisions were on. I invited any adult family members at home at the time to join the interview.

I and the interpreters sat equidistant from the participants as far as was possible. We waited for all the adult family members were seated. In several cases the women in the

family made sure that we waited for their husbands. In every case we reviewed the information sheet. This set the tone for the interview. It says that the purpose of the research project is to find out what you, your family and your child think of the Keeping Kids Smokefree study and how Asian and Indian children can be protected from smoking. I also explained that even though the KKS study was directed at Māori and Pacific Island families, I and the research team considered the perspectives of Asian families very important. I made sure that families understood what was going to happen, about confidentiality, research dissemination plans and that they could withdraw from the interview at any time. I asked them if they would like copies of the results posted to them. I asked them to sign consent forms if they had not returned signed consent forms to me previously. We filled out the demographics forms. I showed them the data recorders and explained why I was using two. I said I could turn them off at any time. I answered any questions they had about me and the research.

After turning on the recorders I showed the participants the KKS study baseline results and explained them where necessary. After the family focused questions I asked them to comment on the KKS study interventions using the examples and clear files. On two occasions additional family members arrived part way through interviews. I welcomed them and invited them to participate. When they agreed we followed the ethics processes described above before carrying on with the interviews. After data collection was complete, I turned off the recorders, thanked the participants and gave them the \$20.00 Warehouse vouchers for their time. I have described the processes I followed with the interpreters previously.

Reflection on Data Collection with Families

In general the family interviews went well but there were points which could have been improved. I reviewed the interviews because I was concerned about my interview technique. I sometimes asked closed-ended questions. Luckily, the participants often elaborated on their answers themselves. I sometimes asked two or even three similar questions about the same topic at once. This is poor interview technique and confusing as participants answered the last question (Patton, 1987; Robson, 1993). Fortunately this was infrequent. Usually I reflected back the exact words of the participants in order to get them to say more about a topic but sometimes I summarized or interpreted their words and reflected these back to them. If they agreed they seized on these words and used them in their responses. I was concerned that this was leading participants but

there were instances where they disagreed with what I asked them about so I had more confidence in my data.

I wondered if English as a second language was an issue in the English language interviews but participants either sought clarification if they did not understand me or answered the questions I asked. English was not an issue in interviews without interpreters apart from with one mother whose husband translated for her. He had not expected her to be present at the interview and she arrived part way through. Participants who thought they would have trouble with English asked for interpreters.

The participants were happy to contribute. My impression is that participants saw the data from the quantitative analysis and thought it was positive. They were pleased to be asked about what they thought and did. Many thanked me for reaching out to them. Some thought the school should seek them out more.

Overall the participants seemed to view me as someone who wanted to hear what they had to say rather than as an expert who was there to give advice. They did not seek my approval or ask my opinions. Participants talked at length in most of the interviews rather than giving short monosyllabic answers although answers to questions about the KKS study tended to be brief. Expecting the facilitator to provide information, seeking approval and giving short answers were all problems in qualitative research with Asian women in Australia (Yelland & Gifford, 1995).

Because I am Asian I felt the participants knew I understand about protecting “face” and found it easy to talk to me. In addition I could understand some of the participants’ actions in terms of “face”. For example, parents who indirectly teach their children by using others as examples rather than directly telling them what to do or telling them off, may be giving face. Two participants addressed me as either “teacher” or “Ma’am”. These modes of address are courteous and show respect. Perhaps the participants used them because they wished to give me face, because I was older than them or because they associated me with their children’s schools and respected my role as a student researcher from a university. Some of the participants were senior to me in terms of their scholarly knowledge, social standing and religious and cultural education. I made sure they knew I understood and respected this as well as respecting the knowledge that all the participants had about the issues I asked them about. I felt participants trusted me but that they perceived me as different enough to feel they needed to explain things to me. I felt they thought I would understand their points of view, that I was respectful of

their integrity and good intentions and that I would not misrepresent them. Liamputtong (2010) stresses the need for courteous procedures, correctly establishing relationships, confidentiality, and the researchers' responsibility to research participants.

I was concerned my association with the children's schools would mean the participants produced glowing accounts about their families and children. It is impossible to say if this was the case. They told me positive and negative things about their families, their children's schools and other aspects of their lives in New Zealand and in their countries of origin. I wanted to understand the context of their actions – their beliefs and values - and thus I invited them to express their ideals as well as what they did. Sometimes it was difficult for them to articulate the underlying foundations of their behaviour. This tacit knowledge is "normal", unarticulated and taken for granted by New Zealanders for the New Zealand way of life. I could appreciate how and why it was hard for the participants to convey this to me. As discussed previously, my understanding of the social, political, religious and philosophical systems and history in their heritage cultures and countries is limited.

I wondered if having children present would censor the family interviews. On reflection I decided that the families were pleased to have the opportunity to air their points of view and happy to talk about their children in front of them.

Data Analysis

As noted previously, this an explanatory mixed methods study with a post-positivist philosophical position. I have selected a qualitative descriptive approach for the qualitative phase of the study. A qualitative descriptive study aims at providing an analysis which is close to the data. That is not to say the data is not interpreted. This would be impossible (Sandelowski, 2010). Sandelowski & Barroso (2002, p. 216) wrote that "Inquiry entails the hard work of locating participants' views and lives in some intellectual, theoretical, or other disciplinary tradition, and the risk of committing oneself to an interpretation"

Topics must be selected and prioritized even in content analyses of data. If they are not undifferentiated material is presented to the reader. The choices, selection or prioritization researchers make when they create lists of contents, summaries or themes are interpretations. The aim is to make the interpretative process clear so research consumers can follow the reasoning behind the choice. The consumer must be able to see that the themes are supported by the data. They must be presented with information

showing the researcher has considered her influence on the results. The limitations of the study must be articulated.

I elected to do a “general inductive analysis” in common with texts about qualitative research to inform public policy and evaluation (Lincoln & Guba, 1985; Patton, 1986; Robson, 2011; Tesch, 1990)). Thomas (2006) uses this term to capture the descriptive qualitative, thematic or unlabelled qualitative analysis approaches found in many social science and health research studies. The term distinguishes the approach from the inductive analysis methods used in other qualitative research genres such as phenomenology, grounded theory, feminist and post-modern. Thomas asserts that the outcomes of general inductive analyses may be indistinguishable from those of grounded theory analyses. My analysis is guided by Thomas’s 2006 article.

The purposes of the analysis methods recommended by Thomas and the other authors cited above are compatible with Sandelowski’s vision of the outcome of descriptive qualitative research studies. As noted previously this is a “comprehensive summary of events in the everyday terms of those events”. Thomas provides more detail about the aims of analysis:

1. To condense extensive and varied raw text data into a brief, summary format.
2. To establish clear links between the research objectives and the summary findings derived from the raw data and to ensure these links are both transparent (able to be demonstrated to others) and defensible (justifiable given the objectives of the research).
3. To develop a model or theory about the underlying structure of experiences or processes which are evident in the text (raw data).

With regard to aim 3) above, Sandelowski (2000) recommends that results are presented in ways that fit the data. Her examples are similar to what Thomas (2006, p. 240) describes as models, theories or frameworks about the “underlying structure or processes evident in the text”. They include arrangement of results in an “open network (no hierarchy or sequence)”, chronologically (temporal sequence), hierarchically (from broadest contextual factors to most individual/particular and vice versa; from most prevalent theme to least) and causal networks. The models and frameworks are not a priori. Some results may fall outside the framework but still be included in the results. Both Sandelowski and Thomas state that results can be presented without any supra organising structure.

The terminology and definitions of terms for qualitative data analysis vary. I will discuss the terms “category”, sub-category, “theme”, “sub-theme”, “concept”, “topic”, “code”, “coding”, “meaning unit” and “memo” and define their use in this study. All authors recommend reading the transcripts, writing memos and “coding” them. Memos are notes the researcher writes to herself about what she is reading. They can include insights, points to follow up, interpretations and queries. Initially I wrote memos in comment boxes on the transcripts. I used the “memo” function in NVivo when I learned how to use NVivo.

In keeping with the idea that qualitative research works inductively or up from the data (Richards, 2005), I will begin the definitions at the data level. “Meaning units” are segments of text in the transcripts which contain information that is related to answering the research questions. They can be as short as one word – for example, “teach”. I highlighted “meaning units” in the text. “Codes” are words which capture groups of meaning units. They are sometimes “in vivo”, that is they are words from the transcript. “Coding” refers to the process of identifying meaning units and either creating codes for them or categorising them to existing codes. The codes change as the analysis progresses. Text can be assigned to multiple codes. Initially I wrote codes into comments boxes on the transcripts. Later I coded transcripts using NVivo. I define “topics” as the subject matter the participants talk about and “concepts” as abstract ideas and not necessarily supported with evidence. Meaning units, codes, topics and concepts are precursors to subthemes/themes and subcategories/categories.

In qualitative research the usage or definition of “theme” is particular to individual authors and researchers. Themes are commonly defined as “regularities in the data” (Polit & Hungler, 1997, p. 386). This is true of “codes”. However the lay meaning of theme is more than a regularity or pattern. The theme of an event, essay or speech is a recurring idea or topic or concept which unifies the whole. The theme in a piece of music is the melody that draws the piece together. I have chosen to define “theme” as something which unifies different people’s perspectives or different parts of their talk.

In qualitative descriptive research there is usually more than one theme. The themes are likely to be inductively developed out of the codes. Sub-themes express different facets of themes. However themes are not merely the sum of the subthemes. Sub-themes give the consumer a fuller understanding of the themes.

“Categories” and “categorising” imply bounded and precise entities and activities. One does not usually have a category for an event as opposed to a theme for an event. However both categories and themes can be “fuzzy” (Tesch, 1990). They can segue or shade into one another. They can counter point one another such as when different or even opposing perspectives occur simultaneously. Some researchers group categories into themes. Some do the opposite and group themes into categories. Yet when taken together the themes and categories should reflect the people interviewed in their variety (idiographic) and in their commonality (nomothetic). The themes and categories are the elements of the models and frameworks.

Some authors, including Thomas (2006) use the terms categories and themes interchangeably. Thomas generally uses the term “category” but sometimes pairs it with “theme”. Some authors avoid the term theme completely (Bazeley, 2007). Despite my preference for the word “theme” I use the terms “sub-category” and “category” in keeping with Thomas and NVivo.

Analysis Process

In summary, general inductive data analysis in post-positivist research is a process of deriving a compact salient description of factors, characteristics or attributes from many pages of textual data (Giddings & Grant, 2009). Thomas advises reading the text of the transcripts first. This is followed by coding the text or identifying “segments of information” (what I call “meaning units”). The meaning units are grouped into sub-categories and categories and labelled. Then the researcher reviews and rearranges the sub-categories and categories considering their relationships with one another, altering their levels and label names, subsuming some into others and discarding those which are redundant. Finally she may create a model comprising the most important categories. Thomas expects fully analysed data to have no more than eight categories but most likely fewer.

I will explore and discuss data analysis in more depth as well as recounting the process in this study to be transparent and allow the reader to judge the credibility of the results. Data analysis is a reflexive process. The researcher filters ideas, concepts and themes through her conscious and sub-conscious (DePoy & Gitlin, 1998). Close engagement with the interview data begins at varying stages of the research process. In my case analysis began during data collection. Some researchers consider that transcription is an analytical step. Unlike some qualitative researchers, I transcribed the interviews. Listening to the participants’ voices helped understand what they were saying especially

when English was their second language. Their tone of voice conveyed meaning since they did not all have a full English language vocabulary or nuanced grasp of English idioms, expressions and euphemisms. I continued to identify and compare topics and concepts within interviews as well as across interviews when I transcribed the interviews. When I wrote down who said what and I asked myself if their characteristics (e.g. their gender) had a bearing on what they said.

I analysed the family interviews simultaneously with data collection and transcribing. I wrote field notes (sometimes called “memos”) after each interview describing the interview. In these I described the context of the interview. This included how the family was recruited, the location of the interview, the physical surroundings, the seating arrangements, any problems with the conduct of the interview, and comments about interpreters where relevant. I also recorded any major insights and suggestions for the next interview. By insights I mean major new understandings or new ways of interpreting Asian family influences on youth smoking. At this stage these were strong impressions people get when they listen to people talk about an issue they know a little about. Nevertheless these impressions weighed heavily on the course of the interview since they shaped the direction and content of subsequent questions. They shaped my reflection on the interview, influenced the analysis of the interview and thus the interview schedule, subsequent interviews and data analysis. I will explain and illustrate these points.

In my first family interview I interviewed a father and a mother who spoke volubly about their beliefs and practices for parenting their children in order to prevent them from smoking and the influence of culture and migration to New Zealand. In my field notes I wrote the following:

“Greatly interesting as material expressed about religion and continuity between generations. Also I did not know at first-hand how passionate parents were about monitoring and being involved with their children, or the lengths they went to preserve that. I didn’t know how certain they were that they were right and in charge and responsible.”

This excerpt from my records reminds me of the facets of the interview that made a strong impression on me. These facets were new topics (religion; intergenerational continuity) which I had not found in my interviews with Asian families about smoking in a prior study and the tone of the parents’ responses. I was surprised by the intensity of

the parents' belief in their own authority, the lengths to which they went to protect their children and their impassioned delivery.

I reflected on the interview and transcribed it two days after I collected the data. After I completed transcribing I did a preliminary analysis by highlighting text and writing either key words they used or a very brief interpretation of their words in comments boxes. This was the beginning of coding and writing memos. Examples follow in Table 43.

Table 43: Examples of preliminary coding

| | |
|-----------------------------------------------------------------------------------|------------------|
| Example 1 – key words (in vivo codes) – preliminary only | |
| Researcher (me): Why do you think smoking rates are so low in the Asian children? | |
| Mother: Because we always teach our talk to our children that | teach children |
| smoking is good and bad for you we always tell them that it's | talk to children |
| bad for health. | bad for health |
| Example 2 – interpretation – preliminary only | |
| Mother: Sometimes we show them some people that are drunk and | |
| that and at that time we started to tell them that that particular going | consequences |
| to happen if you going to drink or you going to smoke. | |

On reflection, I see that my comments and highlights were influenced by my qualitative research questions. They included what family members did to influence their children ("teach", "talk") in the context of their beliefs, for example that smoking is "bad for health" and will be passed on "to the next generation". I reviewed the comments I had created and added sub-questions about religion, monitoring and prioritising children to the question schedule for the next interview.

I felt elated and excited by the first interview. It was an experience of something that was separate from me but part of me since it was my research and because I am Asian too. My prior interviews with Asian families and Asian youth omitted the context of values, world-views and migration. I was thrilled that this family was so happy to share these with me. I did not feel I had forced the interview or the analysis because I had not thought of much of the material the family told me. I was pleased with my question schedule and with the effect of sharing the quantitative data results with the participants. The quantitative results stimulated participants to reflect on their own practices in

contrast to what they perceived as others' practices and to talk about New Zealand culture and society.

The participants in the second family interview were equally generous with their knowledge. I repeated the process I described above and was astonished to find that this family brought up the same topics and were equally voluble and comprehensive in their responses. The key words, summaries and brief interpretations I had created for the first interview fitted this interview as well. In addition I was presented with the idea that addiction is a deterrent for smoking since it could lead to smoking another person's partly smoked cigarette and becoming "human waste" or a "human loo" like the owner of the cigarette. I speculated that this was related to literature I had read about avoiding contamination in Indian society by banning shared smoking practices between different castes. I described how I consulted one of my cultural advisors about the analysis in the section about developing the interview schedule in Chapter Five.

I went on to interview another three Fijian Indian families, transcribing and comparing their interviews with the ones I had already done to see if there were new topics but there were none. I inserted comments boxes when there were variations (including thinking the opposite of other families about a topic), different examples and reflections on my own process such as where I could have followed up more.

The subsequent interviews were with families from other Asian cultures. I returned to doing more detailed preliminary analyses of the first four of this set of interviews using the comments boxes. I did this because I was worried about imposing my preconceived ideas on families from non-Fijian Indian backgrounds. I did not discern any new topics although the families talked about different aspects of them. I did not alter the question schedule. I completed all the family interviews except for two Fijian Indian families. I decided to leave these to later because I wanted to consult them progressively about the developing results.

I transcribed the remaining interviews, read them and made comments. I reviewed the highlighted words and the comments boxes in all the transcripts. I created a preliminary analytic framework. I discussed this with one of my cultural advisors and rearranged the framework (Appendix R). She is a grounded theorist and this influenced the framework. For example the process question "How?" and the terms "strategies" and "conditions" appear. The word "context" is from the original research questions but is also used in grounded theory.

I created a file for each interview with the framework in it and re-read each interview pasting text from it into comments boxes beside the appropriate concepts in the framework. I read across the documents noting different examples or manifestations of the concepts. I also saw that there were interviews with little or no textual data attached to some of the concepts. I reduced the number of concepts as some were subsumed under others. I discussed them with my advisor and re-grouped them into a diagram which I include as part of my analysis audit trail (Appendix R).

I took the framework to a Fijian Indian family and showed it to them. I found that one interpretive leap I made confused them and was not the way they viewed a set of behaviours. However the other concepts were supported. The family used the framework as a springboard to describe their experiences and points of views. I would not call the topics categories – they seemed far more like tentative concepts.

I needed to follow the KKS study timeline and complete the family interviews in twelve weeks to fit in with the end of the three years of KKS study interventions. Because of this I did the analyses reported above with unchecked interpreted interviews. I was worried about the accuracy of the interpreting, wanted to engage more deeply with the data, to ensure the interpreted interviews were checked and to incorporate changes in the results before asking the last un-interviewed Fijian-Indian family in my sample for their opinion. I contacted this family and asked if I could interview them in 2010. They agreed. It took five months to locate and organise people to check and re-interpret the interpreted interviews. During this time I learned how to use NVivo. I did a credibility check by comparing the Word and NVivo analyses and can see the development of the analysis through the process with the work I done previously informing the NVivo analysis. I found NVivo particularly useful for checking that higher levels of the analysis were well supported.

From here on I refer to my analysis using NVivo terms. I *coded* the data beginning with the first family interview to the last into *free nodes* and *tree nodes*. I created a new NVivo file and re-coded all the data beginning with the interpreted data and ending with the first interview. This enabled me to closely check the initial coding in my prior analyses for fit with the participants' data. I then reviewed the nodes in NVivo and revised their status combining some and moving some up and some down in terms of their level (parent, child, sibling, grandchild). These levels constitute a “tree” framework for the results and imply relationships between the parent nodes and their “relations”. Relationships among the parent nodes constitute the next overall results

framework (Appendix S). The free nodes may stand alone. I chose to code the responses to the interview questions about the KKS study interventions in both the student and family interviews under a separate tree node after completing the above analyses.

I took the results framework to the last family interview. There was one participant who had different characteristics from any other respondent being the only mother who smoked. The participant supported the framework overall but did not agree with some lower level coding. The framework was modified as seen in the next chapter.

Trustworthiness

I discussed rigour in mixed methods studies in Chapter Four. This section concerns the rigour of the descriptive qualitative phase of the study. There are many commentaries, frameworks and recommendations about establishing the trustworthiness of qualitative research studies. (Giddings & Grant, 2009) maintain that the epistemological position taken by the researcher is the primary consideration. Different positions lead to different validation strategies. In post-positivist studies such as this one the focus is on the trustworthiness of the researcher's actions. The aim of validation is therefore to ensure the accuracy of data collection and analysis. Other criteria are available for interpretive/constructivist, critical/radical, poststructuralist/postmodern and evaluation research (Patton, 2002, Giddings and Grant, 2009).

I combined strategies for validating cross-cultural research (see Chapter Five) with the strategies for validating post-positivist research. Giddings and Grant propose the following strategies for validating the qualitative component of a post-positivist mixed methods study. They are clear articulation of the research questions, triangulation, auditability, expert critique, member checking, reliability (when there are multiple coders), negative case analysis and relevance via transferability or "fit". These criteria match those of Thomas's although he omits clear articulation of the research questions, auditability, member checking and negative case analysis.

With regard to triangulation, I triangulated data collection by conducting family group and individual interviews and student focus groups. I also used the interpreters' messages where they deviated from the second interpretation or translation as part of the data. The process the researcher has gone through to arrive at conclusions should be made transparent to demonstrate auditability. I have described my process of analysis and use of NVivo as my "audit trail" to show the path of my thinking so others can follow the logic of the decision making. In addition, I have used the participants' own

words in the reporting of results. I presented the results to TANI for expert critique (see Chapter Five).

In order to increase reliability I did a “coding consistency check” (D. R. Thomas, 2006) by asking experienced Asian and non-Asian researchers to code one interview. The results were at different levels. The Asian researcher coded the data thematically. The non-Asian researcher coded the content broadly. Here is an example (Table 44):

Table 44: Example of coding consistency check

| Data | Researcher | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|----------------------------------|
| | Asian | Non-Asian |
| “If you will have to get married you will have to have your own family and think about which girl will marry you. There will be no-one who will marry you. Before you have a baby and you will smoke you will influence your reproduction. And there will be a high possibility you won’t have your next generation. This he will understand” | Life cycle – generations. Transcends current generation to those to come – not just here and now and implications for self | Beliefs about effects of smoking |

The coding from the Asian researcher was consistent with my own, providing confidence in the analysis. I also had the interpreted data re-interpreted to increase reliability (Chapter Five). In fact the re-interpretation provided more depth to the analysis with the women’s perspectives being more clearly visible, but did not change the coding. I also re-coded the interviews starting with those who were not Fijian Indian because I was concerned that by starting my analysis with these interviews I had forced the analysis for the other ethnic sub-groups. This was not the case. In the discussion I describe the relevance and transferability of the findings and compare them with other research.

Summary

Descriptive qualitative research methods were used in Phase Two of this study. Semi-structure interview schedules were created with questions about the KKS study interventions and to follow up the Phase One (a) results. Data collection included two student focus groups run at school and fifteen individual and group family member interviews in the participants’ homes. The largest participant group was Fijian Indian. Chinese, Southeast Asian and other Indian families were also interviewed. Participants identified with five different religions. Grandparents, parents (smoking and non-smoking) and other adult family members participated in the family interviews. NVivo was used to support a general inductive data analysis. The results are presented in the next chapter.

Chapter Nine: Qualitative Results

Introduction

The qualitative research sought to determine cultural and family drivers for smoking and being smokefree from the perspectives of Asian youth and family members in the context of tobacco control and migration to New Zealand. The results are presented in two parts. Part one describes family influences on Asian youth smoking in the context of culture and migration to New Zealand. Part two is a qualitative descriptive evaluation of the KKS study interventions.

Part One: Family Influences on Youth Smoking

There is a detailed analysis of the categories and codes with supporting quotes and an overview of the results (Table 45). A list of abbreviations used to identify the source of the quotes is on page *xiii*.

Family Authority

Participants unequivocally accepted the authority of the hierarchy of family members. Adults were knowledgeable and certain with regard to their children's upbringing. The following quotes reflect the families' authority over their children in terms of their relative levels of knowledge and role in guiding them.

-Parents are a big tree and their children know nothing (E Asian father s I.12 interpreted)

-In every aspect of life we always guide them (S Asian father ns I.4)

-We always tell them the wrongs and rights of each and everything (S Asian father ns I.4)

Themes under family authority include caring; communicating and controlling. Each will be discussed below.

Caring

Family participants cared for and about their children. They were devoted to them. They valued them, made sacrifices for them, worked together to protect and nurture them and were committed to their long term care and support. They provided a nurturing family environment. In return, elders expected children to be respectful and obedient – including not smoking.

Table 45: Protecting Asian children from smoking: Family authority, values, beliefs and life in New Zealand.

| Category | Sub-category | Code | Sub-code |
|---------------------|------------------|------------------------------|--------------------------------------------------|
| Family authority | C a r e | Valuing children | Vigilance |
| | | Responsibility, duty | |
| | | Reciprocity | |
| | | Working together | |
| | Communication | Nurturing | Long term commitment |
| | | | Providing for children |
| | | | Food |
| | | | Spending time together |
| | | Messages about smoking | Smoking is bad |
| | | | Health |
| | | | Cost |
| | | | Gateway |
| | | Communicating about smoking | Environmental hazard |
| | | | Telling and teaching |
| Values and beliefs | Culture | | Using every opportunity |
| | | | Keeping the tone appropriate |
| | | | Persisting |
| | | | Listening |
| | | | Role modeling |
| | | Obedience | |
| | | Starting early | |
| | | Setting boundaries | Forbidding smoking |
| | | | Having consequences |
| | | Monitoring | Monitoring whereabouts |
| Life in New Zealand | Religion | Protecting from smokers | Monitoring friends |
| | | | Monitoring money |
| | | | Monitoring smoking status |
| | | Limits of family control | Protecting at home |
| | | | Resisting peer pressure |
| | | Children and smoking | |
| | | Gender and smoking | Women |
| | | | Men |
| | | Intergenerational continuity | |
| | | Community life | Caring for extended family and community members |
| Tobacco control | Religion | Respect for elders | Maintaining family face |
| | | | No smoking in front of elders |
| | | | Honouring custom |
| | | Precepts for living | |
| | | Religion and smoking | |
| | Western life | NZ youth norms | Youth smoking |
| | | | Lack of respect for elders |
| | | Freedom and rights | Rights to have the wrong things going on |
| | | School | |
| | Tobacco control | Adapting to NZ life | Benefits of living in NZ |
| | | | Taking from NZ culture |
| | | Asia | |
| | | New Zealand | Cost |
| | | | Social marketing |
| | | | Smokefree environments |

Valuing Children

Children were perceived as the most important thing in the participants' lives.

-We can sacrifice something else but we don't want to lose our kids -They are the most important thing in our lives (S Asian father s I.3)

-Our most precious asset for us Indians is our children (S Asian father ns I.4)

Responsibility and Duty

Families accepted responsibility for their children remaining smokefree and believed it was their duty to care for, guide and discipline their children.

-It depends on the parents, it depends on the family, you know

-They can't do that (smoke) – it all depends how we bring them how we bring them up

-Yeh – it's us, the parents' duty to take care of the children (S Asian mother ns I.16)

-But we, as parents, I think have the greatest responsibility. Huge, huge responsibility

-We can be there with our family everyday but they will end up smoking and drinking because we haven't been doing right at home (S Asian father s I.3)

-There's a Chinese saying "It's the parents' problem when a child is not disciplined" (E Asian father s I.12 interpreted)

Vigilance

The families were "vigilant" in their efforts to fulfil their duty to bring up healthy, well-educated, respectful children. The families were constantly alert for opportunities to improve their children and protect them from threats to their moral and physical well-being. The word vigilance conveys the constancy, persistence and pervasiveness of their actions and gives a flavour of the intensity of their responses.

Reciprocity

Families provided a nurturing environment for their children and expected them to be respectful, obedient, smokefree and not to hurt or embarrass their parents in return. For students, not smoking showed they cared for their parents.

-Because in Vietnam we bring them up, and we work, and we feed them. So when they go out to study they need clothes and we look after everything. And then in the afternoon, after school they go home to eat at dinner. Where's the money for them to eat out? So that's why they have to depend on us. And when they depend on us, they have to listen to us (E/SE Asian father s I.11 interpreted)

-I'm going to work hard, I'm going for you to work hard when I come home (father)

-Yes, usually we tell them before they leave the house (mother)

-Don't steal, don't smoke (S Asian father ns I.4)

- Don't do anything bad (father)
- Bad (mother)
- That it comes back on your father (S Asian father ns I.4)

- Um, when you go somewhere, um, my parents says, and there's kids smoking, and they say that they don't care about others (Student)
- They don't care about others? (Grace)
- Like their Mum or Dad (Student FG.1)

Working Together

Participants expected children to reciprocate multi-faceted care in which everyone played their parts. Fathers talked about being leaders. All but one of the families included their male household heads in the interviews. Sometimes husbands and wives finished each other's sentences, echoed and affirmed each other. Parents supported each other and their children when the children were disciplined. Wives discouraged their husbands from smoking. Parents worked together to care for their children. Children had jobs. One boy kept his mother company until his father came home before going to play with friends.

- We are steady in our boat we are going probably to seas which are a bit rough and rocky and I'm the captain of the house (father ns)
- Yeh (mother)
- And I be very, very, careful that I guide this boat (father)
- Boat (S Asian mother ns I.4)

But like this I will tell you. The couple - the husband and the wife - one person is tough, the other person should be soft. If both husband and wife tough, so which person will the child come to and get help? (SE Asian mother ns I.11 interpreted)

- And your wife she was keen for you to stop? (Grace)
- Yes she not keen for me to stop but 14 hour came home but I'm came home, open the door, "You stink!" (father)
- Did your wife say one of the rules (Grace)
- Not the rule. I don't want to listen to her (father)
- Yeah, okay (Grace)
- You know? But when I've had enough when I open the door after work- "You stink". You know I'm nearly 14 hour in the cab and come home. Nothing sweet to hear that "You stink!" (SE Asian father, ns I.14)

No we decided that she would work part time so she could pick and drop (from school) (S Asian father ns I.6)

After coming we close our shop at six and we come home we have family part to be played. I'll be in the kitchen my daughter she have to help and laundry as well whereas my son he is going to tidy up the whole house (S Asian mother ns I.16)

- He doesn't, he won't go (*to play with friends*) when Mum's there. So he will wait till I'm home about five-thirty, six, and then he will shoot off and go and play (father)
- I see so he keeps his mum company before he goes and plays (Grace)
- Yeh so his mum is not there by herself (S Asian father ns I.6)

Being together in a nurturing family environment

Children were expected to behave well in order to reciprocate care that included: a family environment in which their wants and needs were identified and catered for long term; "lovely food"; and parents who worked hard to provide for their children.

Families said it was important to spend time together and to eat together daily. Some had special family times every week.

Long term commitment to children

Children were not expected to leave home at eighteen and when they had left home, were welcome to return and seek their parents' and elders' advice and support whenever needed.

It's like this, sister, my children they are grown up now. So when they go out I told them like this. Now children, you can go out wherever you want in order to learn and get the knowledge. If you get some difficulties or some problems, anything difficult, please come back because you still have parents to help you solve the problem (SE Asian mother ns I.11 interpreted)

-And no matter what happened or how big you are you still have us. But for Western families, when the kids are eighteen or older, they tend to flatting or leaving the house for working or something like that. But for my child, I still remind them that they still have us around (SE Asian mother ns I.13 interpreted)

Providing everything children need

Children were expected to reciprocate their parents' careful attention in terms of thoughtfully providing everything they needed.

The way you look after them. You know their needs and wants you know (S Asian mother ns I.16)

Now generally speaking, for example, we have a house like this and everything organized in order. The place they eat, the place they study. When they finish school they go home. It's a second place for them. They have place to have dinner ready, they have place to get clean. They all their clothes get washed and dried with a good care. We look after everything so what else would they like? Ha ha ha! (E/SE Asian father s I.11 interpreted)

Food

Food was a very important part of the care lavished on children. It was used as a way of binding the family together. Shared meals provided regular times when family values were affirmed. Parents catered for requests from children and provided special foods that children could only get at home. One family grew special vegetables for a traditional dish. On one visit a child was eating rice porridge, a dish that requires planning as it takes a long time to cook, after school.

-So even you know we sit down with them watching TV as a family. We also sit down and eat together, it's not like he has his lunch or my daughter has her whatever, we all have it together (father ns)

-We have it together (S Asian mother ns I.16)

-In general the habit of our family, for example, every day in Vietnam the children eat some dishes. And now, here, if they want to have those dishes or any dishes so she will cook. For example, Mum cooks a dish with salty fish dish served with rice noodle. Boondrio - another soup noodle with the rice noodle and fresh meat or she cooks the stir fried wok which suits the children's taste (father s)

-So can't give up (SE Asian mother ns)

-Children can't give up those dishes or the food so wherever they are they still have to come home to eat it (father)

-They all have to come back home (E/SE Asian mother ns interpreted)

- I mean the father is a very family man. He loves like every Saturday. He'll wake up. He'll make breakfast. And he expects all of us to have breakfast on Saturday and Sunday because we are unable to do that on the weekday (S Asian mother s I.17)

Yeh, yeh. And kids, you know, they come home and they hungry. And you give them to day care or wherever - like we don't eat pork and beef, so they will be limited whatever you get at day care or whatever. So at least my missus she cooks him afternoon tea before she goes. And when he comes home he's hungry and there's food on the table there (S Asian father ns I.6)

Spending time together

Some families described spending time together at home outside mealtimes, talking, watching movies and praying. These were opportunities for nurturing family unity, sharing and passing on family values.

-Well, like every evenings we sit together and talk about our families (father ns)

-Talk about our families, our children, other children (S Asian mother ns I.5)

-Mondays is the day we have family time you know altogether with lovely meals, sitting together, scripture studies (S Asian mother ns I.16)

- Right that you participate in the prayers and help in preparation of the prayers and if we invite the (father)
- family (mother ns)
- The family or visitors for prayers they (*the children*) have to be part and parcel from beginning to end (S Asian father ns I.4)

Communicating with Children

Families believed that one of their most important duties was teaching their children. They wanted their children to learn their values and to warn them against dangerous practices like smoking. They took responsibility for making sure this happened.

- Children are just children whatever you teach them they going to listen. If you won't teach them they will never know (S Asian mother ns I.16)

Codes in this section include the content of communications about smoking and the process of conveying this content.

Messages about Smoking

Student focus group and family interview participants reported similar messages about smoking. Smoking was "bad". Family members' messages were in the context of communication about other risky behaviours, especially drinking. The main message was that smoking is unhealthy. Other messages included: smoking is expensive, could be a gateway to other unsociable behaviours, and an environmental hazard.

Smoking is Bad

Participants referred to smoking as "bad" throughout the interviews. It was bad for health and conflated with education about values.

- In Indian movies mostly the bad guys smoke (father)
- Ah (Grace)
- So smoking is a bad value (S Indian father s I.3)
- We teach them – this is good for you this is not good for you. Stay away from the kind of evil things (S Asian mother ns I.16)
- My Mum says it's (*smoking is*) bad (Student FG.2)

Health

Student and parent participants talked about the risk of smoking to health. This was an important message and graphically illustrated with talk about rot, smell, deformity, disease, death and addiction as well as the threat to children's ability to study.

-We tell them, first of all we tell them, smoking is a bad habit itself. It's unhealthy. Secondly it is bad for your health, you'll have cancer. All the other diseases, kidney diseases all kinds of diseases there's nothing lung, lung cancer, heart problems, breathing problems, diabetes and all sorts diseases you carry which will be passed onto your children (S Asian father ns I.4)

-But for us we have to remind our children that these stuff are not good especially for your brain to study. It will destroy your brain (SE Asian mother ns I 13 interpreted)

-My Dad told us what happens if you smoke like what are the risks. He said you have more chances of dying than living and you'll smell very bad and your teeth will rot (Student FG.1)

-My Dad says it's addictive and so if you start smoking you can't quit it's pretty hard to stop (Student FG1)

One father said it was acceptable to smoke after you had children.

-Smoking influences reproduction there is a lot of certain evidence that it influences reproduction.....Before you have a baby and you will smoke you will influence your reproduction. And there will be a high possibility you won't have your next generation. This he (*son*) will understand.....So after he get married he has his own family and he has children he might be like his Daddy that he might smoke but before that he must not (E Asian father s I.12 interpreted)

Cost

Another strong message was that smoking is a waste of money that could be used for other purposes such as food and for future family expenses.

-you'd be throwing about 40, 60 maybe a \$100 a week just on smokes (Student FG.1)

-Oh I said look son, you know it's smoking. I tell him like they don't realize, they wasting money on that number one. I said it doesn't give you anything. Doesn't fill your stomach, doesn't do anything to you. You suck the stuff inside and puff the smoke outside (S Asian father ns I.6)

-Secondly your pocket, the amount of money you spend on cigarettes. If you set aside that money and put in the bank then tomorrow, you will be able to educate your child with that money. That's your savings for your children when you grow up (S Asian father ns I.4)

Gateway

There were concerns that smoking would lead to unsociable behaviours such as stealing, begging and contamination through sharing cigarettes.

-I wouldn't like to see you smoking because where would you get the money? That would be like you're stealing from somebody, asking for somebody's money, and it would draw you into doing something stupid (SE Asian father ns I.8)

-And if we did get addicted to smoking some kids might try to steal money to kind of get money of their own (Student FG.1)

-You can steal to buy the smoke and more than that if you not able to steal, and the person beside you is smoking, and you got that kind of habit there that you can't, even that fellow is the waste, human waste, human waste, human loo, and there's smoking you'll take the half butt from him and end up smoking. And that attracts my son or daughter, to think deeply what's my papa saying if that fellow is a loo and he is smoking and I got a habit (S Asian father ns I.4)

Environmental Hazard

Children were told that smoking was not just unhealthy and expensive but a nuisance to others, polluting and a fire hazard.

-Well I tell you first of all you are a nuisance to others, you are a nuisance to others (S Asian father ns I.4)

-My Mum just tells me it's bad for my health and makes the environment dirty (Student FG.2)

-and in the papers if something happen smoking related, then sometimes you hear that someone was smoking he left the cigarettes burning the house caught fire so we tell him about that Fijian (S Asian father ns I.6)

Communicating Messages about Smoking

Telling and teaching

Family members used a range of processes to convey messages about not smoking to their children. Different family members were involved. Students said that parents, grandparents and siblings instructed them not to smoke.

-They say don't smoke, my Dad does and my Mum (Student FG.1)

-My grandmother tells me not to grow up and smoke (Student FG.2)

-My sister tells me not to smoke and my brother (Student FG.2)

Similarly parents, an aunt and grandparents instructed their children about smoking, generally using the terms "tell" and "teach" synonymously.

-No smoking. No drinking wine or beer. So it's the way I teach (E/SE Asian father s I.11 interpreted)

-I tell the children "No smoke, no drink" (S Asian Aunt ns I.10 interpreted)

-And we tell them that in our community we shouldn't eat anything like that or drink or smoke (S Asian grandmother ns I.9 interpreted)

In general family members instructed children whenever opportunities arose and when they were receptive. This included at dinner time, before going to sleep, before children entered environments outside home, when they saw adults or children smoking, when they saw anti-smoking advertisements or when children talked about learning about smoking at school.

-Normally I will use circumstances to educate (E Asian father s I.12 interpreted)

-But overall, like, ah, we try to in every respect, always we try to tell them, and we tell them in the right environment, in the right form, at the right time, when the mind is in peace, so they are able to pick up the pieces.

-That's the time they think before going to sleep. And they must be thinking I want to get papa's respect and at that time the environment itself will form them into their thinking..... That's the time they relax. And they feel that my mum comes and kiss me and kiss me and that's the right time (S Asian father ns I.4)

- But the most important thing if I want to teach my children I have an idea. The way I do it is every evening I gather all the children together in a bright house in our house for dinner (E/SE Asian father s I.11 interpreted)

-Yes usually we tell them before they leave the house (mother)

-Don't steal, don't smoke (S Asian father ns I.4)

-Yeh, and then I show him, sometimes we see packets lying around, like I told you before, showing all those diseases - you know you can get that (S Asian father ns I.6)

-'Cos he was trying to tell us about smoking so he asked me and my sister to go in the car 'cos we were going for a drive. And we saw a bunch of people smoking, like, near the road. And he told us 'See that is bad!' Yeah, he told us (Student FG.1)

-Because then he would see other kids smoking at the school. He comes and asks us and we tell them 'No it's not good 'cos he might get cancer of the mouth cancer, or lung cancer. (S Asian father ns I.9 interpreted)

Keeping the Tone Appropriate

Some family members did not want to send "heavy" messages. They could not forbid their children from smoking so they conveyed their anti-smoking messages and reminders lightly.

-My son when he went out with his friends I asked him whether his friends smoke. But I tried to make it in the way of joking question (SE Asian mother ns I.13).

-We can't force her not to but we can tell her about do and don't things. So you can't say no but you have to carry on with your do and don't things (SE Asian father ns I.13)

Persisting with Anti-smoking Messages through Life

Families emphasised starting teaching children about smoking when they were young. Some families said they did not give up advising children not to smoke even when they were adults. One Sikh family said they never talked about smoking but relied on school and lifelong regular reminders from their faith to convey messages about not smoking.

-But if we tell her when she is still living with us, it's very very hard and a very small percentage of chance, that she will take up smoking (SE Asian father ns I.13)

-No! No! No! Not stop keep telling to them. Keep explaining to them (father)

-Doesn't matter how old they are? (Grace)

-Yeh! (mother)

-Doesn't matter even if they man and wife. Keep say! Say! Say! Say! (SE Asian father ns I.14)

-Nobody smokes in our house so he doesn't even know about smoking.....and everyone asks what smoking is so we not even talking about smoking (father)

-So how do the children learn they shouldn't smoke? (Grace)

-Because then he would see other kids smoking at the school he comes and asks us and we tell them no it's not good.....at the temple we learn not to smoke and it's even there are "no smoking" signs in the temple and he reads them as well (S Asian father ns I.9 interpreted)

Listening

Smoking and non-smoking parents described two way communication with their children to keep them safe. They thought it was important to hear their views.

Children don't want their parents to know they smoke and someone who talk about him and hate him. I just don't want to create this kind of detrimental cycle. Hoping that between he and I father and son there will be normal communications so he really respect me and he respect me as well (E Asian father s I.12 interpreted)

And then maybe if you have seen your child smoking the best thing would be you know to talk to your child tell them you know make them sit down tell you (S Asian father ns I.16)

As you see my youngest son he arrived home he even told me "Father, you not allowed to smoke". He even put the paper on the wall on the fridge. (E/SE Asian father s I.11 interpreted)

Role Modelling

Families believed that elders were role models for their children. Non-smokers believed that children would want to try smoking if their parents smoked and that children who smoked were not at fault if their parents role-modelled smoking.

When the parents smoke and drink at home, the children see this and want to try it. At first they test it. After trying it a few times, they do it again and again and it slowly becomes a habit (S Asian grandfather ns I.10 interpreted)

If they are smoking they are saying they are the role model. That means they are the role model teaching the child to smoke, and if the child smokes, then you cannot blame the child (S Asian father ns I.16)

Parents who smoked explained that it was more difficult to discourage others from smoking. They counteracted role-modelling smoking with anti-smoking messages.

I am the father. I teach my children. Well I now am an addict of tobacco. Please don't follow my steps (E/SE Asian father s I.11)

Like I said if the 16 years old would have asked me I would have said ok son go ahead go and smoke but the thing is that Mum has a dirty habit. I'm trying to quit it. Don't follow that (S Asian mother s, I 17)

Control

Participants in the family interviews talked about controlling their children. They trained their children to be obedient and respectful from a young age. Control included setting boundaries including forbidding smoking with serious consequences if children were disobedient. They monitored their children's whereabouts and friendships, limited disposable income, monitored spending and used the smell of cigarettes to see if children were smoking. They protected children from the negative influence of people who smoke. They acknowledged there were limits to their control.

Our children, I mean they born in Fiji, and we have taught them what to do, what not to do, so they are under our control (S Asian father ns I.16)

I mean, like, they keep tight control their children. You know they don't allow them. No, you don't do this (S Asian father ns I.16)

Obedience

Families were strict about obedience and children did as they were asked even though they were not living in their countries of origin.

Yes they obey. I understand that the environment and the society here are different from that in Thailand but they respect us and they are obedient (SE Asian father ns I.13 interpreted)

-Yes so they have to obey my rules, not the other people's rules

-Yeh, my children, my son, he obey my rules (S Asian father s I.7)

They know their rules (S Asian mother ns I.4)

Starting Early

Families began to control and shape their children while they were young and malleable. Starting young meant that their children knew what was “wrong or right” and were well-behaved when they were older.

You know when the trees are small you can trim them and shape them. Once they are grown up it will be very hard for you to do (S Asian father ns I. 15)

From the very, very, early age trying to bring discipline to children and that discipline plays a very big portion of how we mould our children into growing a well behaved child. Since early childhood I’ve been moulding them so that has paid off now (S Asian father ns I.4)

Like my son, you know, we try to stop him taking up smoking at the early age. And then when he’s twenty, he knows what’s wrong or right by himself (SE Asian mother ns I.13)

Setting Boundaries

Parents were strict and discipline was important. Some participants said the families were stricter with girls than boys. They set clear boundaries for their children. They told or advised them strongly not to smoke and followed this up with consequences if they did.

Discipline comes first and our children that, ah, too (S Asian father ns I.4)

No, no. None of my sisters smoke. It’s just they get disciplined – the parents are more actually strict with the girls to the boys (SE Asian father ns I.8)

Forbidding Smoking

Some children were forbidden to smoke.

Alcohol, wine, you can consume. One or two bottles of beer is okay. Tobacco or cigarettes definitely, I told you, I forbid it (E Asian/SE Asian father s I.11)

Cigarettes I don’t actually tolerate them (SE Asian father ns I.8)

Consequences of Smoking

Children who smoked could expect consequences such as being shamed in front of others, told off, angering parents, being threatened with the family’s return to country of origin and being disowned. Families talked about physical discipline for disobedience in their countries of origin but rarely in New Zealand.

- Well when they catch them, they really give them a, you know, you know - tell them off or embarrass them to their friends or something like that, to get them not to smoke because it's a very bad impression for other people (SE Asian father s I.8)

-You don't have to actually smack them..."I saw you smoking. Eh, I think we better move out of NZ. Go back to Fiji where I can control you if they don't let me control you here". Right? So he will think "Papa goes back to Fiji. Oh no, no, I better leave this." You got to use all those words and things (S Asian father s I.3)

-What would they do if they found you smoking? (Grace)

-They'd never give us lunch money again (Student)

-How would they feel? (Grace)

-Angry

-Upset

-Worried (Students FG.1)

-If you see him start smoking what you do (Grace)

-I think I may not see him as my son (E/SE Asian father s I.11 interpreted)

Back in Fiji if you find a nineteen year old son smoking and the parents don't like it they will give him a slap on the face. One, two or three! What are you doing? You got to leave this habit (S Asian father s I.3)

Monitoring Children's Whereabouts

Children had little opportunity to smoke since their whereabouts was monitored intensively. Parents took great care over travel to and from school although this was not just to prevent smoking. Some families dropped their children at school and picked them up afterwards. Others gave children set times to be home by and explained that they looked for them if they did not arrive. Many children did everything outside school under the watchful eye of their families. A few played with friends but they had to tell their parents who they were with and where they were.

-Because my wife will go to pick my daughter. And my son, he have to come within ten minutes from Manurewa to here (Asian father)

-Yes (mother ns)

-Expected home within 10 minutes (Grace)

-Yes. If not we have to look (S Asian father s I.7)

-No because it's the schedule of the day. For example, at that place they have the bus route and when I go out to pick up I pick up two boys. And the boy and the girl at this high school, they learn next to each other and they have the bus route. So I take them to school in the morning but in the afternoon they go home by themselves (E/SE Asian father s I.11 interpreted)

Parents who had lived in New Zealand for longer were slightly more relaxed about children walking home with friends and playing at other people's houses.

- Yeah, currently she walks by herself but before she normally meet up with friend (mother)
- And coming home? (Grace)
- She walks home with friends every day (mother)
- And is someone here when she comes home? (Grace)
- Yeah, but sometime if I'm not home she will hang out at the neighbor about three houses from here who having a daughter at her age (mother)
- Thai friends? (Grace)
- Yes, Thai (mother)
- So do you expect her to come home straight after school? (Grace)
- Yes we keep an eye on that (father)
- When I'm at work and I know what time she should be back, I'll ring my friend to check if she is already there. She will be on time (SE Asian mother ns I.13 interpreted)

Oh usually they walk with their friends specially because now they don't even want me to pick them up they just walk with their friends and then their friends, usually they go for sports (SE Asian father ns I.8)

Some South Asian families were always with their children apart from when they were at school. Their children accepted this.

- Nobody stays home alone no way (S Asian mother ns I.16)

Yeh we go for prayer meetings, we go for birthday parties we go everywhere but we know our limits, where to go and where to come, and we never leave our kids alone. We always keep them with us (S Asian mother ns I.3)

- That's a different thing but they always respect. Probably they say I want to go there and I say "NAH!! You are not going, you are not going with them. It's not right I will..." (father)
- “I will take you” (mother ns)
- They never fuss (S Asian father ns I.4)

Monitoring Friends

Parents were strict about the friends their children associated with and monitored their relationships. They did not allow their children to associate with others who might behave badly or smoke. They knew their children's friends and the families, observed their children when they socialized, placed strict time-frames around contact time, and told their children not to play with those whom they did not trust.

- We only want them to have friends you know the children who are really good as their friends (father)
- How so you make sure they are only playing with good people? (Grace)
- Cos they check their mobile numbers they have. So we can confirm it by ringing them who they are. And we check even like how their family is. And we think they're not good, we just ask them not to be friends with them. And when we see something like

that, we tell them, you know, that's the last time they playing with them (S Asian father ns I.9 interpreted)

We know most of their friends since she always told us where she went and we also observed (SE Asian father ns I.13)

We never allow our children to go on their own to socialise. We go even with their friends and their kind of parties we go with them so that we have a constant watch on their behavior, and what they are doing, what kind of people, children, friends are they socializing with (S Asian father ns I.4)

If he keep in touch with some people who give him cigarettes, who smoke with him during playtime, what I can only say to them? Sorry my child cannot play with you now at the moment. (E Asian father s I.12 interpreted)

Yes, they can go, if they have some relations with us. My granddaughters and their friends, they mingle, meet each other and go to each other places (S Asian grandfather ns I.10 interpreted)

- He asked us a couple of times his friends would stay the other side of the street, they walk, if he could walk with them. I said no.....

- I mean children do catch they catch really fast. So I don't think his friends will smoke, but I haven't seen them, so just in case someone might say - oh I got some smokes shall we try, some might encourage him, I don't know (S Asian father ns I.6)

Controlling Money

Families controlled the amount of money they gave children and checked how it was spent. This was one way they made sure that children would not have access to cigarettes.

-And don't give them spending money extra than \$5.00 you know (mother)

-Oh yeah (father ns)

-It's senseless. Just prepare their lunch like we always do and just give them some money for their drinks, or their fruit juice, or whatever. Don't give extra (S Asian mother ns I.16)

-Cigarettes they can't get them without money (father)

-We don't give them (mother ns)

- We actually give them a very controlled amount of money. If it's \$3 for lunch it's going to be \$3 not \$10.00 or \$20.00 (S Asian father s I.3)

How do I know? Well I always ask them when they come home what they had for lunch today. What did you buy? Then they tell me, oh I had pie. So I say what did you do with the rest? So usually I ask them for the change back usually, so I know that, you know. I just put it back in the coin jar and give it to them next day (SE Asian father ns I.8)

Monitoring Smoking Status

Families monitored their children of all ages for smoking using the smell of cigarettes

Sometimes I'm not confident about his answers so I open the car door and smell (SE Asian mother ns I.13)

But if your rule is strict when they come home, you know what, can tell because you all in the house - you not smoking. When he come home, you can smell the smoke (SE Asian mother ns I.14)

Actions to Protect Children from People who Smoke

Protection from Smoking at Home

Families took various measures to protect children from family members and others who smoked. They included warning children about staying with relatives who smoke, not allowing children to handle smoking paraphernalia, allowing children to leave the room when someone was smoking, keeping smoking outside and not smoking in the car.

-Well I just told them "it's not good. Your mother's habit is not good". Like my son usually like stays with her in the weekend..... And he comes back, he comes back, get blood nose.....I said I don't mind you seeing your mother but when you go there and they all smoking inside the house, that's what you get because you allergic to it (SE Asian father, I.8)

-I never tell them to bring my smoke.....I just put it here when I am sitting here so when I go to my bedroom I take it with me (S Asian father s I.7)

When he smokes, he smokes and has a chat with me. So I have to see where is the wind comes from, the direction of the wind. So I try to avoid the smoke. Since we married now we are ok but my children they all know if their father smokes. So they all go back to their room. (SE Asian mother ns I.11)

No tobacco is allowed in our home (S Asian grandfather ns I.9 interpreted)

I never smoke in the car (*with his daughter*). I replace it with the lollies. I'll be sucking on lollipops (SE Asian brother s I.15)

Unlike fathers who smoked, two mothers who smoked did not forbid their children to smoke. One mother was interviewed and the other was described by another participant. They wanted their children to tell them if they wanted to smoke rather than smoking secretly.

- I told my son, I said "Son, I know there's the respect, you respect us in every way. But the thing is that if you want to smoke don't lie, don't hide, don't think that my Mum is

older than me and I respect her and can't talk to her you know? You come and tell me Mum, I want to smoke. We'll talk and then you can go ahead." (S Asian mother s I.17)

Resisting Peer Pressure to Smoke

Families told children to stay away from children who smoke, to say "no" if they were offered cigarettes and to tell the teacher if there was a problem.

I always tell them to learn to stand up for themselves and learn to say no. The very big thing in this language and every race is NO! You learn to say no you'll be in everything (S Asian mother s I.17)

-Yep, yep. Cos, right, my daughters they come from school. They tell me they seen something, someone, doing something wrong, like someone smoking or smoking (father)

-Drinking (mother ns)

Or someone bullying someone but they will tell me those things happen at school. So what'll I say, tell them, so be away from those things. Like something is wrong you tell your form teacher or the head teacher there (S Asian father ns I.5)

-So if he knows his friends smoke will tell you? (Grace)

-Normally he won't tell. He will only say I don't like to be friends with that person (E Asian father s I.12 interpreted)

Limits on Family Control

Families recognised limits on their control of their children and that children who smoked were likely to hide this from their families. They could not watch them all the time. Families could not force adult children to be smokefree. In one case, a mother occasionally bought cigarettes for her oldest adult son.

Parents can't follow them. We can only provide before they get married to prevent them from going the wrong way ((E Asian father s I. 12 interpreted)

Like if they steal, the time they sneaking the smoke. I mean like that they smoking from outside the house or in the park with friend. So we can't parent stop. But when they come home we don't want to see them smoke at home in front of the parents. Never ever want to see them smoke in front of the parents (SE Asian father s, I.14)

Unless they got married, they got job that we can't stop them, because they say "I'm a man. I got a job. I don't take your money." We can't stop them. They got freedom (SE Asian father ns I.14)

Values and Beliefs

The participants said that culture and religion explained what they believed in and what they did. The participants' cultural and religious values and beliefs about children and women smoking; the importance of the intergenerational effects of smoking; the responsibility of extended family and community elders for watching children outside

home; and respect for elders underpinned the proximal family influences on child smoking described previously under “Family Authority”.

Culture

Participants used the broad terms “culture” and “tradition” to explain what underlay their values, beliefs and actions to protect their children from smoking. Culture was viewed as normal and integral to being. It was something “everyone” knew, something people grew up with and the definition of who they were. Culture told people what was “right” and “wrong”. It was also traditional and customary practice. Respect for elders was an essential cultural cornerstone of preventing children from smoking. Participants distinguished between their heritage and Western New Zealand culture.

Yeh, it's part of the culture but everyone have understanding, everyone knows what's right and what's wrong (S Asian father ns I.5)

Give them good examples. You know, about the culture and everything. It's in our culture. It's not in our culture. If you do this it's good for you. If you don't do that it's not good. Things like that (S Asian grandfather ns I.10 interpreted)

-Well, ah, I mean that's all about our culture ah? What we brought up, what our parents have taught us so we respecting that

-Like the New Zealand culture, it's different from us. So we can't take everything from that but we have to do some parts but not all. The good things, take some things from there – the good things (S Asian father ns I.5)

But here in our family we go for the traditional customs. I save. I manage. I look after everything. So us an example my children follow it (SE Asian mother ns I.11)

-I always respect people older than me anyway (brother)

-How do you know to do that? (Grace)

-It's just how I grew up and it's pretty much who we are (SE Asian brother s I.15)

Culture and Child Smoking

All of the family participants believed that children (as in youth, not in the relationship sense) should not smoke. Some said this was part of their cultural or religious heritage.

Yes it's in my culture usually. Generation and generation and generation. No smoke and no drink. No boy, no, no girl. Same (S Asian Aunt ns I.10)

No child is allowed to smoke (E/SE Asian father s I. 11 interpreted)

No definitely it (*child smoking*) is not correct. It should be prohibited (E Asian father s I.12 interpreted)

Two participants noted that disapproval of child smoking was not always the case for boys in their countries of origin. One said his aunt and father punished him for smoking when he was young but his parents encouraged him to smoke when he was fifteen years old. Another participant said that child smoking in his country of birth depended on class. “Highly educated” people discouraged smoking and “ordinary” people, especially farmers, made complimentary remarks to boys as they grew up and started smoking.

-Yeh. Like when my father first found out that I was smoking, because he caught me smoking, you know, when I was in the market. I was smoking, sitting down on a table on a bench. I was smoking. I got a slap. Ha ha! It was he didn't approve that but of course I was out of the house all the time I was, ah, living on the street so.... (*participant lived on the street before going back to his village as per the next quote*)

-Um, like in my growing up, I was actually encouraged by my parents to smoke because of, probably because at the time we were planting rice, the cold. It's actually to fight off the cold and we were in rainy days. I was about fifteen. (SE Asian father ns I.8)

Depends on what kind of family. For highly educated people they will actively prohibit that. So ordinary family especially farmer they will praise their children – oh you are a big boy that you can smoke (E Asian father s I.12 interpreted)

Gender and Smoking

The general consensus was that women did not traditionally smoke and few Asian women smoke currently but there were many exceptions. While smoking was associated with prostitution, drinking, party going and being “dirty”, participants did not talk about conveying these messages to the girls in their families. Some thought that the marriage prospects of girls were affected if they smoked but others did not. One woman who smoked argued that women have as much right to smoke as men. Male smoking was not stigmatised.

Female Smoking

Women were not expected to smoke and few did.

Traditional that's how it's expected. It's expected that men can smoke but not women (E/SE Asian father s I.11)

-Maybe it's alright for the men to smoke but for the ladies it's completely banned (mother ns)

-Especially if they are breast feeding you know (S Asian father ns I.16)

The participants said that Asian women who smoked included widows, women past child-bearing age in their home countries; rural women; women privately at home;

women and teenage girls in nightclubs and dance venues away from their families; prostitutes and gang members ('black society') in their home countries; artists; city women; and rich women.

- The ladies who do smoke in Fiji (*are*) the ones whose husbands have died (mother ns)
- Older ones (S Asian father ns I.4)

When I just graduated from the medical school I went in my practical year to a fisherman village to do a survey. There was around 300 fisherman family over there. What I saw was most of the women there smoked waterpipe (E Asian father s I. 12 interpreted)

- There's heaps of Indian women going to parties. In fact there's heaps of Indian women smoking wouldn't tell you the truth (*about whether they smoke or not*)
- They wouldn't like their partners to know, their kids to know they actually smoking. Or their parents (S Asian father s I.3)

In Vietnam the past if women smoked people said that those women(s) are sister and brothers, it means belonged to the gangs (SE Asian mother ns I.11)

If she smokes, then she will smoke. But very few women there smoke. Women of that "high level" usually are the ones who would smoke (S Asian grandfather ns I.10 interpreted)

Negative connotations of female smoking included dirtiness; bad reputation/bad impression; being outgoing; drinking, dancing and going to nightclubs (New Zealand and countries of origin); and prostitution and illegal activities (Asia).

- It's a dirty job if girls smoke (S Asian grandfather ns I.10 interpreted)
 - Bad reputation (Aunt ns)
 - If somebody smokes they will never sit there. They will just leave - especially (*if*) women (*smoke*) (S Asian grandfather ns I.10 interpreted)
 - Girls smoke when they drink beer, or like that you know, or alcohol – when they drink (S Asian father s I.7)
- In our culture it's bad to see a girl smoking. It's ah like they are the prostitutes – only the prostitutes smoke. It's like, ah, the idea. When a girl smokes you are a prostitute ha ha (SE Asian father ns I.8)

Participants said that culture change resulted in women smoking. Women were freer in New Zealand and could smoke and not be considered prostitutes.

- Well, I think in 1970s. And also because Americans. All of this armies, navies were there because the prostitution went so much. And that's when it started a lot of women (*smoking*). It was more or less when, ah, outside influences. That's really from the whole culture you know (SE Asian father ns I.8)

- We change because some ladies come and live in New Zealand they live with the New Zealand law (father)
- So that means? (Grace)
- That means they got more freedom than in Cambodia (*and can smoke*) (SE Asian father ns I.14 interpreted)

A woman who smoked associated this with gender equality. She was trying to quit.

Why shouldn't (*women smoke*)? What is the difference between a man and a woman? If a man can smoke why can't a woman smoke? (S Asian mother s I.17)

Parents were stricter with girls than boys. Some agreed that smoking diminished girls' marriage prospects but it depended on the man and his family.

I got my son but I know I have to control my daughter (S Asian mother ns I.3)

Girls smoke, if they go out, nobody want to marry them (E Asian/SE Asian father s I.11)

-If it was me I wouldn't marry a girl if she's smoking and I don't smoke. I wouldn't (S Asian father ns I.16)

-Like normally they look for the decent one you know the respected families (mother ns)

-Well I really don't know. I think it depends on who is going to marry her. I think it's also part of like in my culture Philippines. Like I've observed that when the women smokes and the man really love her, it's okay. But most of the men are actually put off with the women smoking (SE Asian father ns I.8)

Male Smoking

Male smoking was not stigmatised.

Traditional that's how it's expected. It's expected that men can smoke but not women (E/SE Asian father s I.11)

Some of the male participants who smoked talked about quitting. Men who were ex-smokers quit for their health, their families and because it was inconvenient to smoke in New Zealand.

Intergenerational Continuity

South Asian family participants emphasised a multi-generational view of child-rearing strategies and the causes and consequences of smoking. Other participants mainly focused on two generations – parents and children. Women who smoked were considered to have an especially bad influence on future generations.

-I seen some of them they carrying the baby in their hand and they also have the smoke in the other one and you know from that if you look at it (father)

-So the baby smoking too (mother ns)

-So maybe their parents were doing the same thing when they were young and maybe their parents' parents they were doing the same thing in front of their parents. So if you look at it that tide keeps coming up you know (S Asian father ns I.16)

-It's a dirty job. Girls are working at home. Cooking, cleaning, washing. She's smoke. No good. Always the children (Aunt)

-Because the children will directly learn from her if she has kids (S Asian grandfather ns I.10 interpreted)

When the parents smoke and drink at home, the children see this and want to try it (S Asian grandfather ns I.10 interpreted)

Yeh because depend on the family and the parents when they don't smoke the children they can't smoke (SE Asian father ns I.14)

Smoking is Not Passed on to Future Generations

Some disagreed that child smoking was related to elders' smoking. They cited exceptions in their families. One non-smoker explained that he did not smoke even though his father did. Smokers did not blame elders for their own smoking. One said he smoked even though close relatives who smoked had quit. One mother who smoked held contradictory views. On the one hand she explained that her father was a heavy smoker who condoned her smoking so long as she smoked in front of him. On the other hand she noted that her siblings and children did not smoke. She concluded that her own and her father's smoking was not passed on. In addition she argued that non-smoking was not passed on to future generations since her nieces and nephews smoked.

-That's why I teach my kids to go for the light not the darkness because I tell you before that my father was a smoker. I bought smokes for him. Yeh? But I tell you one thing, there's a warning there, there's a warning on the packet there (father)

-The packet - it's written there (mother ns)

-Yes, I read that thing then I understood that it is a bad thing (*and did not smoke*) S Asian father ns I.5)

But coming into my family here it's a bit different 'cos my grandfather used to smoke - left smoking. My father used to smoke - left smoking, I am smoking, my brother is not smoking, another brother doesn't even like the smell. He doesn't smoke at all so you know we got experience from both sides right (S Asian father s I.3)

My children don't smoke. And my dad was a very heavy smoker. I am the only one smoking in my family. All of my brothers and sisters are not smoking and their children are not smoking. That's the, what? third generation, fourth generation they are not smoking. And nobody my husband's family are smoking, neither my husband, but they cousins and nephews and nieces they are smoking (S Asian mother s I.17)

Community Life

The participants were part of networks of relatives and/or other families from similar cultural and religious backgrounds. Their sense of responsibility to children who were not in their own households varied. Families wished to preserve face for other families as well as their own in their communities. They were potentially exposed to loss of face through gossip if children or women smoked.

Protecting extended family and community members

Participants observed the behaviour of extended family and community members. Some said that they would tell children to stop smoking if they saw them and/or tell their parents. For these people it was a right, duty and family responsibility which they expected to be reciprocated although this was different in New Zealand. For others becoming directly involved depended on how closely related or friendly they were with the families.

Yeh, it's making sure that all the elders of our family, whenever they see them doing wrong, they report it to us right? And they actually tell them on the spot this is wrong and I'm going to tell your father or mother about it (S Asian father s I.3)

Oh yes, yes. Definitely I give them authority to say discipline my kids. If you see them discipline them (SE Asian father ns I.8)

-Yes. If it concerns the family if I see, we like watch dog, if we see if it applies to the family or his duty to tell them. If I hide it means I am also not faithful to our family. I have to tell them (S Asian father ns I.4)

Yeah, I saw my niece actually lighting a cigarette. And I thought it was her that was actually smoking. So I actually grabbed her on the hair – she said “what are you doing?” “Why are you smoking?” And she said “Oh no, no. This is not for me” SE Asian father ns I.8)

-(In New Zealand) there's not many people that look out and have the same values and most of their influence is much more because they are in different races. Like in Philippines because they are mostly in one community and mostly related so everybody looks after each other. Or, when someone smokes, you will hear that soon, and they're hiding because there is all family and you'll find out. And it's different (SE Asian father ns I.8)

One participant said that it was normal in his culture but could lead to trouble between families. He subtly gathered information from community members about his own child but for others he observed a principle of non-action unless asked to give advice. A Buddhist mother also said she would not intervene if she saw someone else smoking.

-So because I do not know well but I know a little bit I shouldn't interfere in other family problem. Even if their parents ask "Oh if my children smoke?" I will only say I don't know (E Asian father s I.12 interpreted)

For me, you know, if I saw someone smoking I think it is their right to do that. It's not myself (SE Asian mother ns I.13 interpreted)

Family Pride

Some participants described the importance of maintaining the reputation of the family and limiting gossip about family members. One family said it was not shameful if adult sons smoked if the family had done what they could to prevent this.

-Well that's you know the family's not – the family's not disciplining the kids that well. It's more or less of, ah, like the face of the family

-They'll be embarrassed, ah, other people find out the girl's smoking because it's the impression of people when a girl smokes they are, like, either a prostitutes or something like that.

-Well, it is, you know, Filipino reputation is like that, want to be, you know. They're proud of how they bring up their kids (SE Asian father ns I.8)

-Just stop smoking! Why you smoking? About the money, and, pretty much, like, ah, their pride (brother)

-Who's pride? (Grace)

-Their girl's pride. It's like them having sex before marriage or something (SE Asian brother s I.15)

People gossiped about children and women who smoked. It was important for youth and women to remain smokefree in order to avoid talk among community members which could reflect badly on families and limit marriage prospects.

-Yes yes. Some are doing like that. If anyone – see I know my wife is not smoking so when she go to work like, she tried one or two puffs, and my, one of my friends told me - hey your wife is smoking there. Yes (S Asian father s I.7)

-Ah not really if you talk about my child and he is, people would like they would say "oh look that's his son there" - and then you know everyone would like "oh did you see his son? He is smoking "and then you know they go in front of his dad "your son's smoking, don't you know that?" You know that would be one of the reasons you know. Probably the kids don't want his dad to get him calling him (S Asian father ns I.6)

-Yeah for instance one girl is just about to get married and the parents would ask their immediate family friends - do you know the girls my son is ah my son is just about going to get married - oh no she smokes, she drinks and all that so then the parents would kind of hold back you know (S Asian father ns I.16)

Respect

Respect underpinned the authority of the family to rear their children and protect them from smoking. Participants said that respect arose from their culture and religion. It ran through generations and applied to all. Therefore adults talked about their respect for people older than themselves as well as expecting their children to respect them. Children were expected to respect their parents even when they were wrong. Respondents detailed different ways that younger people showed respect. They included not smoking in front of elders, being polite, helpful and not talking back.

Well, ah, I mean that's all about our culture ah? What we brought up, what our parents have taught us so we respecting that (S Asian father ns I.5)

It is starting like that – It's inherited in our culture to respect our elders. We are respecting our parents and they were respecting their before and that's why our children are respecting us. It's in the family (S Asian father ns I.9 interpreted)

What you can do is to forgive all your mother's mistakes. And respect the right things about your mother. For adults we will also have mistakes. (E Asian father s I.12 interpreted)

No Smoking in Front of Elders

Smoking in front of elders was considered extremely disrespectful, especially among South Asian participants.

In Fiji it's the respect it's the respect they can't smoke. In Fiji if a daughter smokes in front of the parents, that's hell for the parents in front of other family members (S Asian father s I.3)

But Indians – a lot of them like me, I'm forty and I still haven't smoked in front of my father. It's not that we are afraid if you go to other cultures in NZ, they will look at it in a different way that you are afraid of your father. He's controlling you. See it's not that, it's the respect, it's the respect...my father is older than me (S Asian father s I.3)

-Would you smoke in front of your elders? (Grace)

-NAHH!! They would kill us!!! No, no! We just hide the thing and smoke (S Asian father s I.7)

Honouring Custom

Younger people were expected to show respect by not talking back, greeting others using the correct greetings and honorifics and treating guests properly. These expectations reinforced one another and messages to the children to be obedient, listen to their elders and not to smoke.

The same thing we follow here in NZ we always teach our children not to talk back to us, to your older person. Doesn't matter if she is young or whatever he is but you do have to respect them (S Asian mother ns I.3)

-What do you have to do to be respectful? (Grace)

-Always greet them by saying "sat sirya kal", like "hello hi" and always be polite and help them in everything (S Asian father ns I.9 interpreted)

she's not supposed to take the name for somebody older than you. You know, just say "aunty" or "uncle" if you see an old lady or when my old father, "grandfather" you know (S Asian mother ns I.16)

Religion

Religion permeated the lives of many of the families, especially those which were South Asian. Participants were Hindu, Buddhist, Christian, Muslim and Sikh. Some participants were flexible in their allegiances.

Precepts for Living

Devout families attributed their cultural practices and child-rearing practices to their religious beliefs. For these families religion and culture overlapped. They prayed that their children would respect their elders, be obedient and not smoke. Children learnt these values from their exposure to prayer at home and in places of worship. Hindu children watched DVDs with religious stories. Most non-Indian Asian families also attended places of worship. However they did not associate religion overtly with the way they brought up their children.

Respect the family's religion and from that everything just falls in place itself (S Asian father ns I.4)

Please come back home and ask your parents advice. Don't get stuck. It means, by all means, we are parents. Us teaching from God (SE Asian mother ns I.11 interpreted)

-Whatever God gave to us, right, everything God gave to us - we might be saying we created this that we invented that - but it is all God given. We are taking everything out from the land, or the earth, or we just drawing it from the air. It's there already (father)

-So how does that relate to smoking? (Grace)

Ah, it's attitude the way the people think I mean ah you teach your children the right values (S Asian father s I.3)

-Ah in our culture we are, ah, what our god says we are telling them (father)

-Yeh (Grace)

-Please do obey or respect (S Asian father s I.7)

Even in the morning, before I go to work, I go visit my daughter or my son. I pray before I go in the morning. I pray. My son is sleeping there. And after praying, I tell him: "Son, you are going to school. Don't do anything naughty" (S Asian father ns I.4)

Religion and Smoking

Smoking was banned in one family because of their Sikh religious beliefs but this was not the case for the other families.

Our religion say that don't take anything which is of any kind of drugs. You would have heard yesterday at our prophet's (*annual*) birthday celebrations they have told not to drink anything, or not to smoke, or to do anything (S Asian grandmother ns I.9 interpreted)

-Actually I'll tell you we call it there is a special occasion when we take Amrit (*holy water*) we take holy water at that time. We say, you know, right, we pray. Okay we take an oath like we will never eat non veg, we will not smoke, we will never drink, and we will be helping others, any religion (S Asian grandmother ns I.9 interpreted)

No it's not in our religion (*Muslim*). No cigarettes is not in our religion. They can smoke. It's not a sin to smoke. But culturally, yes, they don't like, but from religion doesn't really (S Asian interpreter I.10)

Life in New Zealand

Family participants protected their children from smoking in a Western society. Some believed that westernisation threatened their culture and ability to protect their children from smoking. Association with peers put children at risk of being disrespectful and smoking. Children had individual rights which could over-ride the authority of their families. Participants supported New Zealand tobacco control measures. They especially noted the cost of cigarettes compared with their homelands and used cost and social marketing to warn their children not to smoke.

Western Life

Participants said that westernisation threatened traditional culture and heritage norms which protected children from smoking. The longer children lived on New Zealand the higher the risk. They thought that Asian children who smoked were likely to be New Zealand born. They believed it was easier to become Westernised and behave badly than learning to be "good".

It's just that Westernization in fact spoils a lot of culture so if you have a generation of westernisation everything is gone out of it. It's forget it (S Asian father s I.3)

I mean in the tape (KKS DVD) there was one Indian girl was smoking. So from that you could see either she was influenced by the other. Or the other reason, could I mean, what I was thinking, that she must have been born in New Zealand. And then, you know, if she was born in New Zealand, then you can't do any(*thing*) because just that's how it is (S Asian father ns I.16)

The different between smoking rate that higher in Western people than Thai - this for example. When I went to the party and my child, they are like 17 or 18 years old, and they still want to come with me to the party. In the party, I saw the child of others (*Westerners*) both smoking and drinking. They asked me “Why your kids are not smoking or drinking? You should let them try. I think it’s time” (SE Asian mother ns I.13)

Even if you live here if you don’t control them or educated them they just become like Kiwi, Westernised. Learn to be bad is so easy but learn to be good is hard must be very hard (SE Asian interpreter I.11)

New Zealand Youth Norms

Youth Smoking

Participants thought that youth smoking was common in New Zealand. They reported seeing and hearing about school children smoking. They were concerned that peers could be a negative influence on their children because of their different values and because some of them smoked.

These children the non-Asian even smoke on the road it’s because it’s from their birth you know their parents teach them like that (S Asian grandmother ns I.9 interpreted)

Like what I said, I stop the kids from smoking at home because of the school kids are smoking at school, I’ve heard that. I’ve seen plenty of kids smoking in the school so those are the other kids, yeh (S Asian father ns I.5)

See I was Asian at school. My Asian friends we hanged out with everyone. So if you’re Asian you could probably stick with the Asian. But for me I was.... I played with everyone – that’s why I turned out to be a smoker (SE Asian brother s I.15)

Lack of Respect for Elders

The participants believed that New Zealand children were disrespectful to their elders and consequently disregarded their elders’ instructions. This put them at risk of smoking.

Children here have no respect or manners whatsoever. They don’t know how to treat their elders. This is specially the case here in New Zealand (S Asian grandfather ns I.10 interpreted)

....for one of my friend’s family - so they live and they don’t manage. And they don’t control so they live a European lifestyle. So their children follow the lifestyle living. And further than that, they don’t respect the parents because they just follow up the adults’ example (SE Asian mother ns I.11 interpreted)

-Yeah, their friends. Their friends, TV, their friends Islander, their friends Pakeha. They say “Ooh we don’t listen to our parents!” (SE Asian father ns I.14)

Freedom and Rights

In New Zealand children have individual rights and freedom of thought and expression are encouraged. Some parents perceived this as a threat to their authority. At the same time parents encouraged their children to use their autonomy to say they did not want to smoke.

The Rights to Have the Wrong Thing Going On

Participants said that children and young people have more freedom in New Zealand than children in their countries of origin. This was supported with children's rights and the law which bans physical discipline. Individual freedom limited the ways parents could express their authority over their children's behaviour. They noted that rights and freedom have limitations in terms of protecting children from risky behaviours such as smoking. For example, they could not physically punish their children for smoking.

Ah, New Zealand is, ah, more Westernised. In comparison to our small island Nisan where people are more religious and they are not exposed, not exposed to that much freedom (S Asian father s I.4)

-Eighteen years old if we touch them we might be in jail (*in New Zealand*). So for example if hit him is not allowed. But in Vietnam, twenty, I still can beat him up. I force him to lie down and I beat him (E/SE Asian father s I.11 interpreted)

Better that we start doing it (*teaching*) from now than leave it. Because 14 and 15, you can't tell them. Better be now. Forget about it when they're 14 and 15. And you know they can just simply pick up the phone and (*dial*) triple one (*to report*) "My father is looking angry" (S Asian father s I.3)

I mean you can't really ask them questions directly too, because once they grow to that age they're starting to know about their rights, which actually lead not just to rights, but wrongs too. Those rights give them the rights to have wrong thing going on (S Asian father s I.3)

Parents also wanted their children to think for themselves. One father said that he believed in Confucian values but he also wanted his son to be "independent and self-empowered".

I don't reject about Confucius teaching and thoughts. So for several thousands of years in China it actually prevent young people from going astray from commit crime. But there's some special conditions so I agree this kind of teaching but like I have said previously children should learn to be independent and self-empowered. Confucius did not mention self independence because Confucius taught you have to depend on the emperor depend on the royal and also to depend on the government. Which means you won't have any self opinions but we want him to have his own opinions (E Asian father s I.12 interpreted)

School

In New Zealand teachers were perceived as less respected by students and schools were less strict about students who smoke. The participants said that smoking is strictly prohibited in Fijian and Indian schools. Some said that parents did not work together with one another and schools to protect children in New Zealand as they did in their countries of origin.

-The teachers here are scared of the children 'cos there's Māori and Islander children and they go and threaten them but in India the children respect their teachers (S Asian father ns I.9 interpreted)

We keep on telling them "No. You have to listen to the teacher 'cos they're the one whose teaching you. So you always respect" (S Asian father ns I.9 interpreted)

In Fiji children they are strictly not allowed to smoke in the school but they are not smoking. Anyone they are found, parents are calling the school (S Asian mother ns I.5)

I mean in Fiji mostly what we have is that, like you know, all the parents they play their part. Like students when they go to school, like we know that we play our part, and then my child's friends parents, they play their part (S Asian father ns I.16)

-And it's hard the schools here are – the schools don't do anything because it's against the system (father)

-Because I don't think they want to hear anything about the smoking (S Asian mother ns I.3)

Adapting to Life in New Zealand

Participants adjusted to both the positive and negative things in New Zealand society. They appreciated the benefits of life in New Zealand such as the opportunities for their children to be safe, cared for by the government and educated. They also appreciated the opportunity to carry out their lives without interference.

Here is very good society. Only certain things become an issue that we have to work on. Like the example that I mentioned earlier. The family that allows their children to drink and smoke when the child are not at the suitable age for those things (SE Asian father ns I.13 interpreted)

-Peaceful country (grandfather)

-Yes, peaceful country (aunt)

-People have their own business. Nobody is interfering (grandfather)

-Yeh, it's a very good country. I love this for country (aunt)

-The government is looking after children, old people, sick people. Just New Zealand. No -Pakistan, India (S Asian grandfather ns I.10 interpreted)

One parent thought that it was easier to bring his child up in New Zealand because New Zealand has a small population.

So in China, because there are so many and you don't know which province they come from, so if you have to bring up him in China, the same as you bring him up in New Zealand, you will have to put two or three times more effort. (E Asian father, I.12 interpreted)

Taking from New Zealand Culture

Participants adapted some of their practices to fit with the culture and legal requirements of New Zealand society. For example they did not use physical discipline. Some allowed their children to walk home by themselves. One family did not mind their son having a modern hair-cut and some families ate Western food occasionally. They wanted their children to use the freedom promised in New Zealand to retain the good things they perceived in their own heritage culture. On balance the messages about respect, obedience and no smoking were strongly preserved.

Like the New Zealand culture, it's different from us so we can't take everything from that but we have to do some parts but not all. The good things, take some things from there – the good things (S Asian father ns I.5)

Tobacco Control

Participants identified elements of tobacco control in their home lands and in New Zealand. In general they supported tobacco control. They mentioned the price of cigarettes most frequently and talked about the cost of smoking to deter their children from starting smoking.

In Asia

Participants originated from countries with a wide range of levels of tobacco control.

- My friends in Thailand who used to smoke now they've stopped (father)
- What's made the difference? (Grace)
- The smoking campaign in Thailand (SE Asian father ns I.13 interpreted)

Basically smoking in the public places is not right and smoking is a work problem. But there are many smokers and you can't prohibit people who smoke. It's hard for you to ban smoking because there's so many smokers otherwise you just not allow people to smoke. You just prohibit people grow any tobacco products. Normally smoking in public places is not allowed. So principally the government did not allow smoking in public places. But actually nobody prohibit people smoking in public area (E Asian father s I.12 interpreted)

In New Zealand

Participants supported tobacco control generally.

I think whatever the government doing very good. So far whatever I've observed and any government for the community the government is doing their best but it's not up to the government, it's community at large and the people, individuals, parents all in one help towards that the government can't. The government can bring in legislations. They can they can enforce fines and other things but this thing won't stop unless the government is amply supported (S Asian father ns I.4)

Cost

Cigarettes were more expensive in New Zealand than in Asia or Fiji. Even though the cost reduced the number of cigarettes people smoked and made them want to quit no-one complained about the price.

Oh it is very expensive here. Yes, in Philippines very cheap. Philippines is probably about a dollar, two dollars, a packet but here it's 10 to \$13 a packet. It's expensive (SE Asian father ns I.8)

-Like me I've been wanting to leave cigarettes the past 20 years now you see but the more I wanted to leave it the more I smoked. I smoked about 100 rolls a day in Fiji. Cigarettes quite cheap over there. Here it's quite dear so I end up smoking about 20 rolls a day (S Asian father s I.3)

-Or if they can't remove them they could, like, make the price higher (Student)

-Make the price higher? (Grace)

-So that people wouldn't like so that people would have to save up money so they can't buy as much and then they can't buy that much they'll quit (Student FG.1)

One family thought that price did not deter smokers.

-Prices won't mean anything because people they smoke (father ns)

-They will buy (S Asian mother ns I.5)

Social Marketing

Students were full of ideas for social marketing. One of the messages they suggested targeted parents.

Parents used the graphic warnings on cigarette packs and Health Sponsorship Council advertisements on television to educate their children about the health effects of smoking.

-Like a Keeping Kids Smokefree ad on TV (Student)

-Cos that's when they'll be watching (Student)

- Oh you could advertise them on cereal boxes or make up a brand (Student)
- Yeah. And milk cartons (Student)
- What message should go on those cereal boxes? (Grace)
- Parents stop smoking (Student)
- Some pictures (Student)
- It's bad for your lungs (Student FG.1)

-When they saw the TV or the advertisements, they saw the people smoking. We always explain to them about smoking. And sometimes we can see the people sick and cough beside us. We explain to them - that's why he coughing because he smoke! (SE Asian father I 14)

Smokefree Environments

Restrictions on smoking were well supported and encouraged some participants to quit.

- Are there other reasons why you stopped smoking? (Grace)
- Yes, many reasons. Because I work – and there was no smoking area provided
- No room to smoke And I have only 15 minutes break. I have to have tea or coffee so there was not enough time for me to smoke as well (SE Asian father ns I.13 interpreted)
- So why did you stop smoking? (Grace)
- I looked at the world. They don't accept smokers anymore. I couldn't believe the government. They put the law no smoking in the airport terminal, in the hotel in the apartment anywhere. I couldn't believe that because smoke need the freedom. Smoke need to have this and the law said if you smoke you get fined and people stop (father)
- So you stopped smoking because (Grace)
- No freedom, no freedom to smoke (SE Asian father ns I.14)

Banning Smoking

Some supported a ban on smoking.

Why can't they just ban smoking or stop smoking? (Student FG.1)

I think they should ban the whole product not to bring it over (S Asian mother, I 16)

Health education

Antenatal health education triggered one family's oldest son to quit.

- He said "Oh Mum, don't worry. I stop smoking now." I said "What happened?" He said - oh, they go to the group you know for pregnant people? (mother)
- Yeh (Grace)
- They always say your son not like smoking, your baby not like smoking. That's why he stopped SE Asian mother ns I.14)

Part Two: Evaluation of the KKS Study Intervention Strategies

Part two of the qualitative results comprises the evaluation of the Keeping Kids Smokefree study intervention strategies from the perspectives of Asian students and family members. Family participants respected education and supported their children's

schools and teachers. They accepted smokefree school-based education and incorporated it into their smoking prevention training for their children. Almost all family interview participants and all the students were familiar with at least one aspect of the KKS study interventions. Some adults said that language was a barrier to understanding KKS material. Family members participated in home-based interventions their children were involved in. They rarely attended social functions at school. Few knew about smoking cessation opportunities for adult family members and no-one participated. Three fathers questioned the appropriateness of children telling them what to do. The children remembered the competitions.

The Value of Education

The families were respectful of schools and teachers. They supported schools and felt that issues at schools were not the schools' fault but the children's or the "system's".

-Yes education is very important to me. That's part of the values that I put on them, my kids. You know it's very important. It's, ah, the most powerful weapon for you, you know, being an adult (SE Asian father ns I.8)

Teachers are like gurus (S Asian father s I.3)

I think it's good. Sometimes I used to ask my child about his opinion about the school since some people said this school is not good, that school is not good. My child said it's not just because of the schools, Mum. All schools are good but it depends on the children (SE Asian mother ns I.13 interpreted)

-And it's hard the schools here are – the schools don't do anything because it's against the system (S Asian father s I.3)

Parents supported their children's school's actions and decisions.

Like we don't get involved like sometimes when the children say hey my master smacked me here – so why? What did you do? Oh I didn't do my home work – so who's to blame? We not blaming your teacher, we blaming you. You know in that way we got a very good respect for our teachers and masters there (S Asian mother s I.17)

Moral Direction

Families expected schools to provide moral direction to students. This included preventing them from smoking.

-And they (*parents*) expect schools and teachers to teach children that it will provide a good role in life and give them a correct way

-Parents cannot stay with their children forever so they expect teachers and school to give them correct direction so they can be independent and make their own decisions.

- There is a Chinese saying – everyone has their own fate. How they will survive in the society in the future. Parents can't follow them. We can only provide before they get married to prevent them from going the wrong way. But parents they have little time in their home. They have little time in the society so they have schools and teachers they can be sincere and effective. Most important is effectiveness to give a good direction to their children to their live to their work and to their learning. That once they in the society they won't be influenced by bad things in society. For example, when we talk about smoking (E Asian father s I.12)

-From what we learned at school from teachers, from what we learn from community leaders like you, alright? (father)

-Yeh (mother ns)

-We just picked everything from there and we educated our children to understand what is wrong, what is right, good sense of humour, to make right practices so what we want one of our beliefs us Indians one of our beliefs is we just want the rightful (S Asian father ns I.4)

Schools and Student Smoking

Asian family members expected schools to discourage their children from smoking, to reinforce smokefree messages from home and counteract family role-modelling of smoking. Students supported the idea of taking messages from school home to families.

Reinforcing what is taught at home:

We talk to him, like tell him that smoking is, you know, not good and whatever he gets told at school as well (SE Asian father ns I.6).

When I talk about not smoking to her she says she knows you know I think she learns from there (school) (SE Asian father ns I.13 interpreted)

Counteracting role modelling by family members who smoke:

Because parents, especially when they are smoking, they would not teach their kids not to smoke because they are smoking anyway. So I think the school should actually emphasise that for the kids, so the kids will not actually follow the parents' footsteps (SE Asian father ns I.8)

-I had to watch it (KKS DVD) because my sister told me or she would give me a hiding. She's sixteen (student)

-And why did she want you to watch it (Grace)

-I don't know. Because my brother smokes (Student FG.1)

Support for taking smokefree messages home:

Asian is more sensible and sensitive about these things whatever information you give them it helps (SE Asian father ns I.8)

Parents don't have to drive all the way here if they're busy, us kids can go and just tell them at home where we see them most (Student FG.1)

Family participants were shown KKS study results showing that more Asian than non-Asian parents think that schools, rather than parents, should teach their children about smoking. They believed that both parents and schools should provide guidance to children about smoking. There was no category for this response in the questionnaire. Families went on to talk about their experiences and expectations of student smoking in their countries of origin.

As reported previously, South Asian parents said that the schools in their countries of origin were strict and got in touch with parents if children smoked. They talked approvingly about how these schools invoked their authority and worked with parents to manage smoking. They were keen to work together with schools in New Zealand to protect their children from smoking. One family felt that communication should be two-way and it was important for schools to listen to parents.

If there is a problem the teachers can find it out timely and the parents can find it out timely and we just solve it together. We can halt the harmful situation to occur (E Asian father s I.12 interpreted).

It's not just the messages from school to the parents, it's the messages from parents going back to them (S Asian father s I.3)

Language Difficulties

The KKS interventions were difficult for family members who did not read English. Parents who could not read English had to wait for their children to translate material for them. One family said that they forgot if they had to wait for two or three days for their children to find time to translate.

Cambodian will be better for me. It will be good for both of us my wife English is even lower than me (E Asian father s I.12 interpreted)

My aunty can't speak good English (Student FG.2)

She brought some home (*KKS materials*) but I can't really understand English. Sometime she talks to me in Thai (SE Asian mother ns I.13 interpreted)

Core Behavioural Change Interventions

KKS DVD

Approximately half of the families recalled receiving the DVD. Two were unsure if they had got it or not. Not all reported watching it. Almost all of the respondents who

watched it were South Asian. They saw it with their children either by themselves or as a family. Most commented positively and said they talked to their children about it.

The messages are very clearly passed on (S Asian father s I.3)

There's another one who's selling, you know, so we told him, I told my son, you know, never you know, if someone offers you a smoke, just say you don't smoke eh' (S Asian father ns I.6)

Those who were not South Asian were more likely to report that English was a barrier to watching the DVD and that their children saw the DVD by themselves or with siblings. One ex-smoker said it was too short and did not contain relevant advice about quitting for adults. One family did not want to have anything about smoking in their house as they did not smoke, did not talk about smoking and did not want the issue raised. Students in focus groups reported watching with a range of family members – mother, both parents, siblings, cousin, aunt. Some had difficulty getting parents to watch.

I gave it to my Mum she put it somewhere. She lost it (Student FG.2)

When I got home my dad was asleep so I watched it myself and when my Dad woke up I told him about it. And he just says have a good sleep and went back to sleep (Student F.G 2)

Those who attended the screening of GI Joe recalled seeing the DVD at the same time. Collectively, focus group participants had a high recall of the content. They felt the DVD was for both parents and children. One student said “It was kinda cool”. Another said the talking was “a bit boring”.

South Asian participants were asked about the Indian shopkeeper who sold cigarettes to underage students. They did not comment on his ethnicity but on his lack of scruples. A husband and wife said:

Bloody money face man you know (father)

Just to make money he will do anything (S Asian mother ns I.16)

Although one participant said that he did not think that the DVD was “good” for Asian people because “it's not showing Asian people” (SE Asian brother s I.15); other participants did not mention the ethnicity of the actors apart from one father who thought one of the female students depicted smoking was Indian.

Smoking Cessation Support

Asian families said that school-based smoking cessation interventions for adult family members are appropriate.

At least somebody is tapping your shoulder - don't do that (S Asian mother s I.17)

At the same time some fathers noted a clash with their values of respect by children for their parents. They reconciled this by respecting the higher authority of the school or consciously excepting themselves from this convention.

The children can tell their parents to stop smoking (*laughing*). It should have been another way around instead of parents are telling children but children are telling the parents (SE Asian father ns I.13 interpreted)

The family participants who smoked said they did not know about the in-home and at school cessation services offered by the KKS study. Some said they would have used them and others said they would not, either because they preferred to quit by themselves, or because they did not wish to be identified. Students in the focus groups did not think family members would use the services. Family members did not mention receiving Quit Cards in the mail.

There was some recall of "Sponsor-to-Win". However none of the participants participated or knew anyone who participated in Sponsor-to-Win. Some students remembered Sponsor-to-Win but said they were unsuccessful in involving family members in the competition.

He come home and he tell his father and his father said he can't give up (SE Asian mother ns I. 11 interpreted)

A father said:

I don't have time to join this kind of activities (E Asian father s I.12 interpreted)

Some non-smokers thought it was a good idea to involve children. A husband and wife said:

- I think it's a good idea involve the kids (mother)
- Yeh, give more influence to the children (father)
- To set examples (S Asian mother ns I.16)

Most families and students reported receiving smokefree home and car stickers. Some had put them on doors and windows to alert people that their homes and cars were smokefree while others said they did not need them because no-one smoked. Two students reported receiving magnets with smoking quit tips and putting them on their fridges. One said:

My mum, my dad, said it's good they're sending these home to the parents (Student FG.2)

Reducing Social Supply to Minors

The participants did not receive the wallet cards because they did not attend the events where the cards were distributed.

KKS Study Profile Building Components

Competitions

Students remembered the art competitions and competition promoting the DVD. The first response to a student focus group query about the KKS study was:

Um Keeping Kids Smokefree keeps us busy with competitions (Student FG.1)

There were varying levels of student support for the art competition ranging from a favourite activity to not wanting to participate because the participant couldn't draw. The use of student art in the "Back of the Bus" contest triggered student suggestions about spreading the smokefree message widely. The DVD competition stimulated some students and family members to watch the DVD.

I watched it with my family and there's a form for them and I filled it in and in two weeks we got the \$50.00 voucher (Student FG.2)

-Yeah. If we can get all of us students round MI and Weymouth if that's like 2,000 students, and we would spread the word so then maybe all of NZ would just quit (student)

-Yup , yup And how would be a good way to spread to word for students (Grace)

-That bus idea (student)

-That bus idea. Yeah? (Grace)

-And the stickers. We've got, um, smokefree stickers (student)

-You got smokefree stickers (Grace)

-You can stick it on your door then who come to your house – they notice that they can't smoke in your house so they won't smoke (Student FG.1)

KKS Study Newsletters and Health Promotion Events

Families said they had seen KKS newsletters and read them if they could read English. Students also said their parents read newsletters from school. Fathers especially talked about reading material from school.

I always read whatever I get from school (S Asian father ns I.4)

-What happens when the newsletters come home? (Grace)

-We read it together. When I tell them, like, with all your research files, I always talk to them about that. We got some stickers on the front door. I usually have them when my mother-in-law (who smokes) was here I put them on the doors you know (SE Asian father ns I.8)

One student described his family's system for newsletters:

Oh my Dad just get notices I put them on the wall where the clip and whenever my Dad gets home from work he just reads them and then in the morning he talks to me about them what they're about and stuff (Student FG.1)

No participants recalled attending KKS study health promotion specific events at school. They said they were too busy or couldn't speak English. However one parent said he sent his son's older sister to an event, and one father said he attended events if they were after work.

Summary

The over-riding factor for protecting children from smoking was the families' belief in, and acceptance of, the authority of family parents and elders. Family members took responsibility for their children and were vigilant in their efforts to care and provide for them. Children were expected to reciprocate by respecting their parents' wishes, one of which was for them to be smokefree. Care encompassed "communication" and "control". Communication included instruction about not smoking, listening to children and role modelling not smoking. Control included setting boundaries, monitoring and protection.

Families described the values and beliefs which underpinned their authority and health promoting actions. These included no smoking for children and women with traditional values, concern about the intergenerational effects of smoking, respect for elders and religious beliefs and practices. Life in New Zealand presented both challenges and support for families. Challenges included the consequences of a society in which individual freedom is paramount and concern about the potential influence of peers. On

the other hand, participants appreciated the benefits of life in New Zealand, accommodate some differences and appreciated the role and potential of tobacco control strategies to deter smoking.

While participants supported the idea of school-based smoking prevention action some noted that it was a turn-around having children tell their parents to what to do, for example, quit smoking. Most families were aware of at least some of the KKS study interventions. Adult family members were more likely to participate in those that were home-based, involved their children and directed at both smokers and non-smokers. Some family members noted that language was a barrier to their participation.

In the final chapter the qualitative and quantitative results are drawn together and discussed in relation to the mixed methods research questions and theoretical and empirical literature. The significance of the research is considered.

Chapter Ten: Discussion

Introduction

The discussion is framed by the ecological model. First I summarise the quantitative and qualitative results including the evaluation of the Keeping Kids Smokefree study interventions. Then I discuss the quantitative results about the micro-level family risk and protective factors for Asian and non-Asian youth smoking. I relate the results for the Asian participants to family, cultural and religious drivers identified in the qualitative phase of the research. I discuss the context of migration to New Zealand by considering acculturation, school and tobacco control (including the KKS Study) and the fit of Asian families' perspectives about protecting their children from smoking with theories of child socialisation and development. I describe the strengths and limitations of the study and reflect personally on the study. Finally I make recommendations for health promotion and tobacco control for New Zealand Asian families.

Summary of Quantitative and Qualitative Findings

In this summary I describe the protective and risk factors for Asian youth smoking identified in the quantitative phase of the research and compare them with results for the sample and the qualitative results. The summary of family and community drivers for low New Zealand Asian youth smoking rates in the context of culture and migration is derived from the qualitative results. Then I summarise the Keeping Kids Smokefree evaluation results.

The analysis of the KKS study data shows that Asian youth have low ever-smoking rates. They are protected by micro-system level family factors such as family cohesion (living in two parent family vs one parent), family control of children's exposure to smokers, and parental surveillance of children (monitoring pocket money). Factors which put them at risk of smoking include exposure to household members who smoke (not fathers), exposure to smoking in the car (not fathers), and the macro-level system influence, acculturation (identifying as Asian/non-Asian vs Asian). Of interest is the amount of pocket money the children receive. There is no relationship between the amount of pocket money children receive and their ever-smoking status. Asian parents who do not smoke are less likely to expose their children to smoking related risk factors than smokers (smoking in home; smoking material available to children when smoker in house). There is no relationship between parental smoking status and the amount of

pocket money parents report giving their children. Among parents who smoke, intending to quit does not protect children (or put them further at risk).

The majority of the non-Asian children and parents in the KKS study are Māori and Pacific Islanders. In the Asian and non-Asian comparative analyses, the Asian child ever-smoking and parent current smoking rates are lower than the non-Asian rates. However more acculturated Asian children (those who identify as Asian/non-Asian) are at the same risk of ever-smoking as non-Asian children. Asian children are more likely to experience the family factors associated with protecting them from smoking described above than non-Asian children. Specifically, they are more likely to report living in two-parent households and having their spending monitored by parents than their non-Asian counterparts. They are less likely to be exposed to second-hand smoke and modelling of smoking by parents and others at home or in cars.

The qualitative results augment the quantitative results. The shared factors include low Asian youth and mother smoking rates and the protective effects of two parent family structure, parental monitoring (pocket money), homes and cars where mothers and others do not model smoking, and self-identifying as Asian rather than non-Asian. The results diverge in two instances. First, most participants in the family interviews believe that fathers who model smoking put their children at risk of smoking. In the quantitative results, paternal smoking (home and car) places youth at risk but the relationship is not significant. Second, family members say that telling and teaching their children about negative aspects of smoking explains low Asian youth smoking rates. However in the quantitative results, there is no significant relationship between students' reports of factors such as parental rules about not smoking and parents being upset about children smoking and ever-smoking rates.

The KKS study survey results do not account for low Asian youth smoking rates fully because the study questions do not include many of the factors found in the qualitative results. According to these the key driver for smokefree Asian children is socialisation into their families' and communities cultural and religious values. The results show that family drivers are based on culturally based beliefs (ethnotheories) and practices such as the primacy and authority of the family and the family's assumption of responsibility to rear, shape and protect children, including protecting youth from smoking. Families value and prioritise children; instruct them not to smoke; monitor them and their environments carefully to prevent them from harm including smoking; and promote

reciprocity whereby children respect and obey elders, including not smoking, in return for benevolent and vigilant care.

The context of migration, a chrono-system level influence, has a minor influence on Asian family socialisation of children about smoking. The strength of the influence of family on Asian youth smoking rates in New Zealand is clear in the quantitative results - parental monitoring of youth spending remains significantly associated with lower ever-smoking rates in the presence of acculturation. Parents and adult family members support macro-system level societal tobacco control measures and adjust their child socialisation strategies to preserve their cultural values and protect their children from smoking in what they perceive as risky, permissive New Zealand school and social environments.

The Keeping Kids Smokefree Study intervention strategies Asian family evaluation findings are in keeping with the findings above. The results from the student focus groups and family interviews are congruent. Students and family members support the family-centred nature of the KKS study interventions and promoting smoking cessation for adult family members through the respected institution of school. They participate in strategies which are home rather than school-based. Language was a barrier to understanding and participation in the KKS study for some adult family members.

Youth Smoking Rates

The smoking rates among the Asian students in this study are low, similar to those of Asian youth in New Zealand and international studies. While this study describes ever-smoking, this result is similar to current smoking rates in other studies of mostly older Asian youth. In this study a greater proportion of Asian boys than girls are ever-smokers, a finding similar to the national Year 10 survey where a higher percentage of Asian boys smoke regularly (daily/weekly/monthly) than Asian girls (Paynter, 2010).

The smoking rates by Asian sub-ethnicity are difficult to interpret as the numbers in all but the Indian group are small. There are no comparable studies in New Zealand. The Year 10 and Youth2000 and Youth07 analyses are of Indian and Chinese students who are older, in a different environment (high school) and from school deciles one to ten rather than one to three. Indian, Chinese and other Asian youth rates are described but there are no comparative analyses (Parackal et al., 2011; Paynter, 2010; Rasanathan, Ameratunga, Chen, et al., 2006). In this study Asian/non-Asian multi-ethnic youth have significantly higher smoking rates than students who identify as Asian only. These

findings are similar to those of Unger and colleagues in the United States for multi-ethnic youth. Over 25% of this group identify as Asian and non-Asian (Unger, Palmer, et al., 2000)

I argue that the explanation for low Asian youth smoking rates is at least in part, because of micro system level family factors which are, in turn, driven by cultural and social macro-system level forces. Most strikingly, Asian child socialisation to protect children from harm draws on traditional ethnotheories of child rearing and deeply embedded cultural values. Family interview participants are keen to embrace the “good things” in New Zealand society but Western approaches are only superficially evident in their strategies for keeping their cherished children safe compared to strategies based strongly on heritage values.

Protective and Risk Factors for New Zealand Asian Youth Smoking

An explanatory mixed methods study aims to elucidate quantitative results with qualitative research. In this section I discuss the micro-level quantitative results, comparing them with the literature and drawing on the qualitative results and ethnotheoretical perspectives I have outlined in Chapter Two.

Family Structure

With regard to family structure, the protective effect of living in a two-parent household is congruent with results from a prior study about New Zealand Asian youth (Wong, 2008) and with studies with non-Asian children. While family interview participants did not specifically talk about the effects of having both mothers and fathers living in the same household on their children smoking, family cohesion is normative in collectivist societies (Table 8). Family cohesion is not synonymous with the nuclear family. Nevertheless generations of married couples and their children support the strong family ties inherent in familist perspectives of collectivist cultures. Divorces are less common than in individualistic cultures. Asian children are more likely than non-Asian children to live in two parent households in this study and in the 2006 census results (Pool, Dharmalingam, & Sceats, 2007). The values which support these may change as successive generations live in New Zealand. They may also be changing overseas as women become financially independent and able to afford to live independently.

“Collectivism” does not explain the reason for differences between Asian and the collective cultures of the largely Māori and Pacific Island families in the KKS study data base. The explanation may be purely practical. Having more than one parent in a

household supports the intensive monitoring of children described in the Asian family group interviews. For example, parents describe how they jointly organise their work hours so they can share supervising children before and after school including their travel. This is an appealing reason but other factors may also be influential such as whether or not the parents' relationship is intact (for example, it is unknown if children in one parent households such as those where the mother is in New Zealand caring for the children and the father is working overseas have low smoking rates or not), the expectation that children are obedient and respectful regardless of how many parents are physically present in the household, and socio-economic status.

Of interest is the lack of a significant relationship between living in an extended family (parents and grandparent) and child ever-smoking given the description of positive intergenerational influences by qualitative research participants. The non-significant result may be because the small number of students who are ever-smokers in this category (n=8). In addition the question does not capture the effects of close contact with, and supervision by, extended family which can occur when family members live in separate houses.

Family Modelling of Smoking

Asian youth in this study are less likely to be exposed to smoking by mothers, fathers and other household members than non-Asian students. Asian parents who do not smoke are significantly more likely than smoking Asian parents to believe that children smoke if their parents smoke, and if people smoke in the home. These factors may be part of the reason for higher non-Asian youth smoking rates. There is an additional interesting dynamic within Asian families. The risky effect of mother smoking on youth rates is marked although the confidence intervals for the effect of maternal smoking are wide both in this study and the Year 10 survey, perhaps because few mothers of Asian students smoke. Father smoking increases the odds of youth smoking but the results are not significant. The explanation may be cultural since differential effects by parent gender are not found for non-Asian children elsewhere (Scragg et al., 2003).

In the family interviews almost all of the Asian participants, including fathers who smoke, believe that children imitate elders who smoke. They also believe that children should not smoke and expect their children to be obedient – points that are reflected in the categories “family authority” and “values and beliefs” in the qualitative results. Asian mothers who smoke may break strong cultural and social taboos on women smoking described in family interviews and Chapter Two. Asian mothers who smoke

say they cannot forbid their children from doing so. Instead they say that if their children want to try smoking they can, but should do so with their mother's knowledge. Mothers who do not smoke do not hesitate to disapprove of and forbid their children from smoking. Mothers who smoke may feel compromised in terms of telling their children not to do so. This may explain the higher risk of smoking experienced by their children. However this needs to be investigated further. For example, it is not known if the mothers of the ever-smoking Asian students in the student dataset are Asian. This is because Asian prioritised, not Asian only, students are used in the analysis.

In contrast, the normalisation of smoking among men and patriarchal hierarchy of authority described in the interviews and ethnotheories in Chapter Two may mean that fathers can forbid children from smoking, even when they smoke themselves, and expect to be obeyed. The fathers identify themselves as the heads of their families. Unfortunately the effects of modelling smoking by fathers may become apparent later in life since smoking uptake among Asian youth continues through older adolescence and young adulthood (Gong et al., 1995; Rissel et al., 2000; Trinidad, Gilpin, Lee, & Pierce, 2004).

Reducing smoking among family members has multiple benefits since non-smoking parents are more likely than smoking parents to believe that children are more likely to smoke if people smoke at home and in cars, less likely to allow smoking in their homes and cars, and to have smoking materials accessible to children. As a consequence non-smoking parents may encourage smokers to quit as well as being vigilant about not allowing smoking in indoor environments. Older family members (including older siblings) who quit smoking improve their personal health and reduce exposure to second-hand smoke and modelling to children no matter what their age.

Parenting

Smoking Specific Parenting Factors

None of the KKS study student questionnaire smoking specific parenting variables are related to Asian student ever-smoking rates despite family interview participants explaining that some are important elements of their efforts to protect their children from smoking. The variables include "parents think it's ok if people aged less than 16 years smoke"; "parents are upset if their children smoke"; and "parents have rules about not smoking". Asian parents do not think it is "ok" for children to smoke either ever, or at least until they are financially independent and of age. According to the qualitative results category "values and beliefs", child smoking is not acceptable in Asian cultures.

This is supported by the literature (Bhojani, Elias, & Devadasan, 2011; Bradby, 2007; Rissel et al., 2000).

Family interview participants express their grave concern or “upset” about their children taking up smoking in different ways. They invoke family authority, a category in the qualitative analysis, to control the issue by having strong boundaries. One of these is having or threatening severe consequences for smoking such as being excluded from the family, the ultimate threat for family-minded cultures. Chinese, South-East Asian and Indian participants/interpreters/advisors say variously “I think I would not see him as my son (if he smokes)”; “If my daughter smokes I told her I will cut her out of my will”; “My father cut my sister out of the will when she started smoking ” (she was reinstated when she quit). There is no KKS study question about consequences for youth smoking.

With regard to the insignificant relationship of rules about not smoking and smoking rates among Asian students, boundary setting about smoking may be tacit rather than explicit as in the Sikh family interview where the participants explained that they never talk about smoking. Implied disapproval and approval are important in some Asian cultures whereas explicit verbal communication is more usual in others (Camplin-Welch, 2007). Indeed families may rely on intensive monitoring, parental involvement and talking about the dreadful effects of smoking using others as examples, rather than explicit spoken rules to protect their children.

Other factors may relate to low Asian youth smoking rates. In the KKS study parent analysis Asian non-smokers are significantly less likely than smokers to have smoking materials available to children at home or to allow smoking in the home. These parenting actions are supported in the family interviews. Under the sub-category “control” in the qualitative finding framework smoking and non-smoking family members are careful to protect their children from smoking and smokers by banning children from touching smoking paraphernalia and/or making sure smokers smoke outside. These points further support the case for quitting for smokers.

General Parenting Factors

Monitoring and Control

There is support for the positive effect of controlling children by monitoring them in both the quantitative and qualitative results. Monitoring is the only significant “general” parenting factor located in the children’s questionnaire as well as the family interviews

where it is a sub-category of “control”. The family interview results strongly support monitoring as part of protecting children from smoking. There are several sub-codes representing different dimensions of family monitoring. These are monitoring spending, friends, whereabouts, and smoking status (using smell). Other studies have identified the protective effect of different facets of parental monitoring against a range of risk factors for children (Chamrathirong et al., 2010; Engels & Willemsen, 2004; Farmer, Sinha, & Gill, 2008; Guo et al., 2011; K. G. Hill, Hawkins, Catalano, Abbott, & Guo, 2005) (Guilamo-Ramos, Jaccard, & Dittus, 2010).

Parental monitoring of Asian youth spending is significantly protective. Monitoring money is important to family interview participants even though the amount of pocket money given is not significantly related to ever-smoking. This differs from findings for Asian 14 and 15 year olds in New Zealand, perhaps because these students are older and consequently less closely supervised, increasing their opportunities to buy cigarettes when they have enough money (Scragg et al., 2003). According to the family interviews participants believe that children should not be given much money and it should be for specific purposes in case it is misused. They monitor spending by asking to see what is purchased and for the change. In another study a young Asian boy said his mother always asked for, and checks, the receipts (G. Wong et al., 2007 unpublished data).

Monitoring friends is important for both Indian and Chinese family interview participants - “We only want them to be friends with good people”. They explain their concerns about the possible influence of peers on risky behaviours such as smoking and how they monitor this at length – including watching them while they play, not inviting children over, investigating playmates’ families and, for older children, checking their phones. The importance of controlling children’s friends in Chinese parenting is discussed at length in a quantitative thesis about American Chinese children and smoking (S. S. Wong, 2000).

“Starting early” is a code in the “control” sub-category in the qualitative results. It seems to address the question as to whether or not monitoring protects children from taking up risky behaviour, or occurs as a result of detecting risky behaviour. Family interview participants describe starting to mould and shape their children including being with them or knowing their whereabouts constantly and knowing who they are with, and what they are doing from birth. This suggests that parental monitoring is prophylactic rather than reactive.

Communication

Communicating with children about smoking is another important facet of parenting. This is reflected in the qualitative results where “communication” is a sub-category of “family authority”. The duty of parents as educators is taken very seriously by family interview participants in line with their view of children as “knowing nothing” and of adults as the authorities in their children’s lives ultimately responsible for their children’s health and well-being. As described above, communication by way of rules about smoking is not significantly related to Asian youth ever-smoking and neither is talking to children about smoking according to the matched parent/child analysis (although the results of this analysis are not robust because of the small number of child ever-smokers). This is at odds with the qualitative research findings in which parents described teaching and telling their children about multiple negative aspects of smoking at length. There is also no significant difference in the proportion of Asian versus non-Asian parents who talk to their children about smoking.

A feature of the communication strategies is their intensity. Asian parents report they convey messages forcefully in moral and health terms at significant times in parent-child interactions such as before bed and as part of religious observances. They reinforce their points with external smokefree social marketing messaging. Parents who want to convey messages “lightly” use every opportunity to slip in the lessons about not smoking. Subtle messages are likely to be taken seriously by children used to such tacit forms of communication. These points relate specifically to the code “communicating about smoking”, especially the sub-codes “teaching and telling”; “using every opportunity”; “keeping the tone appropriate”; and “persisting”. While parents mentioned listening to their children as well as putting their own view points across, the examples were in the context of telling children what to do if a problem arose or reinforcing messages to behave correctly and not to smoke.

Care

The KKS study questionnaire does not include a number of the parenting factors identified in the qualitative research which protect Asian children from smoking. The qualitative category “family authority” includes the sub-category “care”. This sub-category is important because it provides the rationale for the other two sub-categories “control” and “communication” which I have covered above. The codes which make up “care” are “valuing children”, “responsibility and duty”, “reciprocity”, “working

together” and “nurturing”. These codes reflect the ethnotheoretical perspectives of children in the context chapter.

There is no ambivalence about the value of children in the family interviews.

Participants prioritise their children’s moral, intellectual and physical development with no concern about potential conflicts with their own freedom. The children are brought up in cultures which stress interdependence – expressed in this case by the sub-codes “reciprocity” and “working together”. Parents expect children to reciprocate their devoted care by being obedient and smokefree. Care means paying for and providing everything children need as well as controlling, monitoring and teaching children about right and wrong. Keeping the family together by “nurturing” through “lovely meals”, “time together” and “working together” not only emphasises the obligations children have to their families but enhances opportunities to teach about smoking and to monitor them.

Financial independence may alter the delicate balance of reciprocity between younger and older family members in some families. Some family interview participants explain that they cannot forbid their children from smoking once they are earning their own money. However this does not take away the collectivist responsibility of long term care especially for unmarried children. They are always welcome or even expected to live at home. Some families reflect the enduring nature of the hierarchical parent/child relationship explaining they will never give up directing children not to smoke even when they are adults.

The Context of Migration to New Zealand

Acculturation and Family

The questions about acculturation in the KKS questionnaire are limited to the structural variables “place of birth” and “length of residency in New Zealand” if born off-shore and the psychological variable self-identification as Asian or Asian/non-Asian and non-Asian. Place of birth almost reached significance but no analysis was possible on length of residence because the number of ever-smokers in this category was so small.

Students who identified as Asian only were less likely to be ever-smokers than Asian/non-Asian students. This is logical because Asian students have lower smoking rates than non-Asian so students who are part non-Asian will be more exposed to factors which are related to higher smoking rates in non-Asian children. Unfortunately acculturation factors such as those measuring adherence to non-Western and Western

cultural values and practices are not available in this study. However participants in the qualitative research think that children who had live here longer will be more Westernised and thus more likely to smoke.

This is the second study of New Zealand Asian youth to show that family effects on ever-smoking remain significant in the presence of acculturation (G. Wong et al., 2008). Potentially modifiable family factors are powerful with regard to ever-smoking since the effect of parental monitoring of spending remains in the presence of acculturation. Asian families work hard to protect their children from smoking in New Zealand. For example, one Asian father worries about the potential effects of child exposure to smoking by his non-Asian ex-wife and her family members. He condones frequent child/mother/mother's family contact but strictly forbids his children to smoke, insists that visitors smoke outside, and lets the children know that exposure to smokers when they visit their mother's family exacerbates their previously existing health problems.

The remaining discussion about migration is about the qualitative category "Life in New Zealand" and the evaluation of the KKS study interventions. I reflect on participants' perspectives about the threats and opportunities of Western life with regard to raising smokefree children and the benefits of tobacco control. This last includes the acceptability of the KKS study interventions.

Freedom and Rights

Participants in the qualitative interviews wrestle with the idea of rights for children – "these rights give them the right to have the wrong thing going on". The parents fear not being informed when their children misbehave – in this case smoke – because of respect for privacy for teenagers.

It is very important to disengage smoking from children's and women's rights. One mother who smokes asserts that the "right to smoke" is a women's rights issue. In fact smoking has been framed as a men's rights issue since more men than women smoke and die early as a consequence of this (Morrow & Barraclough, 2010). Smoking is not a children or women's rights issue but a health issue, despite advertising about women smoking with connotations of independence and freedom, and tobacco industry blandishments to youth advising them that smoking is a choice for adults, not children.

School

School, and travel to and from school, are times and places where parents do not have direct control over their children and are unable to monitor their environments and

behaviour. I have discussed arrangements to protect children on their way to school and home. Paradoxically, a majority of Asian parents in the KKS study data say that schools rather than parents should teach children about smoking. Closer investigation in the family interviews made it clear that parents wanted schools to reinforce what they taught their children, similar to their experiences in their countries of origin. In other words the question did not have the response option that captures their viewpoints, that is that both schools and parents should teach children about not smoking.

Despite their respect for, and belief in, the benevolent intent of the teachers and schools, many family interview participants view schools in New Zealand as risky to their youth, mainly because of exposure to other children and values they do not agree with. As one father says, bad behaviour is “catchy”. One interpreter noted that it is easier to be bad than good. Participants say that the non-Asian children are not respectful of teachers or adults in general and that smoking among them is common.

Tobacco Control

The macro-level tobacco control context plays an important part of discouraging youth from smoking and encouraging people to quit. Generally both adult and student qualitative research participants support New Zealand’s tobacco control strategies. In this section I relate the KKS study intervention evaluation and other results to relevant Articles of the WHO Framework Convention on Tobacco Control (FCTC) and to the Smokefree Aotearoa 2025 Next Steps Action Plan 2013–2015 (Next Steps Action Plan) or achieving the government goal of a smokefree New Zealand by 2025 (National Smokefree Working Group, 2013; World Health Organisation, 2003).

FCTC Article 6: Price and Tax Measures to Reduce the Demand for Tobacco

Asian youth and adult participants understand the effects of higher prices and congruent with findings in a New Zealand study, are unlikely to oppose them (Wilson et al., 2010). Some participants who smoke say that the higher price in New Zealand compared with their countries of origin means they smoke less. This reduces youth exposure to second-hand-smoke and modelling of smoking. Parents use the cost of cigarettes to discourage children from smoking, a message which students reflected in their focus groups. Students support higher prices to deter smoking.

Price is an effective tobacco control measure world-wide and the single most effective strategy to reduce smoking uptake and consumption and trigger quitting. More expensive cigarettes are a barrier to acquiring cigarettes for youth and known to reduce

uptake (Chaloupka & Wechsler, 1997). The New Zealand government takes a conservative approach to increasing tobacco tax. In 2102 the Budget included ten percent increases annually for four years. The recent Next Steps Action Plan proposes tax increases of more than fifty percent each year. Laugesen (2012) argues that the goal of five percent prevalence will not be met without at least 40% tax increases.

FCTC Article 8: Protection from Exposure to Environmental Tobacco Smoke

Smokefree environments protect non-smokers from environmental tobacco smoke, raise awareness of the harm caused by tobacco use and de-normalise smoking. There is a high level of understanding among Asian and non-Asian parents of the health impact of environmental tobacco smoke on children's health. Asian participants are more likely than non-Asians to have smokefree homes and cars according to both child and parent analyses. These points are supported in the qualitative research where almost all participants have smokefree homes. One current suggestion in the Next Steps Action Plan is banning smoking in cars. This subject was not followed up in the interviews but many Asian families are likely to support it because they are aware of the harmful effects of ETS and support tobacco control generally.

The normative effect of environmental bans on smoking may be effective in discouraging smoking among Asian adults and youth because of their respect for social harmony and authority. One participant says he quit because everywhere he turns he finds bans on smoking – there is, as he puts it, no freedom to smoke. Qualitative evidence from an evaluation of an Asian quit smoking programme in New Zealand found that participants quit when they were in New Zealand but resume when they visited China where male smoking is common and environmental restrictions on smoking are either weak or not enforced (G. Wong, 2007, unpublished data). The Next Steps Action Plan looks at banning smoking in parks and other public places based partly on a de-normalisation argument since there is no evidence that smoke in outdoor environments causes harm. This might reduce covert and blatant smoking by youth in parks – something which parents commented on as a risk to their children in the family interviews.

FCTC Article 12: Education, Communication, Training and Public Awareness

The KKS study provided resources designed to increase the awareness of the school communities about smoking, quitting and bringing up smokefree children. A key plank was a DVD about parents talking to children about smoking. Many of the families say they watched the DVD with their children. They are positive about this kind of resource

but note the language barriers for those who do not understand English. Their respect for education and school mean that school-based interventions that reach into homes are well received although some note that it is strange for children to tell their fathers what to do – they say it should be the other way round, reflecting the patriarchal and hierarchical nature of their families. They do not participate in activities that are held at school saying they are too busy.

With regard to social marketing in general, parents appreciate and use material from health promotion campaigns and pack warnings to educate their children about the dangers of smoking to health. The students have many ideas to promote smokefree and are a good source of innovative ideas, energy and enthusiasm. Some want to create a social movement by engaging other schools to create awareness and discourage smoking. These ideas will help drive New Zealand to be smokefree by 2025 if they are followed up.

FCTC Article 14: Cessation Support

The KKS study is based on the theory that parental quitting will reduce youth uptake. The level of knowledge that recent Asian migrants have about the harmful effects of smoking is unknown. It is possible that they have left environments where smoking is normalised and missed recent strides in their countries of origin in terms of information and education. One Asian participant believes that holding cigarettes a certain way protects him from harm. Asian family interview participants have a low level of awareness of the quit smoking services offered by the KKS study. Language is a barrier to using services such as the KKS cessation support and the national Quit Line in common with understanding educational resources as described above. Two participants have accessed government subsidised nicotine replacement therapy. Asian Smokefree Communities, New Zealand's only Asian dedicated smoking cessation support service, is available only to people in Waitemata District Health Board.

Increasing successful cessation is one of the three action strands in the Next Steps Action Plan. This will be welcomed by Asians since a greater proportion (60%) of Asians who smoke want to quit than other ethnic groups nationally and in this study (Ministry of Health, 2009b). As noted in Chapter Three, there may be an unmet need for quitting services for Asians.). Zhu and colleagues (2007) found higher rates of quitting among Chinese and Korean immigrants to California than in their countries of origin. They suggested that the non-smoking social norms influenced this, and that strategies to increase quitting could be important population wide measures. However, getting the

messages about the support that is available to Asian smokers will require the engagement of their community leaders and resources in the appropriate languages.

FCTC Article 16: Sales to and by Minors

In this section I discuss youth acquisition of cigarettes. In ASH Year 10 and Youth Tobacco Monitor studies the main sources of cigarettes for youth (not disaggregated by ethnicity) are shops and friends (Darling et al., 2005; Ford, Scragg, & Weir, 1997). Parents in the family interviews strongly support measures to reduce commercial and social supply of cigarettes to children. This is likely related to their traditional strong disapproval of child smoking. In the quantitative analysis nearly all of the Asian and non-Asian parents agree that they would not supply cigarettes to their children if they are under 18 years old. Asian family interview participants comment on the social supply aspect of the KKS DVD and provide their children with strategies to refuse to participate. Indian participants ignored the Indian ethnicity of the shop keeper illegally selling cigarettes to children DVD. Instead they focused on his wrong-doing. Family participants are not aware of the KKS study intervention to support restriction of sales to minors.

Family, Cultural and Religious Drivers for Protecting New Zealand Asian Children from Smoking

Family Authority

The families accept the responsibility of maintaining smokefree children in a Western society. Family authority is the over-riding category in the qualitative results with regard to the influence of family on Asian youth smoking. It is driven by the participants' macro-system level cultural and religious backgrounds which emphasise family responsibility, duty, morality and interdependence. When asked to define culture when it was given as an explanation for behaviour a participant said it is "how we are".

Although Asian families share these overarching perspectives as well as some processes to prevent their children from smoking, their childrearing practices have very different cultural and religious foundations as described briefly in Chapter Two. It is likely to be important to consider these differences when working with Asian families and communities to maintain low youth smoking rates.

Culture

In this section I will discuss the context of culture around smoking and family that the participants brought up. These are cultural views of children and smoking, gender and

smoking, intergenerational continuity and smoking, smoking and community life, and smoking and family face

Children and Smoking

The ethnotheory driving the family participants' values and behaviour is that moral duty is the route to self-fulfilment. A "good" child is first and foremost morally sound. This means respectful, obedient, and, as a consequence, smokefree. This is consistent with research findings for Hindu (Bisht, 2008; Carolan, Bagherinia, Juhari, Himelright, & Mouton-Sanders, 2000; Chao & Tseng, 2002; Seymour, 1999). Self-fulfilment is desirable – doing well at school, participating in sport and in cultural practices, maximising health by not smoking etc – and this is achieved for personal health but also the family, community and even, in China, the nation (Benedict, 2011). Thus self-maximisation occurs but it is within an interdependent framework. It ultimately aims to fulfil moral duties and responsibilities to family. This is common in traditional and even modern non-Western societies despite Western influences via the media that proselytise individual self-gratification and market smoking to young people as cool (Knight & Chapman, 2004).

The fear of getting caught by family is a key driver for being smokefree in other studies of older Asian and Pacific Island youth. For Asian college students, normative expectations to conform and keep peers who smoke from feeling lonely are also powerful drivers towards smoking (Hsia & Spruijt-Metz, 2003). Despite this, family influences are important. A longitudinal study shows that Asian college students are less likely to smoke when their parents disapprove of smoking (Ellickson et al., 2003). The power of de-normalising smoking in New Zealand society is very important for Asian teenagers and young adults as their parents' authority wanes. Research is needed to explore whether or not Asian youth see their parents' actions to protect them from smoking as part of concerned loving care or as an affront to their right to do as they please as they get more opportunities.

Gender and Smoking

The quantitative results show that Asian female smoking rates are lower than men's and also lower than non-Asian female smoking rates. The participants are clear that their communities and cultures strongly disapprove of female smoking and that this social norm is threatened by westernisation. While they do not say they teach their children that women who smoke are "immoral", many hold this view strongly and may transmit it when talking about others. Some believe that smoking by women affects their

marriage prospects, a point of view borne out by a member of the TANI reference group who said that her aunts told her she would not find a husband if she did not quit. She says she found the family pressure for her to quit so strong she gave up in the end.

In New Zealand men do not have to gift cigarettes and smoke as part of maintaining relationships as is the case in China (A. Mao, Bristow, & Robinson, 2013; Rich & Xiao, 2012). One exception is a male family interview participant who took up smoking for business purposes when he came to New Zealand. The advent of Smokefree Aotearoa by 2025 will hopefully normalise non-smoking in all sectors of society.

Intergenerational Continuity and Smoking

Family group participants from a number of Asian cultures emphasise the importance of not smoking to reduce modelling of smoking and to protect reproductive health and the health of future generations by both those who came before them and on into the future. This very long term view of responsibility and connectedness is not emphasised in Western society although the importance of whanau and ancestors is recognised among Māori and other collectivist societies. For Hindu and Buddhist participants the circular view of causality encapsulated in “karma” and reincarnation may underlie this particular perspective about why it is important for children and women not to smoke.

Community Life

Part of life in a collective society is community, or at least extended family, responsibility for the health and wellbeing of children. Many of the family group participants regret the loss of community support and care for children when they come to New Zealand. Participants also describe how they maintain this in New Zealand. The surveillance by family members is similar to that which Indian youth report in a study about smoking in the United Kingdom (Bradby, 2007).

Some participants talk about maintaining “family face”, a cultural concept that is strong in East Asian cultures. They note that child and daughter smoking reflects badly on their families. Students concur - in the school-based focus groups they suggested that children who smoke do not care about their parents. This is unfilial.

Religion

Families in the first two qualitative interviews alerted me to their belief that the “big picture”, in their cases their faith, has an important influence on low Asian youth smoking rates. They and other (but certainly not all) families identify it as a key factor preventing their children from smoking both indirectly, through its effect on culture and

child rearing, and directly, in terms of religious expectations about smoking. This led me to expanding my frame of reference and reading to include religion as well as culture which participants also identify as a key influence on low smoking rates among Asian children.

The Asian participants in the study come from cultures based on Confucianism, Taoism, Buddhism, Hinduism, Sikhism, Islam, Communism and Christianity. Sikh interviewees explained that their tenth guru forbade smoking and that this ban is reinforced regularly through reminders when they attend the temple especially on the guru's birthday. It is so strong that the family say they do not need or want to talk about smoking to their children.

Religious and traditional stories are a vital part component of the transmission of moral values in Hindu families (Kakar, 1981) and possibly inform participants' statements about smoking being "evil" and "bad". The child socialisation goals of the Fijian Indian families in the interviews reflected the development of the social and moral values needed to practice *dharma*. Smoking is couched in moral as well as health and other terms - as evil. One Fijian Indian mother said "Stay away from this kind of evil thing".

In Fijian Indian Hindu parent interview participants say their children hear sacred stories from family members and at places of worship and watch them at home on DVDs. The stories concern ideal relationships between family and societal members especially respect for elders. For example, one interview participant described a DVD episode of the Ramayana where Krishna does not listen to his mother, leaves home and falls among "bad people", realises his mistake and returns home remorseful.

Shrines and prayers at home bring religion into the centre of daily life. Muslims pray five times daily. Hindu interviewees report "puja" or worship at home up to twice daily, a common practice in Hindu households (Bose, 2010). A Hindu Fijian Indian participant prays over his son before he goes to work enjoining the boy not to smoke among other things. This powerful message is delivered by the head of the household, in a moral context, first thing in the morning. Another father talks about directing his children to the "light" (away from smoking) rather than the "darkness" reflecting Hindu perceptions of the nature of the subconscious (Kakar, 1981; Saraswathi & Ganapathy, 2002).

I discussed the pros and cons of involving religious organisations in combating smoking in Chapter Two. Activities can range from supporting smoking cessation to advocating

for stronger smokefree public policy. The Asian Smokefree Communities service should be extended to congregations with high smoking rates. All religious groups can advocate for tobacco control policies to de-normalise in society since this is a powerful tool for devout Asian youth and families.

Theories of Family and Child Socialisation

With regard to the fit of theories and models with the data, the Asian children are predominantly protected from smoking by family processes derived from a markedly and probably persistently different world view from Western families. There is a good fit with the concept of collectivism/interdependence as it pertains to family. The qualitative results reflect the view of humans as interdependent (collective) rather than independent beings a categorisation I discussed in Chapter Two. Respect for elders was foremost amongst the values inculcated into children. In this study the parents said this included being obedient and not smoking. Kâğıtçıbaşı's (1994) theory about the autonomous-related self is also supported with regard to parents wanting children think independently to resist pressure from other students to smoke. This means that students both protect their health and conform to family and heritage cultural expectations.

The findings tentatively support the assertion that collectivism and individualism are limited in terms of their explanatory power since Māori, Pacific and Asian youth smoking rates vary widely among the students despite being classified as "collective". It may be that they share some collectivist features but not others, or that the processes leading to these shared factors differ. An ethnotheoretical approach is ideal for exploring these differences although it is important to bear in mind factors like socioeconomic status. In this study the students all attend the same schools. This reduces the potentially confounding effect of socio-economic status on the results. However there may be marked inter-ethnic and intra-ethnic differences within schools.

The ethnotheories described by the Asian parents are at odds with the individualistic Western models of child development and parenting such as Baumrind's typology of parenting. Others have challenged the applicability of these theories for Asian families, for example, Chao (1994). Educationalists have noted the difference between teaching children from collectivist and individualistic cultures (Trumbull, Rothstein-Fisch, Greenfield, & Quiroz, 2001). An effort is made to address these differences in some schools. At one large primary school I was a public health nurse in, classrooms

comprised children from three year levels to accommodate family groups. This was largely for Māori and Pacific Island children.

Teaching methods in schools in Asia where teachers are authorities, or, as some participants say, “gurus”, and educational practices like rote learning, repetition and homework, are not compatible with Western views of education (Pine, 2012). Western views emphasise earned rather than ascribed authority, problem centred approaches, and the development of the critical thinking, individual and independent thought and personal uniqueness. There is no teaching about obedience and respect for elders in New Zealand schools. The fit of these modes of education with Māori and Pacific approaches would be interesting to follow up.

Some Asian parents want a closer relationship with schools in the hope that school will reinforce home-based teaching and values. Given the strength with which teachers and the education system value models of child development which prioritise the development of the individual autonomy of children this is unrealistic. However both sides can benefit when schools reach out openly to Asian parents. Many do so already through involving parents in cultural dance groups and festivals. This level of engagement is shallow but a beginning.

The KKS Study questions about family modelling of smoking test Bandura’s social learning theory. In this study Bandura’s theory is supported for Asian students for maternal smoking and smoking by other household members but not for paternal smoking.

Strengths and Limitations

This study is one of two in New Zealand that is about smoking and prioritises Asian students. In addition, the sample is unlike other studies of youth smoking in New Zealand because it includes child and adult family members from the same low decile, year seven and eight schools. Other quantitative studies about family factors and smoking report the students’ perspective only, for example Scragg and colleagues (2007) and Darling and colleagues (2003). The link between the parents and children strengthens confidence in the overall study results in terms of associating family factors with youth ever-smoking rates reported by students.

The study population provides a valuable opportunity to see if Asian students in low decile schools also smoke less than their non-Asian counterparts and to consider factors

that influence this. On the other hand the focus on low decile schools limits the generalisability of the results. The quantitative results show that some family factors differentiate Asian from non-Asian students but as the qualitative sample was limited to Asian families there was no opportunity to investigate the processes, attitudes and beliefs underlying the results for Māori and Pacific Island families.

The mixed methods design was a strength of the study because the KKS study questionnaire omitted questions about culture, and the questions about acculturation were very limited. There were no questions about family variables such as quality of relationships, for example, feeling valued, closeness to family members, attachment, monitoring (except pocket money), let alone questions about family harmony or familism, for example, obedience and respect. There were problems with interpreting individual questions especially “Have you talked to your children about smoking?” This question does not specify what is said but presumably it is about the risks of smoking or about not smoking, rather than the benefits of smoking. The qualitative results bore out this assumption.

It should be noted that the qualitative data was collected from the decile one intervention schools only. Therefore care is necessary with using these to interpret the quantitative results from all four schools since they include deciles two and three. The majority of the Asian students in the quantitative analysis are from the decile two and three schools.

Quantitative

None of the results for the quantitative analysis of the child/parent matched data set are significant, perhaps because the number of Asian youth ever-smokers is small and the scope of the variables is limited. The high response rates of the students (82.2%) and parents (73.1%) in the KKS study strengthen the internal and external validity of the results. The response rate of the students by ethnicity is likely to be accurate even though it is based on Ministry of Education mid-year roll returns rather than on February/March school roll returns when the data was collected. The increase of students from February/March to July was small ($n=38$; $N= 5704$). It could not be determined if the students who moved in and out of the schools between the two time points were proportionally spread across the four ethnic groups. The number of Indian student respondents born in Fiji was difficult to determine. Some were classified as Asian /non-Asian (when they selected both Indian and Fijian) but it is not possible to discern how many self-classified as Indian only. The effect of misclassification is likely

to be a lower Asian/non-Asian student smoking rate. The number of international fee paying students is unknown but is likely to be either none or a very small number because international students in New Zealand mainly attend secondary or tertiary institutions.

Asian students and Pacific Island students have the highest response rates (89.5% and 84.3% respectively). The European/other student response rate is the lowest (67.9%) but this has less impact on validity because they are the smallest ethnic group (7.1%) in the study population. One fifth of the participants are Asian. The sample size (n= 1093) and proportion of ever-smokers (4.6%) provided enough power for the Asian student analysis. The power decreased in the combined student /parent analysis with fewer dyads (n= 1023) and a smaller percentage of student ever smokers (3.5%).

Another issue is the cross-sectional design which threatens internal validity and attribution of causality to the explanatory variables. Prospective longitudinal studies are more effective for this. The study did not examine possible mediating and moderating variables. The “pna” number which matched siblings in the 2007-2009 KKS study data was useful because it controlled for cluster effects by family. The difficulty with matching parent and student databases by family across the three cohorts (2007 – 2009) was also an issue.

Qualitative

The qualitative sample was very diverse. The question is whether or not it is possible to draw conclusions about Asian peoples in general given the included families and students are from three broad ethnic categories – South Asian, South East Asian and East Asian. The Indian families alone included three distinct regional groupings and three distinct religions. The largest group was Fijian Indian. It would be valuable to do a separate analysis for them. I did reach redundancy on the codes showing there were shared similarities across the groups.

The number of fathers who participated is unprecedented in qualitative research with Asian families about smoking. It is very useful to have their view points because they are the heads of the households. However the traditionally hierarchical nature of Asian families and the precedence men took in some of the interviews means I may have missed women’s views. Even addressing women directly may not be productive because I am not sure how much they would want to disagree with their husbands in front of them. The strong drive for family harmony and for preserving family face may

act here as well. It would be ideal to interview women separately for further insights into their role in keeping their children smokefree and I strongly recommend this.

The mix of male smokers and non-smokers is a strength of the qualitative phase of the study. It is difficult to find Asian women who smoke because they are few and may not want to be interviewed about their smoking. There is very little research with Asian women about the dynamics of their smoking and parenting. This is an area which is important to follow up since the odds of smoking among their children are very high.

A strength of the qualitative research was the care taken with interpreted interviews. This gives more confidence in the accuracy of the data. There are other ways of improving the quality of research with people who do not speak the same language as the researcher such as using a team of researchers who share the cultural and language heritage of the sample. This should be considered in the future.

A limitation of the study is the qualitative information gained from students. The focus on the KKS study interventions in the interviews reduced the ability to elicit the perspectives of the children of their families' processes to protect them from smoking. In Western cultures the viewpoints of children are important and the Asian parents were also interested in listening to their children's views. Data from the students would have served to corroborate the parents' reports. While the reasons for not interviewing students directly about family processes, such as protecting face in the group, are valid, it may have been possible to elicit information in a different more "face saving" way, for example, in gender separated groups or by using different expressive media than talking in a group. The experience with the students suggests that gender specific groups are more comfortable for participants of this age. It should also be noted that the family interview results were not available to inform the student question schedule. Therefore it might have been more beneficial to conduct the student interviews after the family interviews or to arrange some qualitative data collection with students afterwards.

Transferability

The transferability of the research to Asian families from different ethnic subgroups was supported by the TANI Council. Because of this and because the results are congruent with health promotion principles and strategies (such as strengthening community action), as well as health professional practice recommendations from other organisations, the results can be used to inform work with young Asian adolescents and their families (Camplin-Welch, 2007; Te Pou, References/2010).

The findings of this study may not be transferable to older Asian youth. The TANI Council members feel that the problems with protection from risky behaviours lie mainly with children aged 13 years and up whereas younger children are under their families' control. The Council members commented that problems did not begin until children are older when the cultural pressures of conforming put them at risk of peer influences. This concern is shared by the parents I interviewed. It is supported by the increase in Asian smoking rates through adolescence and young adulthood albeit at a lower level than non-Asian youth (Ministry of Health, 2009b). However elements of the findings may be useful for older children since many of the qualitative research family participants say they will discourage smoking in their older children even when they are adults. In addition, family influences on American Asian youth smoking were found to continue into young adulthood in a large longitudinal study (Ellickson et al., 2003). Smoking and the transition from younger to older adolescence and young adulthood is an area worthy of follow up especially among Asian children who do not attend tertiary education. There is almost no research with this group. It is certainly necessary to conduct further research with Asian families, adolescents and young adults to help them reconcile the different demands that they face in New Zealand.

With regard to transferability to non-Asian families, Timimi suggests that non-Western cultures have much to offer the West in terms of offering models of child rearing stressing interdependence, respect for elders and the responsibility of elders to care for dependents (Timimi, 2005a). In this study New Zealand Māori children are exposed to westernisation through colonisation. Pacific Island and Asian children are exposed to westernisation through immigration and globalization. Transferring family practices in the context of deep-seated and widely varying ethnotheories of child socialisation even when cultures are referred to as "collective" is challenging. It is difficult to imagine how these differences can be reconciled in order to make recommendations. Timimi (2005a, 2005b, 2010) does not address this.

The Council's members were proud that Asian youth smoking rates are low but did not think that the methods that families use to achieve this are transferable to non-Asians. They perceived an almost insurmountable divide between the way Asian and other parents bring up their children. They noted that there are different ways of achieving the same results (for example smokefree children) and merely asked that these differences are respected. For example they could not envisage non-Asians checking their teenagers' mobile phone messages. One member said that there is a point where Asians

and non-Asians come together – but they use different routes to get there. He cited a research study which shows that children from different cultures all complete a puzzle, but use different methods to do so. The analogy is that parents from different cultures want to have smokefree children but use different methods to reach their goal. One family group who originate from a country experiencing religion-based civil unrest supported this when they noted that New Zealand is a country where differences are tolerated:

-People have their own business. Nobody is interfering (S Asian grandfather ns I.10 interpreted)

The perspective of the TANI Council advisors reflects a multi-cultural or pluralistic view of ethnicity and culture in New Zealand. A critical perspective notes that the perception of the difficulty of transferability of Asian parenting values and practices to other social groups shows that multi-culturalism is essentially conservative. Groups are free to maintain their own “folkways” for health without disturbing the status quo except via channels acceptable to the dominant group in society – a form of democratic racism. Thus health promotion approaches which seek out and accept the differing perspectives of the families and individuals support the application of the findings but only in the micro-level sense of family functioning.

Another view is that acceptance of difference reflects a post-modern view of society. This is paradoxical and essentially conservative. While there is support for shifting particularistic forms and processes as created and experienced by individuals or even cultural groups, the wider society also reflects this. The approach results in fragmentation overall which ultimately privileges the dominant individualist social milieu. Asian families noted that New Zealand society does not support their beliefs about the collective responsibility of adults to care for and control children in public and youth respect for elders. The Asian parents’ ethno-theories which underlie their actions to protect their children from smoking and other risks are not supported by Western values and education which promote individual freedom, autonomy, self-fulfilment and independence.

Efforts to support Asian children to be smokefree through mass cultural change to a more interdependent society in the wider New Zealand community and education system will not be successful. Transferring recommendations for many of the family practices found in this work to families with different ideological backgrounds is not

realistic despite the apparent effectiveness of the Asian families' processes. It could be argued that determining and acting on micro-level family differences and similarities between Māori, Pacific Island and Asian families would be useful since they share collective/interdependent underpinnings. However this approach does not take into account the wider cultural, social and historical factors which may drive this difference. These factors include the impact of colonisation on Maori.

The KKS study DVD intervention was tailored for Maori and Pacific Island families. It had many elements similar to those described in the family interviews in this study. For example, it advised families to warn their children and families about social supply of cigarettes from other students and family members, and to monitor their children's spending closely. It warned families about the risk of smoking to youth if parents smoke. More vigilant monitoring of children by families and even communities would complement exo-system level tobacco control initiatives and could reduce other youth risk factors such as cyber bullying.

It is worth noting that collectivism and interdependence can threaten efforts to become smokefree when smoking is built into social norms for male identity and group belonging (Bush et al., 2003; Hsia & Spruijt-Metz, 2003; M. Hu, Rich, Luo, & Xiao, 2012; A. Mao et al., 2013; Markham, Featherstone, Taket, Trenchard-Mabere, & Ross, 2001; Rich & Xiao, 2012; Spruijt-Metz et al., 2004; S. K. Sun, Son, & Nam, 2005). Knowledge about the harm of tobacco, and the normative effects of low male smoking rates in Western countries, may exert an effect on Asian men's desire to quit and quit rates, and on retaining low female smoking rates (Ministry of Health, 2009b; S. H. Zhu et al., 2007).

Reflection

Here I compare my presuppositions interview with my findings and reflect on my learning. The key parenting factors I identified are supported. They are respect for elders, family monitoring and training children. I found that parents are concerned about protecting children from smoking and take steps to prevent this. Some communicate with children directly and some more subtly. This differs from my personal experience possibly because the parents feel they have to take action because their children are in a risky environment. I now believe this is because my children were brought up in an environment where smoking is rarely seen. However, like the parents in the interviews, my children were monitored carefully.

My expectation that Asian families support the KKS intervention strategies in general is supported by the findings as is my concern that language and being busy are barriers to active participation. The parent participants do not say that the interventions do not suit them because they are tailored for the Māori and Pacific school population. However they do not attend school-based events - possibly because they feel they do not fit in. I did not follow this possibility up in the interviews.

My secular background meant I did not consider the influence of religion on Asian people's parenting until I interviewed the families. I learned a good deal about the origins of my own behaviour and motivations and enriched my understanding of different religious and cultural world-views. The ecological model has been invaluable throughout my work. It has kept me focused on the big picture and its ramifications on lower level systems as well as the dynamic nature of whole system and its components. It accommodated my new understanding of fundamental differences in world-views. Based on my own life experience, my reading and the results I now believe that Asian parents retain parenting goals even as they acculturate in other ways. They may perceive themselves as permissive in matters such as choice of marriage partner, dress, food, pressure to succeed and study, and choice of career but when it comes to protecting health and doing well at school they have similar hopes and even expectations of academic success and financial security for their children as their parents had for them.

Asian parents may or may not convey the depth of their care and concern or reasons for their attitudes and actions clearly to their children. I suggest that it would be helpful if they did. Then Asian youth might understand their parents' motives better. Western society does not provide Asian families with tacit reinforcement and support. The Western perspective leads to expectations such as that parents should tell children they love them. The family participants in the study did not mention love. In the meantime, we can respect statistics which show that young Asians continue to have lower smoking rates than non-Asians without stereotyping them as a "model minority". We can explore prior research findings that Asian youth do not smoke because they fear their parents' reactions. A key question is whether they perceive their parents' values, attitudes and actions as oppressive or part of their parents' concern for their well-being.

Recommendations

Research

Asian children are at a high risk of smoking if their mothers smoke. The factors that influence maternal smoking and quitting should be followed up empirically, perhaps in conjunction with researchers overseas. Asian/non-Asian students also had high smoking rates. I am interested in finding out how cultural identity in this group influences risky behaviours, and whether or not interventions can be developed to reduce uptake and increase quit rates through identifying with protective elements of individuals' multiple heritages.

Efforts to help Asian parents to quit smoking could be strengthened if new migrants were provided with a language appropriate resources about New Zealand's smokefree 2025 goal and the availability of quit smoking services, especially subsidised nicotine replacement therapy. The effectiveness of these interventions could be tested using a quasi-experimental research design.

I recommend research about protecting older Asian adolescents from smoking, differentiated by gender and Asian subgroups. The research would include Asian international students and young adults who work in the hospitality industry. This reflects concerns expressed by the Asian family research participants and the TANI Council. I would particularly like to investigate social norms for smoking and ways to change these through social networks, as well as the young people's use of internet quitting services.

I recommend using measures which reflect collective family socialisation processes and parenting practices in all studies which include children from such cultures. This will allow researchers to determine family factors which protect and place Asian children at risk of smoking and other behaviours more accurately. Some validated measures exist already, including ones which take into account modern Asian family practices in contemporary environments (Supple, Peterson, & Bush, 2004; Trinidad et al., 2003).

I recommend a Fijian Indian only analysis of the qualitative and quantitative data in the study because the majority of the participants are Fijian Indian. This would maximise the use of data, and enable a more focused interpretation of the results than the current one. It would allow interventions to be focused more precisely. I recommend that this is undertaken with a Fijian Indian research partner.

Policy

The most important policy recommendation is supporting New Zealand's tobacco control goal of becoming smokefree by 2025 and the wider tobacco control strategies that are being implemented to support this. The goal is important because the normalisation of non-smoking will influence those with interdependent world-views such as Asians.

I also recommend more funding to support smoking cessation for Asians who smoke. This will help achieve the government tobacco target "Better Help for Smokers to Quit" in primary care (Ministry of Health, 2013). Funding is required to locate and test print and internet resources in different Asian languages and to provide them to the Quitline and smoking cessation providers. In addition I suggest that more Asian ethnic groups are included in the Asian Smokefree Communities programme and making it more widely available than Waitemata District Health Board.

Practice

Health professionals must support Asian and other family centred cultures to retain the strategies which make their children resilient against smoking. To this end, I recommend promoting understanding of Western and non-Western world views in order to reduce the taken-for-granted Euro-centred nature of health and education services. All health professionals should be funded to undertake the WDHB Culturally and Linguistically Diverse (CALD) cultural competency courses. This includes Asians since the individual sub-ethnicities vary widely. I recommend using interpreters and translations whenever necessary, and the CALD course for working with interpreters to maximise inter-language communication opportunities to promote health, smoking cessation and the Smokefree 2025 goal.

In addition I recommend that Asian health providers, especially general practitioners and those providing complementary alternative therapies, are encouraged to provide evidence-based brief smoking cessation interventions including access to subsidised nicotine replacement therapy. According to the qualitative results, Asian parents who smoke can be reached through school so long as the activities are home-based. Therefore I recommend that schools and public health and school nurses engage with the Smokefree 2025 goal, convey their support for this to students and their families, and encourage Asian families to join in by supporting smokers to quit and providing access to subsidised nicotine replacement therapy.

I recommend that current efforts to teach Asian parents how to talk to their children are balanced with efforts to help Asian children to understand the world-views underlying their various cultural heritages in the context of life in New Zealand. This could provide children with the tools to make informed decisions about their identity and perhaps reduce emotional anguish and smoking to relieve this.

Closing

Despite the heterogeneous nature of the samples, the Asian families share key factors which influence low youth smoking rates. In general the participants' religious and cultural backgrounds reflect worldviews which emphasise family and community interdependence, morality and duty. These shape parenting practices which engender behaviours in children which protect them from smoking. The children's parents take full responsibility for their children's care. Part of this care is controlling their children and their environments to protect them from harm. It is my hope this understanding will have an impact on more than my own knowledge. It is my job to ensure that this is so.

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Appendices

Appendix A: Student Questionnaire



**Keeping Kids
Smokefree**

An Auckland Tobacco Control Research Centre,
University of Auckland Project

Student Questionnaire

Parent number: _____

Family number: _____

PDA number: _____

Student number: _____

Date: _____

Start Here

1 Your Name: _____

First Name
Last Name

2 Your Date of Birth: ____/____/19____

Day
Month
Year

3 What is your home address?

Street Number and Name:

Suburb:

4 What is your home phone number?



5 What is the name of your mother/stepmother/female caregiver living with you?

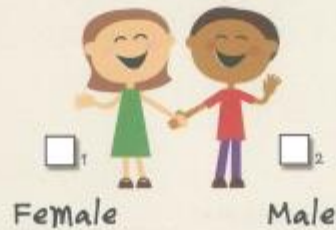
6 What is the name of your father/stepfather/male caregiver living with you?

First Name
Last Name

First Name
Last Name



Are You:



Which ethnic group/s do you belong to? Tick the box or boxes that apply to you.

- | | |
|-----------------------------------------------------------------------|--------------------------------------------------------------|
| <input type="checkbox"/> Maori | <input type="checkbox"/> New Zealand European |
| <input type="checkbox"/> Samoan | <input type="checkbox"/> Chinese |
| <input type="checkbox"/> Tongan | <input type="checkbox"/> Indian |
| <input type="checkbox"/> Niuean | <input type="checkbox"/> Other Asian (Please write in) _____ |
| <input type="checkbox"/> Cook Island Maori | <input type="checkbox"/> Other (Please write in) _____ |
| <input type="checkbox"/> Other Pacific Island (Please write in) _____ | |



Thinking about your home where you normally live, who else lives with you? Please tick ALL that apply.

- | | |
|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| <input type="checkbox"/> Mother | <input type="checkbox"/> Other Male caregiver (e.g. step father, foster father) |
| <input type="checkbox"/> Father | <input type="checkbox"/> Older brothers or sisters |
| <input type="checkbox"/> Grandparents | <input type="checkbox"/> Younger brothers or sisters |
| <input type="checkbox"/> Other Female caregiver (e.g. step mother, foster mother) | <input type="checkbox"/> Other people (e.g. relatives, friends, flatmates) |

10

During the past 7 days (one week), how much pocket money (\$ per week) did you get?

- ☐ I did not get any ☐ \$21 to \$30
☐ \$1 to \$5 ☐ \$31 to \$40
☐ \$6 to \$10 ☐ \$41 to \$50
☐ \$11 to \$15 ☐ Over \$50
☐ \$16 to \$20



11

Please think about all the money that you spent last week. How many dollars did you spend on each of the following things? (Tick one box for each one.)

| | \$0, | under \$5, | \$5 - \$10, | \$10 - \$15, | \$15 - \$20, | \$20+. |
|-------------------------------------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Magazines | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Clothes | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Transport | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Going out (for example, to the movies) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Sporting activities | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Alcohol | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Cell phones / text messaging | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Cigarettes | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Put money into savings account | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| School/Tuckshops | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Fast food (like KFC or McDonalds) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Snack food from shops and dairies (like chips, chocolate bars) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Music CD, tapes, DVD's etc. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Hired out games or movies from a video shop | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Other | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

12

Who was smoking around you in your home during the past 7 days?
Please tick ALL that apply.:

- ☐ No one smoked around me in my home during the past 7 days
- ☐ Father
- ☐ Mother
- ☐ Grandparent
- ☐ Other caregiver (e.g. step mother or father, foster parents)
- ☐ Older brother(s)
- ☐ Older sister(s)
- ☐ Other people not mentioned above (e.g. visitors)
- ☐ Best friend
- ☐ Other close friends

13

During the past 7 days which of the following people smoked around you while you were travelling in a car or van? Please tick ALL that apply.:

- ☐ No one smoked around me while travelling in cars or vans
- ☐ Father
- ☐ Mother
- ☐ Older brother(s)
- ☐ Older sister(s)
- ☐ Other caregiver or relative who live with you (e.g. grandparents)
- ☐ Family friends
- ☐ Best friend
- ☐ Other close friends
- ☐ Other people not mentioned here.

Appendix B: Student PDA Questions

KKS

Student Baseline Questionnaire 'Ever Smoked'



KKS Prelude

1. What is the name of your school ?

Manurewa Intermediate

Kedgley Intermediate

Papatoetoe Intermediate

Weymouth Intermediate

2. What year are you in?

Year 7 ☐ 01

Year 8 ☐ 02

3. I am:

Male

Female

4. What is your date of birth?

--/--/---- (Enter into pda)

5. Which ethnic group do you most identify with?

1, Maori

2, Samoan

3, Cook Island Maori

4, Tongan

5, Niuean

6, Other Pacific

7, NZ European / Pakeha

8, Other European eg. English/Dutch

9, Chinese

10, Indian

11, Other

6. Were you born in NZ?

Yes

No

SKIP – If YES

How long have you lived in NZ?

1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18 years.

7. During the past 7 days (one week), roughly about how much pocket money (\$ per week) did you get?

PLEASE TICK ONE BOX ONLY

- I did not get any pocket money..... ☐ 01
- \$1 to \$5..... ☐ 02
- \$6 to \$10..... ☐ 03
- \$11 to \$15..... ☐ 04
- \$16 to \$20..... ☐ 05
- \$21 to \$30..... ☐ 06
- \$31 to \$40..... ☐ 07
- \$41 to \$50..... ☐ 08
- Over \$50..... ☐ 09

8. How many people usually live at your home including yourself during the school week?

1,2,3,4,5,6,7,8,9,10,11,12,13,14,15

NEW SECTION: The following questions are about tobacco smoking.

9. Have you ever tried cigarette smoking even one or two puffs?

Yes ☐ 01

No ☐ 02 skip to no sense questioning

If NO (SKIP)

Please tick if you have tried any of the following?

Krumping, Hip Hop, Acting, Singing in front of people, None of these.

How many pets have you ever owned?

None, One, Two, three, Four or more.

Do you have other sisters and brothers?

Yes, No

How often do you eat lollies?

1. I have never eaten lollies before

2. At least once a day.

3. At least three times a week.

4. About once a week.

5. hardly ever.

Which sport do you play the most?

1. Rugby

2. Netball

3. Cricket

4. Tennis

5. Other

6. I don't play sport.

Where do you like to hang out?

At home

At school

At friends homes

At the shopping centre

At public places like parks

Don't like to hang out anywhere.

(SKIP ENDS) (Following questions are only for those students who indicated YES for question 9).

10. How old were you when you first tried to smoke a cigarette?

PLEASE TICK ONE BOX ONLY

7 years old or younger..... ☐ 02

8 years old..... ☐ 03

9 years old..... ☐ 04

10 years old..... ☐ 05

11 years old..... ☐ 06

12 years old..... ☐ 07

13 years old or older..... ☐ 08

11. How many cigarettes have you smoked in your entire life?

PLEASE TICK ONE BOX ONLY

1 to 10 cigarettes (includes just having a few puffs)..... ☐ 02

11 to 100 cigarettes..... ☐ 03

100 or more cigarettes..... ☐ 04

12. Were you smoking 12 months ago?

Yes..... ☐ 01

No..... ☐ 02

13. How often do you smoke now?

PLEASE TICK ONE BOX ONLY

- I have never smoked cigarettes / I am not a smoker now..... ☐ ₀₁ Go to Q16
- At least once a day..... ☐ ₀₂
- At least once a week..... ☐ ₀₃
- At least once a month..... ☐ ₀₄
- Less often..... ☐ ₀₅

14. During the past 30 days (one month), on the days you smoked, how many cigarettes did you **usually** smoke?

PLEASE TICK ONE BOX ONLY

- I did not smoke cigarettes during the past 30 days (one month)..... ☐ ₀₁
- Less than 1 cigarette per day..... ☐ ₀₂
- 1 cigarette per day..... ☐ ₀₃
- 2-5 cigarettes per day..... ☐ ₀₄
- 6-10 cigarettes per day..... ☐ ₀₅
- 11-20 cigarettes per day..... ☐ ₀₆
- More than 20 cigarettes per day..... ☐ ₀₇

15. Where do you or did you **usually** smoke?

PLEASE TICK ONE BOX ONLY

- At home..... ☐ ₀₂
- Near school..... ☐ ₀₃
- At friends' houses..... ☐ ₀₅
- At social events (like parties, socials, dance parties or concerts)..... ☐ ₀₆
- At public places (parks, in town)..... ☐ ₀₇
- Other..... ☐ ₀₈

16. Do you **usually** smoke "ready made" or "roll your own" cigarettes?

PLEASE TICK ONE BOX ONLY

- I have never smoked cigarettes / I am not a smoker now..... ☐ ₀₁
- Ready made cigarettes..... ☐ ₀₂
- Roll your owns..... ☐ ₀₃
- Other..... ☐ ₀₄

Do you have a brand that you smoke the most?

PLEASE TICK ONE BOX ONLY

Yes ☐ 01
No ☐

17. What brand of cigarettes or tobacco do you smoke most often?

PLEASE TICK ONE BOX ONLY

Benson & Hedges ☐ 01
Dunhill ☐ 02
Holiday ☐ 03
Horizon ☐ 01
John Brandon ☐ 02
Marlboro ☐ 03
Pall mall ☐ 01
Peter Jackson ☐ 02
Peter Styvesant ☐ 03
Rothmans ☐ 01
Winfield ☐ 02
Other ☐ 03

18. Do your parents know that you smoke?

PLEASE TICK ONE BOX ONLY

No ☐ 01
Yes ☐ 02
Not sure ☐ 03

19. During the past 30 days (one month), how did you **usually** get your own or someone else's cigarettes?

PLEASE TICK ONE BOX ONLY

I did not get any cigarettes in the past 30 days (one month) ☐ 01
I bought them from a shop ☐ 02
I bought them from (another person or) ☐ 02
I got them from another student at school ☐ 03
I stole them ☐ 04
I got them from friends ☐ 05
I got them from my parents ☐ 06
I got them from my brother/sister ☐ 07

Someone else bought them for me..... ☐ 08
 I got them some other way..... ☐ 09

20. Which places did you **buy** cigarettes from in the past 30 days (one month)?

PLEASE TICK ONE BOX FOR EACH TYPE OF PLACE (tick the 'never' box, if you didn't buy cigarettes in the past month or if you do not smoke)

| | Never | Once | 2-3 times | 4 times or more |
|--------------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| 1 Dairy..... | <input type="checkbox"/> 01 | <input type="checkbox"/> 02 | <input type="checkbox"/> 03 | <input type="checkbox"/> 04 |
| 2 Service Station..... | <input type="checkbox"/> 01 | <input type="checkbox"/> 02 | <input type="checkbox"/> 03 | <input type="checkbox"/> 04 |
| 3 Supermarket..... | <input type="checkbox"/> 01 | <input type="checkbox"/> 02 | <input type="checkbox"/> 03 | <input type="checkbox"/> 04 |
| 4 Takeaway shop..... | <input type="checkbox"/> 01 | <input type="checkbox"/> 02 | <input type="checkbox"/> 03 | <input type="checkbox"/> 04 |
| 5 Other shop (Please write in):..... | <input type="checkbox"/> 01 | <input type="checkbox"/> 02 | <input type="checkbox"/> 03 | <input type="checkbox"/> 04 |

21. When you bought, or tried to buy cigarettes, in a store during the past 30 days (one month), were you ever asked to show proof of age (ID)?

PLEASE TICK ONE BOX ONLY

I did not try to buy cigarettes in a store during the past 30 days..... ☐ 01
 Yes, I was asked to show proof of age (ID)..... ☐ 02
 No, I was not asked to show proof of age (ID)..... ☐ 03

22. During the past 30 days (one month), has anybody refused to sell you cigarettes because of your age?

PLEASE TICK ONE BOX ONLY

I have not tried to buy cigarettes during the past 30 days..... ☐ 01
 Yes, someone refused to sell me cigarettes because of my age..... ☐ 02
 No, my age did not keep me from buying cigarettes..... ☐ 03

23. Which of the following people smoke?

PLEASE TICK ALL THAT APPLY

Mother ☐ 01 Father ☐ 02 Older brother or sister ☐ 03 Best Friend ☐ 01
 Other Close Friend ☐ 02 None of these ☐ 03

24. If one of your best friends offered you a lit up cigarette, would you have a smoke or try a puff?

PLEASE TICK ONE BOX ONLY

Definitely not..... ☐ 01
 Probably not..... ☐ 02
 Probably yes..... ☐ 03
 Definitely yes..... ☐ 04

25. At any time during the next year (12 months) do you think you will smoke a cigarette?

PLEASE TICK ONE BOX ONLY

- Definitely not.....☐ 01
- Probably not.....☐ 02
- Probably yes.....☐ 03
- Definitely yes.....☐ 04

26. Do you think you will be smoking cigarettes 5 years from now?

PLEASE TICK ONE BOX ONLY

- Definitely not.....☐ 01
- Probably not.....☐ 02
- Probably yes.....☐ 03
- Definitely yes.....☐ 04

27. Once someone has started smoking, do you think it would be difficult to quit?

PLEASE TICK ONE BOX ONLY

- Definitely not.....☐ 01
- Probably not.....☐ 02
- Probably yes.....☐ 03
- Definitely yes.....☐ 04

28. Out of 100 people your age, how many do you think smoke cigarettes at least once a day?

PLEASE TICK ONE BOX ONLY

- None (0).....☐ 01
- About a quarter (25).....☐ 02
- About half (50).....☐ 03
- About three quarters (75).....☐ 04
- Everyone (100).....☐ 05

29. Do you think cigarette smoking could make you unwell?

PLEASE TICK ONE BOX ONLY

- Definitely not.....☐ 01
- Probably not.....☐ 02
- Probably yes.....☐ 03
- Definitely yes.....☐ 04

30. Do you think the smoke from other people's cigarettes is harmful to you?

PLEASE TICK ONE BOX ONLY

- Definitely not ☐ 01
- Probably not ☐ 02
- Probably yes ☐ 03
- Definitely yes ☐ 04

31. Generally, if someone has been smoking cigarettes near you, how would you say you find the smoke?

PLEASE TICK ONE BOX ONLY

- Enjoyable on the whole ☐ 01
- Does not bother me ☐ 02
- Bothers me slightly ☐ 03
- Bothers me a lot ☐ 04

32. During the past 7 days, on how many days have people smoked around you in your home?

PLEASE TICK ONE BOX ONLY

- No days ☐ 01
- 1 to 2 ☐ 02
- 3 to 4 ☐ 03
- 5 to 6 ☐ 04
- 7 ☐ 05

33. During the past 7 days, on how many days have people smoked in your presence, in places other than in your home? For example in the car, in the garage, picnic area.

PLEASE TICK ONE BOX ONLY

- 0 ☐ 01
- 1 to 2 ☐ 02
- 3 to 4 ☐ 03
- 5 to 6 ☐ 04
- 7 ☐ 05

34. During the past 7 days, on how many days have people smoked while you were travelling in a CAR?

PLEASE TICK ONE BOX ONLY

- Yes ☐ 01
- No ☐ 02
- I did not travel in a car/van during the past 7 days ☐ 07
- Not sure/Don't know ☐ 08

35. For each of the statements listed below, please show us whether you agree or disagree with them.

PLEASE TICK ONE BOX FOR EACH STATEMENT

- | | Agree | disagree | don't know |
|-------------------------------------------------------------------------------------------|-----------------------------|-----------------------------|-----------------------------|
| a) Pregnant women shouldn't smoke | <input type="checkbox"/> 02 | <input type="checkbox"/> 03 | <input type="checkbox"/> 04 |
| b) People under the age of 16 shouldn't smoke | <input type="checkbox"/> 03 | <input type="checkbox"/> 04 | <input type="checkbox"/> 05 |
| c) People should be able to quit smoking without the help of programmes or products | <input type="checkbox"/> 02 | <input type="checkbox"/> 03 | <input type="checkbox"/> 04 |
| e) Smoking is common among my friends | <input type="checkbox"/> 02 | <input type="checkbox"/> 03 | <input type="checkbox"/> 04 |
| d) Smoking is common among people my age group | <input type="checkbox"/> 02 | <input type="checkbox"/> 03 | <input type="checkbox"/> 04 |

36. For each of the statements listed below, please show us whether you agree or disagree with them.

PLEASE TICK ONE BOX FOR EACH STATEMENT

- | | Agree | disagree | don't know |
|--------------------------------------------------------------------------------------------------|-----------------------------|-----------------------------|-----------------------------|
| a) My parents or caregivers would be upset if they knew I smoked. | <input type="checkbox"/> 03 | <input type="checkbox"/> 04 | <input type="checkbox"/> 05 |
| b) My parents have set <i>specific</i> rules with me about not smoking cigarettes/tobacco1 | <input type="checkbox"/> 03 | <input type="checkbox"/> 04 | <input type="checkbox"/> 05 |
| c) My parents or caregivers generally know what I spend my money on1 | <input type="checkbox"/> 04 | <input type="checkbox"/> 05 | <input type="checkbox"/> 0 |
| d) My parents think that it is OK for people under the age of 16 to smoke | <input type="checkbox"/> 02 | <input type="checkbox"/> 03 | <input type="checkbox"/> 04 |

37. For each of the statements listed below, please show us whether you agree or disagree with them.

PLEASE TICK ONE BOX FOR EACH STATEMENT

| | Agree | disagree | don't know |
|-------------------------------------------------------------------------------------------------------------------------|----------------------------------------|----------------------------------------|----------------------------------------|
| a) Tobacco companies should have the same right to sell cigarettes as other companies have to sell their products | <input type="checkbox"/> ₀₂ | <input type="checkbox"/> ₀₃ | <input type="checkbox"/> ₀₄ |
| b) Tobacco companies are responsible for people starting to smoke | <input type="checkbox"/> ₀₂ | <input type="checkbox"/> ₀₃ | <input type="checkbox"/> ₀₄ |
| c) Tobacco companies try to get young people to start smoking..... | <input type="checkbox"/> ₀₂ | <input type="checkbox"/> ₀₃ | <input type="checkbox"/> ₀₄ |
| d) I would believe it if a tobacco company said they had made a safer cigarette..... | <input type="checkbox"/> ₀₂ | <input type="checkbox"/> ₀₃ | <input type="checkbox"/> ₀₄ |

That's the end of the questionnaire now!
Thank you for helping us.

Please check that you have answered every question, then
hand in your questionnaire / PDA and wait to hear
what you need to do next.

Appendix C: Parent Questionnaire

Survey number:
2008
D14

Keeping Kids Smokefree
An Auckland Tobacco Control Research Centre,
University of Auckland Project

Parent Questionnaire

This questionnaire is about you and your YR 7 child who is at Intermediate School.

Start Here

1 Who lives in your household?
Please tick all that apply. Please tick if this person smokes.

| | | |
|----------------------------------------------|--------------------------|--------------------------|
| Child at Intermediate School, year 7 | <input type="checkbox"/> | <input type="checkbox"/> |
| Child's Mother | <input type="checkbox"/> | <input type="checkbox"/> |
| Child's Father | <input type="checkbox"/> | <input type="checkbox"/> |
| Older Brother/s of child | <input type="checkbox"/> | <input type="checkbox"/> |
| Older Sister/s of child | <input type="checkbox"/> | <input type="checkbox"/> |
| Younger Brother/s or Sister/s of child | <input type="checkbox"/> | <input type="checkbox"/> |
| Please add any others in the spaces provided | <input type="checkbox"/> | <input type="checkbox"/> |
| | <input type="checkbox"/> | <input type="checkbox"/> |
| | <input type="checkbox"/> | <input type="checkbox"/> |

2 Do people smoke INSIDE your house?
Yes ☐ No ☐

3 If someone in your household smokes, are cigarettes, matches or lighters left where your child could get them?
Yes ☐ No ☐

4 Do people smoke in your car?
Yes ☐ No ☐

5 Have you talked to your child about smoking?

Yes ☐ 1 No ☐ 2



6 On average, how much money does your child get to spend each week?

| | Year 9 Child |
|----------------|----------------------------|
| 0-\$5 | <input type="checkbox"/> 1 |
| \$6-\$10 | <input type="checkbox"/> 2 |
| \$11-\$15 | <input type="checkbox"/> 3 |
| \$16-\$20 | <input type="checkbox"/> 4 |
| \$21-\$30 | <input type="checkbox"/> 5 |
| More than \$30 | <input type="checkbox"/> 6 |

7

For each of the statements below, please tick Agree, Disagree or Don't know

1 Agree 2 Disagree 3 Don't know

| | | | |
|-------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------|
| Children are more likely to smoke if parents smoke | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Children are more likely to smoke if people smoke in the home | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Second hand smoke is harmful to children's health | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Mild cigarettes are safer than regular cigarettes | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Schools, rather than parents, should teach children about smoking | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| If one of my children under 18 took up smoking, I would provide cigarettes for them | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

8

Rank the following problems in order of seriousness with "A" representing the most serious issue.



| | |
|--------------------|--------------------------|
| Bullying/Violence | <input type="checkbox"/> |
| Overweight/Obesity | <input type="checkbox"/> |
| Marijuana Smoking | <input type="checkbox"/> |
| Cigarette Smoking | <input type="checkbox"/> |
| P and other drugs | <input type="checkbox"/> |
| Alcohol Drinking | <input type="checkbox"/> |
| Sex | <input type="checkbox"/> |



Use each letter once.

The following questions are about YOU:

9 Have you EVER smoked a cigarette?

Yes ☐ 1 No ☐ 2

Go to Q.19

10 Were you smoking 12 months ago?

Yes ☐ 1 No ☐ 2

11 How much do you smoke now?

Go to Q.14

☐ 1 I don't smoke now

☐ 2 1-10 cigarettes a day

☐ 3 11-20 cigarettes a day

☐ 4 More than 20 cigarettes a day

12 What brand of cigarettes do you smoke most often?



If you smoke roll-your-own cigarettes, why do you smoke them rather than manufactured cigarettes only?

13

During the past 12 months have you ever tried to stop smoking cigarettes?

I did not smoke during the past year ☐

Go to Q.17

Yes, I have tried to stop smoking ☐

No, I have not tried to stop smoking ☐

14

Please tick whether you have done any of the following in the past year: (Tick all that apply)

Called the Quitline 0800 778 778 ☐

Attended a programme to stop smoking ☐

Got help to stop smoking from a doctor ☐

Used NRT (Nicotine Replacement Therapy) ☐

Other (please specify) ☐

15

Please tick one of the following options:

I have already stopped smoking ☐

Go to Q.17

I plan to quit in the next 30 days ☐

I plan to quit in the next 6 months ☐

I do not plan to quit in the near future ☐

16

Do you think you would be able to stop smoking if you tried to quit?

Yes, I think I would be able to stop smoking ☐

No, I don't think I would be able to stop smoking ☐

17

Your relationship to the child:

☐ Mother

☐ Father

☐ Other Female Caregiver

☐ Other Male Caregiver

☐ Other (Please Specify) _____

18

Which ethnic group/s do you belong to?

Maori ☐

Pakeha/European ☐

Pacific Island ☐

(Please Specify) _____

Other ☐

(Please Specify) _____

19

Which age group do you belong to?

☐ 16-24

☐ 25-34

☐ 35-44

☐ 45-54

☐ 55-64

☐ 65+

Finish Line

Thank You - Kia Ora - Faafetai tele lava - Malo Aupito - Meitaki Maata - Fakau lahi - Zse Zse

Send in to WIN a FAMILY PASS to:

Your Name: _____

Your YR 7 Child's name: _____ Room No. _____

Address: _____

Phone Number: _____

RAINBOW'S END
N.Z.'s Premier Theme Park

OR

SKYCITY
CINEMAS

OR

VALENTINES
Family = 2 adults and 4 kids.

Appendix D: Interpreting options for qualitative data collection

| Interpreter | Researcher | Pros | Cons |
|------------------------------------------------------------|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Independently conducts interview in participants' language | May or may not be present at interview | <ul style="list-style-type: none"> – good interview flow with no interruptions for interpreting -interpreter able to identify and follow up points meaningful to the shared culture independently of direction (or misdirection) from researcher | <ul style="list-style-type: none"> -researcher has less control eg cannot be sure that points of interest and unexpected answers to the researcher are followed up; cannot direct or re-direct the flow of the interview; cannot seek the opinions of different participants; cannot check back with participants about what they meant or validate what they said |
| Interprets simultaneously | Conducts the interview | <ul style="list-style-type: none"> - interviewer less likely to forget what has been said and summarise - has been found to reflect interview material more closely – closer to the quality of a same-language interview (Twinn, 1997) - interview flow enhanced and few time problems -high researcher control eg points of interest followed up | <ul style="list-style-type: none"> -exhausting for interpreter. Two maybe needed in order to maintain quality - issues with two voices speaking simultaneously - more difficult to record; may need specialised equipment so the participant and the researcher hear only their first languages - researcher unlikely to detect, interpret and follow up nuances and subtle indications expressed via body language, tone and participant content choices |
| Interprets consecutively | Conducts the interview | <ul style="list-style-type: none"> -high researcher control eg points of interest followed up | <ul style="list-style-type: none"> -slow as flow of interview interrupted for interpreting eg an hour long interview may take two hours -interpreters have to remember long sections of data if they do not wish to interrupt the participant -researcher unlikely to detect, interpret and follow up nuances and subtle indications expressed via body language, tone and participant content choices |

| Interpreter | Researcher | Pros | Cons |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-------------|
| Professional interpreter Interpreted simultaneously in booth and this was recorded in English Also facilitator conducted interview in Spanish – recorded in Spanish (Esposito, 2001) | Listened to English in real-time without disturbing group dynamics. Could interject in English to facilitator when wanted to | Two versions of interview – triangulate More researcher control but not too slowed down. | Expensive |

Appendix E: Interpreter Confidentiality Form



THE UNIVERSITY OF AUCKLAND
FACULTY OF MEDICAL AND
HEALTH SCIENCES



The University of Auckland
Private Bag 92019
Auckland, New Zealand,

School of Population Health,
Morrin Rd, Tamaki, Auckland.
www.health.auckland.ac.nz

Telephone: 64 9 373 7599 extn 86044
Facsimile: 64 9 3737 624

Interpreter Confidentiality Agreement

Keeping Asian Kids Smokefree in Aotearoa/New Zealand

I, _____ (interpreter)
acknowledge that the information given in the interviews I conduct is confidential. I
therefore agree to keep the information I gain, which includes the names of the participants
completely confidential.

Interpreter's signature: _____

Interpreter's name: _____

Date: _____

Researchers' Contact Details

The University of Auckland

Dr Marewa Glover

Associate-Professor Robert Scragg

Tel: 373 7599, ext 86044 or
373 7599 ext 86336

The Head of Section is:

Associate-Professor Peter Adams
Social & Community Health, School of Population
Health, Tamaki Campus
University of Auckland, Morrin Road, Tamaki
Tel: 373 7599 ext 86538

AUT University

Grace Wong

Professor Jane Koziol-McLain

Tel: 921 9999, ext 7501 or
921 9670



Appendix F: Transcription options for qualitative data

| Data collection | Transcription process | Advantages | Disadvantages |
|-------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| Interview conducted entirely in participants' language or Simultaneous interpreting or Consecutive interpreting | Stage 1: The interview is transcribed in the source language Stage 2: This transcript is translated into the target language in written form only <u>or</u> Stage 3: The transcript is translated into the target language orally and recorded, then transcribed in the target language | Recommended (Twinn, 1997) Little difference noted in thematic analyses conducted on scripts in source and target languages (G. I. Lopez, Figueroa, Connor, & Maliski, 2008; Twinn, 1997) | More expensive and time consuming as a minimum two stage process |
| Simultaneous interpreting or Consecutive interpreting | Only the English in the interview is transcribed | | Cheaper as one stage of transcribing only |

Appendix G: Ethics Approval (University of Auckland)



The University of Auckland
Private Bag 92019
Auckland, New Zealand

UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE

Research Office
Office of the Vice-Chancellor
Level 3, 76 Symonds Street
Telephone: 64 9 373 7599
Extension: 83711 / 87830
Facsimile: 64 9 3737432

16 February, 2009

MEMORANDUM TO:

Prof. Jane Koziol-McLain
School of Population Health

Re: Application for Ethics Approval

The Committee met on 11 February, 2009 and considered the application for ethics approval for your research titled "Keeping Asian and Indian Kids Smoke-free in Aotearoa New Zealand: A family and community focused study." (Our Ref. 2009 / 021).

Ethics approval was given for a period of three years.

If the project changes significantly you are required to resubmit your application to the Committee for further consideration.

In order that an up-to-date record can be maintained, it would be appreciated if you could notify the Committee once your project is completed.

Please contact the Chairperson if you have any specific queries relating to your application. The Chair and the members of the Committee would be most happy to discuss general matters relating to ethics provisions if you wish to do so.

A handwritten signature in black ink, appearing to read 'Lana Lon'.

Lana Lon
Executive Secretary
University of Auckland Human Participants Ethics Committee

c.c. Head of Department / School, School of Population Health

Grace Wong
School of Health Care Practice,
Faculty of Health and Environmental Sciences
AUT University
Pvt Bag 92006
Auckland

1. Please quote the reference number - (2009/021) in all future correspondence.
2. Should you need to make any changes to the project write to the UAHPEC giving full details including revised documentation.
3. The approval is for three years. Should you require an extension write to the UAHPEC before the expiry date giving full details along with revised documentation. Extension can be granted for up to 3 years, after which time you must make a new application.
4. At the end of three years, or if the project is completed, you are requested to advise the Committee of its completion.
5. Do not forget to fill in the 'approval wording' on the Participant Information Sheets and Consent Forms giving the dates of approval and the reference number before you send them out to your participants.

Appendix H: Ethics Approval (Auckland University of Technology)



MEMORANDUM

Auckland University of Technology Ethics Committee (AUTEC)

To: Jane Koziol-McLain
From: **Madeline Banda** Executive Secretary, AUTEC
Date: 30 June 2009
Subject: Ethics Application Number 09/127 **Keeping Asian and Indian kids smoke-free in Aotearoa New Zealand: A family and community focussed study.**

Dear Jane

Thank you for providing written evidence as requested. I am pleased to advise that it satisfies the points raised by the Auckland University of Technology Ethics Committee (AUTEC) at their meeting on 15 June 2009 and that I have approved your ethics application. This delegated approval is made in accordance with section 5.3.2.3 of AUTEC's *Applying for Ethics Approval: Guidelines and Procedures* and is subject to endorsement at AUTEC's meeting on 13 July 2009.

Your ethics application is approved for a period of three years until 30 June 2012.

I advise that as part of the ethics approval process, you are required to submit the following to AUTEC:

- A brief annual progress report using form EA2, which is available online through <http://www.aut.ac.nz/about/ethics>. When necessary this form may also be used to request an extension of the approval at least one month prior to its expiry on 30 June 2012;
- A brief report on the status of the project using form EA3, which is available online through <http://www.aut.ac.nz/about/ethics>. This report is to be submitted either when the approval expires on 30 June 2012 or on completion of the project, whichever comes sooner;

It is a condition of approval that AUTEC is notified of any adverse events or if the research does not commence. AUTEC approval needs to be sought for any alteration to the research, including any alteration of or addition to any documents that are provided to participants. You are reminded that, as applicant, you are responsible for ensuring that research undertaken under this approval occurs within the parameters outlined in the approved application.

Please note that AUTEC grants ethical approval only. If you require management approval from an institution or organisation for your research, then you will need to make the arrangements necessary to obtain this.

When communicating with us about this application, we ask that you use the application number and study title to enable us to provide you with prompt service. Should you have any further enquiries regarding this matter, you are welcome to contact Charles Grinter, Ethics Coordinator, by email at charles.grinter@aut.ac.nz or by telephone on 921 9999 at extension 8860.

On behalf of the AUTEC and myself, I wish you success with your research and look forward to reading about it in your reports.

Yours sincerely

Madeline Banda
Executive Secretary
Auckland University of Technology Ethics Committee

Cc: Grace Wong grace.wong@aut.ac.nz

From the desk of ...
Madeline Banda
Executive Secretary
AUTEC

Private Bag 92006, Auckland 1142
New Zealand
E-mail: madeline.banda@aut.ac.nz

Tel: 64 9 921 9999
ext 8044
Fax: 64 9 921 9925
page 1 of 1

Appendix I: Letter of Support from Dr Marewa Glover

Auckland Tobacco Control Research Centre



THE UNIVERSITY OF AUCKLAND
FACULTY OF MEDICAL AND
HEALTH SCIENCES

SCHOOL OF POPULATION HEALTH
Social & Community Health
The University of Auckland
Private Bag 92019
Auckland, New Zealand

Bldg 730 Level 3
North Entrance, Tamaki Campus
Morrin Road, Glenn Innes

Mobile: 027 27 57 852
Telephone: 64 9 373 7599 extn 98044
Facsimile: 64 9 303 5932
Email: m.glover@auckland.ac.nz

17/12/2008

Chair
University of Auckland Human Participants Ethics Committee

Re: Grace Wong

This letter is to confirm that Grace Wong is undertaking PhD study with our Keeping Kids Smokefree project (2006/416).

Grace will be analysing a subset of our data. She also wants to interview some students and parents, which is not covered by our initial application for ethics approval (2006/416).

Naku noa
Nā

Dr Marewa Glover
Director
Auckland Tobacco Control Research Centre

Appendix J: Letter of Support from The Asian Network Inc.



7A Wagener place
Sandringham
Phone: (09) 815 7851
Email: asian_network@xtra.co.nz
P.O. Box 27-550, Mt Roskill
Auckland, New Zealand.

Date: 1.12.08

University of Auckland Human Participants' Ethics Committee
University of Auckland
Private Bag 92019
Auckland

Letter of Support – "Keeping Asian Kids Smokefree in Aotearoa/New Zealand" PhD research

Dear Committee Members,

The Asian Network Incorporated (TANI) is a community group committed to developing healthy strong Asian communities in New Zealand. TANI advocates for and promotes their health, wellbeing, quality of life and active participation in policy making. TANI consists of members of different Asian ethnic groups. The TANI Council meets monthly. General network meetings, seminars and events are held regularly.

TANI has a strong interest in and commitment to public health and conducted community consultations to identify public health needs of Asian people in Auckland, as part of the Asian Public Health Project (Asian Public Health Project Team, 2003). *Asian Health in Aotearoa: An analysis of the 2002/03 New Zealand Health Survey* (Scragg and Maitra, 2005) is a TANI publication.

TANI strongly supports Grace Wong's PhD research. Reducing smoking is highly relevant to the health of Asian New Zealanders. TANI is keen to ensure that Asian peoples are specifically included in tobacco control research and interventions. TANI is aware that there has been little research specifically focused on protecting New Zealand Asian youth from starting smoking. The PhD research has the potential to help reduce uptake of smoking among Asian youth and to help adults quit.

Members of the TANI Council reviewed the PhD proposal with the candidate. They are satisfied that there are adequate mechanisms in place to protect the cultural safety of the research participants including the use of trained health interpreters if necessary for the qualitative research. In order to support these mechanisms, the TANI Council has agreed to meet with Grace twice more. Members of TANI will comment on her quantitative data analysis results, advise her about her qualitative research and review and comment on overall recommendations.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Virinder Aggarwal'.

Virinder Aggarwal
Chairperson
The Asian Network Inc.

Appendix K: Ethics Change Approval (University of Auckland)

Office of the Vice-Chancellor
Ethics and Biological Safety Administration



Te Whare Wānanga o Tamaki Makaurau
The University of Auckland
Private Bag 92019
Auckland, New Zealand

Level 3, 76 Symonds Street
Telephone: 64 9 373 7599
Extension: 83711 / 87830
Facsimile: 64 9 373 7432

UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE

13 August 2009

MEMORANDUM TO:

Prof. Jane Koziol-McLain / Grace Wong
School of Population Health

Re: Application for Ethics Approval (Our Ref. 2009 / 021)

The Committee met on 12-August-2009 and considered your request for change for your project titled "Keeping Asian and Indian Kids Smoke-free in Aotearoa New Zealand: A family and community focused study."

The Committee approved the change(s).

Note: Approval of this change does not constitute an extension of the project approval period.

The expiry date for this approval is EXPIRES NOT AVAILABLE.

If the project changes significantly you are required to resubmit a new application to the Committee for further consideration.

In order that an up-to-date record can be maintained, it would be appreciated if you could notify the Committee once your project is completed.

Please contact the Chairperson if you have any specific queries relating to your application. The Chair and the members of the Committee would be most happy to discuss general matters relating to ethics provisions if you wish to do so.

All communications with the UAHPEC regarding this application should indicate this reference number - 2009 / 021

A handwritten signature in black ink, appearing to read 'Lana Lon'.

Lana Lon
Executive Secretary
University of Auckland Human Participants Ethics Committee

c.c. Head of Department / School, School of Population Health

Grace Wong
Nursing
School for Health Care Practice,
Faculty of Health and Environmental Sciences
AUT University
Pvt Bag 92006
Auckland

Appendix L: Invitation letters, information sheets and consent forms



The University of Auckland
Private Bag 92019
Auckland, New Zealand,

School of Population Health,
Morrin Rd, Tamaki, Auckland
www.health.auckland.ac.nz

Telephone: 64 9 373 7599 extn 86044
Facsimile: 64 9 3737 624
Email: m.glover@auckland.ac.nz

Keeping Kids Smokefree

Parents, caregivers, family members research participant information sheet

Keeping Asian and Indian Kids Smokefree in Aotearoa/New Zealand

You and your son/daughter are invited to participate in a Keeping Kids Smokefree research sub-study especially focused on Asian and Indian children and families. The researcher is Grace Wong, a PhD student from AUT University. Her research is funded by the Tertiary Education Commission and AUT University. She has worked with the Keeping Kids Smokefree study team throughout the study. The Keeping Kids Smokefree study is running at your child's school from 2007 to 2009.

Why are we doing this study?

The purpose of this research project is to find out what you, your family and your child think of the Keeping Kids Smokefree study and how Asian and Indian children can be protected from smoking.

Who is being invited to participate?

This sub-study involves Indian and Asian students and families of students who have already agreed to be part of the Keeping Kids Smokefree study.

Do you or your son/daughter have to take part in this Keeping Kids Smokefree sub-study?

Participation is entirely voluntary and you and/or your child may decline without giving any reasons. If you and your child do participate, you may both withdraw from your interviews at any time. If you and/or your child do not want to participate in the sub-study, the Principal has given an assurance it will not affect the student's assessment, grades or standing at school.

What is involved?

Students: Your child cannot participate without your signed consent. After receiving your consent, your child will be invited to participate in a short focus group discussion with up to 15 children and the researcher at school. Your child will be given an information sheet and full explanation and asked if he/she wishes to participate and to sign his/her own consent form before the student focus group begins. Students will be asked what they think of the Keeping Kids Smokefree study. The discussion will be less than 40 minutes long. It will be audio-taped. Written notes will be made. Children will be given a drink, fruit and a muffin at the completion of the discussion.

Parents and family members: Parents and family members will be invited to meet the researcher at a venue convenient to them. A trained interpreter will be provided if requested. You will be asked to complete a brief anonymous questionnaire asking details such as your relationship to the student and country of birth. The researcher will ask you what you think of the Keeping Kids Smokefree study and about smoking and your children. The discussion will be 40 - 60 minutes long. It will be audio-taped. Each adult who participates will receive a \$20.00 Warehouse voucher in appreciation of their contribution to the research. We will send reminders to those who do not respond to our invitation. Please ignore these if you have replied.

What about privacy?

Because you are being interviewed in a group situation you cannot withdraw information later, we cannot turn the tape off during the interview or guarantee confidentiality about what you say in the group. However, no information that could personally identify you will be used in any reports from this study.

Interpreters will sign confidentiality forms. The audiotaped information will be typed into documents by a transcriber who will also sign a confidentiality form. The documents will be stored electronically in computer files, in case there is a future need to analyse the data. They will not contain names, addresses or any other information that could identify you or your child. Audio-tapes and paper versions of transcripts will be stored in locked cabinets. All records will be destroyed after six years. Tapes will not be available to participants because they are a record of everyone present.

The results of the study will be presented at Keeping Kids Smokefree study community feedback sessions and to health groups. It will be included in Keeping Kids Smokefree study reports given to participating school boards, local District Health Boards and relevant government ministries.

What are the benefits and risks of the study?

The future benefit of this study is that it will help develop interventions to help Asian parents reduce the chance that their children will take up smoking.

The only risk involved with taking part in a focus group is the possibility of embarrassment from talking about smoking. The research interviewer is trained to respond to this. In the unlikely event of any injury from participating in this study, you will be covered by the Injury Prevention, Rehabilitation and Compensation Act 2001.

Research findings

A summary of the research findings will be available. Please indicate on the consent form if you would like one sent to you. Summaries of the results will also be given to your child's school, local District Health Boards, some government ministries and TANI, an Asian public health group. They will be presented to the Keeping Kids Smokefree study community in feedback sessions and to health groups.

Contact persons

If you have any questions about the project, please contact:
Faculty of Health and Environmental Sciences, AUT University

| | |
|--------------------------------------------------|-------------------------|
| Grace Wong (PhD student) | Tel: 921 9999, ext 7501 |
| Professor Jane Koziol-McLain (supervisor) | 921 9670 |

University of Auckland

| | |
|--------------------------------------|--------------------------|
| Dr Marewa Glover (supervisor) | Tel: 373 7599, ext 86044 |
|--------------------------------------|--------------------------|

The Head of Section is: Associate-Professor Peter Adams
Social & Community Health, School of Population Health, Tamaki Campus
University of Auckland, Morrin Road, Tamaki
Tel: 373 7599 ext 86538

For any queries regarding ethical concerns you may contact the Chair, The University of Auckland Human Participants Ethics Committee, The University of Auckland, Office of the Vice Chancellor, Private Bag 92019, Auckland 1142. Telephone 09 373-7599 extn. 83711.

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE ON
11.2.09 for (3) years, Reference Number 2009/021

Keeping Kids Smokefree

Asian and Indian student research participation information sheet

Keeping Asian and Indian Kids Smokefree in Aotearoa/New Zealand

You are invited to participate in a study about Asian and Indian children and families and smoking. It is part of the Keeping Kids Smokefree Study at your school. The researcher is Grace Wong, a student from AUT University. She works with the Keeping Kids Smokefree study team.

Why are we doing this study?

We want to find out what you think of the Keeping Kids Smokefree study.

Who is being invited to participate?

Indian and Asian students who are already part of the Keeping Kids Smokefree study.

Do you have to take part in this Keeping Kids Smokefree sub-study?

Even though your parents have given permission for you to join this discussion, you do not have to participate. You may leave the discussion at any time. If you do not participate your school learning will not be affected.

What is involved?

You will join a short discussion (40 minutes) with up to 15 children and Grace, the researcher, at school. It will be tape recorded. Written notes will be made. You will be given a drink, fruit and a muffin at the completion of the discussion.

What about privacy?

Because you are being interviewed with others, we cannot turn the tape off during the interview or promise that what is said will be completely private. However, no information that could individually identify you will be used in any reports. All audio-tapes and records of the discussion will be stored securely and destroyed after 6 years.

What are the benefits and risks of the study?

The study will help stop children from smoking. The only risk involved is possible embarrassment from talking about smoking. The research interviewer is trained to respond to this

Research findings

Summaries of the results will be given to your school, local District Health Boards, some government ministries and TANI, an Asian public health group. They will be presented to the Keeping Kids Smokefree study community in feedback sessions and to health groups. You parents will receive a results summary if they ask for one.

Contact persons

If you have any questions about the project, please contact:
AUT University

Grace Wong (PhD student) Tel: 921 9999, ext 7501 or
Professor Jane Koziol-McLain (supervisor) 921 9670

University of Auckland

Dr Marewa Glover Tel: 373 7599, ext 86044 or
The Head of Section is: Associate-Professor Peter Adams
Social & Community Health, School of Population Health, Tamaki Campus,
University of Auckland, Morrill Road, Tamaki
Tel: 373 7599 ext 86538

For any queries regarding ethical concerns you may contact the Chair, The University of Auckland Human Participants Ethics Committee, The University of Auckland, Office of the Vice Chancellor, Private Bag 92019, Auckland 1142. Telephone 09 373-7599 extn. 83711.

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE
ON 11.2.09 for (3) years, Reference Number 2009/021

Parent/ caregiver consent form

This form will be held for a period of 6 years

Keeping Asian and Indian Kids Smokefree in Aotearoa/New Zealand

Researcher: Grace Wong

I have been given, and have understood, an explanation of this research project including why I and my child were selected. I have had an opportunity to ask questions and have them answered to my satisfaction.

- I have discussed the invitation for my child to participate with him/her.
- I understand that the information will be audio-taped.
- I understand that participation is voluntary and that I and/or my child may withdraw from the interviews without giving a reason at any time.
- I understand that information from a group interview cannot be withdrawn.
- I understand that no names or personal identifiers will be used in any reports.
- I understand that records of the focus group discussions will be kept securely and destroyed after 6 years.
- I understand that whether or not I or my child participates will have no effect on my child's grades or standing at school.
- I agree to not disclose anything discussed in the focus group

☐ I agree for myself to take part in this research.

☐ I agree for my son/daughter to take part in this research.

☐ I wish to have an interpreter

☐ I would like a copy of the study results

Signed by parent (or guardian):

Name:

_____ **Date:** _____

(please print clearly)

Address: _____

Phone:

Please return in stamped addressed envelope or to school

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE ON
11.2.09 for (3) years, Reference Number 2009/021

Family member consent form

This form will be held for a period of 6 years

Keeping Asian and Indian Kids Smokefree in Aotearoa/New Zealand

Researcher: Grace Wong

- I have been given, and have understood, an explanation of this research project including why I was selected.
- I have had an opportunity to ask questions and have them answered to my satisfaction.
- I understand that the information will be audio-taped.
- I understand that participation is voluntary and that I may withdraw from the interviews without giving a reason at any time.
- I understand that information from a group interview cannot be withdrawn.
- I understand that records of the focus group discussions will be kept securely and destroyed after 6 years.
- I understand that no names or personal identifiers will be used in any reports
- I agree to not disclose anything discussed in the focus group

☐ I agree to take part in this research.

☐ I wish to have an interpreter

☐ I would like a copy of the study results

Signed: _____

Name: _____
(please print clearly)

Date: _____

Address: _____

Phone: _____

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE ON
11.2.09 for (3) years, Reference Number 2009/021

Student consent form

This form will be held for a period of 6 years

Keeping Asian and Indian Kids Smokefree in Aotearoa/New Zealand

Researcher: Grace Wong

- I have been given, and have understood, an explanation of this research project including why I was selected.
- I have had an opportunity to ask questions and have them answered to my satisfaction.
- I understand that the information will be audio-taped.
- I understand that participation is voluntary and I may withdraw from the interviews without giving a reason at any time.
- I understand that information from a group interview cannot be withdrawn.
- I understand that my name will not be used in any reports.
- I understand that records of the focus group discussions will be kept securely and destroyed after 6 years.
- I understand that whether or not I participate will have no effect on my grades or standing at school.
- I agree to not disclose anything discussed in the focus group

☐ I agree to take part in this research.

Signed: _____

Name: _____
(please print clearly)

Date: _____

Address: _____

Phone: _____

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE ON
11.2.09 for (3) years, Reference Number 2009/021



THE UNIVERSITY OF AUCKLAND
FACULTY OF MEDICAL AND
HEALTH SCIENCES

The University of Auckland
Private Bag 92019
Auckland, New Zealand,

School of Population Health,
Morrin Rd, Tamaki, Auckland.
www.health.auckland.ac.nz

Telephone: 64 9 373 7599 extn 86044
Facsimile: 64 9 3737 624
Email: m.glover@auckland.ac.nz

Letter to Schools and Boards of Trustees

14.6.09

The Principal
The Board of Trustees
School Name

Tena koutou

I am a PhD student analysing the Asian student and parent data in the Keeping Kids Smokefree (KKS) research project which your school is participating in. I would also like to conduct qualitative research with Asian students and parents/significant family members about the KKS study, smoking and Asian families. My PhD supervisors are Professor Jane Koziol-McLain (AUT University) and Dr Marewa Glover (the University of Auckland). Dr Glover leads the KKS study.

I am seeking your permission to run one 40 minute focus group involving up to 15 Asian students at school, to get advice from school staff in terms of selecting students, and to send parent invitation letters home with Asian students. Only students and family members who have agreed to participate in the Keeping Kids Smokefree Study will be approached. Unless parents wish otherwise, qualitative research with Asian families will not be at school. If they want to meet me at school, I will negotiate this with you.

Research information sheets for you and your teaching staff, and consent forms to recruit from your school are attached.

In recognition of your support, I would like to make a donation to the school's fundraising efforts of \$100.00.

Thank you

Grace Wong
PhD Candidate
AUT University

Information Sheet for Schools and Boards of Trustees

Keeping Asian Kids Smokefree in Aotearoa/New Zealand

I am a PhD student analysing the Asian student and parent data in the Keeping Kids Smokefree (KKS) research project which your school is participating in. I would also like to conduct qualitative research with Asian students and parents/significant family members to find out how they perceive the KKS project interventions and to better understand how Asian families protect their children from smoking. My PhD supervisors are Professor Jane Koxiol-McLain (AUT University) and Dr Marewa Glover (the University of Auckland). Dr Glover leads the KKS study.

I am asking teachers from your school to help me identify Asian students to participate in a focus group, to send invitation letters home for students and parents, and to collect consent forms from students and return these to me.

Why are we doing this study?

Tobacco smoking is a problem among young people. The purpose of this sub-study of the KKS project is to prevent Asian children from taking up smoking in New Zealand. I would like to find out what students and their parents think of the Keeping Kids Smokefree project for Asian families and how Asian children can be protected from smoking.

Who is being invited to participate?

This sub-study involves Asian students and their parents and primary caregivers who have already consented to be part of the wider KKS study. Parents will be mailed reminders if consent forms are not returned. They will be asked to return their forms to school or by mail. Written consent of parents or guardians is required for student participants. In addition, children are invited to sign the consent forms.

Do parents and students have to take part in this Keeping Kids Smokefree sub-study?

Participation is entirely voluntary and parents and students may decline without giving any reasons. If they do participate, they may withdraw from their interview at any time.

Does the school have to be involved?

Participation is entirely voluntary.

What is involved?

School: We are seeking your permission for this sub-study and to approach teachers to help select students, to give information sheets and consent forms to students to take home to their parents or caregivers, and support returning these to the researcher. A donation to your school of \$100.00 will be made to recognise the time and effort involved.

Students: Students taking part in the study will be invited to participate in a short focus group discussion with up to 15 children and the researcher at school. Students will be asked what they think of the Keeping Kids Smokefree Project. The discussion will be less than 40 minutes long. It will be audio-taped. Written notes will be made. Children will be given fruit and a muffin at the completion of the discussion.

Parents: Asian parents and family members will be invited to meet the researcher at a venue convenient to them. A trained interpreter will be provided if requested. The researcher will ask parents what they think of the Keeping Kids Smokefree Project and how they protect their children from taking up smoking. The discussion will be less than 60 minutes long unless an interpreter is present. Each person who participates will receive a \$20.00 Warehouse voucher in appreciation of their contribution to the research.

Research findings

Summaries of the results will be given to your school, local District Health Boards, some government ministries and TANI, an Asian public health group. They will be presented to the Keeping Kids Smokefree study community in feedback sessions and to other health groups.

Contact persons

If you have any questions about the project, please contact:

AUT University

Grace Wong (PhD student)

Tel: 921 9999, ext 7501 or

Professor Jane Koziol-McLain (supervisor)

921 9670

University of Auckland

Dr Marewa Glover

Tel: 373 7599, ext 86044 or

The Head of Section is: Associate-Professor Peter Adams

Social & Community Health, School of Population Health, Tamaki
Campus, University of Auckland, Morrin Road, Tamaki

Tel: 373 7599 ext 86538

For any queries regarding ethical concerns you may contact the Chair, The University of Auckland Human Participants Ethics Committee, The University of Auckland, Office of the Vice Chancellor, Private Bag 92019, Auckland 1142. Telephone 09 373-7599 extn. 83711.

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE ON 11.2.09 for (3) years, Reference Number 2009/021



THE UNIVERSITY OF AUCKLAND
FACULTY OF MEDICAL AND
HEALTH SCIENCES

The University of Auckland
Private Bag 92019
Auckland, New Zealand,

School of Population Health,
Morrin Rd Tamaki, Auckland.
www.health.auckland.ac.nz

Telephone: 64 9 373 7599 extn 86044
Facsimile: 64 9 3737 624
Email: m.glover@auckland.ac.nz

School consent form

This form will be held for a period of 6 years

Keeping Asian and Indian Kids Smokefree in Aotearoa/New Zealand

Researcher: Grace Wong

- We have been given, and have understood, an explanation of this research project and had an opportunity to ask questions and have them answered to our satisfaction.
- We understand consent will be obtained from students and families.
- We agree to provide advice about student selection and to send consent forms home with children.
- We agree that non-participation by children will not affect their grades or standing in the school in any way.
- We understand that school participation is voluntary.

☐ I agree for _____ School to take part in this research.

Signed: _____

Name: _____
(please print clearly)

Position: _____

Date: _____

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE ON
11.2.09 for (3) years, Reference Number 2009/021



THE UNIVERSITY OF AUCKLAND
FACULTY OF MEDICAL AND
HEALTH SCIENCES

The University of Auckland
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Letter to teachers

14.6.09

Tena koutou

I am a PhD student analysing the Asian student and parent data in the Keeping Kids Smokefree (KKS) research project which your school is participating in. I would also like to conduct qualitative research with Asian students and parents/significant family members about the KKS study, smoking and Asian families. My PhD supervisors are Professor Jane Koziol-McLain (AUT University) and Dr Marewa Glover (the University of Auckland). Dr Glover leads the KKS study.

I would like to run one 40 minute focus group involving up to 15 Asian students at school, and to send parent invitation letters home with Asian students. I hope you will help me identify Asian students who can participate from my list of those who have agreed to participate in the Keeping Kids Smokefree Study, send consent forms home with students and help collect them and return them to me.

An information sheet and consent form for you are attached.

In recognition of your time and support, I am making a donation to your school's fundraising efforts of \$100.00.

Thank you

Grace Wong
PhD Candidate
AUT University

Information Sheet for Teachers

Keeping Asian Kids Smokefree in Aotearoa/New Zealand

I am a PhD student analysing the Asian student and parent data in the Keeping Kids Smokefree (KKS) research project which your school is participating in. I would also like to conduct qualitative research with Asian students and parents/significant family members to find out how they perceive the KKS project interventions and to better understand how Asian families protect their children from smoking. My PhD supervisors are Professor Jane Koxiol-McLain (AUT University) and Dr Marewa Glover (the University of Auckland). Dr Glover leads the KKS study.

I am asking teachers from your school to help me identify Asian students to participate in a focus group, to send invitation letters home for students and parents, and to collect consent forms from students if they return them to school and support returning these to me.

Why are we doing this study?

Tobacco smoking is a problem among young people. The purpose of this sub-study of the KKS project is to prevent Asian children from taking up smoking in New Zealand. I would like to find out what students and their parents think of the Keeping Kids Smokefree project for Asian families and how Asian children can be protected from smoking.

Who is being invited to participate?

This sub-study involves Asian students and their parents and primary caregivers who have already consented to be part of the wider KKS study. Information sheets and consent forms will be given to students at school to take home to their parents or caregivers. They will be mailed reminders if consent forms are not returned. Parents will be asked to return their forms to school or by mail. Written consent of parents or guardians is required for student participants. In addition, children are invited to sign the consent forms.

Do parents and students have to take part in this Keeping Kids Smokefree sub-study?

Participation is entirely voluntary and parents and students may decline without giving any reasons. If they do participate, they may withdraw from their interview at any time.

Do teachers have to be involved?

Participation is entirely voluntary.

What is involved?

Teachers: We are seeking your help with selecting students, and giving information sheets and consent forms to students to take home to their parents or caregivers, as well as supporting their return to the researcher. A donation to your school of \$100.00 will be made to recognise the time and effort involved.

Students: Students taking part in the study will be invited to participate in a short focus group discussion with up to 15 children and the researcher at school. Students will be asked what they think of the Keeping Kids Smokefree Project. The discussion will be less than 40 minutes long. It will be audio-taped. Written notes will be made. Children will be given fruit and a muffin at the completion of the discussion.

Parents: Asian parents and family members will be invited to meet the researcher at a venue convenient to them. A trained interpreter will be provided if requested. The researcher will ask parents what they think of the Keeping Kids Smokefree Project and how they protect their children from taking up smoking. The discussion will be less than 60 minutes long unless an interpreter is present. Each person who participates will receive a \$20.00 Warehouse voucher in appreciation of their contribution to the research.

Research findings

Summaries of the results will be given to your school, local District Health Boards, some government ministries and TANI, an Asian public health group. They will be presented to the Keeping Kids Smokefree study community in feedback sessions and to other health groups.

Contact persons

If you have any questions about the project, please contact:

AUT University

Grace Wong (PhD student)

Tel: 921 9999, ext 7501 or

Professor Jane Koziol-McLain (supervisor)

921 9670

University of Auckland

Dr Marewa Glover

Tel: 373 7599, ext 86044 or

The Head of Section is: Associate-Professor Peter Adams

Social & Community Health, School of Population Health, Tamaki
Campus, University of Auckland, Morrin Road, Tamaki

Tel: 373 7599 ext 86538

For any queries regarding ethical concerns you may contact the Chair, The University of Auckland Human Participants Ethics Committee, The University of Auckland, Office of the Vice Chancellor, Private Bag 92019, Auckland 1142. Telephone 09 373-7599 extn. 83711.

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Teacher consent form

This form will be held for a period of 6 years

Keeping Asian and Indian Kids Smokefree in Aotearoa/New Zealand

Researcher: Grace Wong

- I have been given, and have understood, an explanation of this research project and. had an opportunity to ask questions and have them answered to my satisfaction.
- I understand consent will be obtained from students and families.
- I agree to give advice about student selection, to send consent forms home with children and support returning them to the researcher.
- I agree that non-participation by children will not affect their grades or standing in my class.
- I understand that my participation is voluntary.

☐ I agree for _____ to take part in this research.

Signed: _____

Name: _____
(please print clearly)

Position: _____

Date: _____

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សន្និដ្ឋានសំរាប់អ្នកចូលរួមការស្រាវជ្រាវរបស់មាតាបិតា អ្នកមើលថែ សមាជិកគ្រួសារ

ការរក្សាក្មេងជនជាតិអាស៊ី និងឥណ្ឌាកុំឱ្យជក់បារី (Kids Smokefree) នៅ Aotearoa/ ញូវហ្សីឡង់

លោកអ្នក និងតួនាទីរបស់លោកអ្នកត្រូវបានអញ្ជើញឱ្យចូលរួមនៅក្នុងការស្រាវជ្រាវជាដំបូងមួយអំពីការរក្សាក្មេងកុំឱ្យជក់បារី (Keeping Kids Smokefree) ដែលផ្តោតអារម្មណ៍ជាពិសេសទៅលើតួនាទីជនជាតិអាស៊ី និងឥណ្ឌា ព្រមទាំងគ្រួសារ។ អ្នកស្រាវជ្រាវគឺ Grace Wong និងស្រីម្នាក់បណ្ឌិតមកពីសាកលវិទ្យាល័យ AUT University។ ការស្រាវជ្រាវរបស់នាងត្រូវបានផ្តល់មូលនិធិដោយករណី: កម្មការវេជ្ជកម្មវិទ្យុស្តមសិក្សា និងសាកលវិទ្យាល័យ AUT University។ នាងបានធ្វើការជាមួយក្រុមសិក្សាអំពីការរក្សាក្មេងកុំឱ្យជក់បារីនៅគ្រប់ពេលធ្វើការសិក្សា។ ការសិក្សាអំពីការរក្សាក្មេងកុំឱ្យជក់បារីត្រូវបានចាត់ចែងឡើងនៅសាលារៀនតូចរបស់លោកអ្នកចាប់ពីឆ្នាំ២០០៧ ដល់ឆ្នាំ២០០៩។

ហេតុអ្វីបានជាយើងធ្វើការសិក្សានេះ?

គោលបំណងនៃកំរោងការស្រាវជ្រាវនេះគឺដើម្បីរកឱ្យដឹងថាតើលោកអ្នក គ្រួសាររបស់លោកអ្នក និងតួនាទីរបស់លោកអ្នកយល់យ៉ាងណាដែរចំពោះការសិក្សាអំពីការរក្សាក្មេងកុំឱ្យជក់បារី ហើយថាតើតួនាទីជនជាតិអាស៊ី និងឥណ្ឌាអាចការពារកុំឱ្យជក់បារីបានយ៉ាងម្តេចដែរ។

តើអ្នកណាត្រូវបានអញ្ជើញឱ្យចូលរួម?

ការសិក្សាដើមដំបូងនេះជាប់ទាក់ទងជាមួយនិងស្ត្រីជនជាតិឥណ្ឌា និងអាស៊ី ព្រមទាំងគ្រួសាររបស់និងស្ត្រី ដែលបានយល់ព្រមរួចមកហើយ ដើម្បីចូលរួមនៅក្នុងការសិក្សាអំពីការរក្សាក្មេងកុំឱ្យជក់បារី។

តើលោកអ្នក ឬតួនាទីរបស់លោកអ្នកត្រូវតែចូលរួមនៅក្នុងការសិក្សាដើមដំបូងអំពីការរក្សាក្មេងកុំឱ្យជក់បារីឬ?

ការចូលរួមគឺជាការស្ម័គ្រចិត្តទាំងស្រុង ហើយលោកអ្នក និង/ឬតួនាទីរបស់លោកអ្នកអាចប្រកែកបានដោយពុំចាំបាច់បញ្ជាក់ហេតុផលណាមួយ។ ប្រសិនបើលោកអ្នក និងតួនាទីរបស់លោកអ្នកសុខចិត្តចូលរួម លោកអ្នក ព្រមទាំងតួនាទីរបស់លោកអ្នកអាចដកខ្លួនចេញពីការស្រាវជ្រាវស្របតាមការស្នើសុំរបស់លោកអ្នកបានគ្រប់ពេល។ ប្រសិនបើលោកអ្នក និង/ឬតួនាទីរបស់លោកអ្នកពុំចង់ចូលរួមនៅក្នុងការសិក្សាឡើយដំបូងទេ នាយកសាលាបានផ្តល់ការធានារ៉ាប់រងថាទីនឹងមិនប៉ះពាល់ដល់ការងាររបស់អ្នកឡើយ ឬនូវទំហំសិល្បៈនៅសាលារៀនទេ។

តើទំនាក់ទំនងអ្វីខ្លះ?

សិល្បៈ តួនាទីរបស់លោកអ្នកពុំអាចចូលរួមដោយគ្មានលេខាយល់ព្រមរបស់លោកអ្នកឡើយ។ ក្រោយពីបានទទួលការយល់ព្រមរបស់លោកអ្នកហើយ តួនាទីរបស់លោកអ្នកនឹងត្រូវបានអញ្ជើញឱ្យចូលរួមនៅការពិភាក្សារយៈពេលខ្លី នៅក្នុងក្រុមផ្តោតអារម្មណ៍ជាមួយតួនាទីដែលមានចំនួនរហូតដល់១៥នាក់ និងអ្នកស្រាវជ្រាវនៅសាលារៀន។ តួនាទីរបស់លោកអ្នកនឹងបានទទួលសន្និដ្ឋាន និងការពន្យល់យ៉ាងពេញលេញ ហើយត្រូវបានសួរថាតើមានបំណងចង់ចូលរួមដែរឬទេ និងចុះហេតុអ្វីបានជាយើងហ៊ុមយល់ព្រមរបស់គេផ្ទាល់ មុនពេលក្រុមផ្តោតអារម្មណ៍សិល្បៈធ្វើការចាប់ផ្តើម។ សិល្បៈនឹងត្រូវបានសួរថាតើគេយល់យ៉ាងណាដែរទៅលើការសិក្សាអំពីការរក្សាក្មេងកុំឱ្យជក់បារី។ ការពិភាក្សានឹងមានរយៈពេលតិចជាង៤០នាទី។ គេនឹងថតដោយវិទ្យុឆ្លាក់ចាក់សម្លេង។ កំណត់ហេតុជាលាយលក្ខណ៍អក្សរនឹងត្រូវបានធ្វើឡើង។ ក្មេងនឹងបានទទួលកេសដូ: វ៉ែលីយ៉េ និងទំនាក់ទំនងនៅពេលបញ្ចប់ការពិភាក្សា។

មាតាបិតា និងសមាជិកគ្រួសារ: មាតាបិតា និងសមាជិកគ្រួសារនឹងត្រូវបានអញ្ជើញឱ្យចូលរួមជាមួយអ្នកស្រាវជ្រាវ តាមទីកន្លែងដែលងាយស្រួលចំពោះគេ។ អ្នកបកប្រែដែលមានការហ្វឹកហ្វឺនឹងមានផ្តល់ជូន ប្រសិនបើមានការស្នើសុំ។ លោកអ្នកនឹងត្រូវបានស្នើសុំឱ្យបំពេញបញ្ជីសំណួរនានាមួយ ដែលស្របនឹងស្តីពីលំអិតដូចជាទំនាក់ទំនងរបស់លោកអ្នកជាមួយសិល្បៈ និងប្រទេសដើមកំណើត។ អ្នកស្រាវជ្រាវនឹងសួរលោកអ្នក ថាតើលោកអ្នកយល់យ៉ាងណាដែរទៅលើការសិក្សាអំពីការរក្សាក្មេងកុំឱ្យជក់បារី ហើយអំពីការជក់បារី និងតួនាទីរបស់លោកអ្នក។ ការពិភាក្សានេះនឹងមានរយៈពេល៤០-៦០នាទី។ គេនឹងថតដោយវិទ្យុឆ្លាក់ចាក់សម្លេង។ មនុស្សពេញវ័យម្នាក់ៗដែលចូលរួមនឹងបានទទួលប័ណ្ណ Warehouse ដែលមានតម្លៃ២០ដុល្លា ជាការដឹងគុណចំពោះការចូលរួមនិងការធានារបស់គេនៅនឹងការស្រាវជ្រាវ។ យើងនឹងផ្ញើលិខិតលើកដល់អ្នកដែលពុំបានឆ្លើយតបទៅនឹងការអញ្ជើញរបស់យើង។ សូមកុំយកចិត្តទុកដាក់លើលិខិតនេះ ប្រសិនបើលោកអ្នកបានឆ្លើយតបរួចហើយ។

ចុះអំពីភាពងាយស្រួល

ដោយហេតុថា លោកអ្នកត្រូវបានធ្វើសម្ភាសនាទៅក្នុងក្រុម លោកអ្នកជំនាញដឹងពីការសម្ភាសនាដែលបានកើតឡើងនៅក្នុងក្រុម យើងជំនាញបិទក្នុងតារាងខ្សែអាត់នៅក្នុងពេលធ្វើសម្ភាសនា ឬតាមការសម្ភាសនាដែលអ្នកបាននិយាយទៅក្នុងក្រុមឡើយ។ ទោះជាយ៉ាងណាក្តី ពុំមានព័ត៌មានណាដែលអាចសម្គាល់ដឹងរឿងផ្ទាល់ខ្លួនអំពីលោកអ្នកនឹងត្រូវគេយកប្រើទៅក្នុងរបាយការណ៍អំពីការសិក្សានេះទេ។

អ្នកបកប្រែភាសា និងចុះហត្ថលេខាលើឃ្លីមរក្សាការសម្ភាសនា។ ព័ត៌មានដែលបានផ្តល់ទៅក្នុងខ្សែអាត់ចាក់សម្លេង និងត្រូវបានរាយការណ៍ទៅក្នុងក្រុម ដោយអ្នកកត់ត្រាដែលបានចុះហត្ថលេខាលើឃ្លីមរក្សាការសម្ភាសនាផងដែរ។ ឯកសារនិងត្រូវបានរក្សាទុកតាមប្រព័ន្ធអេឡិចត្រូនិកនៅក្នុងសំណុំឯកសារខុមហ្វ្រែង ក្នុងករណីមានសេចក្តីត្រូវការនៅពេលអនាគតដើម្បីធ្វើការស្រាវជ្រាវ។ ឯកសារនេះពុំមានចុះឈ្មោះ អាស័យដ្ឋាន ឬព័ត៌មានដទៃទៀតណាដែលអាចស្តែងសម្គាល់ដឹងអំពីលោកអ្នក ឬត្រូវបានបំប្លែងទៅជាអក្ខរក្សា ខ្សែអាត់ចាក់សម្លេង និងចំណាត់ថ្នាក់របស់ក្រុមការងារស្រាវជ្រាវ និងត្រូវបានរក្សាទុកនៅក្នុងទម្រង់ឯកសារដែលមានចាក់ឈ្មោះ។ កំណត់ត្រាទាំងអស់នឹងត្រូវបំប្លែងទៅជាអក្ខរក្សា រៀបចំជាឯកសារដែលមានចាក់ឈ្មោះ។ ខ្សែអាត់ចាក់សម្លេង និងព័ត៌មានផ្តល់សំណុំឯកសារទូទៅទេ ពីព្រោះវាជាកំណត់ត្រារបស់មនុស្សគ្រប់គ្នាដែលមានវត្តមាន។

លទ្ធផលនៃការសិក្សានឹងត្រូវដាក់បង្ហាញនៅក្នុងការផ្តល់មតិឆ្លើយតបពីសហគមន៍លើការសិក្សាស្រាវជ្រាវអំពីការរក្សាក្មេងកុំឱ្យជក់បារី និងដល់ក្រុមសុខភាព។ វានឹងរាប់បញ្ចូលទៅក្នុងរបាយការណ៍ស្តីពីការសិក្សាស្រាវជ្រាវអំពីការរក្សាក្មេងកុំឱ្យជក់បារីដែលផ្តល់ទៅក្រុមប្រឹក្សាសាលាដែលបានចូលរួម ក្រុមប្រឹក្សាសុខភាពប្រចាំតំបន់ និងក្រសួងរដ្ឋាភិបាលដែលទាក់ទង។

តើអ្វីដែលជាគុណប្រយោជន៍ និងភាពប្រឈមនឹងគ្រោះថ្នាក់នៃការសិក្សា?

គុណប្រយោជន៍ទៅអនាគតនៃការសិក្សានេះគឺថា វានឹងជួយបង្កើតអន្តរាគមន៍ដើម្បីជួយដល់មាតាបិតាជន ជាតិអាស៊ីកាត់បន្ថយនូវលទ្ធភាពដែលកូនរបស់គេនឹងចាប់ផ្តើមធ្វើការជក់បារី។

ភាពប្រឈមនឹងគ្រោះថ្នាក់តែមួយគត់ដែលទាក់ទងនឹងការចូលរួមនៅក្នុងក្រុមផ្តោតអារម្មណ៍ គឺលទ្ធភាពនៃការរៀនខ្លាស់បណ្តាលមកពីការនិយាយអំពីការជក់បារី។ អ្នកធ្វើសម្ភាសនាស្រាវជ្រាវបានហ៊ុកហាត់ដើម្បីឆ្លើយតបទៅនឹងរឿងនេះ។ នៅក្នុងព្រឹត្តិការណ៍ដែលមិនទំនងជាកើតឡើងចំពោះការមានប្តូរសណ្តាប់ធ្នាប់ ដែលបណ្តាលមកពីការចូលរួមនៅក្នុងការសិក្សាស្រាវជ្រាវនេះ លោកអ្នកនឹងត្រូវរាប់បញ្ចូលការពារប្រព័ន្ធផ្លូវចិត្ត និងការសងបង្កើនវិញ និងការសងបង្កើនវិញ ឆ្នាំ២០០១ (Injury Prevention, Rehabilitation and Compensation Act 2001)។

ការកម្រិតពីការស្រាវជ្រាវ

សេចក្តីសង្ខេបនៃការកម្រិតពីការស្រាវជ្រាវនឹងមានផ្តល់។ សូមបង្ហាញនៅលើឃ្លីមយល់ព្រម ប្រសិនបើលោកអ្នកចង់ឱ្យគេផ្ញើមួយច្បាប់ជូនលោកអ្នក។ សេចក្តីសង្ខេបនៃលទ្ធផលនៃការស្រាវជ្រាវនឹងត្រូវផ្តល់ទៅក្រុមសាលារៀនរបស់កូនលោកអ្នក ក្រុមប្រឹក្សាសុខភាពប្រចាំតំបន់ ក្រសួងរដ្ឋាភិបាលខ្លះ និង TANI ក្រុមសុខភាពសាធារណៈជនជាតិអាស៊ីផងដែរ។ សេចក្តីសង្ខេបនឹងមានដាក់បង្ហាញនៅក្នុងការផ្តល់មតិឆ្លើយតបពីសហគមន៍លើការសិក្សាស្រាវជ្រាវអំពីការរក្សាក្មេងកុំឱ្យជក់បារី និងដល់ក្រុមសុខភាព។

ជនសំរាប់ទាក់ទង

ប្រសិនបើលោកអ្នកមានសំណួរណាមួយអំពីកំហែង សូមទាក់ទង៖

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(មហាវិទ្យាល័យវិទ្យាសាស្ត្រ សុខភាព និងបរិស្ថាន នៅសាកលវិទ្យាល័យ AUT University)

| | | |
|-----------------------------------------|-----------------------|----------------------------------|
| Grace Wong | (និស្សិតថ្នាក់បណ្ឌិត) | ទូរស័ព្ទ: 921 9999 លេខបន្ត: 7501 |
| សាស្ត្រាចារ្យ Jane Koziol-McLain | (អ្នកត្រួតពិនិត្យ) | ទូរស័ព្ទ: 921 9670 |

សាកលវិទ្យាល័យ Auckland

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| បណ្ឌិត Marewa Glover | (អ្នកត្រួតពិនិត្យ) | ទូរស័ព្ទ: 373 7599 លេខបន្ត: 86044 |
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ចំពោះការសាកល្បងព័ត៌មានទាក់ទងនឹងការចូលរួមផ្នែកសីលធម៌ លោកអ្នកអាចទាក់ទងជាមួយប្រធាននៃសាកលវិទ្យាល័យ The University of Auckland Human Participants Ethics Committee, The University of Auckland, Office of the Vice Chancellor, Private Bag 92019, Auckland 1142. ទូរស័ព្ទ 09 373-7599 លេខបន្ត 83711។

បានទទួលយល់ព្រមដោយសាកលវិទ្យាល័យ Auckland គណៈកម្មការសីលធម៌មនុស្សក្នុងក្រុមនៅថ្ងៃទី១១ ខែកុម្ភៈ ឆ្នាំ២០០៩ សំណុំ (៣) ឆ្នាំ។ លេខយោង 2009/021



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ហ៊ុយលំព្រមសំរាប់មាតាបិតា/អ្នកមើលថែ

ហ៊ុយនេះនឹងត្រូវរក្សាទុកសំរាប់រយៈពេល៦ ឆ្នាំ

ការក្បាច់ជនជាតិអាស៊ី និងជនជាតិដើមឥណ្ឌូ-ឥស្រាអ៊ីលី (Kids Smokefree) នៅ Aotearoa/ ញូវហ្សីឡង់

អ្នកស្រាវជ្រាវ: Grace Wong

ខ្ញុំត្រូវបានគេផ្តល់ឱ្យ និងបានយល់ទៅនឹងការពន្យល់ប្រាប់អំពីគំនិតស្រាវជ្រាវនេះរាប់បញ្ចូលទាំងតើហេតុអ្វីបានជាខ្ញុំ និងគូរបស់ខ្ញុំត្រូវបានគេជ្រើសរើស។ ខ្ញុំបានទទួលឱកាសដើម្បីស្ទង់សំណួរ ហើយបានទទួលថវិកាជាទីពេញចិត្តដល់ខ្ញុំ។

- ខ្ញុំបានពិភាក្សាអំពីការអញ្ជើញដើម្បីឱ្យគូរបស់ខ្ញុំចូលរួមជាមួយគេ។
- ខ្ញុំយល់ថាព័ត៌មាននឹងត្រូវបានថតក្នុងខ្សែអាត់ចាក់សម្លេង។
- ខ្ញុំយល់ថាការចូលរួមគឺជាការស្ម័គ្រចិត្ត ហើយថាខ្ញុំ និង/ឬគូរបស់ខ្ញុំអាចដកខ្លួនចេញពីការសម្ភាសន៍ដោយពុំចាំបាច់ពន្យល់ប្រាប់ហេតុផលបានគ្រប់ពេល។
- ខ្ញុំយល់ថាព័ត៌មាន បានមកពីការសម្ភាសន៍ជាក្រុមមិនអាចដកចេញបានទេ។
- ខ្ញុំយល់ថាពុំមានឈ្មោះ ឬអត្តសញ្ញាណផ្ទាល់ខ្លួននឹងត្រូវដកយកប្រើនៅក្នុងរបាយការណ៍ណាមួយទេ។
- ខ្ញុំយល់ថាគំនិតស្រាវជ្រាវនេះក្នុងក្រុមផ្តោតអារម្មណ៍នឹងត្រូវរក្សាទុកដោយសន្តិសុខ ហើយត្រូវបំផ្លាញចោលនៅក្រោយរយៈពេល៦ ឆ្នាំ។
- ខ្ញុំយល់ថាទោះជាខ្ញុំ ឬគូរបស់ខ្ញុំបានចូលរួម ឬមិនចូលរួមក្តីនឹងពុំមានការប៉ះពាល់លើពិន្ទុ ឬតួនាទីរបស់គូរខ្ញុំនៅសាលារៀនទេ។
- ខ្ញុំយល់ព្រមមិនបញ្ចេញប្រាប់ឱ្យគេដឹង អំពីអ្វីដែលបានពិភាក្សានៅក្នុងក្រុមផ្តោតអារម្មណ៍ទេ។
- ☐ ខ្ញុំយល់ព្រមដោយខ្លួនឯងដើម្បីចូលរួមនៅក្នុងការស្រាវជ្រាវនេះ។
- ☐ ខ្ញុំយល់ព្រមឱ្យគូរប្រុស/ស្រីរបស់ខ្ញុំចូលរួមនៅក្នុងការស្រាវជ្រាវនេះ។
- ☐ ខ្ញុំប្រាថ្នាឱ្យមានអ្នកបកប្រែភាសាមួយរូប។
- ☐ ខ្ញុំចង់បានទទួលច្បាប់ចម្លងនៃលទ្ធផលការសិក្សាស្រាវជ្រាវនេះ។

ចុះហត្ថលេខាដោយមាតាបិតា (ឬអាណាព្យាបាល): _____

ឈ្មោះ: _____ ថ្ងៃខែ: _____

(សូមសរសេរឱ្យបានច្បាស់)

ឈ្មោះ: _____ ទូរស័ព្ទ: _____

សូមផ្ញើត្រឡប់មកវិញដោយដាក់ចូលទៅក្នុងស្រោមសំបុត្រដែលមានចុះអាសយដ្ឋាន និងមិនតែម្ដងស្រេច ឬប្រគល់ឱ្យគេសាលារៀន។

បានទទួលយល់ព្រមដោយសាកលវិទ្យាល័យ Auckland គណៈកម្មការសីលធម៌មនុស្សក្នុងចូលរួមនៅថ្ងៃទី១១ ខែកុម្ភៈ ឆ្នាំ២០០៩ សំរាប់(ពា)ឆ្នាំ។ លេខយោង 2009/021



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ហ៊ុមយល់ព្រមសំរាប់សមាជិកគ្រួសារ

ហ៊ុមនេះនឹងត្រូវរក្សាទុកសំរាប់រយៈពេល៦ ឆ្នាំ

ការរក្សាក្មេងជនជាតិអាស៊ី និងឥណ្ឌាកុំឱ្យជក់បារី (Kids Smokefree) នៅ Aotearoa/ ញូវហ្សីឡង់

អ្នកស្រាវជ្រាវ: Grace Wong

- ខ្ញុំត្រូវបានគេផ្តល់ឱ្យ និងបានយល់ទៅនឹងការពន្យល់ប្រាប់អំពីគំរោងស្រាវជ្រាវនេះរាប់បញ្ចូលទាំងតើហេតុអ្វីបានជាខ្ញុំត្រូវបានគេជ្រើសរើស។
- ខ្ញុំបានទទួលឯកសារដើម្បីស្វែងរកឈ្មោះ ហើយបានទទួលថ្លៃដើម្បីដាក់ចេញចិត្តដល់ខ្ញុំ។
- ខ្ញុំយល់ថាគំរោងនេះត្រូវបានរៀបចំឡើងដើម្បីស្រាវជ្រាវថាមានអ្វីជាប់សម្រាប់យើង។
- ខ្ញុំយល់ថាការចូលរួមគឺជាការស្ម័គ្រចិត្ត ហើយថាខ្ញុំអាចដកខ្លួនចេញពីការសម្ភាសន៍ដោយពុំចាំបាច់ពន្យល់ប្រាប់ហេតុផលបានត្រង់ពេល។
- ខ្ញុំយល់ថាគំរោងនេះ បានមកពីការសម្ភាសន៍ជាមួយមនុស្សម្នាក់ទៀតបានទេ។
- ខ្ញុំយល់ថាការណែនាំនៃការពិភាក្សានៅក្នុងក្រុមគ្រួសារអាចមានលក្ខណៈស្មើគ្នា ហើយត្រូវបំពេញចោលនៅក្រោយរយៈពេល៦ ឆ្នាំ។
- ខ្ញុំយល់ថាពុំមានឈ្មោះ ឬអត្តសញ្ញាណផ្ទាល់ខ្លួននឹងត្រូវរក្សាទុកដោយស្របច្បាប់ ហើយត្រូវបំពេញចោលនៅក្រោយរយៈពេល៦ ឆ្នាំ។
- ខ្ញុំយល់ព្រមមិនបញ្ចេញប្រាប់ឱ្យគេដឹង អំពីអ្វីដែលបានពិភាក្សានៅក្នុងក្រុមគ្រួសារមួយទេ។
- ☐ ខ្ញុំយល់ព្រមចូលរួមនៅក្នុងការស្រាវជ្រាវនេះ។
- ☐ ខ្ញុំប្រាថ្នាឱ្យមានអ្នកបកប្រែភាសាមួយរូប។
- ☐ ខ្ញុំចង់បានទទួលច្បាប់ចម្លងនៃលទ្ធផលការសិក្សាស្រាវជ្រាវនេះ។

ហត្ថលេខា: _____

ឈ្មោះ: _____

(សូមសរសេរឱ្យបានច្បាស់)

ថ្ងៃខែ: _____

អាសយដ្ឋាន: _____

ទូរស័ព្ទ: _____

បានទទួលយល់ព្រមដោយសាកលវិទ្យាល័យ Auckland គណៈកម្មការសីលធម៌មនុស្សក្នុងឆ្នាំ១១ ខែកុម្ភៈ ឆ្នាំ២០០៩ សំរាប់(ពា)ឆ្នាំ។ លេខលេខ 2009/021



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ថ្ងៃខែ

ជូនចំពោះ

ខ្ញុំបាទស្នើសុំឱ្យអ្នកបណ្តុះបណ្តាលការងារស្រាវជ្រាវរ៉ាំរ៉ៃ និងគ្រូសាកលវិទ្យាល័យកំពង់ចាម រ៉ាំរ៉ៃការងាររក្សាកុមារឱ្យឆ្ងាយពីការប្រើប្រាស់បារី (KKS) ដែលសាលារៀនរបស់កូនលោកអ្នកកំពុងចូលរួម។ ខ្ញុំសូមអញ្ជើញលោកអ្នក និងកូនរបស់លោកអ្នកឱ្យជួយខ្ញុំ។ សូមអានព័ត៌មានដែលភ្ជាប់មកជាមួយនេះ ហើយចុះហត្ថលេខា និងផ្ញើត្រឡប់មកវិញ ប្រសិនបើលោកអ្នកយល់ព្រមឱ្យកូនរបស់លោកអ្នកចូលរួម និងដើម្បីចូលរួមដោយខ្លួនលោកអ្នកផ្ទាល់។ សូមអញ្ជើញសមាជិកគ្រួសាររបស់លោកអ្នកមកចូលរួមផងដែរ។

ខ្ញុំនឹងទាក់ទងលោកអ្នក ប្រសិនបើលោកអ្នកពេញចិត្តនឹងជួយ។

សូមថ្ងៃឆ្នាំណាមួយលោកអ្នកយ៉ាងប្រាសប្រៀបបំផុត។

Grace Wong
បេក្ខជនថ្នាក់បណ្ឌិត
AUT University



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Parents, caregivers, family members research participant information sheet 家长、照顾者、家庭成员参与研究者信息单

为新西兰亚裔及印度裔孩子创造无烟环境

诚邀您和您的子女参加“为孩子创造无烟环境”研究项目中特别针对亚裔和印度裔儿童和家庭的专项研究。研究员是奥克兰理工大学的博士生 Grace Wong。她的研究是由高等教育委员会以及奥克兰理工大学资助的。在整个研究过程中,她一直与“为孩子创造无烟环境”研究小组一同工作。“为孩子创造无烟环境”研究从 2007 年到 2009 年在您孩子的学校进行。

我们为什么做这项研究?

本研究项目旨在发现您、您的家庭和您的孩子对于“为孩子创造无烟环境”研究的看法以及怎样保护亚裔和印度裔儿童,使其不受吸烟影响。

邀请谁参加?

本专项研究的参与者是已经同意参与“为孩子创造无烟环境”研究的印度裔和亚裔学生及学生家人。

您或您的子女是否必须参与“为孩子创造无烟环境”研究?

参与完全是自愿的,您和/或您的孩子无需提供任何原因即可拒绝参与。如果您和您的孩子参与,你们都可以在任何时候退出采访。校长已经保证,如果您和/或您的孩子不想参与本专项研究,这不会影响您的孩子在校鉴定、成绩或处境。

都包括哪些方面?

学生:没有您在同意书上签字,您的孩子不能参与。收到您的同意后,会邀请您的孩子在学校参与一个简短的焦点问题小组讨论,最多有 15 个孩子以及研究者参加。您的孩子将得到一份信息单和完整的解释,并被问到他们/她是否希望参与,以及被邀请在他/她的同意书上签字,然后学生焦点问题小组才开始运作。学生们将被问到他们对“为孩子创造无烟环境”研究的看法。讨论将持续不到 40 分钟。将会录音。将会有书面记录。讨论完毕时,将会给孩子们一份饮料、一个水果和一个蛋糕。

家长和家庭成员:将邀请家长和家庭成员在对他们来说方便的地点与研究员见面。如果需要,会提供一名经过训练的口译人员。将请您填写一份简短的不记名的问卷,问卷问到有关您与学生的关系以及出生国等情况。研究员会问您对“为孩子创造无烟环境”研究以及您对吸烟和您孩子的看法。讨论将持续 40 到 60 分钟。将录音。每一位参与的成年人将收到一张\$20.00 的 Warehouse 购物券,以答谢其对研究的贡献。对那些未回应邀请的人我们会发出提醒。如果您已经回复,请不要理会这些提醒。

那么隐私情况如何？

因为您是在小组里接受采访，所以您不能过后又收回信息，我们在采访过程中不能关上录音机，也不能保证您在小组里所说的内容会保密。但是，本研究中的任何报告都不会使用可能暴露您身份的信息。

口译人员将在保密书上签字。录音信息将由一位抄写员通过打字制成文件，该抄写员也会在保密书上签字。这些文件将以电子形式储存成电脑文件，以便将来需要分析数据时使用。文件中不会包含可能暴露您或您孩子身份的名字、地址或任何其它信息。这些录音带以及记录的打印版将储存在上锁的柜子里。6年后所有记录将销毁。录音带不会提供给参与者，因为录音带记录了每一个在场的人。

本研究的结果将在“为孩子创造无烟环境”社区反馈会议上呈现，并呈现给健康团体。“为孩子创造无烟环境”研究报告将交给参与学校的董事会、地方医疗管理局以及相关政府部门，该研究报告将包括本研究结果。

本研究的益处和危险是什么？

本研究的长远益处是，它会有助于开发出一些措施来帮助亚裔父母降低他们孩子将来吸烟的机会。

参与焦点问题小组所涉及到的唯一危险是谈论吸烟时可能产生尴尬。研究采访员受过这方面训练，知道如何应付这种情况。参与本研究不太可能受伤，万一受伤，你会受到《2001年伤害预防、康复与赔偿法》的保障。

研究结果

会提供一份研究结果综述。在同意书中请说明您是否想让我们送一份给您。研究结果综述还会给您孩子的学校、当地的地方医疗管理局、一些政府部门以及一个叫 TANI 的亚裔公共健康团体。研究结果将在“为孩子创造无烟环境”社区反馈会议上呈现，并呈现给健康团体。

联系人

如果您关于本项目有任何问题，请联系：

奥克兰理工大学健康与环境科学系

Grace Wong（博士生）

电话: 921 9999, 分机: 7501

Jane Koziol-McLain 教授（导师）

921 9670

奥克兰大学

Marewa Glover 博士（导师）

电话: 373 7599, 分机: 86044

部门领导是: Peter Adams 副教授

奥克兰大学 Tamaki 校园人口健康学院社会及社区健康

地址: University of Auckland, Morrin Road, Tamaki

电话: 373 7599 分机: 86538

如果您有任何问题涉及到道德方面，请联系奥克兰大学人类参与者道德委员会主席。地址是 The University of Auckland, Office of the Vice Chancellor, Private Bag 92019, Auckland 1142., 电话 9 373-7599 分机 83711

奥克兰大学人类参与者道德委员会于 2009 年 2 月 11 日通过，为期 3 年，参考号 2009/021

Parent/ caregiver consent form 家长 / 照顾者同意书

此同意书将保存 6 年

为新西兰亚裔及印度裔孩子创造无烟环境

研究员: Grace Wong

本人已经得到有关本研究项目的解释, 并已经理解其内容, 包括为什么选择本人和本人的孩子。本人已经得到一个提出问题并得到满意答复的机会。

- 关于邀请他 / 她参加一事, 本人已经跟本人的孩子讨论过了。
- 本人知道该信息将会用录音带录下来。
- 本人知道参与是自愿的, 并且本人和/或本人的孩子无需提供原因即可随时退出采访。
- 本人知道, 小组采访的信息不能被撤回。
- 本人知道, 任何报告中都不会使用名字或暴露身份的用词。
- 本人知道, 焦点问题小组讨论的记录将会被安全地保存起来, 6 年后会被销毁。
- 本人知道, 本人或本人的孩子是否参与将不会对本人孩子在校成绩或处境产生影响。
- 本人同意不透露焦点问题小组中讨论的任何事情。

☐ 本人同意自己参加本项研究。

☐ 本人同意本人的儿子 / 女儿参加本项研究。

☐ 本人希望有一位口译人员。

☐ 本人希望得到一份研究结果。

家长 (或监护人) 签名: _____

姓名: _____ 日期: _____
(请清楚书写)

地址: _____
电话: _____

请用贴好邮票并写好地址的信封寄回, 或送回到学校

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传真: 64 9 3737 624
电邮: m.glover@auckland.ac.nz

Family member consent form 家庭成员同意书

此同意书将被保存 6 年

为新西兰亚裔及印度裔孩子创造无烟环境

研究员: Grace Wong

- 本人已经得到有关本研究项目的解释, 包括为什么选择本人。
- 本人已经得到一个提出问题并得到满意答复的机会。
- 本人知道该信息将会用录音带录下来。
- 本人知道参与是自愿的, 并且本人无需提供原因即可随时退出采访。
- 本人知道, 小组采访的信息不能被撤回。
- 本人知道, 焦点问题小组讨论的记录将会被安全地保存起来, 6 年后会被销毁。
- 本人知道, 任何报告中都不会使用名字或暴露身份的用词。
- 本人同意不透露焦点问题小组中讨论的任何事情。

☐ 本人同意参加本项研究。

☐ 本人希望有一位口译人员。

☐ 本人希望得到一份研究结果。

签名: _____

姓名: _____ 日期: _____
(请清楚书写)

地址: _____

电话: _____

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电邮: m.glover@auckland.ac.nz

Date

Dear / 尊敬的

我是一名博士生,正在通过“为孩子创造无烟环境”研究项目对亚裔学生和家庭进行研究。您孩子的学校正在参与该研究项目。我想邀请您和您的孩子帮助我。如果您同意让您的孩子参与以及同意您自己参与,请阅读所附资料,在同意书上签名并将同意书交回。并邀请其他对您孩子重要的家庭成员加入我们。如果您愿意帮助,我会联系您。

非常感谢。

Grace Wong
博士生
奥克兰理工大学

Parents, caregivers, family members research participant information sheet

माता पिता, संरक्षक, पारिवारिक सदस्यों के लिए जानकारी शीट जो रिसर्च में भाग ले रहे हैं।

एशियाई एवं भारतीय बच्चों को न्यूजीलैंड / आटोरोआ में धूम्रपान मुक्त रखना

आपको और आपके बेटा / बेटो को निमंत्रण दिया जाता है कि बच्चों को धूम्रपान मुक्त रखने के रिसर्च में आप भाग लें जो खास तौर पर एशियाई और भारतीय बच्चों और उनके परिवार पर केंद्रित है। गैस वॉग इसको रिसर्च कर रही है, जो कि AUT विश्वविद्यालय में पी.एच.डी को धारता है। उसको रिसर्च टरशरी ऐजुकेशन कमिशन एवं विश्वविद्यालय द्वारा कोषित है। उसने बच्चों को धूम्रपान मुक्त रखने वाली टीम के साथ अपनी खोज के दौरान लगातार काम किया है। बच्चों को धूम्रपान मुक्त रखने की खोज 2007 से 2009 तक आपके बच्चों के स्कूल में चल रही है।

हम यह खोज क्यों कर रहे हैं ?

इस खोज का उद्देश्य यह पता करना है कि आप, आपका परिवार एवं आपके बच्चे, बच्चों को धूम्रपान मुक्त रखने की खोज के विषय में क्या सोचते हैं और किस तरह एशियाई एवं भारतीय बच्चों को धूम्रपान से सुरक्षित रखा जाए।

कैसे भाग लेने का निमंत्रण दिया गया है ?

इस उप-खोज में एशियाई एवं भारतीय क्षात्र एवं क्षात्रों के परिवारों को लिया गया है जो बच्चों को धूम्रपान मुक्त रखने की खोज में भाग लेने की सहमति दे चुके हैं।

क्या आप या आपके बेटा / बेटो ने धूम्रपान मुक्त रखने की उप-खोज में भाग लेना है ?

इसमें भाग लेना पूरी तरह इच्छापूर्वक है और आप या आपका बच्चा बिना किसी कारण बताए इससे इन्कार कर सकते हैं। अगर आप या आपका बच्चा इसमें भाग लेते हैं, तो आप दोनों किसी भी समय इस इन्टरव्यू से पीछे हट सकते हैं। अगर आप या आपका बच्चा इस उप-खोज में भाग नहीं लेना चाहते, तो प्राधान्याचार्य ने आश्वासन दिया है कि इसका प्रभाव क्षात्रों के मूल्यांकन, ग्रेड या स्कूल में उनके दर्जे पर नहीं पड़ेगा।

इसमें क्या शामिल है ?

क्षात्र : आपको हस्ताक्षर सहमति के बिना आपका बच्चा इसमें भाग नहीं ले सकता। आपकी सहमति मिलने के बाद आपके बच्चे को छोटे फोकस ग्रुप चर्चा में भाग लेने का निमंत्रण दिया जाएगा जिसमें एक रिसर्च करने वाला एवं 15 तक बच्चे हो सकते हैं। आपके बच्चे को एक जानकारी शीट और पूरी व्याख्या दी जाएगी और उनसे इसमें भाग लेने की इच्छा पूछी जाएगी और उन्हें फोकस ग्रुप शुरू होने से पहले सहमति फार्म पर हस्ताक्षर करना होगा। क्षात्रों को पूछा जाएगा कि वह बच्चों को धूम्रपान मुक्त रखने की खोज के बारे में क्या सोचते हैं। यह चर्चा 40 मिनट से कम होगी। यह आडिओ टेप की जाएगी। लिखित नोट बनाए जाएंगे। चर्चा समाप्त होने पर बच्चों को ड्रिंक, फल एवं मफिन दिए जाएंगे।

माता पिता एवं पारिवारिक सदस्य : माता पिता एवं पारिवारिक सदस्यों को, रिसर्च करने वाले से अपने सुविधाजनक स्थान पर मिलने का निमंत्रण दिया जाएगा। अगर अनुरोध किया जाएगा तो एक प्रशिक्षित दुभाषी भी प्रदान किया जाएगा। आपको एक छोटी बेनाम प्रश्नावली भरने को कहा जाएगा जिसमें आपको विवरण देना होगा जैसे कि आपका क्षात्र से रिश्ता एवं जन्म भूमि क्या है। रिसर्च करने वाला आपसे पूछेगा कि बच्चों को धूम्रपान मुक्त रखने की खोज एवं धूम्रपान और आपके बच्चों के बारे में आप किया सोचते हैं। यह चर्चा 40-60 मिनट लंबी होगी। यह आडिओ टेप पर होगी। हर व्यक्ति जो इसमें भाग लेगा उसे इस खोज में योगदान देने के लिए \$20.00 का वेयरहाउस का वाउचर मिलेगा। जो हमारे निमंत्रण का जवाब नहीं देंगे उन्हें हम स्मरण पत्र भेजेगे। अगर आपने जवाब दे दिया है तो कृपया इस पर ध्यान न दें।

गोपनीयता की मात्रा कितनी है ?

क्योंकि आप की इन्टरव्यू एक ग्रुप में होगी तो आप यह सारी जानकारी वापस नहीं ले सकते, हम इन्टरव्यू के दौरान टेप बंद नहीं कर सकते या जो आपने ग्रुप के सामने कहा है उसकी गोपनीयता की गारंटी नहीं दे सकते। परंतु, कोई भी जानकारी जिसमें आपकी व्यक्तिगत रूप से पहचान हो सके वह इस खोज की किसी रिपोर्ट में इस्तेमाल नहीं की जाएगी।

दुभाषी भी गोपनीयता फार्म पर हस्ताक्षर करेंगे। आडिओ टेप की जानकारी भी टैप्सक्राइबर द्वारा टाईप की जाएगी और वह भी गोपनीयता फार्म पर हस्ताक्षर करेगा। यह टैप्सक्राइबर कंप्यूटर फाइल में इलेक्ट्रॉनिक ढंग से संग्रह किए जाएंगे, ताकि भविष्य में इसके विश्लेषण की अगर जरूरत पड़े तो। उसमें नाम, पता या किसी भी तरह की जानकारी शामिल नहीं होगी जिसमें आपकी या आपके बच्चे की पहचान हो। आडिओ टेप और टाईप किए गए टैप्सक्राइबर एक बंद अलमारी में संग्रह किए जाएंगे। छह साल बाद ये सारे प्रमाण नष्ट कर दिए जाएंगे। भाग लेने वालों को टेप प्राप्त नहीं होगी क्योंकि यह सभी के हाज़िर होने का प्रमाण है।

इस खोज के परिणाम बच्चों को धूम्रपान मुक्त रखने वाले सामूहिक प्रत्युत्तर बैठक में एवं स्वास्थ्य ग्रुप में प्रस्तुत किए जाएंगे। बच्चों को धूम्रपान मुक्त रखने की खोज की रिपोर्ट के परिणाम भाग लेने वाले स्कूल बोर्ड, स्थानीय जिला स्वास्थ्य बोर्ड एवं संबंधित सरकारी मिनिसटरी को दिए जाएंगे।

इस खोज के क्या फायदे और नुकसान हैं ?

भविष्य में इस खोज के फायदे यह हैं कि यह हस्तक्षेप एशियन माता पिता की मदद करेगा ताकि उनके बच्चों की धूम्रपान करने की संभावना कम हो।

इस खोज का एक ही नुकसान है कि फोकस ग्रुप में भाग लेने वाले धूम्रपान के बारे में बातचीत करने में शर्मिन्दागी महसूस करें। इन्टरव्यू लेने वाला इसका जवाब देने में प्रशिक्षित है। इस खोज में भाग लेने के दौरान अगर किसी को कोई चोट आए, तो यह इंडुरी प्रिवैन्शन, रीहैबिलिटेशन अंड कंफैन्सेशन एक्ट 2001 द्वारा सुरक्षित है।

रिपोर्ट के परिणाम

इस रिपोर्ट के परिणाम का सारांश उपलब्ध होगा। कृपया सहमति फार्म में संकेत कीजिए अगर आप चाहते हैं कि आपको यह भेजे जाए। परिणाम का सारांश आपके बच्चों के स्कूल, स्थानीय जिला स्वास्थ्य बोर्ड, कुछ सरकारी मिनिसटरी और टानी (जो कि एक एशियन सार्वजनिक स्वास्थ्य ग्रुप है) को भी भेजा जाएगा। इसे धूम्रपान मुक्त रखने वाले सामूहिक प्रत्युत्तर बैठक में एवं स्वास्थ्य ग्रुप में प्रस्तुत किया जाएगा।

संपर्क कर्ता

अगर आपके इस योजना के बारे में कोई सवाल है, तो कृपया संपर्क करें :

Faculty of Health and Environmental Sciences, AUT University

ग्रेस वौंग (पी.एच.डी. छात्रा) Tel: 921 9999, ext 7501
प्रोफ़ेसर जेन कोज़ीअल-मक्लेन (निरीक्षक) 921 9670

University of Auckland

डा. मारेवा गलोवर (निरीक्षक) Tel: 373 7599, ext 86044

सेक्शन का मुखी:

सहायक- प्रोफ़ेसर -प्रोफ़ेसर पीटर अ़ैडम्स
Social & Community Health, School of Population Health, Tamaki Campus
University of Auckland, Morrin Road, Tamaki
Tel: 373 7599 ext 86538

कोई और जातीय संबंधी पूछताछ के लिए सम्पर्क करें : The Chair, The University of Auckland Human Participants Ethics Committee, The University of Auckland, Office of the Vice Chancellor, Private Bag 92019, Auckland 1142. Telephone 09 373-7599 extn. 83711.

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE ON 11.2.09 for (3) years,
Reference Number 2009/021

Parent / Caregiver Consent Form

माता पिता / संरक्षक सहमति फार्म

यह फार्म छह साल तक रखा जाएगा

एशियाई एवं भारतीय बच्चों को न्यूज़ीलैंड / आस्ट्रेलिया में धूमपान मुक्त रखना

रिसर्च कर्ता : ग्रेस वॉग

इस रिसर्च योजना की व्याख्या मुझे दी गई है, मुझे इसका पूरा ज्ञान है, और इसमें मैं और मेरा बच्चा क्यो चुने गए हैं यह जानकारी भी शामिल है। मुझे यह अवसर दिया गया है कि मैं प्रश्न पूछ सकूँ और इसके संतोषजनक उत्तर जान सकूँ।

- मैंने इस निमंत्रण में अपने बेटा / बेटी के साथ भाग लेने के बारे में विचार-विमर्श कर लिया है।
- मुझे यह ज्ञान है कि यह जानकारी टेप की जाएगी।
- मुझे यह ज्ञान है कि इसमें भाग लेना इच्छापूर्वक है और कि मैं और / या मेरा बच्चा बिना किसी कारण बताए इससे किसी भी समय इनकार कर सकते हैं।
- मुझे यह ज्ञान है कि ग्रुप इन्टरव्यू में दी गई जानकारी वापस नहीं ली जा सकती।
- मुझे यह ज्ञान है कि इसमें किसी का नाम या व्यक्तिगत जानकारी शामिल नहीं होगी।
- मुझे यह ज्ञान है कि यह ग्रुप विचार-विमर्श संग्रह किए जाएंगे और छह साल बाद यह सारे प्रमाण नष्ट कर दिए जाएंगे।
- मुझे यह ज्ञान है कि चाहे मैं या मेरा बच्चा इसमें भाग ले या न ले, इसका प्रभाव बच्चों के ग्रेड या स्कूल में उनके दर्जों पर नहीं पड़ेगा।
- मैं यह सहमति देता हूँ कि इस ग्रुप में किए गए विचार-विमर्श को किसी से जाहिर नहीं करूँगा।

- ☐ मैं इस रिसर्च में भाग लेने के लिए सहमत हूँ।
- ☐ मैं, अपने बेटा / बेटी को इस रिसर्च में भाग लेने के लिए सहमति देता हूँ।
- ☐ मुझे एक दुभाषी की जरूरत है।
- ☐ मुझे इस खोज के परिणाम की कॉपी चाहिए।

हस्ताक्षर : _____

नाम : _____ तिथि : _____
(कृपया साफ लिखें)

पता : _____

फोन : _____

कृपया इसे स्कूल में या टिकट लगे हुए एवं पता लिखे लिफाफे में भेजें

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE ON 11.2.09 for (3) years,
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Family Member Consent Form पारिवारिक सदस्य सहमति फॉर्म

यह फॉर्म छह साल तक रखा जाएगा

एशियाई एवं भारतीय बच्चों को न्यूजीलैंड / आस्ट्रेलिया में धूम्रपान मुक्त रखना

रिसर्च कर्त्ता : ग्रेस ग्लोवर

- इस रिसर्च योजना की व्याख्या मुझे दी गई है, मुझे इसका पूरा ज्ञान है, और इसमें मुझे कथो चुना गया है भी शामिल है।
 - मुझे यह अवसर दिया गया है कि मैं प्रश्न पूछ सकूँ और इसके संतोषजनक उत्तर जान सकूँ।
 - मुझे यह ज्ञान है कि यह जानकारी टेप की जाएगी।
 - मुझे यह ज्ञान है कि इसमें भाग लेना इच्छापूर्वक है और कि मैं बिना किसी कारण बताए इससे किसी भी समय इन्कार कर सकता हूँ।
 - मुझे यह ज्ञान है कि ग्रुप इन्टरव्यू में दी गई जानकारी वापस नहीं ली जा सकती।
 - मुझे यह ज्ञान है कि यह ग्रुप विचार-विमर्श संग्रह किए जाएँगे और छह साल बाद यह सारे प्रमाण नष्ट कर दिए जाएँगे।
 - मुझे यह ज्ञान है कि इसमें किसी का नाम या व्यक्तिगत जानकारी शामिल नहीं होगी।
 - मैं यह सहमति देता हूँ कि इस ग्रुप में किए गए विचार-विमर्श को किसी से ज़ाहिर नहीं करूँगा।
- ☐ मैं इस रिसर्च में भाग लेने के लिए सहमत हूँ।
- ☐ मुझे एक दृभाषी की जरूरत है।
- ☐ मुझे इस खोज के परिणाम की कॉपी चाहिए।

हस्ताक्षर : _____

नाम : _____ तिथि : _____
(कृपया साफ लिखें)

पता : _____

फोन : _____

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तिथि

प्रिय.....

मैं एक पी.एच.डी की छात्रा हूँ जो एशियाई छात्र और परिवार के साथ बच्चों को धूम्रपान मुक्त रखने (के के एस) की रिसर्च योजना पर खोज कर रही हूँ जिसमें आपके बच्चे का स्कूल भाग ले रहा है । मैं आपको और आपके बच्चे को इसमें सहायता देने का निमंत्रण देती हूँ । कृपया दी गई जानकारी पढ़ें और सहमति फार्म पर हस्ताक्षर करके भेजें अगर आप अपने बच्चे को इसमें भाग लेने की सहमति देते हैं और खुद भी भाग लेना चाहते हैं । कृपया किसी और बड़े परिवारिक सदस्य को भी साथ ले आएँ जो बच्चे के लिए महत्वपूर्ण है ।

अगर आप मेरी सहायता करने में खुश है तो मैं आपसे सम्पर्क करूँगी ।

धन्यवाद ,

ग्रेस वौभ

पी.एच.डी छात्रा

ए यू टी विश्वविद्यालय

Appendix M: Student focus group question schedule

1. The first thing we would like to know what you know about Keeping Kids Smokefree. Tell me what you know.
Write down activities

Can you explain what the purpose of KKS is?

2. DVD

What was the DVD about?

Who was it for?

Why do you think it was given to students?

Did you get copies? How? If not why not?

How did it work for you (and your family)?

What happened to your copy of the DVD:

Who watched it? Together? Apart? What prompted people to watch it? What did they think of it?

Have you seen the DVD?

What do you remember about it?

What did you think of it?

How do you and your parents communicate about smoking? Give examples

Did people enter the competition for the bike? What about the movie night?

3. Sponsor to Win

What was this activity about?

Who was it for?

Why do you think it was given to students?

Were you involved? How?

Were people at home interested in the competition?

Did you ask anyone to sponsor you?

How did that go?

What did you think of the activity?

What would work better for you and your families?

What would be a good way to get your parents involved?

4. Art competitions, stickers, cards, fridge magnets

What was this activity about?

Who was it for?

Why do you think it was given to students?

Were you involved? How?

What happened to the stickers, cards, fridge magnets at home?

Were your parents interested?

What did you think of the activity and the competition?

Questions:

Check understanding of what the activity or resource was

What was this activity about?

Who was it for?

How did it work for you (and your family)?

- **Quit support for parents at school**
- **Whanau days**
- **Website**
- **NRT sent home to parents who smoke**

Appendix N: Timeline for qualitative sampling and data collection

| GRACE PHD FOCUS GROUPS TIMELINE | | | |
|---------------------------------|----------|-----------------------------------------------------|---------------|
| By when or when | | What needs to be done | Who does it |
| May | | | |
| 30.06.09 | t2/w5 | List of Asian families/students extracted from data | Grace |
| June | | | |
| 5.06.09 | t2/w6 | Consult schools on suitable families | Grace & Candy |
| July | | | |
| 3.07.09 | t2/w10 | Parent packs made up | Grace |
| 22.07.09 | t3/w1 | Parent packs sent home with students | Grace & Candy |
| 29.07.09 | t3/w2 | First follow-up card or parent pack | Grace |
| August | | | |
| 5.08.09 | t3/w3 | Second follow-up card, parent pack or phone call | Grace |
| 10-21.08.09 | t3/w4&5 | Candy on leave in South Island | Candy |
| September | | | |
| 1-25.09.09 | t3/w7-10 | Candy on leave | Candy |
| 14.09.09 | t3/w9 | Student focus groups at school | Grace |
| 25.09.09 | t3/w10 | Parent interviews scheduled with families | Grace |
| October | | | |
| 30.10.09 | t4/w3 | Parent interviews completed | Grace |

Appendix O: Recruitment leaflet



Wanted: **PARENTS**

Indian

Chinese

Cambodian

Filipino

Thai

Vietnamese

Why do very few Asian children smoke?

What is the influence of family on child smoking?

What do you think of the Keeping Kids Smokefree activities?

I am researching the above issues at Weymouth and Manurewa Intermediate Schools. I want to talk to Indian, Chinese, Cambodian, Filipino, Thai and Vietnamese parents. If you can spare a little time, I would like to know what you think.

Each parent or adult family member who participates receives a \$20.00 Warehouse voucher.

For more information and to contact me if you can help:

Grace Wong

Phone: 921 9999 ext 7501 (leave your name and phone number. I will call you back)

Mobile phone: 021 2179519

E-mail: grace.wong@aut.ac.nz

Or write your details here and give this to a Keeping Kids Smokefree team member or reception at Weymouth or Manurewa Intermediate School.

Name _____

Address _____

Phone _____ Child's school _____

Child's name _____

Appendix P: Family interview question schedule

Quantitative results

Show parents preliminary baseline results.

- **What explains these results?**
 - Can you give examples of your explanation?..... Examples from your family?
 - If cultural reasons (“it’s our culture”) – what is that cultural reason?
 - If family/parental influence -
 - Can you explain what these things mean to your family?
 - How do they apply?
 - Can you give examples of it for you and your boys and girls?

- **How do you keep your children safe from smoking in New Zealand?**
 - What influence, if any, does your culture and cultural community have? Please give examples
 - What are your messages to your boys...and girls...about smoking?
 - Eg health, ETS, religious reasons, not culturally acceptable
 - How do you convey your messages about smoking to your sons and your daughters?
 - How are messages from your Auckland cultural community about smoking conveyed to your sons and your daughters?
 - Who conveys these messages?
 - What would the consequences be to your family and father and mother separately if your children smoke?
 - What influence, if any, does your immediate local community (people in your neighbourhood; community groups in your neighbourhood; local schools your children go to) have? Please give examples

- **How is keeping your boys and girls safe from smoking different in New Zealand from your country of origin (traditional culture)?**
 - What is different?

Eg lack of extended family, cigarette prices, forms of tobacco, SE laws, no advertising

Keeping Kids Smokefree Study

Keeping Kids Smokefree has been working at your child’s school since 2007 with the aim of working with parents to reduce uptake among children.

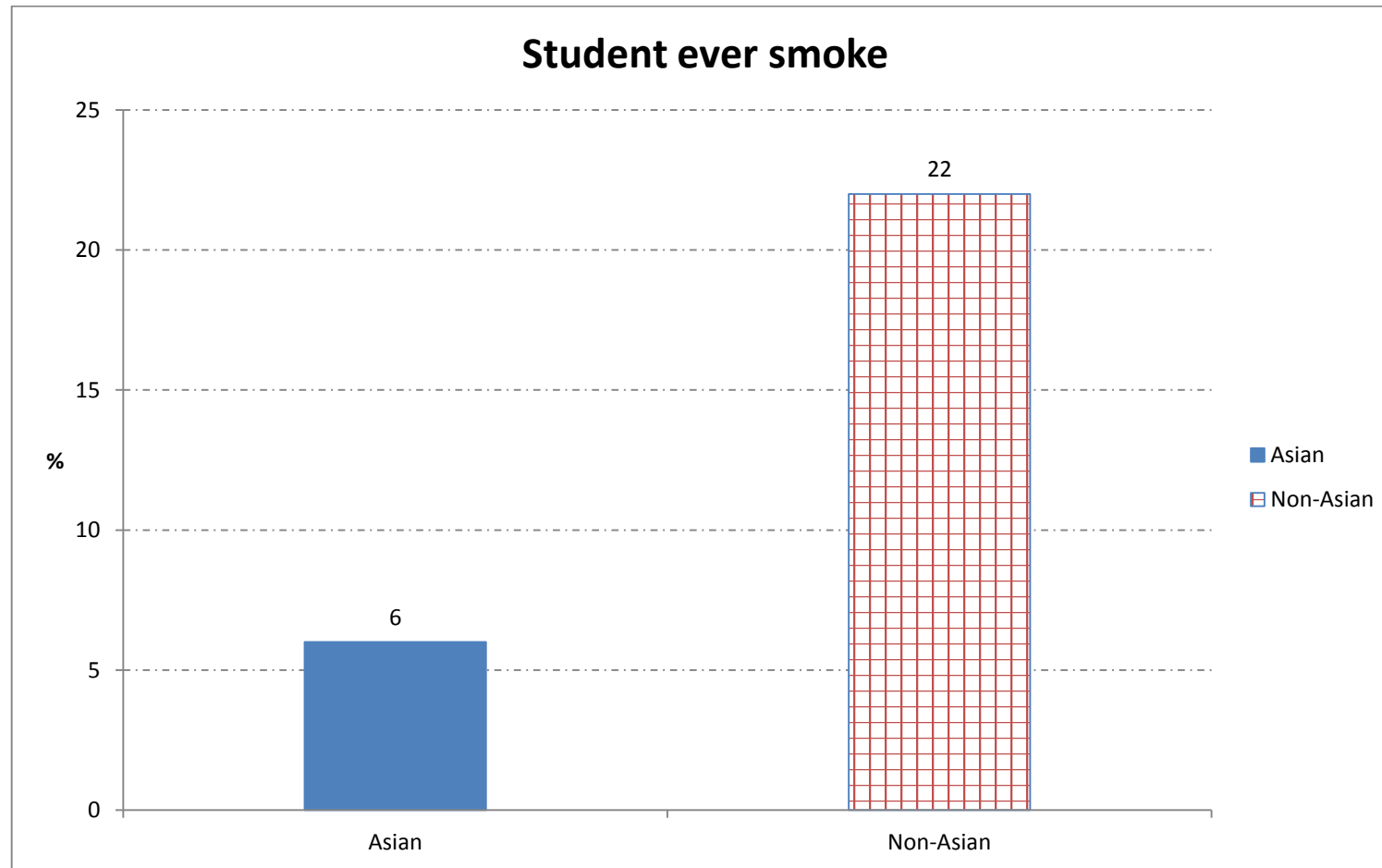
Participants shown a clear file with KKS study materials including

- a) Intervention strategies
 - a. DVD about family communication about smoking;

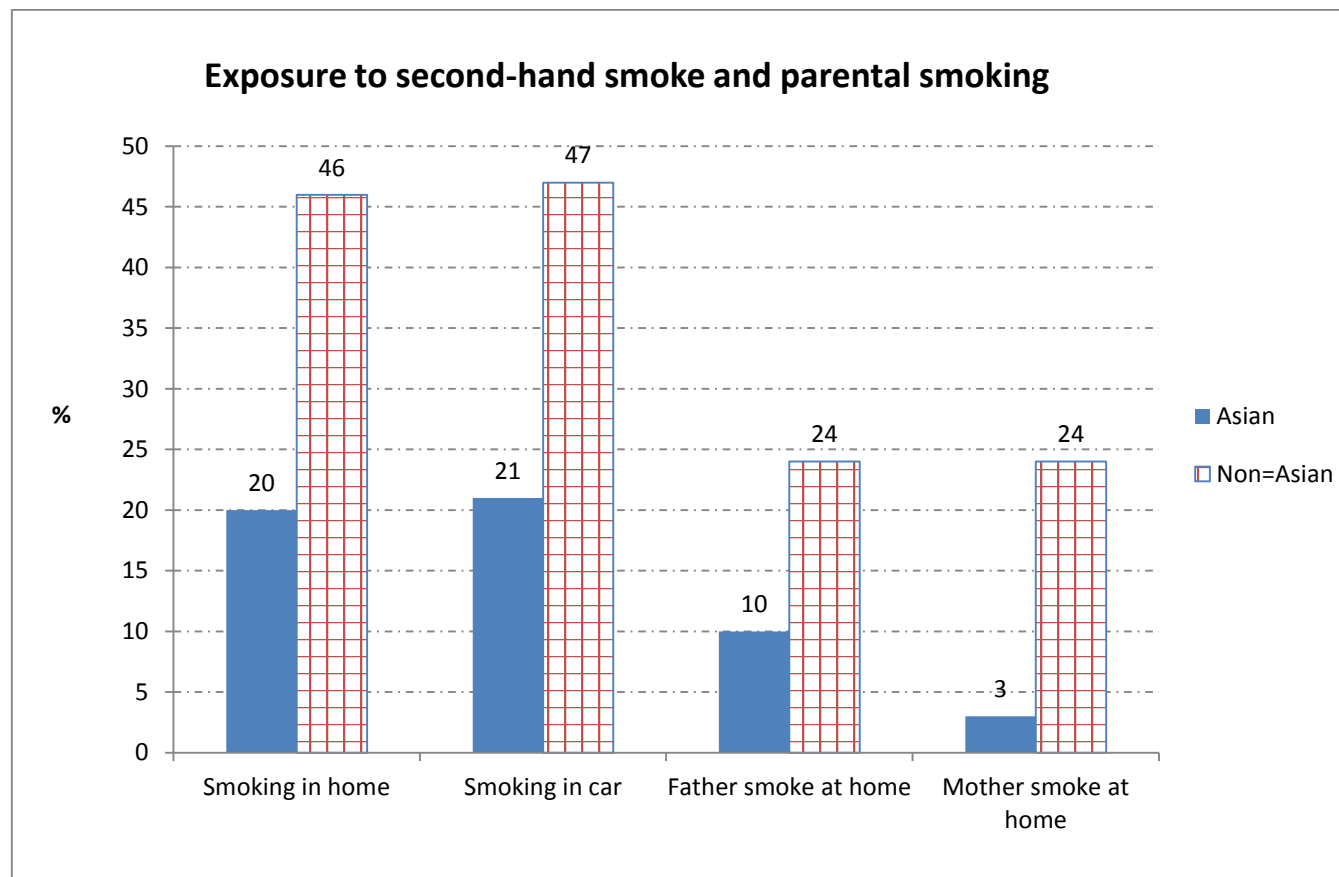
- b. cessation strategies - sponsor to win, cessation advisors at school/home visiting, Quit card sent directly
 - c. Retailers
 - b) communication strategies
 - a. newsletters
 - b. whanau days
 - c. website
- What involvement have you and your family had with this Keeping Kids Smokefree strategy?
 - What happened when you received this resource/intervention?
 - (eg watched DVD, entered competition, used it to talk to children)
 - How does this Keeping Kids Smokefree strategy fit with the ways your family and community protect your children from smoking?
 - Eg is encouraging Asian and Indian parents to talk to their children about smoking appropriate?
- Overall, which KKS strategies do you prefer?
 - Please explain why
- Overall, what do you think of delivering smoking cessation and smokefree environments messages to parents through their children's schools?
- How can work with parents to prevent smoking among Asian and Indian children be improved?
 - For example, many Asian parents believe that their own smoking influences youth smoking, ETS influences children; how can this message to communicated to other Asian parents?

Appendix Q: Quantitative results for family interviews

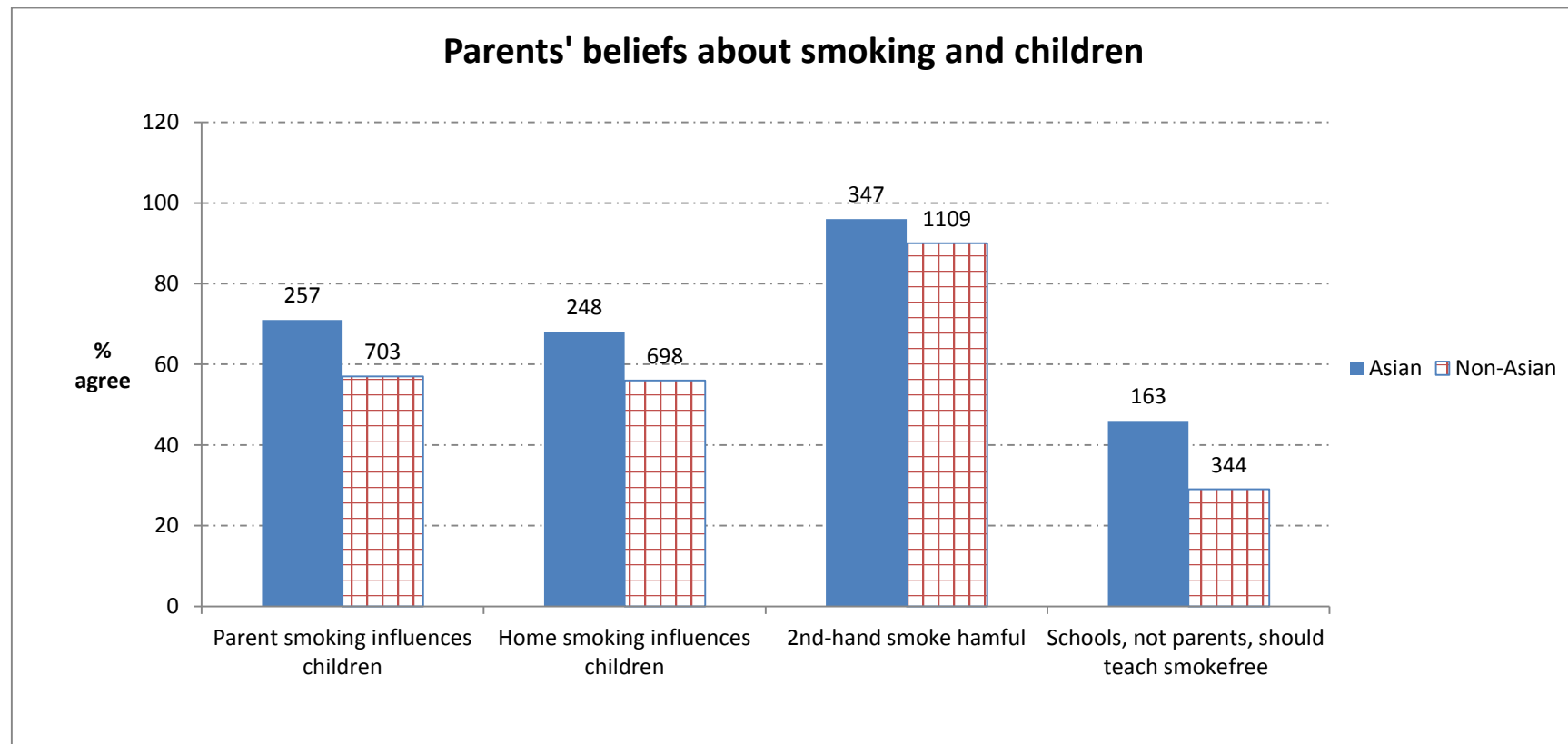
- Fewer Asian children smoke than



- Asian children report less smoking in their homes and cars than children
- Fewer of their fathers smoke than fathers
- Fewer of their mothers smoke than mothers
- But other studies show that when Asian mothers do smoke, their children are much more likely to smoke than when mothers smoke



- There is little difference between
 - the proportion of Asian (85%) and parents (81%) who have talked to their children about smoking;
 - the proportion of Asian and parents who believe that parental smoking, and smoking in the home influences their children to smoke
 - the proportion of Asian and parents who believe that 2nd-hand smoke is harmful
- More Asian parents believe that schools, not parents, should teach children about not smoking



Appendix R: Developing the qualitative analytic framework

First analytic framework created from comments boxes and highlighted words in transcripts

Communicating with children about smoking

Topics

Health

Cost

Responsibility to family – parents work hard for children, give everything and they should do as told (not smoke) in return

(Not addiction)

When and where

After school, at dinner, before bed, when triggered by ads or other people's behaviour

Discipline

Teaching respect, instilling values

Role model

Use of example of others when seen smoking or hanging about

Harder in NZ for some – because of children's rights

Religion and use of stories with a moral – generally about consequences of not respecting

Girls/boys

Tell off

Monitoring

Friends

Culture

Generation follows generation

Influence of neighbourhood – keep children off the streets

Time without parental or school supervision - rare

Money – heavily monitored

Girls/boys – girls much more monitored – ‘Boys can do anything’

Extended family monitor mostly but not all (would have to be close)

In Fiji – school monitors heavily

Responsibility

Parents have the greatest responsibility

Parents sacrifice

Role of school – share with school

Influence of family smoking

When parent smokes what they say

Norms re smoking

Traditional

Girls/boys

NZ vs traditional

Drinking vs smoking

Context

NZ – children’s rights; freedom

People who could be bad influences on children - in NZ but also in countries of origin

Smoking is unhealthy

Smoking is not for boys or girls

Smoking is not for women

Culture

Generation
follows
generation

Second analytic framework created from first framework in consultation with cultural advisor

This framework was used with all interviews. Each interview given a separate document and quotes from interviews pasted into comments boxes beside each heading.

How Asian parents protect their children from smoking in New Zealand

Parents take responsibility

Parents know best

Context

The big picture –

religion;

values

respect for big things means respect for small things;

the law;

intergenerational

Cycle of life - waiting for your age

In NZ: Things are different in NZ - migration, Westernization

School is different

Children's rights;

freedom;

no smacking;

Everywhere: people who may be bad influences

Smoking is unhealthy

Consequences

For children

Gateway

Consequences for families

Children should not smoke

Women should not smoke

Conditions

Prioritisation -family and children are the most important things

Duty and sacrifice

Control and discipline - smoking is not tolerated

Respect

- parents do everything for children therefore children should reciprocate

Authority -parents know best

Parent strategies

Taking responsibility

Telling

Teaching

role modelling;

using every opportunity to instruct;

Start young

Being vigilant -

monitoring;

reminding;

communicating

Family, acquaintances and friends with the same values

Third analytic framework taken to family for review

How Asian parents protect their children from smoking in New Zealand

Context

In New Zealand: children's rights; freedom

Everywhere: people who may be bad influences

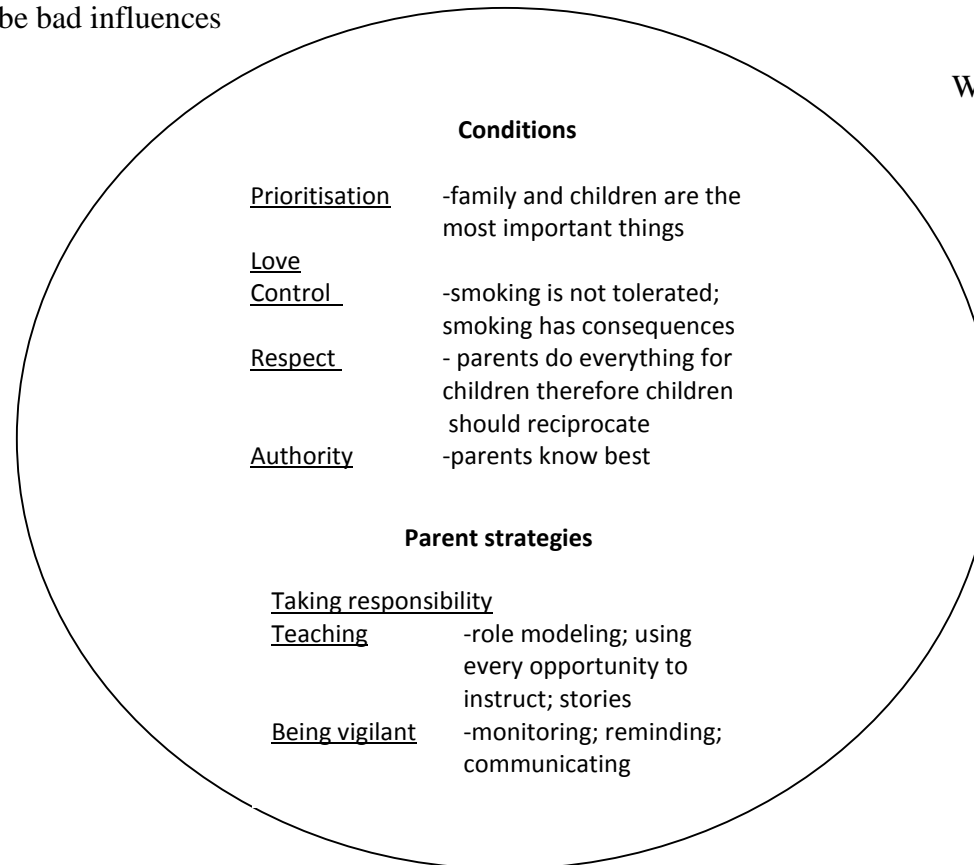
Culture

Context

Smoking is unhealthy

Children should not smoke

Women should not smoke



Appendix S: Analytic framework taken to final family interview

Family, authority and respect: Factors that influence low smoking rates among Asian children aged 11-13 in the context of culture and migration to New Zealand.

1. Family authority - “It depends on the parents. It depends on the family you know”.

Families are vigilant

Monitoring children - “together is the best”.

Setting strict boundaries -Forbidding children to smoke – “Tobacco or cigarettes definitely I told you I forbid it”.

Communicating

Teaching – “If you won’t teach them they will never know”.

-Starting young –“ since early childhood I been moulding them and that has paid off now”.

-Taking every opportunity to instruct - “Normally I will use circumstances to educate”.

Listening

Role modelling

Protecting children from the influence of others – “we keep our children away from those people who smoke”.

-Parents who smoked protected their children from taking up smoking

Working together -Supporting other extended family and/or community members to protect children from smoking - “...if I hide it I am also not faithful to our family. I have to tell them”.

-Parents prioritise children and family by working together

Supporting children and expecting them to reciprocate

-“I’m going for you to work hard. When I come home don’t steal, don’t smoke”.

-Providing everything children need including good home-made meals

-Warm family environment – children not expected to leave home

2. Having values and beliefs that protect children – “... here in our family we go for the **traditional customs**”.

Believing that children should not smoke - “No child is allowed to smoke”

Believing that women should not smoke

Believing that smoking has intergenerational effects – “your habits will be passed on to your generation”.

Respecting older people – “It’s inherited in our culture to respect our parents and they were respecting theirs before and that’s why our children are respecting us”.

The positive influence of religious beliefs and practices

3. Parenting in the **New Zealand context** –

Children’s rights - “These rights give them the right to have the wrong thing going on”.

Managing the perceived influence of peers from school – the teachers do their best but other children are concerning

Tobacco control – smokefree environments, picture warnings, smokefree mass media, high cigarettes prices and smokefree messages from school discourage smoking