TE MAHI KAIPAIPA I WAENGANUI I NGA TAMAHINE MAORI: NGA AHUATANGA E PA ANA KI ENEI TAWAITANGA

YOUNG MAORI WOMEN AND SMOKING: KNOWLEDGE, ATTITUDES, INITIATION AND MAINTENANCE

A thesis presented in partial fulfilment of the requirements for the degree of Master of Arts in Psychology at Massey University

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ABSTRACT

Cigarette smoking leads to many of the most harmful diseases of our time. The prevalence of smoking is excessively high amongst young Maori women. Most research has focused on knowledge of the health consequences associated with smoking, and attitudes toward cigarette smoking. Teaching individuals of the health consequences of smoking and attempting to change individuals' assumed positive attitudes toward smoking have been the basis for smoking prevention and cessation programmes. Recent research suggests these programmes are ineffective in preventing or eliminating smoking. The process of initiation into cigarette smoking is not well understood. Also, the maintenance of cigarette smoking after initiation is not well understood. This is a mixed method study with young Maori women participants. The study includes both smokers and non-smokers. Non-smokers are almost always excluded from research into smoking but are a valuable source of information on smoking. A quantitative methodology was employed and a questionnaire developed to investigate young Maori women's knowledge and attitudes toward cigarette smoking. A qualitative methodology was used and a semi-structured interview developed to explore young Maori women's thoughts, feelings and experiences of initiation and maintenance of cigarette smoking. The aims of this study are to assess participants' knowledge of the health consequences of smoking and participants' attitudes toward smoking. The study also explores participants' thoughts, feelings and experiences of smoking with an emphasis on the initiation and maintenance of smoking behaviour. Results indicate participants possess good knowledge of the health consequences of smoking. Participants were found to possess negative attitudes toward smoking. However, smokers were found to have more positive attitudes toward smoking than non-smokers. These findings are consistent with previous research. Results also indicate that social factors play the greatest role in both initiation and maintenance of smoking in young Maori women. Recommendations for future research and practical suggestions for prevention and cessation programmes are made.

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CHAPTER 1 INTRODUCTION

1.1 HISTORY OF CIGARETTE SMOKING

In the past, tobacco smoking has been more prevalent among males. However, tobacco use by women is not an occurrence of modern times. There is a new trend of increased smoking prevalence in Western women over the past 70 years (Shaw, Crane & O'Donnell, 1991), and research suggests women have smoked cigarettes, pipes and cigars through out history (Gritz, 1980)

Maori did not smoke until tobacco was brought to New Zealand by early Pakeha explorers and traders. There is no record of any ancient Maori words (pre-Pakeha) which relate to tobacco, its smoking or its cultivation. Tobacco use was recorded in 1893 in the New Zealand Official Year Book as, "a consumption per head of population-including Maoris (sic) who are heavy smokers-of 2.01 lbs" per annum (Department of Statistics, 1893; cited in Reid & Pouwhare, 1991). At that time Maori smoked tobacco in pipes which was the most popular form of smoking.

Cigarette smoking originated in Spain and was introduced into France and England by soldiers returning from the Crimean war (Royal College of Physicians, 1983). Gradually tobacco smoking using pipes became less popular. Today smoking of cigarettes is the most popular form of tobacco use. Smoking of cigarettes became popular during World War I and free cigarettes were given to soldiers during World War II (Diehl, 1969). From 1920 to 1940 there was an increase in cigarette smoking by women in the Western world. Cigarette smoking became socially acceptable for women and women became targets for the advertising of cigarettes. Today the tobacco

industry sells to women through every conceivable image: if you want to be popular, healthy, relaxed, more feminine, fashionable, assertive, and the list continues, all you need is the 'right' kind of cigarette (Jacobson, 1986).

1.2 WOMEN AND SMOKING

Previous research suggests a low level of education, which is an indicator of low socio-economic status, is linked to cigarette smoking. Women of all cultures with less education are more likely to smoke than better educated women (Berman & Gritz, 1991). Daily smoking in New Zealand adolescents was found to be associated with low socio-economic status and almost half of the daily smokers in the same study intended to leave secondary school as soon as possible (Stanton, Silva & Oei, 1989).

A recent study in Britain by Marsh and McKay, reported in The Dominion (Hawkes, 1994) shows that smoking has halved among middle class families, where as those less well off smoke as much as they did 20 years ago. Women of lower socio-economic status who are often single parents were found to be the "most inveterate smokers" (Hawkes, 1994; p 10). They were also reported to feel that smoking was their only luxury. The article discussed the logic behind raising the price of cigarettes as an incentive to reduce smoking when those who are most likely to continue smoking will have less money to spend on necessities, and suggests there may be a parallel between Maori women and the less well off British women who participated in the study. Maori women are often from a low socio-economic status. Maori women often receive a low level of education and are more likely to be solo parents than pakeha women

(Ministry of Women's Affairs, 1990). Low socio-economic status and solo parenthood may result in increased stress Maori women experience.

There is evidence to suggest cigarette smoking plays a role in helping women cope with negative affect or stress (Brandon & Baker, 1991; USDHHS, 1988). Research suggests that while it is not entirely clear whether smoking reduces stress, stress does play a role in relapse and continuation of smoking for women (USDHHS, 1988; Berman & Gritz, 1991).

"When you're stressed out and haven't got any money you can't go out for a social life. So what do you do? Have a smoke" (Broughton & Lawrence, 1993; p 15).

CONCLUSION

Cigarette smoking has become increasingly popular in New Zealand. While cigarette smoking is a relatively recent phenomenon in this country, it has become extremely popular during this century.

1.3 HEALTH AND SMOKING FROM A MAORI PERSPECTIVE

"Health from a Maori perspective embodies a holistic philosophy. It encompasses spiritual, mental, family and physical dimensions. Maori people believe that each one of these dimensions cannot be looked at separately" (Ngata, 1985; p 20).

Cigarette smoking by Maori is a Maori issue. A Maori perspective of health suggests smoking can affect a smoker's family and affects a smoker physically, mentally and spiritually.

Cigarette smoking is considered to be the single most damaging health behaviour and is the largest cause of preventable death in New Zealand (N.Z. Health Department, 1988). Other physical health effects of smoking for both men and women are well researched and well known due to advertising and education programmes. These health effects include lung cancer and other cancers, heart disease, stroke, emphysema, peptic ulcers, chronic bronchitis and sudden infant death syndrome (SIDS) (Brownson et al, 1992; Berman & Gritz, 1991).

More recently researched and consequently less well known are the health effects of smoking specific to women alone. Smokers who take oral contraceptives are at increased risk from heart attack and stroke, and are more likely to become pregnant than non-smokers who take oral contraceptives (Ministry of Women's Affairs, 1990). Women smokers are 2 to 5 times more likely to develop cervical cancer than non-smokers (Ministry of Women's Affairs, 1990). Pregnant smokers are at greater risk of complications during pregnancy and are more likely to have miscarriages, premature and low birth weight babies (Ministry of Women's Affairs, 1990).

Cigarette smoking also affects smokers mentally. Firstly, tobacco is known to be addictive in the same way as drugs such as heroin and cocaine (USDHHS, 1988). Secondly, the nicotine found in tobacco acts as a stimulant. It attaches to acetylcholine receptors in the brain thus increasing heart rate and arousing parts of the cerebral cortex (Kalat, 1992). Thirdly, as previously stated, many female smokers smoke to combat stress. It is unclear how smoking and nicotine relieve stress but women are more likely than men to be

described as 'negative affect smokers' who smoke in response to emotional discomfort and to reduce tension (Gilchrist, Schinke and Nurius, 1989). Research also suggests that stress does play a role in relapse and maintenance of smoking for women (USDHHS, 1988; Berman & Gritz, 1991). *"I smoke more when I'm stressed out; that's my pacifier"* (Broughton & Lawrence, 1993; p 36).

The spiritual effects of cigarette smoking are more subtle. To isolate the spiritual effects of smoking from a Maori perspective first it is necessary to explore Maori spiritual concepts. One spiritual concept is mana. The concept of mana is extremely important in Maori culture. Mana may be translated to mean power, authority and prestige in English (Barlow, 1991). Mana has various meanings including "the power of the individual" (Barlow, 1991; p 61). Many smokers begin smoking by adopting the habits of a desired peer group and subsequently to maintain or gain power, authority and prestige among their peers. Researchers suggest cigarette smoking may be linked with attempts to create a favourable image amongst their peers such as being mature or sophisticated (Bhatia, Hendricks & Bhatia, 1993). One young person is reported as stating, *"I smoked I guess, to be accepted by the others."* (Broughton & Lawrence, 1993; p 31).

Ihi refers to "the vitality or total personality of a person" (Barlow, 1991; p 31). Ihi may be understood in English as "the power of living things to develop and grow to their full maturity and state of excellence" (Barlow, 1991; p 31). Cigarette smoking effects an individual's ihi by reducing vitality through addiction and through the various physical effects cigarette smoking has on an individual's

health.

Cigarette smoking is both affected by and has an effect on families and friends. In groups where smoking has become 'the norm' members report there is strong social pressure for them to smoke (Ministry of Women's Affairs, 1990). Several studies have found the best predictors of children smoking to be parents, peers and siblings smoking behaviour (McInman & Grove, 1991; Quine & Stephenson, 1990; Nye, Haye, McKenzie-Pollock, Caughley & Housham, 1980). For international research to be applied to Maori it must be noted that in Maori family life extended family members have the same status as nuclear family members. In particular, cousins are regarded in the same way as siblings in a Western nuclear family.

Too little previous research into cigarette smoking discusses the spiritual effects of smoking to provide sufficient information in this area. Consequently, the spiritual effects of smoking will not be given great consideration in this research, although they are recognised as being important. The mental effects of cigarette smoking which are also important aspects of cigarette smoking will be mentioned through out this report. However, the focus of this report will be the social and physical effects of cigarette smoking. The physical effects of cigarette smoking have been the focus of much previous research. The social effects of smoking have also been the focus of previous research. In previous research, the social and physical effects of cigarette smoking have typically been investigated individually. This report attempts to investigate some social and physical aspects of cigarette smoking together.

CONCLUSION

Cigarette smoking is a dangerous phenomenon which impacts on every dimension of a smoker's life. Cigarette smoking is capable of affecting a smoker socially, physically, mentally and spiritually. The social and physical effects of smoking will be the focus of this study.

CHAPTER 2 REVIEW OF THE LITERATURE

2.1 THE NEW ZEALAND STATISTICS

In 1992, 30 percent of young people aged 15 to 24 years and 37 percent of 20 to 24 year old adults smoked cigarettes. 41 percent of women in this age group smoked. The smoking rates among women aged 25 to 34 showed no decrease between 1983 and 1992 (OTR Spectrum Research, 1993; cited in Public Health Commission, 1994) and the Ministry of Women's Affairs (1990) notes the number of young girls in New Zealand who are taking up smoking is increasing as other groups are giving up. New Zealand appears to be following the same trends as other Western countries with vigour; while men have been giving up smoking since the 1950's, women's tobacco use has increased over the same time frame (Royal College of Physicians, 1983).

The effect of smoking cigarettes on smokers' health is well documented. In 1979, the United States Department of Health, Education and Welfare noted more than 30 000 studies linking cigarette smoking to increased morbidity and mortality due to cardiovascular diseases, various forms of cancer and chronic lung diseases (USDHEW, 1979). Last year, the New Zealand Public Health Commission released a report to the minister of health advising on tobacco products. The Commission states in its report:

"Tobacco smoking shortens the lives of smokers and is:

- *a cause of increased lifetime risk of chronic bronchitis and emphysema, and cancer of the lung*
- *a cause of shortened life due to premature heart attacks*
- *a cause of strokes; a cause of arterial disease causing a reduced blood supply to legs and feet (causing gangrene); a cause of cancer*

of the lip, tongue, throat, larynx and gullet

- *a contributing factor for cancer of the bladder, pancreas, and (possibly) kidney*
- *associated with SIDS and aortic aneurysm*
- *responsible in the United States for 40 to 50 percent of smokers dying early from smoking"* (Public Health Commission, 1994; p 8).

Smoking of tobacco is the chief cause of preventable early death in New Zealand. Smoking of cigarettes is estimated to be a cause of 16 percent of all deaths in New Zealand (Adams, Paulin & George, 1992). This equates to over 4 000 deaths a year (Gray, Reinken & Laugesen, 1988). Cigarette smoking has been identified as a contributing factor in half of all SIDS deaths in New Zealand. Smokers in this country are at extra risk of premature death from heart disease and, along with all New Zealanders, have one of the highest rates of heart disease in the world (Public Health Commission, 1994).

The statistics for cigarette smoking in Maori alone are even more frightening. Tobacco use by Maori men has not declined since the 1950's. Maori women who have had high tobacco usage for most of this century are increasing smoking (Reid & Pouwhare, 1991). Approximately 50% of all Maori smoke as opposed to 25% of non-Maori (Public Health Commission, 1994). Uptake of cigarette smoking by Maori is among the highest in the world (Reid & Pouwhare, 1991). Today, 70% of all Maori women aged between 20 and 24 years smoke cigarettes (Broughton & Lawrence, 1993).

"It is a sad sight today to see some Maori women wearing a cigarette lighter attached to a ponamu or bone carving worn about the neck, or encased within a beautifully woven taniko holder. For young Maori

women it has almost become a "cultural norm" to smoke" (Reid, 1990; cited in Broughton & Lawrence, 1993; p 11).

The New Zealand Health Department first issued a warning to smokers about the risks of lung cancer in 1950. Nevertheless, lung cancer incidence rates in Maori women and men remain the highest recorded in the world for women and men respectively (International Agency for Research on Cancer, 1993; cited in Public Health Commission, 1994). The absence of any decline in the high percentage of older Maori women who smoked in the 1980's means it is likely that the rate of Maori women to die from lung cancer will not decline in the 1990's (Sheerin & Laugesen, 1991). Also, two thirds of pregnant Maori women smoke (Plunket Society, 1992).

Cigarette smoking has severe ramifications on the health of Maori women. Life expectancy at birth is 8.5 years shorter for Maori females compared with non-Maori females and between the ages of 25 and 64 total death rates for Maori women are twice that of non-Maori women due at least in part to the health effects of cigarette smoking (Ministry of Women's Affairs, 1990). Cancer is the leading cause of death in both Maori and non-Maori women between the ages of 25 and 64. Maori women have higher rates of cancer of the lung, cervix and stomach (Ministry of Women's Affairs, 1990). Respiratory diseases cause two to three times more deaths in Maori people of all ages. The SIDS rate for Maori infants is on average almost twice that of non-Maori infants and is the main cause of infant death among Maori (Ministry of Women's Affairs, 1990).

"There is a clear link between our (Maori) patterns of tobacco use and our (Maori) increased sickness and death rates. In the 1990's, the evidence against tobacco is overwhelming. It kills everything we (Maori) value. It kills our kaumatua and kuia. It kills, injures and stunts the development of our children" (Reid & Pouwhare, 1991, p 30).

CONCLUSION

The health effects from cigarette smoking are devastating. Cigarette smoking leads to many of the most harmful diseases of our time, heart disease, cancer and SIDS. Maori women smoke the most tobacco and endure the worst health consequences.

2.2 THE ROLE OF EDUCATION

Acquisition and increase of knowledge are believed to be the first important step in the process of behaviour change (Farquar, Maccoby & Solomon, 1984). Much money and time is invested in educating young people about the dangers associated with cigarette smoking in the hope of preventing them from starting or encouraging them to stop smoking. However, it is possible young people may receive mixed messages.

"Even the best health education will not counteract the social imperative to smoke for many children. They grow up in a country (New Zealand) where cigarettes are cheap, there are many adult models and smoking is permitted in many public places" (Nye et al, 1980; p 434).

Education is the only weapon available in the war against tobacco. It is hoped individuals may form anti-smoking attitudes based on information presented in education programmes which will

discourage them from starting and maintaining smoking. To be effective, anti-smoking education needs to begin with young children, primary school age or earlier (Oei, Brasch & Silva, 1984). Education must commence before smoking behaviour is established (Oei & Burton, 1990). Anti-smoking education is introduced as part of the Third form syllabus in New Zealand high schools. It consists of a four to five week programme aimed at teaching pupils the health consequences associated with smoking.

In the past, anti-smoking campaigns have attempted to reduce or prevent smoking by informing individuals of the health effects associated with smoking or by trying to encourage individuals to adopt negative attitudes toward smoking. However, research suggests that for anti-smoking campaigns to be successful, they must consist of more than merely the transfer of facts (Ockene, 1992).

While most anti-smoking campaigns now go beyond the simple transfer of facts emphasising the health effects associated with smoking, many campaigns are still inadequate because they are not personally relevant to their target audience. Education should occur in such a way that it is personally relevant to the individual and his or her situation if it is to bring about attitudinal or behavioural change to benefit the individual's health (Ockene, 1992). For example, social influences which encourage smoking can vary according to the environment. In an American study, black adolescents who smoked were found to be more likely to come from households with two or more smokers than whites or Hispanics, but white and Hispanic adolescents were more likely to have close friends

who smoked. Asians were less likely to have family members or friends who smoked. Therefore, a programme designed for black adolescents could place greater emphasis on resisting family influences or include a parental cessation programme as part of the prevention campaign (Kopeke, Flay and Johnson, 1990).

Research suggests that for anti-smoking education to be most effective, different campaigns must be designed to address issues relevant to different cultures and the two sexes. Many campaigns fail to address the concerns of adolescent women that accompany their patterns of maturation (Gilchrist et al, 1989). Maori, lower socio-economic status girls are at the highest risk of smoking. Materials developed for lower socio-economic status groups, Maori and each sex individually are not readily available.

CONCLUSION

For education to be effective in the prevention of cigarette smoking, it must begin early in life before the practice of smoking becomes established. To be successful, education programmes must also be personally relevant to bring about attitudinal or behavioural change. Education programmes must consider more than just the transfer of facts as programmes which have focussed on facts have not been successful. Anti-smoking education in New Zealand typically begins at an early age however, it is most often designed to target all school age children regardless of their different age groups, cultures and gender. Education must also be modified to ensure it is relevant to the individual's sex, culture and socio-economic status.

2.3 CONTENT OF CURRENT ANTI-SMOKING PROGRAMMES: KNOWLEDGE OF THE HEALTH EFFECTS OF SMOKING

The effect of smoking cigarettes on smokers' health is well researched and well documented. Sponsored research continues to determine the health consequences associated with cigarette smoking. In 1979, the United States Department of Health, Education and Welfare noted more than 30 000 studies linking cigarette smoking to increased morbidity and mortality due to cardiovascular diseases, various forms of cancer and chronic lung diseases (USDHEW, 1979).

Most anti-smoking education programmes attempt to discourage individuals from starting and maintaining smoking by educating them of the health consequences of smoking. It is hoped that knowledge of the health consequences of smoking will lead to the formation of negative attitudes toward smoking and changes in smoking behaviour. Unfortunately, the theoretical relationship between knowledge, formation of attitudes and behaviour change in this area has never been fully investigated. In fact, recent research indicates that people are aware of the health consequences of smoking, yet do not possess negative attitudes toward smoking and do not manifest a change in their smoking behaviour. Despite the fact that educating individuals of the health consequences of smoking is not an effective way of discouraging individuals from starting or maintaining smoking, millions of dollars continues to be spent each year on educating the public of the health risks associated with cigarette smoking.

Klesges et al (1988) reported smokers' knowledge of the health effects of smoking was only marginally less than that of non-smokers. They

also note that knowledge of certain health effects such as lung cancer are better recognised as health effects associated with smoking than other effects such as heart disease. Similarly, in New Zealand, Oei, Brasch and Silva (1984) report children most frequently associate smoking with cancer, harmful effects on the lungs and death. These researchers, along with other New Zealand researchers, Stanton et al (1989) and Ritchie (1988) note that the children in their study, like the participants in Klesges et al (1988) study, are not as aware of heart disease as a health effect of smoking as they are of lung cancer. However, Oei et al (1984) add, *"further health education programmes emphasising the effects of cigarettes on health would probably not add a great deal to children's knowledge and would possibly not be very effective"* (Oei et al, 1984; p 530).

They also conclude from their study that while the children in their study were aware of the health effects of cigarette smoking, this information did not come from their parents. Oei et al (1984) suggest parents should be recruited as health educators.

Research is necessary to explore the relationship between education, attitude formation and behaviour change. Many current education programmes are targeted toward educating individuals of the health consequences of smoking even though research has concluded that this anti-smoking education is ineffective. Before attempting to prevent smoking it is crucial that the process by which an individual becomes a smoker is determined. Research is necessary to investigate the process of initiation and maintenance of cigarette smoking to determine the focus of more effective future anti-smoking education programmes.

CONCLUSION

Some of the health effects of smoking, particularly lung cancer are better recognised by smokers, non-smokers and children as being a health effect of smoking than other effects, such as heart disease. However, smokers', non-smokers' and children's general knowledge of the health effects associated with smoking appears to be reasonably comprehensive and accurate. Consequently, it is doubtful whether anything would be gained by further education in the field of the health effects of smoking. Research is necessary to investigate the processes of initiation and maintenance of cigarette smoking so more effective anti-smoking programmes may be developed.

2.4 CONTENT OF CURRENT ANTI-SMOKING PROGRAMMES: ATTITUDES ASSOCIATED WITH CIGARETTE SMOKING

Attitudes may be viewed as an individual's intrinsic representation of extrinsic influences. An individual's attitude may be viewed as,

"mediating the broad range of cultural, social, economic and political forces which potentially impel or restrain smoking behaviours" (Beckwith, 1987; p 146).

Attitudes are believed to be founded on a combination of information available to an individual from various influences in their life. Beckwith (1987) states that socialisation experiences, mass media and personal experience would be processed and integrated by an individual eventually manifesting in the form of attitudes. Beckwith (1987) also mentions attitudes may be formed and reformed over time.

Research has suggested that children's attitudes and beliefs about smoking are established well before high school age (Bhatia, et al 1993; Beaglehole, Eyles & Harding, 1978) and that high school years have little or no influence on attitudes toward cigarette smoking (Newman, Martin & Irwin, 1973). There is no definite link between attitudes toward smoking and smoking behaviour. In fact, the relationship between attitudes toward smoking and smoking behaviour has never been fully investigated. However, there appears to be some consistency between children's attitudes toward smoking and their actual smoking behaviour. While most children have been found to describe a negative image of smokers, children who have previously experimented with cigarettes have been found to have a marginally more favourable attitude toward smoking than their peers who have never tried smoking (Bowen, Dahl, Mann & Peterson, 1991; Oei & Burton, 1990). More research is necessary in this area to fully explore the relationship between attitudes toward smoking and smoking behaviour.

At present there are anti-smoking programmes operating which attempt to change individuals' potentially positive attitudes toward smoking. An example of such a programme which is currently operating in New Zealand is the 'Smokefree' campaign which includes sport and rock concert sponsorship and a television programme targeted at young people, 'Lifespan Smokefree'. There are three reasons why research is necessary to evaluate the effectiveness of education programmes such as 'Smokefree'. Firstly, the relationship between attitudes toward smoking and smoking behaviour has not been conclusively determined. Secondly, research suggests

children's attitudes toward smoking are formed before high school and thirdly, research has determined children's attitudes toward smoking change little over time. If effective anti-smoking programmes are to be developed research is also necessary to determine exactly how an individual begins and maintains smoking.

CONCLUSION

The relationship between attitudes toward smoking and smoking behaviour are unclear. Children's attitudes toward cigarette smoking are formed before high school, and change little over time. Most children possess some degree of a negative attitude toward smoking. The effectiveness of programmes which aim to change young people's apparent positive attitude toward smoking, such as New Zealand's 'Smokefree' programme are, therefore, of questionable value. It is necessary to investigate the process by which an individual becomes a smoker before effective anti-smoking programmes may be developed.

2.5 INITIATION TO CIGARETTE SMOKING

Approximately 6% of the children in Stanton et al's (1989) New Zealand study reported having their initial experience of smoking before five years of age. By nine years of age, 36% of children in this study had tried smoking on at least one occasion. By eleven years, 52% had tried smoking at least once, by thirteen years this number had increased to 68%, until by fifteen years old, 80% of the sample in this study had tried smoking at least once. It is worth mentioning that it has been illegal to sell cigarettes to children under sixteen in this country since the introduction of the 'Smokefree Environments Act' 1990. American research indicates the age of initiation into

smoking has fallen in recent years, particularly in females (Koop, 1989; cited in Bhatia et al, 1993). However, little information is available on the nature and specifics of the smoking onset process in children, particularly girls (Bowen et al, 1991).

There appears to be a relationship between initiation into cigarette smoking and social factors. Both peer group and family are two powerful predictors of cigarette smoking. Parents, teachers, siblings, peers and significant others exert control, provide reinforcement and act as models to young people (Bush & Iannotti, 1985; cited in Quine & Stephenson, 1990). Debate exists as to whether peers or family members have a larger effect on the individual leading him or her into experimenting with cigarettes.

Peer influence operates through the individual who adopts the standards of a subculture to gain or maintain social approval. Tobacco is often experimented with in a social setting, not in isolation. The subculture may endorse its use and make it more available thus encouraging smoking (Quine & Stephenson, 1990). Researchers have found strong links between peers' smoking and individual's habits (Conrad, Flay & Hill. 1992). A New Zealand study found 14 and 15 year old adolescents' smoking habits also to be related to their peers' smoking habits rather than their parents' (Nye et al, 1980). Kopeke et al (1990) note in their literature review of smoking in ethnic minority group families, that most studies report a relation between peer smoking and cigarette smoking across all ethnic groups. Dielman, Campanelli, Shope and Buchart (1987) report substance use, including cigarette smoking, to be highly correlated with peer pressure.

The whanau, which consists of not only immediate family but also extended family and friends, is recognised in Maori society as the most important influence on an individual's life. The whanau is similar to the Western concept of an extended family in that family members such as cousins have the same status as siblings. Family members' smoking habits have been reported to have an effect on individuals' smoking habits. An American study reports that an adolescent girl is five times as likely to smoke if one or both parents or an older sibling smokes in the household (National Institute of Education, 1979; cited in Berman & Gritz, 1991). Australian researchers Oei and Burton (1990) report "the effects of parental smoking habits and attitudes on the subject's decision to smoke were considered and seen to be significant" (Oei & Burton, 1990, p 43). American researchers note initiation to cigarettes (not necessarily actually smoking) occurs during preadolescence when family factors are likely to exert a strong influence on the individual (Catalano et al, 1992).

Other researchers have found younger individuals' smoking habits to be related to parents' smoking habits (Oei & Burton, 1990), or related to both parental smoking habits and peer group smoking habits (Quine & Stephenson, 1990). Another New Zealand study found the number of sources of exposure to smoking from a parent, siblings and friends had a cumulative effect on adolescents' smoking behaviour. Those who never smoked tended not to be in contact with smokers while occasional and daily adolescent smokers tended to be in contact with two or more groups of smokers (Stanton et al, 1989). Although this study was conducted in New Zealand, it took place in

Dunedin and its authors warn it may be unrepresentative of Maori adolescents as fewer Maori live in the South Island.

Nye et al (1980) reported that children are most likely to try smoking due to curiosity. Stanton et al (1989) also reported children may try smoking because they are curious. Other researchers suggest cigarette smoking may be a method of asserting maturity since cigarette smoking is accepted as an adult rather than a child behaviour in our society (Bhatia et al, 1993). This finding may be related to the Maori concept of mana or power, authority and prestige (Barlow, 1991). Smoking cigarettes may assist the individual in creating a favourable social image. Stanton et al (1989) concluded girls were significantly more likely to smoke if they had reported delinquent behaviour by 13 years of age. This suggests there is a link between cigarette smoking and rebellious behaviour.

Research also suggests that the first time an individual experiments with cigarettes may not be positive "the difficult, often nauseating, first puff" (Reid, 1993, p 2). Children in Stanton et al's (1989) study reported they tried smoking mainly out of curiosity and frequently described the experience as unpleasant. How then, does cigarette smoking become a habit for so many?

Further research is needed in the area of initiation into smoking. Researchers recognise the need for a clear understanding of the process of initiation (Berman & Gritz, 1991; Stanton et al, 1989). There is a lack of theoretical research in the area of initiation, no successful models of the initiation process have been developed. Research into the initiation process should be focused on the young

who have not yet begun to smoke regularly. There is also a need for research into the initiation process with those most at risk of becoming smokers, that is, females, Maori, those with lower socio-economic status and those with friends and family who smoke.

CONCLUSION

It may be concluded from the research available that initiation into smoking happens at a young age. Previous research suggests initiation is moderated by a number of factors. Social factors such as peer and family influence play a role in an individual's initiation into cigarettes, along with other factors such as experimentation, rebelliousness and an attempt to assert maturity. However, most of the research available in this area has been conducted overseas. Internationally, and in New Zealand, there is a lack of research into the process of initiation into smoking in children, particularly girls. In New Zealand there is no previous research which has investigated the process of initiation into smoking in young women in general or in young Maori women specifically.

2.6 MAINTENANCE OF CIGARETTE SMOKING

Research with young smokers suggests the peak age for beginning regular consumption of cigarettes, alcohol and other substances is thirteen years of age and girls are more likely to start smoking than boys. (Lalinec-Michaud, Subak, Ghadirian & Kovess, 1991). Most young smokers while they dislike aspects of smoking and do not become addicted to nicotine are nevertheless likely to continue smoking (Nye et al, 1980). Children who experiment with cigarettes even though they do not enjoy the experience are more likely to want to smoke in the future than children who have not tried smoking (Oei

& Burton, 1990; Oei et al, 1984; van Roosmalen & McDaniel, 1992).

It is often assumed that smoking is continued primarily because of addiction to nicotine. However, researchers agree that maintenance of cigarette smoking is more complicated than addiction. Chassin, Presson, Sherman and Edwards (1991) note in a simple addiction model variables such as number of family members and peers who smoke would predict initiation to smoking. Smoking would then become a habitual or addictive behaviour. However, adolescent changes in smoking status over time makes long term smoking status difficult to predict. This suggests there are undetermined factors besides addiction which play a role in the maintenance of cigarette smoking.

Social environment appears to play a role in determining whether an individual will continue to smoke. Nye et al (1984) determined children are likely to take up regular smoking to appear tough and conform with the social habits of their peers. An individual with smoking friends is seven times more likely to smoke than an individual with no friends who smoke. If none of an individual's friends smoke, the chances that he or she will smoke are less than one in ten (Health & Welfare Canada, 1987; cited in van Roosmalen & McDaniel, 1992).

Van Roosmalen and McDaniel (1992) found that female adolescents are more influenced by the smoking behaviour of both their friends and family than male adolescents. Van Roosmalen and McDaniel (1992) conclude that social environment is a crucial factor in the maintenance of smoking for girls. More opportunities to smoke are

presented by friends and family who smoke. Smoking is the 'norm' among Maori women (Reid, 1991; cited in Broughton & Lawrence, 1993).

"It may be that the social context of smoking for women makes it easier for them to start smoking and more difficult for them to quit" (van Roosmalen & McDaniel, 1992; p 99).

Social environment has an effect on both initiation and maintenance of cigarette smoking. Research has not been conducted to determine whether social environment acts on maintenance in the same way as it acts on initiation into cigarette smoking. However, maintenance of cigarette smoking appears to be more complex than initiation into cigarette smoking.

There are other factors which may play a role in an individual's decision to maintain smoking. Conclusions from the Horn-Waingrow Smoking Survey (Ikard, Green & Horn, 1969) suggests there are six non-social factors which play a role in an individual's smoking behaviour. These six factors are reduction of negative affect or stress, addiction, habit, stimulation, pleasure and sensorimotor manipulation or having something to do with one's hands. In a more recent investigation it was determined women are motivated to smoke for pleasure and to reduce stress as previously stated (Livson & Leino, 1988). These factors make cessation particularly difficult for women as attempting to quit smoking in itself is a stressful situation and it is difficult to give up something which is pleasurable. Women's fear of weight gain is another reason cessation may be difficult for women (Berman & Gritz, 1991).

Further research into the process of maintenance of cigarette smoking is needed. Theoretical research identifying the process of smoking from initiation to maintenance of cigarette smoking is also needed. This research should be focused on those at who are most likely to become smokers, the poor, females, Maori and those with friends and family who smoke.

CONCLUSION

There is a significant lack of research in the area of maintenance of cigarette smoking in women and more specifically in young Maori women. International research would indicate a young woman is likely to maintain smoking after her initial experience with cigarettes even though she does not enjoy it. According to the research, she may initially continue to smoke not because she is addicted to nicotine, but because social factors, such as friends and family who smoke, make it difficult for her to stop. Later, she may continue to smoke because it has become a habit, she has become addicted, she finds it stimulating or because it gives her something to do with her hands. However, if the research available may be applied to a young Maori woman, then she is more likely to smoke because she has come to enjoy it and finds it helps her cope with stress. These last two factors along with fear of weight gain may make smoking very difficult for her to quit.

CHAPTER 3 RATIONALE AND AIMS OF THIS STUDY

3.1 SUMMARY OF RECOMMENDATIONS FROM PAST RESEARCH

Past research has identified several areas related to cigarette smoking in which further research is needed. Firstly, an understanding of the processes that contribute to the maintenance of cigarette smoking is needed. A better understanding of how and why an individual starts smoking, keeps smoking and finds quitting smoking difficult is needed (Berman & Gritz, 1991; Stanton et al, 1989).

"Despite the known health risks of smoking, the processes of initiation, maintenance and extinction of the behaviour are not yet well understood" (Stanton et al, 1989; p 1).

There is a significant lack of theoretical research in the areas of initiation and maintenance of cigarette smoking. No models of the maintenance process of cigarette smoking from the initiation stage have been developed. Some theories from other topics, such as theories of stress and peer pressure, have been applied to the initiation and maintenance of cigarette smoking. However, there is no unification of ideas which primarily focuses on cigarette smoking.

Secondly, there is a significant lack of practical research in this area using participants from relevant age groups. There is a need for research which focuses on those who are about to try smoking, or make the decision to become a regular smoker. Shaw et al (1991) note that previous research in New Zealand has generally been focused on the prevalence of smoking in adults. Quine and Stephenson (1990) also note that the majority of research investigating cigarette smoking in young people has focused on older adolescents for whom smoking prevalence is already high. There is

clearly a need for age specific research investigating the relationship between cigarette smoking and young people before they try smoking and before they become regular smokers.

Thirdly, research on cigarette smoking needs to be focused on those individuals and groups most at risk of becoming smokers. It is possible to identify at risk individuals and groups from previous research. Those who are poor (Hawkes, 1994), have a lower level of knowledge (Klesges et al, 1988), and those whose friends and family smoke (van Roosmalen & McDaniel, 1992) are most likely to try and to maintain smoking. In New Zealand it is known that girls are more likely to smoke than boys and Maori women are most likely to smoke than any other group of people (Ministry of Women's Affairs, 1990).

Fourthly, it has become evident from past research that boys and girls begin smoking for different reasons. It has also become evident that men and women maintain smoking for different reasons (Berman & Gritz, 1991). Therefore,
"further research should look at smoking status and intentions for the sexes separately" (McInman & Grove, 1991; p 195).

Finally, non-smokers are almost always excluded from research into cigarette smoking. However, it seems that by excluding non-smokers from research into smoking, much valuable information must be lost. It is as relevant to identify why an individual chooses not to try or not to maintain smoking as it is to identify why another individual chooses to try and to maintain smoking. Differences between smokers and non-smokers need to be identified and investigated in greater depth (Klesges et al, 1988).

CONCLUSION

An understanding of the processes of initiation, maintenance, cessation and relapse of cigarette smoking is necessary. Development of accurate theoretical models of the initiation and maintenance process is needed. Age relevant and gender specific research is needed. Research on cigarette smoking should be focused on individuals and groups at risk of trying and maintaining smoking and should not exclude non-smokers who may also provide valuable information.

3.2 AIMS AND HYPOTHESES OF THIS STUDY

This study is exploratory in nature. The study has four specific aims and is comprised of two parts. The first part has two specific aims, they are:

1. To identify and compare young Maori female smokers and non-smokers knowledge of the health effects of cigarette smoking.

It is hypothesised that both smokers and non-smokers will have adequate knowledge of the health effects of smoking thereby confirming the application of previous international research findings to young Maori women. The findings of international research have confirmed that individuals have adequate knowledge of the health consequences associated with smoking but continue to smoke. This hypothesis, if correct, will also further question the effectiveness of anti-smoking campaigns which attempt to dissuade individuals from smoking by informing them of the health effects of smoking.

2. To identify and compare young Maori female smokers and non-smokers attitudes toward cigarette smoking.

It is hypothesised that both smokers and non-smokers will possess some degree of negative attitude toward cigarette smoking. If supported, this hypothesis may also serve to confirm the application of previous international research findings in this area, and allow its application to young Maori women. International researchers have found that attitudes toward smoking are, negative, are formed early in life and change little over time. Also, if this hypothesis is correct, it will question the effectiveness of anti-smoking campaigns, which attempt to alter individuals' apparent positive attitudes toward cigarette smoking.

3. To explore young Maori female smokers' and non-smokers' thoughts, feelings and experiences of cigarette smoking with a particular focus on the initiation into cigarette smoking.

The aim of this section is to investigate a previously under investigated area in the research of cigarette smoking: the process of initiation or how a non-smoker begins to experiment with cigarettes.

4. To explore young Maori female smokers' and non-smokers' thoughts, feelings and experiences of cigarette smoking with a particular focus on the maintenance of cigarette smoking.

This area of the research also aims at investigating a previously under investigated area in the research of cigarette smoking: the maintenance of cigarette smoking or how an individual who experiments with cigarettes becomes a smoker.

3.3 METHODOLOGY RATIONALE

Previous research on cigarette smoking has typically favoured quantitative methodology. Both New Zealand and international past

research in the area of cigarette smoking has typically operated from within a quantitative methodological framework. Quantitative methodology is the most accurate way of determining the norms of a large sample on any chosen factor. However, researchers using quantitative methodology have chosen factors which they feel play a role in cigarette smoking and only these factors have been investigated. Quantitative methodology is by its nature confirmatory. It is only capable of confirming or disconfirming what the researcher has deemed as appropriate to be included in their research. What the researcher includes in his or her quantitative study is typically governed by past research. This is a strength of quantitative research. It allows the detailed investigation of some important factors pertaining to the subject being researched. However, the fact that previous quantitative research governs future quantitative research is also a limitation. It is possible that important factors which have been excluded or over looked by previous quantitative research can continue to be over looked or excluded from future research. Most research into cigarette smoking has employed a quantitative approach.

This study takes a different perspective. A combination of both quantitative questionnaire and qualitative semi-structured interview research has been employed. Quantitative and qualitative methodologies have two quite different functions which may be used effectively within the same study.

"It is important to understand that the interpretive explanation of qualitative analysis does not yield knowledge in the same sense as quantitative explanation. The emphasis is on illumination, understanding, and extrapolation rather than causal determination,

prediction and generalization" (Patton, 1990; p 424).

The use of both quantitative and qualitative methodology allows for a more thorough investigation into young Maori women's knowledge, attitudes, thoughts, feelings, experiences, initiation and maintenance of cigarette smoking. The use of a quantitative methodology in the first section of this study allows the specific isolated investigation of two factors most often investigated in research into smoking; knowledge of the health consequences and attitudes associated with smoking. This investigation is possible because previous quantitative research has governed more recent quantitative research. Enough information in the areas of knowledge and attitudes toward cigarette smoking is currently available to enable the formation of hypotheses and the isolated investigation of young Maori women's knowledge and attitudes toward cigarette smoking.

A questionnaire was developed from previous research (Bhatia et al, 1993; Klesges et al, 1988) to specifically assess participants' knowledge of the health effects of smoking and participants' attitudes toward cigarette smoking. As previously stated, these are two of the most frequently investigated factors in the area of research into cigarette smoking. They are also the two factors which are commonly targeted in education and prevention programmes aimed toward preventing and eliminating cigarette smoking. It is hoped that by assessing young Maori women's knowledge of the health effects of smoking and attitudes toward cigarette smoking the impact of these factors on cigarette smoking might be gauged.

The qualitative methodology used in the second part of this study makes few restrictions on which factors are investigated in the areas

of initiation and maintenance of cigarette smoking. It is hoped that the use of this qualitative methodology will allow participants to govern what was relevant in their initiation and maintenance experiences and consequently, what is worthy of investigation.

An exploratory approach is taken in the qualitative section of this study. As stated, most previous research into smoking has utilised a quantitative methodology. Consequently, some areas of cigarette smoking have been investigated in less detail than other areas. The processes of initiation and maintenance of cigarette smoking have been under investigated. An exploratory approach which may allow participants to more freely explore research topics than a quantitative approach is taken to investigate these topics. A semi-structured interview was developed to explore young Maori women's thoughts, feelings and experiences of cigarette smoking with reference to the initiation and maintenance of cigarette smoking. Qualitative research methods are particularly appropriate for exploratory research (Seidman, 1991; Patton, 1990; Robson & Foster, 1989; Bogdan & Taylor, 1975). The semi-structured interview allowed participants the opportunity to identify for themselves which factors played a role in their decisions to smoke or not to smoke cigarettes.

3.4 CONTRIBUTION OF THIS RESEARCH

This research attempts to satisfy some recommendations made by authors of past research. By its design it is hoped a greater understanding of how young Maori women become initiated to cigarette smoking and how they come to maintain smoking will be gained. This research is gender specific. It is also focused on a specific age group who are currently experiencing what is being

investigated. This research is centred on a group who are more at risk of trying and maintaining cigarette smoking than any other group in this country. Importantly, this research does not exclude non-smokers who are almost always excluded from research on smoking, but who also have relevant information to contribute.

One goal of this research is to evaluate the applications of current international research findings in the area of cigarette smoking. As previously mentioned, most anti-smoking programmes are aimed at teaching individuals the health consequences associated with smoking cigarettes. Other programmes assume individuals at risk of smoking and current smokers have positive attitudes toward smoking. These programmes try to dissuade individuals from smoking by attempting to change their assumed positive attitudes. Findings from recent international research suggest that individuals are aware of the health effects of smoking and already hold less than positive attitudes about smoking cigarettes (Bhatia et al, 1993; Oei & Burton, 1990; Klesges et al, 1988). If the findings from these international studies are replicated by this research, the assumptions from which such anti-smoking programmes operate and validity of such programmes must be questioned.

CHAPTER 4 QUANTITATIVE AND QUALITATIVE METHODOLOGIES

4.1 ETHICAL ISSUES

There are a number of ethical issues which must be considered when conducting research with members of a particular ethnic group. Firstly, qualitative methodology is often a more appropriate form of investigation to use with different cultural groups. Quantitative research allows the researcher to test hypotheses but does not give explanations for the outcomes. Explanations for the outcomes of quantitative research must be inferred by the researcher who may be from a different culture. Qualitative research methods encourage exploration and may more easily provide explanations for issues of concern or allow insight into previously under investigated areas where insufficient information is available to make informed hypotheses.

In this study, qualitative methodology was utilised to explore issues without first hypothesising what those issues may be. Qualitative methodology is more appropriate because it does not attempt to impose the ideas from one culture (Western psychology) on another culture (young Maori women) by forming hypotheses based on previous research with other cultural groups. Also, qualitative research empowers participants by not imposing answers to research questions, and allowing participants to decide on the answer for themselves. This creates a more equal relationship between participant and researcher.

Secondly, quantitative methodology must be used with caution,

"I believe the forced-choice or checklist questionnaire is not appropriate

to investigate many social issues, especially with young people and ethnocultural minorities" (Oliver, 1993; p 45).

Quantitative methodology was deliberately used in this study to impose hypotheses from the culture of Western psychology on young Maori women. The hypotheses used in the quantitative section of this research are constantly imposed on people from many different cultures, including young Maori women. Education and prevention programmes assume that smokers and non-smokers have differing attitudes and knowledge of smoking effects. These hypotheses are often the focus of research into cigarette smoking and are the basis for most anti-smoking campaigns even though there is evidence they are inappropriate. The questionnaire in this research was developed to check the application of those assumptions to young Maori women.

Another criticism with quantitative methodology is that it is often impersonal and that the power relationship between researcher and participant is unequal. This is particularly the case when working with oppressed cultures. Maori culture is recognised as being oppressed, therefore, steps were taken to avoid an unequal relationship between researcher and participants. The questionnaire was handed out personally by the researcher instead of being mailed out. Also, the school is acquainted with the researcher who lives in the area. All of these factors combined to create a more equal relationship between the researcher and participants.

The third ethical issue to be addressed when conducting research with different cultural groups is the issue of data ownership,

"Maori psychology sees people's knowledge and ideas as taonga, or treasures, which belong to the people and must not be removed or handed on to others without express approval" (Oliver, 1993; p 46).

Some Maori researchers argue research data is owned not only by participants, but also by their referrant groups. These may include whanau, hapu or iwi. Both parental (or guardian) and participant consent forms were distributed and signed before questionnaires were completed and before interviewing took place (see Appendices i & ii). Participants' rights were explained and questions were answered before the research took place.

Ethical approval for this study was sought and obtained from the Massey University Ethics Committee. Approval for the study was also sought and gained from St Joseph's College school Board of Trustees and from the school Principal. Informed consent was sought from parents or guardians of participants and from the participants themselves. Participants were accorded certain rights as specified by the Massey University Ethics Committee. Participants had the right to:

- refuse to answer any question, and to withdraw from the study at any time
- ask any further questions about the study that may occur during participation in the study
- provide information on the understanding that it is completely confidential to the researcher and her supervisor. Special care was taken to ensure the status of smokers was kept private as smoking is not permitted at St Joseph's College. All names were removed from questionnaires and replaced with a code number.

- be given access to a summary of the findings.

QUANTITATIVE METHODOLOGY

4.2 QUANTITATIVE SAMPLE

Sixty seven third and fourth form students from St Joseph's Maori Girls' College in Napier participated in this research by completing the questionnaire. Participants were volunteers and were approached during their study period, after school hours. As St Joseph's College is a boarding school, participants came from different areas of New Zealand, providing an adequate sample of young Maori women living in New Zealand.

INFORMED CONSENT

Informed consent and permission from parents or guardians of participants who took part in the research by filling out the questionnaire was necessary as participants were under the age of 16. This was sought through a school newsletter. Consent was obtained from participants prior to completion of the questionnaire (see Appendix i).

4.3 QUANTITATIVE MEASURE: QUESTIONNAIRE

A questionnaire was developed for this research. The instrument was based on Stacy, Bentler & Flay's (1994) cigarette smoking section of their attitudes and health behaviour questionnaire and the section of Klesges et al's (1988) Smoking Attitudes Survey which assesses knowledge of the health consequences associated with smoking cigarettes (see Appendix i).

Stacy et al's (1994) attitude measure was designed and successfully used with 11th grade high school students. Its authors describe their measure as being "similar to the ones used in previous studies" (Stacy et al, 1994; p 79). The scale assesses an individual's attitude to smoking through six bipolar adjective items introduced by the statement "Smoking is:" (see Appendix i).

Klesges et al's (1988) Smoking Attitudes Survey assesses an individual's health beliefs and knowledge of the health consequences associated with smoking. An individual's knowledge of ten smoking associated diseases and of five diseases not associated with smoking are compared by this scale. The scale was designed for use over the telephone, and its simplistic nature makes it appropriate for use with a younger sample. Klesges et al's (1988) scale was condensed and altered to include cot death (SIDS) as a smoking related disease. Emphysema was omitted as a smoking related disease at the request of the Massey University Ethics Committee who felt most participants in this study would not know what the condition is.

A further two questions were added to the scales to determine whether participants had tried smoking cigarettes and to determine their current smoking status. This was kept private by asking participants whether they had smoked during August break.

PILOT TEST

A pilot test of the questionnaire was carried out to ascertain whether the adapted scales and consent forms were easy to read, easy to understand and whether the instructions given were clear. Five

individuals who were not included in the study took part in the pilot testing. No changes were necessary to either the questionnaire, the instructions or the consent forms as a result of the pilot testing.

4.4 ADMINISTRATION OF THE QUESTIONNAIRE

The questionnaire was administered to third and fourth formers in September 1994. Participants were approached during their study period after school and were invited to complete the questionnaire. Informed consent was obtained through a consent form attached to the front of the questionnaire (see Appendix i). Participants were also invited to volunteer for the semi-structured interview through another attachment to the questionnaire (see Appendix i). Participants were assured that their responses would be treated as confidential and their names would be detached from the questionnaire prior to data analysis.

4.5 DATA ANALYSIS OF THE QUESTIONNAIRE

Three participants were excluded from the data analysis of the questionnaire as their consent forms were incomplete. Both the personal computer edition of Statistical Package for the Social Sciences (SPSSPC) and the networked edition of SPSSPC were used for the analysis of data from the questionnaire. Questionnaires were separated into two groups on the basis of participants' answers to question 14. Question 14 asked participants if they had smoked during mid-term break. A t-test analysis was then performed to allow comparison of knowledge of the health consequences of smoking and attitudes toward smoking of participants who smoked and participants who did not smoke.

QUALITATIVE METHODOLOGY

4.6 QUALITATIVE SAMPLE

Six volunteers were randomly selected from those who volunteered to be interviewed. Volunteers for the interview were separated into two groups based on their answers to question 14 of the questionnaire (see Appendix i). Three volunteers were randomly selected from those who had not tried smoking or those who had tried smoking and did not like it and three were randomly selected from those who had tried smoking and smoked occasionally.

INFORMED CONSENT

Informed consent and permission was sought from the parents or guardians of participants through a personal letter and gained by a permission slip which was returned before interviewing began (see Appendix ii).

4.7 QUALITATIVE MEASURE: SEMI-STRUCTURED INTERVIEW

The semi-structured interview was designed to explore two main topics; initiation and maintenance of cigarette smoking. The interview schedule was constructed on the basis of areas under investigated in past research (see Chapter 3).

The semi-structured interview was centred around six aims:

- to isolate which groups have an effect at the time of initiation
- to isolate reasons for trying smoking
- to understand the individual's thoughts/ views on smoking
- to understand social explanations for smoking/ not smoking
- to identify the individual's understanding of reasons for smoking/

not smoking

- to identify the individual's perceptions of addiction.

Each section, initiation and maintenance, also had their own overall aim. The aim of the initiation section was to further understand thoughts, feelings and influences at the time of initiation. The aim of the maintenance section was to further understand the participants thoughts/ views on smoking.

Issues which may be relevant to participants' thoughts, feelings and experiences were identified from past research and open-ended sample questions were developed around the aims and these issues. Foddy (1993) notes that open-ended questions are particularly useful for exploratory research because they allow participants to express themselves in their own words and do not suggest answers. It is important to note the questions contained in the semi-structured interview are sample questions only. Participants were free to determine any other issues which may be relevant to their thoughts, feelings or experiences. A full copy of the semi-structured interview schedule is contained in Appendix ii.

Efforts to ensure reliability and validity were made during the interview. This involved ensuring the researcher understood what each participant said by paraphrasing what the participant said and asking the participant for confirmation. This method may help to ensure that the researcher's interpretation of what each participant has to say is valid (Stiles, 1990).

4.8 ADMINISTRATION OF THE SEMI-STRUCTURED INTERVIEW

All interviews took place in a room of the school office block of St Joseph's outside of school hours, during a one hour study period. Permission was obtained from participants for the interviews to be tape recorded. Participants were assured that the tape recordings would be erased after the interview had been transcribed. A copy of the consent form for the semi-structured interview is contained in Appendix ii. Most interviews ranged in length from 25 minutes to 40 minutes. One interview ran for 10 minutes.

4.9 DATA ANALYSIS OF THE SEMI-STRUCTURED INTERVIEW

Interview tapes were transcribed verbatim by the researcher, then erased. Material was read through to gain an understanding of each participants' responses. Cross-case analysis was chosen as the most appropriate method of data analysis. *"Cross-case analysis means grouping together answers from different people to common questions or analysing different perspectives on central issues"* (Patton, 1990; p 376).

Firstly, participants' responses were grouped according to initiation or maintenance. Common themes were then isolated from participants' responses and from the issues identified in past research and specified in the semi-structured interview schedule (see Appendix ii). These common themes were then used to classify participants' statements into categories. Grouping the data in this manner allowed for clearer comparison between participants and previous research.

CHAPTER 5 QUANTITATIVE AND QUALITATIVE RESULTS

QUANTITATIVE RESULTS

5.1 DESCRIPTIVE STATISTICS

A reliability analysis was performed on the questionnaire. Cronbach's alpha was .79 and indicated good internal consistency (Cronbach, 1951). A sample of 64 participants were used in the final analysis. Of the sample used, 34 participants were defined as current smokers and 30 participants were defined as current non-smokers in accordance with their answers to question 14. Age of participants ranged from 13 to 15 years. 39 (61%) of participants volunteered to be interviewed.

5.2 HYPOTHESIS 1

BOTH SMOKERS AND NON-SMOKERS WILL HAVE ADEQUATE KNOWLEDGE OF THE HEALTH EFFECTS OF SMOKING.

Participants' responses to the first half of the questionnaire, the knowledge of the health consequences of smoking, may be defined as more than adequate. Most participants were correct in their knowledge of the health consequences associated with smoking, while others responded over cautiously reporting kidney stones, baldness, arthritis, skin cancer and heart murmurs as being associated with cigarette smoking (see Table 1). Lung cancer was the health consequence most commonly associated with smoking (see Table 1).

TABLE 1: PARTICIPANTS' RESPONSES TO HEALTH CONSEQUENCES RELATED TO SMOKING.

Question	Frequency of Answer		
	Agree	Disagree	Unsure
1. heart disease	54*	NIL	10
2. SIDS	46*	9	9
3. stomach ulcers	20*	4	40
4. heart murmurs	22	NIL*	42
5. kidney stones	15	15*	34
6. arthritis	4	40*	20
7. skin cancer	19	26*	18
8. lung cancer	63*	NIL	1
9. flu	12*	34	16
10. baldness	9	29*	24
11. bronchitis	32*	5	26
12. heart attacks	39*	7	17

*correct answer

The mean scores of the first half of the questionnaire, the knowledge of the health consequences associated with smoking, were calculated for smoking and non-smoking participants (see Table 2). An independent t-test with a corrected level of significance was calculated for the overall mean scores for smokers and non-smokers knowledge of the health effects of smoking (see Table 2). Results indicate there is no significant difference between smoking and non-smoking participants' responses to the knowledge of the health consequences associated with smoking portion of the questionnaire ($t=.61$, $p>.05$, $df=62$). However, further investigation revealed significant differences in smokers and non-smokers answers to questions 2 and 10 (see Table 3).

TABLE 2: KNOWLEDGE OF HEALTH CONSEQUENCES OF SMOKING: T-TEST BETWEEN SMOKING AND NON-SMOKING PARTICIPANTS.

Group	n		sd	*t* value
Smokers	34	1.9166	.309	
Non-smokers	30	1.8694	.309	
				.61

p>.05 df=62

Question 2 asked participants whether they agreed, disagreed or were unsure whether smoking cigarettes is associated with SIDS. 46 (71.9%) participants correctly agreed SIDS is associated with smoking, while 9 (14.1%) were unsure and 9 (14.1%) did not agree that SIDS is associated with smoking. 20 (58.8%) smokers correctly agreed SIDS is associated with smoking compared with 26 (86.6%) non-smokers. 7 (20.5%) smokers and 2 (6%) non-smokers were unsure whether SIDS is associated with smoking. 7 (20.5%) smokers incorrectly disagreed that SIDS is associated with smoking compared with 2 (6%) non-smokers (see Table 4).

Question 10 asked participants whether they agreed, disagreed or were unsure whether smoking is associated with baldness. Two cases were missing from this question, one smoker and one non-smoker. 29 (45.3%) of participants correctly disagreed that baldness is associated with smoking. Of these participants 21 (63.6%) were smokers and 8 (27.6%) were non-smokers. 9 (14.1%) participants erred on the side of caution reporting that baldness is associated with smoking cigarettes, 5 (15.2%) of these participants were smokers and 4 (13.8%) were non-smokers. 24 (37.5%) participants, comprised of 7 (21.2%) smokers and 17 (58.6%) non-smokers remained unsure whether baldness is associated with smoking (see Table 4).

TABLE 3: KNOWLEDGE OF HEALTH CONSEQUENCES OF SMOKING: T-TESTS BETWEEN SMOKING AND NON-SMOKING PARTICIPANTS' RESPONSES.

Question	Group	n	Mean	sd	df	p value	*t* value
1	Smokers	34	1.3529	.774			
	Non-smokers	30	1.2667	.691			
					62	>.05	**.47**
2	Smokers	34	1.6176	.817			
	Non-smokers	30	1.2000	.551			
					62	<.05	**2.36***
3	Smokers	34	2.1765	.968			
	Non-smokers	30	2.4667	.860			
					62	>.05	**-1.26**
4	Smokers	34	2.3529	.950			
	Non-smokers	30	2.2667	.980			
					62	>.05	**.36**
5	Smokers	34	2.3235	.806			
	Non-smokers	30	2.2667	.868			
					62	>.05	**.27**
6	Smokers	34	2.2941	.462			
	Non-smokers	30	2.2000	.664			
					62	>.05	**.66**
7	Smokers	34	1.9118	.753			
	Non-smokers	29	2.0690	.799			
					61	>.05	**-.80**
8	Smokers	34	1.0000	.000			
	Non-smokers	30	1.0667	.365	no variance in sample		
9	Smokers	33	2.1212	.696			
	Non-smokers	29	2.0000	.655			
					60	>.05	**.70**
10	Smokers	33	2.0606	.609			
	Non-smokers	29	2.4483	.736			
					60	<.05	**-2.27***
11	Smokers	33	2.0000	.935			
	Non-smokers	30	1.8000	.997			
					61	>.05	**.82**
12	Smokers	34	1.8235	.904			
	Non-smokers	29	1.4483	.827			
					61	>.05	**1.71**

TABLE 4: PERCENTAGE OF PARTICIPANTS' ANSWERS TO QUESTIONS 2 AND 10.

Question 2: Is cotdeath related to smoking?		
Agree (%)	Disagree (%)	Unsure (%)
71.9	14.1	14.1
Question 10: Is baldness related to smoking?		
Agree (%)	Disagree (%)	Unsure (%)
14.1	45.3	37.5
(2 cases missing)		

5.3 HYPOTHESIS 2

BOTH SMOKERS AND NON-SMOKERS WILL POSSESS SOME DEGREE OF NEGATIVE ATTITUDE TOWARD CIGARETTE SMOKING.

Statistically, this null hypothesis was not supported. Smoking and non-smoking participants were found to have significantly different attitudes on all but one question of the attitudes section of the questionnaire. However, the majority of participants were found to possess negative attitudes toward smoking (see Table 5).

TABLE 5: PARTICIPANTS' ATTITUDES TOWARD SMOKING.

Question	Smoking Is	FREQUENCY OF ANSWER				
		1	2	3	4	5
15.	very beautiful(1) very ugly (5)	1	1	12	10	40
16.	very good (1) very bad (5)	1	1	8	5	49
17.	very clean (1) very dirty (5)	1	0	4	14	45
18.	very safe (1) very unsafe (5)	1	1	6	13	43
19.	very unpleasant (1) very pleasant (5)	28	6	9	8	13
20.	very nice (1) very awful (5)	6	4	13	7	34

TABLE 6: ATTITUDES TOWARD SMOKING: T-TEST BETWEEN SMOKING AND NON-SMOKING PARTICIPANTS' RESPONSES.

Group	n	Mean	sd	*t* value
Smokers	34	3.9216	.429	
Non-smokers	30	4.2667	.700	
				-2.41*

p<.05 df=62

Mean scores for the second part of the questionnaire, attitudes toward smoking, were calculated for both smoking and non-smoking participants (see Table 6). An independent t-test with a corrected significance level was calculated for overall mean scores for smoking and non-smoking participants' attitudes toward smoking. Results indicate a significant difference between smoking and non-smoking participants' responses to the attitudes section of the questionnaire ($t=-2.41$, $p<.05$, $df=62$). Significant differences between smoking and non-smoking participants were found on all questions in this section of the questionnaire (see Table 7) except question 16.

Question 16 asked participants whether they felt smoking was very good or very bad. 1 (1.6%) participant, a non-smoker, felt smoking was very good. 49 (86.67%) of participants felt smoking was very bad. 23 (67.65%) of these participants were smokers and 26 (41.27%) were non-smokers. Smokers were more likely to rate smoking as neither good nor bad than non-smokers. 6 (17.65%) smokers and 2 (6.67%) non-smokers rated smoking as neither good nor bad (see Table 8).

TABLE 7: PARTICIPANTS' ATTITUDES TOWARD SMOKING: T-TESTS BETWEEN SMOKING AND NON-SMOKING PARTICIPANTS RESPONSES

Question Smoking Is	Group	n	Mean	sd	df	p value	*t* value
15. very beautiful (1)	Smokers	34	4.1176	.946			
very ugly (5)	Non-smokers	30	4.6333	.890			
					62	<.05	**-2.24***
16. very good (1)	Smokers	34	4.4412	.894			
very bad (5)	Non-smokers	30	4.7000	.877			
					62	>.05	**-1.17**
17. very clean (1)	Smokers	34	4.4118	.701			
very dirty (5)	Non-smokers	30	4.8000	.761	62	<.05	**-2.12***
18. very safe (1)	Smokers	34	4.2941	.836			
very unsafe (5)	Non-smokers	30	4.7333	.828			
					62	<.05	**-2.11***
19. very un-pleasant (1)	Smokers	34	2.9706	1.527			
very pleasant (5)	Non-smokers	30	2.1000	1.626			
					62	<.05	**2.21***
20. very nice (1)	Smokers	34	3.2941	1.404			
very awful (5)	Non-smokers	30	4.6333	.890			
					62	<.05	**-4.49***

TABLE 8: PERCENTAGE OF PARTICIPANTS' ANSWERS TO QUESTIONS ON ATTITUDES TOWARD SMOKING.

Smoking Is:				
15. very beautiful				very ugly
1	2	3	4	5
1.6%	1.6%	18.8%	15.6%	62.5%
16. very good				very bad
1	2	3	4	5
1.6	1.6%	12.5%	7.8%	76.6%
17. very clean				very dirty
1	2	3	4	5
1.6%	NIL	6.3%	21.9%	70.3%
18. very safe				very unsafe
1	2	3	4	5
1.6%	1.6%	9.4%	20.3%	67.2%
19. very unpleasant				very pleasant
1	2	3	4	5
43.8%	9.4%	14.1%	12.5%	20.3%
20. very nice				very awful
1	2	3	4	5
9.4%	6.3%	20.3%	10.9%	53.1%

QUALITATIVE RESULTS

The data from this section of the research are grouped under subheadings which correspond with the issues outlined in the semi-structured interview schedule (see Appendix ii). Illustrations of common patterns and themes among participants' responses and variations of patterns and themes in participants' responses are provided in the discussion section (see Chapter 6).

INITIATION: FIRST EXPERIENCE RETOLD

5.4 INFLUENCES

AIM: To isolate which groups have an effect at time of initiation.

PARTICIPANT 1: An older adult relative offered her a cigarette. She was primary school age and found the experience to be unpleasant,

"Well, I was only little... he just offered me a smoke and it was yuck. I couldn't handle it."

The second time participant 1 tried smoking was with her friends. She classifies herself as a non-smoker.

PARTICIPANT 2: An older relative asked participant 2 to light a cigarette for her.

"I was, ahm, lighting it for my Mum, she was on the phone, I just thought I'd try it."

She remembers being about ten years old at the time and found the

experience unpleasant.

Researcher: *"What did you think?"'*

Participant 2: *"Yuck."*

The second time participant 2 tried smoking was with her friends. She now classifies herself as a smoker.

PARTICIPANT 3: Participant 3 remembers being around cigarettes and family members who smoked when she was very young,

"I was probably at primary school. My aunties and uncles were smoking. I didn't try them though."

The first time she tried smoking was with relatives of her own age group,

"I think I was with my cousins and we were just trying them out. I didn't know how to."

Participant 3 was eight or nine years old at the time and found the experience to be unpleasant,

"I just felt sick".

She classifies herself as a smoker.

PARTICIPANT 4: Participant 4 was unable to recall her first contact with cigarettes as they have always been a part of her environment,

Researcher: *"Now, can you think back to the first time you came across cigarettes?"*

Participant 4: *"Ever since I was born, I think. When I was brought up my parents used to smoke a lot."*

She has never tried smoking but remembers being with her friends when they first experimented with cigarettes. They were all twelve years old at the time. Participant 4 is a non-smoker.

PARTICIPANT 5: Participant 5 recalled trying smoking for the first time with relatives of her own age group,

"... we were down south with our cousins, they were smoking and it made my throat really sore."

She was thirteen at the time. She tried smoking again later that same year with an older relative,

"... he just let me have a puff so I wouldn't like it."

She also found this experience to be unpleasant,

"It made me cough. I didn't like it."

Participant 5 is a non-smoker.

PARTICIPANT 6: Participant 6 has no close relatives who smoke,

"Lots of my friends (smoke)... but none of my family smoke."

Her first contact with cigarettes was when she was twelve years old. Her friends were smoking, but she did not try smoking herself,

"I've been around other friends that have smoked before but I didn't try them."

When she was thirteen, participant 6 tried smoking with one other friend,

"I had one but I didn't like it."

Participant 6 is now a smoker.

5.5 BACKGROUND

AIM: To isolate individual's reason for trying smoking.

PARTICIPANT 1: Participant 1 first tried smoking so she could be around her friends,

"They were all smoking, I just did it to be with them."

Participant 1 recalled that her friends obtain their cigarettes from older relatives who smoke.

PARTICIPANT 2: Participant 2 tried smoking because her friends did and because she believed it helped to create a positive social image of herself in her peer group,

"Ahm, they were wanting me to, cos we were up town and they wanted to know how I smoke, and they just gave me one. I did it cos they were doing it. I thought it was cool."

Participant 2 reported that her friends bought the cigarettes.

PARTICIPANT 3: Participant 3 believes she began smoking simply because cigarettes were available,

"... there were just packets left around, my aunties and uncles had just

left them laying around."

PARTICIPANT 4: Participant 4 has never tried smoking. When asked why she reported,

"Oh, well I'm quite scared of what will happen, like I won't be able to breathe or something. Like inhale it, I wouldn't know what to do and I'd feel embarrassed."

Participant 4 reported that her friends buy their own cigarettes.

"They just went to the shop and bought it. Yeah, people, they don't ask, like hardly any of them, they just want people's money. They don't care how old you are."

PARTICIPANT 5: Participant 5 was deliberately given a cigarette by an older relative to discourage her from smoking,

Participant 5: *"My Dad just gave me a puff so I wouldn't like it (laugh)."*

Researcher: *"And what did you think?"*

Participant 5: *"Yuck. It made me cough. I didn't like it."*

PARTICIPANT 6: Participant 6 tried smoking for the first time because the friend she was with pressured her into doing so,

"I was with my friend, we were at her house and she pulled out a packet of smokes and asked me if I'd like one and I said no and then

ahm, she kind of pressured me and, I had one."

They obtained the cigarettes from her friend's mother.

MAINTENANCE: GENERAL THOUGHTS ON SMOKING

5.6 BACKGROUND

AIM: To understand the individual's opinions as to why people smoke

PARTICIPANT 1: Participant 1 twice reported stress as a reason for adults smoking. She also reported addiction as a reason for adults smoking and linked cigarette smoking to drinking alcohol,

"Some smoke for stress or some are just addicted, all my family is except my mother, all of her sisters, they're all addicted to it."

Participant 1 twice reported stress and twice reported a favourable social image as the reasons for her peers smoking,

"... some of them smoke cos they're stressed out... 'ease the pain' is what my friends say (laugh)... and sometimes they just want to do it because everyone else does, to be cool."

PARTICIPANT 2: Participant 2 twice mentioned stress as a reason for adults smoking,

Researcher: *"Why was your Mum smoking, do you remember?"*

Participant 2: *"Ahm, (she was) probably stressed out."*

She also suggested people smoke because they are bored or for something to do with their time or simply because they want to,

"Release stress, ahm, just cos they want to, it's something to do when they're not doing anything."

PARTICIPANT 3: Participant 3 gave creation of a positive social image as the reason for her peers smoking,
Researcher: *"Why do people smoke?"*

Participant 3: *"Cos it's cool."*

Participant 3 also reported adults smoke when they feel like smoking, *"Just whenever they feel like it."*

PARTICIPANT 4: Participant 4 gave creation of a positive social image as the main reason for smoking. She mentioned that her peers smoke to look good, look old and to look sophisticated. She also believes her friends smoke to conform with the rest of the peer group and consequently to become closer to their friends,

"To look good, to look old, sophisticated (laugh), to be in with their friends I think cos everyone's friends are doing it and so they want to do it as well."

Participant 4 believes adults smoke for relaxation, to cope with stress or relieve tension and out of boredom, for something to do when they

are not doing anything,

"When they're relaxing, when they have a coffee or stuff (they) pull out a smoke... it's just something to do... for them it'd probably release tension."

PARTICIPANT 5: Participant 5 believes that some adults smoke for no specific reason, just when they feel like smoking,
"Well my Dad and sister they just smoke when they feel like a smoke."
She also believes adults smoke out of habit, and believes her peers smoke to conform with the behaviour of their peer group,
"It's a habit, and some people do it just to fit in."

PARTICIPANT 6: Participant 6 twice reported that she believes her peers smoke to create a positive social image,
"A lot of the time it's just to show off downtown (laugh)."
Participant 6 also believes peers smoke to conform with their friends,
"I think she did it cos her friends did. I think she did it just for them."
She believes some adults smoke because they like the taste and because they are addicted,
"I've heard they like the taste of it... also, because they are addicted."

5.7 SOCIAL INFLUENCES

AIM: To understand social explanations for smoking and not smoking.

PARTICIPANT 1: Most of participant 1's relations smoke and all her friends smoke. Although she is a non-smoker she feels that their

smoking has had an effect on her,

"Because when they smoke I don't smoke so I'm sort of over there, I'm the only one and it's like "go away" sort of thing and so, I do it just to be with them."

Participant 1 also reported that smoking has caused illness in her family,

"... all the tangis in my family have all been cos of cancer and I don't want to die like that."

PARTICIPANT 2: Participant 2 recognised that the smokers in her family have had an effect on her as a smoker,

"My Mum smokes, my sister does but my Mum and Dad don't know, and my friends and my Nan and my aunties and uncles, they all smoke... I'm around it, and cos they're doing it I just think I could do it too."

Participant 2 does not believe she will ever become addicted to smoking. She dislikes smoking but continues to smoke,

"I can't stand it really. Can't stand the smell... when you breathe it in and yuck."

PARTICIPANT 3: Participant 3 classifies herself as a smoker and believes her non-smoking parents have had an effect on her smoking,

"I think if Mum and Dad did smoke then I'd probably start up smoking properly."

PARTICIPANT 4: Most of participant 4's close relatives and friends smoke. She believes this has had an effect on her as a non-smoker,

"Just seeing all my friends smoke and stuff, like at a young age. It puts you off. (Them) sitting there smoking up large and coughing all over the place (laugh). Your friends, they don't smell very nice."

PARTICIPANT 5: Participant 5 is a non-smoker with only a few family members who smoke. She believes their smoking has discouraged her from smoking,

Researcher: *"Do you think that their smoking has had an effect on you?"*

Participant 5: *"Oh, it's made me not want to do it... their fingers are always yellow from nicotine and it's just horrible, it smells yucky."*

PARTICIPANT 6: Participant 6 has no family members who smoke. She smokes herself and does not believe they have affected her smoking in any way.

5.8 PERSONAL EXPLANATIONS

AIM: To identify the individual's understanding of reasons for smoking/not smoking.

PARTICIPANT 1: Participant 1 reported that the smokers she knows

smoke together in a group. She reported feeling excluded as a non-smoker and mentioned she sometimes smokes just to be with them,

"Because when they smoke I don't smoke so I'm sort of over there, I'm the only one and it's like "go away" sort of thing and so, I just do it to be with them."

She does not believe she smokes because of peer pressure,

"They don't pressure me I just do it cos I feel like doing it, but if I don't feel like it then I won't do it, so it's really me who makes the decision."

PARTICIPANT 2: Participant 2 believes her friends are the reason why she smokes,

Researcher: *"Why do you smoke, when you do?"*
Participant 2: *"Only cos my friends are."*

PARTICIPANT 3: Participant 3 believes she smokes because smokers and cigarettes are always around her,

"... there's so many people around that do smoke...you just see it everywhere."

PARTICIPANT 4: Participant 4 does not smoke because she is worried she would not know what to do and may embarrass herself,

Participant 4: *"Oh, well, I'm quite scared of what will happen, like I*

won't be able to breathe or something. Like inhale it, I wouldn't know what to do and I'd feel embarrassed."

Researcher: *"How did you feel, did you feel like you should be doing it?"*

Participant 4: *"(enthusiastically) Yeah! I felt left out cos they were all smoking and I was just standing there. They always offered, but I didn't want to take it cos I didn't know what to do."*

Participant 4 also mentioned she does not smoke because of the health consequences associated with smoking,

"I just don't want to... cos of all the stuff that happens like bad breath."

PARTICIPANT 5: Participant 5 reported she has been discouraged from smoking by the smell and because smokers have yellow fingers,

"Their fingers are always yellow from the nicotine and it's just horrible, it smells yucky."

When her friends smoke she reports feeling excluded,

"I just watch, I just sit there and do nothing. Sometimes it's hard."

PARTICIPANT 6: Participant 6 reports she smokes because all her friends smoke and seeing them smoke makes her feel like smoking as well,

Researcher: *"Why do you smoke?"*

Participant 6: *"Everyone else does. It makes me feel like doing it too."*

Participant 6 also reports another reason for smoking, possibly rebelliousness,

"I feel kind of funny, knowing that if I have one...I feel like I shouldn't. I like that feeling."

She also mentions that the health consequences of cigarette smoking discourage her from smoking,

Researcher: *"Anything that puts you off (smoking)?"*
Participant 6: *"Just the diseases that are caused by smoking"*

5.9 CESSATION/ADDICTION

AIM: To identify the individual's perceptions of addiction.

PARTICIPANT 1: Participant 1 reported that smokers 'crave' cigarettes. She believes that people can become addicted to cigarettes and indicated that cessation is difficult. Participant 1 linked cessation to weight gain and believes determination is necessary to give up smoking,

"Well, my aunty tried it and she got real big, like when she had a craving for a smoke she just kept eating and it took her mind off it, but she got real big... she said she didn't want any more smokes so she just stopped right then."

Participant 1 believed the most difficult factor in giving up smoking would be social,

"There could be pressure sometimes. Your friends might all do it and you're trying to give up and you'd just keep doing it because everyone else is doing it."

PARTICIPANT 2: Participant 2 linked cessation with weight gain and improved health

"Some of them get fat, some people feel a little bit healthier."

Participant 2 believed addiction to cigarettes is possible and believed cessation is difficult,

"Cos, like if you've been addicted on it for a long time it's like giving up a part of your life."

Participant 2 gave an account of relative's experience of attempting to give up smoking,

"She lasted for about three months. Then she got stressed and she started smoking more again. She's cut down from a packet of 25 to a pack of 10 a day now."

PARTICIPANT 3: Participant 3 also linked cessation with improved health. She believes people can become addicted to smoking and believes the most difficult part of giving up smoking would be social,

Participant 3: *" There's so many people around that do smoke, it'd probably be hard. It's just normal for everyone else."*

Researcher: *"Do you think it would be hard to stop because of them?"*

Participant 3: *"Yeah. You'd just see it every where and you'd just want it."*

PARTICIPANT 4: Participant 4 believes addiction to cigarettes is possible,

Researcher: *"Do you think people can become addicted to cigarettes?"*

Participant 4: *"Yes. I think they can if they smoke enough. They just pull it out all the time and they just get addicted... they smoke all the time, become chain smokers, oh real bad smokers."*

Participant 4 believes cessation is difficult. She linked cessation to weight gain and believes determination is a necessary factor in giving up smoking. She also mentioned cutting down the number of cigarettes smoked if cessation is too difficult,

"I reckon you just have to be confident in yourself to give up, confident that you're going to give up, not just for a while. Or even smoke less if you can't give up completely."

Participant 4 mentioned bad breath and money spent on cigarettes as two incentives for cessation.

PARTICIPANT 5: Participant 5 also linked cessation to eating more and gaining weight. She described addiction as,

"They just think their body needs it, they don't need them, but they just think they need them and they just keep smoking."

Participant 5 believes cessation is difficult and the best way to stop smoking is,

"... they just have to do something every time they feel like a smoke."

PARTICIPANT 6: Participant 6 believes the most difficult aspect of cessation is social,

Researcher: *"What do you think would be hard about it (cessation)?"*

Participant 6: *"Ahm, being around them (friends) when they have some."*

Researcher: *"Why?"*

Participant 6: *"Ahm, just because I'd feel like I should be joining in."*

Participant 6 believes cessation is difficult and gives the cost of cigarettes as an incentive for giving up smoking. Participant 6 is unsure if people become addicted to cigarettes,

"I don't know if it's so much addiction or just wanting to have a smoke cos everyone else is?"

CHAPTER 6 DISCUSSION

6.1 QUANTITATIVE RESULTS: HYPOTHESIS 1

BOTH SMOKERS AND NON-SMOKERS WILL HAVE ADEQUATE KNOWLEDGE OF THE HEALTH EFFECTS OF SMOKING.

Both smoking and non-smoking participants were found to possess adequate knowledge of the health consequences associated with smoking cigarettes. Many participants responded over cautiously reporting health consequences not associated with smoking such as kidney stones, baldness, arthritis, skin cancer and heart murmurs as being associated with cigarette smoking. Lung cancer was the most recognised health consequence of smoking. This finding is consistent with the findings of Klesges et al (1988), Oei et al (1984), Stanton et al (1989) and Ritchie (1988). While no significant difference was found between smoking and non-smoking participants' overall responses, smokers and non-smokers responses varied significantly on two questions. Less smokers were aware of the fact that SIDS is associated with smoking, and nine participants did not believe SIDS is associated with smoking. Also, five smoking participants and four non-smoking participants incorrectly reported that baldness is associated with smoking.

However, there seems little doubt that participants have received and understood the message health professionals have been attempting to convey for so long, that smoking is bad for one's health. Knowledge is claimed to be the first important step in the process of behaviour change (Farquar et al, 1984) yet participants in this study who possess knowledge about the health consequences associated with smoking continue to smoke. This result is consistent with the findings of Klesges et al (1988) and Oei et al (1984) and questions the

effectiveness of anti-smoking campaigns which attempt to dissuade individuals from smoking by educating them of the health consequences of smoking. While it is important that individuals are made aware of the devastating health effects associated with smoking cigarettes, this alone is not a basis for behaviour change.

CONCLUSION

As hypothesised, both smoking and non-smoking participants in this study knew of the health consequences associated with smoking. This result is consistent with the findings of international researchers Klesges et al (1988) and Oei et al (1984). While individuals, particularly smokers, should be aware of the health effects associated with smoking, this knowledge does not appear to be a basis for behaviour change.

6.2 QUANTITATIVE RESULTS: HYPOTHESIS 2
BOTH SMOKERS AND NON-SMOKERS WILL POSSESS SOME DEGREE OF NEGATIVE ATTITUDE TOWARD CIGARETTE SMOKING.

Smoking and non-smoking participants were found to have significantly different attitudes toward cigarette smoking on all but one question. Most participants agreed that smoking is very bad, however, six smokers rated smoking as neither bad nor good and two non-smokers rated smoking as neither bad nor good. This result supports the findings of Bowen et al (1991) and Oei and Burton (1990). These researchers found participants who had experimented with cigarettes to have a marginally more positive attitude toward smoking than participants who had never smoked. One non-smoker rated smoking as very good and although included in the analysis, the credibility of her answer must be questioned. The responses by

participants to questions 15 to 18 illustrate that most participants possess a negative attitude toward smoking. The majority of participants reported smoking as being very ugly, very bad, very dirty and very unsafe.

For questions 19 and 20, the majority of participants still responded by giving a negative attitude toward smoking. However, while most participants believed smoking to be very unpleasant and very awful, some participants believed smoking to be very pleasant and very nice. For both question 19 and question 20 smoking participants responded by displaying a more positive attitude toward smoking than non-smoking participants.

Although the hypothesis put forward was found to be incorrect, and a significant difference between non-smoking and smoking participants' answers was discovered, most respondents, regardless of their smoking status were found to possess some degree of negative attitude toward smoking. The results from this study are consistent with international research. Participants who have experimented with cigarettes and classify themselves as smokers have slightly more favourable attitudes toward smoking than those who have not tried smoking or non-smoking participants (Bowen et al, 1991; Oei & Burton, 1990). Previous research also indicates that children's attitudes toward cigarette smoking are formed before high school and change little over time (Bhatia et al, 1993; Beaglehole et al, 1978; Newman et al, 1973). Clearly this is an area in which more in depth investigation must take place. Both smoking and non-smoking participants were found to possess some degree of negative

attitude toward smoking even though their attitudes differed. If attitudes toward smoking change little over time, the effectiveness of anti-smoking campaigns which attempt to alter the individual's behaviour by changing their attitude toward smoking must be further investigated and questioned.

CONCLUSION

Although the hypothesis was unsupported by the results, both smoking and non-smoking participants illustrated some degree of negative attitude toward smoking. This is consistent with international research findings. Attitudes toward smoking appear to be formed early in life and are difficult to change. While research indicates that slightly positive attitudes toward smoking may be linked with smoking behaviour, the effectiveness of education programmes which attempt to change individuals' attitudes toward smoking and consequently change their behaviour must be further investigated.

6.3 QUALITATIVE RESULTS

The discussion of the qualitative results follows the same format as the semi-structured interview schedule (see Appendix ii) and the results section (Chapter 5). The results are discussed under each of the main aims of the research. The areas investigated were determined by recommendations from past research and areas under investigated in past research.

6.4 QUALITATIVE RESULTS: INITIATION

INFLUENCES

AIM: To isolate which groups have an effect at time of initiation.

All participants in this study except participant 4 had tried smoking at least once. These findings are consistent with those of Stanton et al's (1989) New Zealand study which concluded that by 13 years of age 68% of participants had tried smoking at least once.

There is evidence from international research that the age of initiation into cigarette smoking is falling, particularly amongst girls (Koop et al, 1989, cited in Bhatia et al, 1993). This conclusion may be applied to this study. Three participants in this study had experimented with cigarettes while they were still at primary school. Another two participants both tried smoking when they were thirteen years old.

Debate exists as to whether family or peers have a greater effect on an individual's smoking behaviour. American researchers Catalano et al (1992) suggest initiation to cigarettes, not necessarily actual smoking often occurs during preadolescence and is likely to exert a strong influence on individuals. In this study, participants 1, 2, 3 and 4 stated having older family members who smoked and recalled them as being their first contact with cigarettes. The influence of the whanau in Maori society must be mentioned. In this study, four participants were introduced to smoking by relatives and three participants later tried smoking for the first time with family members. In fact, participants 1 and 2 first experimented with cigarettes with an adult family member. This is a cause for concern.

Australian researchers Oei and Burton (1990) conclude younger individuals' smoking habits are related to their parents smoking habits. Participants 2, 4 and 5 all reported having parents who smoke, however, participants 4 and 5 are non-smokers. Also, participant 6, who is a smoker, reported that none of her family smoke. Conrad et al (1992) and New Zealand researchers Nye et al (1980) conclude fourteen and fifteen year olds' smoking habits are related to their peers rather than their parents. This conclusion appears to be somewhat more consistent with the results of this study, although all participants, both smokers and non-smokers reported having peers who smoked.

Stanton et al (1989) suggest the number of sources of exposure to smoking from parents siblings and friends who smoke has a cumulative effect on adolescent smoking behaviour. Stanton et al (1989) found that those who had never smoked tended not to be in contact with smokers. In this study, however, participant 4, who is the only participant who has never tried smoking, has many family members and many peers who smoke. Stanton et al (1989) also concluded that adolescents who smoked were in contact with two or more groups of smokers. This conclusion may be applied to participants 2 and 3 who are smokers and have contact with two groups of other smokers. However, other participants in this study who are non-smokers recalled contact with at least two groups of smokers, and participant 6 who is a smoker was recalled contact with one group of smokers, her peers.

While Stanton et al (1989) is a New Zealand study, there are reasons why its results may not be generalised to the sample used in this study. Firstly, Stanton et al's (1989) study was conducted in Dunedin, and the authors warn their work may not be representative of Maori adolescents as fewer Maori live in the South Island and consequently, fewer Maori adolescents took part in the study. Secondly, it is difficult to compare conclusions made from quantitative research with those of qualitative research. If a larger sample were taken and a quantitative framework similar to that of Stanton et al's (1989) the results from this study may be more easily compared with that of Stanton et al's (1989). However, the nature of this research is different. Just as quantitative research is unable to identify thoughts, feelings and experiences qualitative research is unable to determine where its participants conclusions fit on a scale determined by quantitative research. It was not the purpose of this study to replicate a previous quantitative study.

Reid (1993) and Nye et al (1984) indicate that the first experience many individuals have of smoking is negative. This was certainly the case for participants in this study. Every participant who had tried smoking reported the incident as being unpleasant.

CONCLUSION

Both whanau and peers have an effect at the time of initiation into smoking. All but one participant in this study had tried smoking. Most participants recalled having older relatives who smoked and all participants except participant 4 had smoked on at least one occasion with peers or relatives of their own age. All participants

who had tried smoking found their first experience to be unpleasant. It is difficult to determine whether peers or whanau have a greater effect on the smoking behaviour of participants. It does not appear that contact with more than two groups of smokers, as suggested by Stanton et al (1989), is predictive of smoking behaviour in this sample.

BACKGROUND

AIM: To isolate individual's reasons for trying smoking.

Participants had a variety of reasons for trying smoking. Bhatia et al (1993) suggest experimenting with cigarettes may be a way of asserting maturity as smoking is accepted as an adult behaviour in Western society. Participant 4 stated *"... to look old... to look sophisticated,"* as reasons why she believes her peers smoke.

Stanton et al (1989) reported that girls are significantly more likely to smoke if they have reported delinquent behaviour by thirteen years of age. Participant 6 reported what may be a possible link between smoking and rebellious behaviour, *"(When I smoke), I feel kind of funny, knowing that if I have one... I feel like I shouldn't. I like that feeling."*

Participant 2 recalled her very first experience of lighting a smoke for an older relative. *"I just thought I'd try it."* This account is consistent with Nye et al's (1980) finding that children are most likely to experiment with cigarettes because they are curious.

Participant 2 also reported other reasons for trying cigarettes. Tobacco is most often experimented with in a social setting, not in isolation. Quine and Stephenson (1990) report that a peer group may encourage its use and make it more available to individuals and therefore encourage smoking. Participant 2 along with participant 1 reported trying smoking so they could be with their friends and because their friends were smoking. Interestingly, participant 4 gave a similar reason for not having tried smoking. Participant 4 is afraid she will embarrass herself in front of her friends because she does not know how to inhale smoke, *"Oh, well I'm quite scared of what will happen... I wouldn't know what to do and I'd feel embarrassed."* The responses of these participants are consistent with the findings of Kopeke et al (1990). Kopeke et al (1990) concluded from their literature review of smoking in ethnic minority families that most studies report a relationship between peers smoking and individuals' smoking.

Dielman et al (1987) found peer pressure to be correlated with individuals' use of cigarettes. Participant 6 was the only individual in this study to recall peer pressure as being the reason she tried smoking.

Participant 5 reported trying a cigarette because an older relative deliberately gave it to her in the hope of discouraging her from smoking.

Most participants obtain their cigarettes from older relatives who smoke. Participant 3 believes she began smoking simply because

cigarettes were available to her. In New Zealand it is illegal to sell cigarettes to people under the age of sixteen years. Yet, both participants 2 and 4 reported that their friends buy their own cigarettes. These individuals are aged between twelve and fourteen years,

"They just went to the shop and bought it. Yeah, people they don't ask, like hardly any of them, they just want people's money. They don't care how old you are."

CONCLUSION

All participants reported experimenting with cigarettes in a social setting. Two participants reported social bonding as the reason for trying their first cigarette, and one participant gave this reason as why she had never tried smoking. One participant reported peer pressure as the reason for first trying a cigarette. Another participant recalled she was encouraged by an older relative to try smoking to dissuade her from smoking in future. Another participant reported smoking simply because cigarettes were available. Other reasons for trying smoking included possible rebelliousness, curiosity and attempts to assert maturity. These results are consistent with the findings of previous research.

6.5 QUALITATIVE RESULTS: MAINTENANCE

BACKGROUND

AIM: To understand the individual's opinions as to why people smoke.

Chassin et al (1991) conclude that maintenance of cigarette smoking is more complex than simply addiction. The findings from this study

support this conclusion. While addiction was mentioned by some participants as a reason for smoking, participants gave a variety of other explanations for why people smoke.

The most common reasons given by participants for smoking were social. Nye et al (1984) concluded that children are likely to take up smoking in an effort to appear tough and conform with the social habits of their peers. Van Roosmalen and McDaniel (1992) report the peer environment as being a crucial factor in the maintenance of cigarette smoking, particularly in women. In this study, the two most common reasons participants reported for smoking were social. Participants 1, 3, 4 and 6 all reported creation of a favourable social image as being a reason for smokers smoking. Participant 4 stated *"...to look good, to look sophisticated, to look old..."*

The second most common reason participants reported as being a reason for smoking was to conform with their peers. Participants 1, 4 and 5 all reported this as a reason for smoking. Participant 6 mentions her peers smoke *"...to be in with their friends."* It is important that a distinction be made between this reason for smoking, that is, wanting to conform with peers and peer pressure. Earlier in her interview participant 6 recalls feeling pressured into smoking by her friend, *"...she kind of pressured me and, I had one."* Participant 4 also differentiates between peer pressure and a personal desire to conform with her peers, *"They don't pressure me I just do it cos I feel like doing it, but if I don't feel like it then I won't do it, so it's really up to me."*

Brandon and Baker (1991), Berman and Gritz; Gilchrist et al (1989) and USDHHS (1988) all conclude that women may continue to smoke because they find it reduces stress. Livson and Leino (1988) report reduction of stress and pleasure as being reasons why women smoke. Ikard et al (1969) concluded from the Horn-Waingrow study that there are six non-social factors which may play a role in an individual's decision to smoke. Stress was the most commonly reported non-social factor by participants in this study. Participants 1, 2 and 4 mentioned stress as being a reason for both peers and adults smoking. Participant 5 reported that many adults smoke out of habit and participant 1 mentioned that many smokers continue to smoke because they are addicted. Participants did not mention pleasure, stimulation or sensorimotor manipulation as reasons for people smoking. Three of the six non-social factors identified in the Horn-Waingrow Smoking Survey (Ikard et al, 1969) as reasons for maintaining smoking were not identified as reasons for smoking by participants in this study. These factors were stimulation, pleasure and sensorimotor manipulation.

Several participants gave other non-social reasons unmentioned in previous research as reasons for why smokers smoke. Participant 6 stated that some individuals smoke because they like the taste. Both participant 2 and participant 4 believe some people smoke because they are bored and smoking gives them something to do. Participants 3 and 5 stated that adults smoke whenever they feel like doing so.

CONCLUSION

Participants from this study believe most smokers smoke to create a favourable social image in their peer group, to conform and feel closer to their friends and to cope with stress. These findings are consistent with those reported in the literature.

SOCIAL INFLUENCES

AIM: To understand social explanations for smoking/ not smoking.

Participants were asked if they believed smokers they were in contact with had an effect on their own decisions to smoke or not smoke. All participants except participant 6 believed others had an effect on their smoking behaviour. Participant 6, who is a smoker, believed her non-smoking parents had no effect on her own behaviour.

Participants 1, 2 and 3 reported experiences which can be compared with the findings of Nye et al (1984) as reasons for smoking or wanting to smoke. Nye et al (1984) reported children smoke to conform with their peers' behaviour. Participant 1 reported smoking or feeling like smoking because her friends and family are smoking. Participant 2 reported that her family have had an effect on her smoking because she is around smokers and smoking *"...and cos they're doing it I just think I could do it too."* Participant 3 who is a smoker, but has non-smoking parents, believes that if her parents smoked she would smoke more often.

The health consequences associated with smoking which are visible and able to be identified in smokers known by participants was the reason given by participants for not smoking. Participants 1, 2, 4,

and 5 reported either not smoking or being discouraged from smoking by smokers who displayed health consequences, *"... it's made me not want to do it (smoke)... their fingers are always yellow from nicotine and it's just horrible, it smells yucky."* Participants did not mention the health consequences they had learnt in formal education settings, such as the Third form health syllabus, as discouraging them from smoking. This result is consistent with Oei et al's (1984) conclusion that little is to be gained by further education of the health consequences associated with smoking. Participants were aware of the health consequences associated with smoking and recalled examples of smokers they know who display them. It appears when the health consequences of smoking are taught to individuals in a formal education setting, such as school, they lose their impact. The health consequences associated with smoking are better learned through 'first hand experience' by witnessing their effect on an actual person.

CONCLUSION

Most participants reported that smokers had affected their smoking behaviour. Participants reported smoking to conform with others behaviour. This finding is consistent with previous research. Participants reported not smoking because they were influenced by the health consequences they were able to identify in other smokers. Participants did not report being influenced to the same extent by the health consequences they were taught in formal education programmes. Education programmes have not taken this into account. This finding suggests the education programmes, such as the third form health syllabus which teach health consequences of

smoking may be ineffective because they wrongly assume knowledge will reduce smoking behaviour.

PERSONAL EXPLANATIONS

AIM: To identify individual's understanding of reasons for smoking or not smoking.

Van Roosmalen and McDaniel (1992) conclude more opportunities to smoke are presented by friends and family who smoke,

"It may be that the social context of smoking for women makes it easier for them to start smoking and more difficult for them to quit." (van Roosmalen & McDaniel, 1992).

Van Roosmalen and McDaniel's (1992) conclusion is consistent with the experiences of all participants in this study. Participants who smoke reported smoking because of the social environment, *"Because when they smoke I don't smoke so I'm sort of over there, I'm the only one and it's like "go away" sort of thing and so, I just do it to be with them."* (Participant 1). Non-smoking participants' comments were valuable in identifying and understanding why many find it difficult not smoking. All non-smokers reported feeling excluded, *"I felt left out cos they were all smoking and I was just standing there."* (Participant 4). Women often socialise and relax by sitting together and 'chatting' This provides the perfect environment and opportunity in which to smoke and to be reinforced for smoking. Participants' experiences are consistent with the conclusions of the Ministry of Women's Affairs (1991). The Ministry of Women's Affairs reports individuals experience strong social pressure to smoke in a group where smoking is the norm.

While participants reported smoking because it was in keeping with social context and non-smokers reported feeling excluded for that reason, participants gave different reasons for other people smoking. Participants were most likely to report that they smoked because their friends or siblings were smoking. This may be compared with the reason participants believed other smokers smoke, because of stress or because the smoker felt it helped create a positive social image.

CONCLUSION

Participants reasons for their own smoking behaviour differed from reasons they gave for others smoking. All participants reported either smoking or feeling excluded because others were smoking in their social environment and they were not smoking. This result is consistent with the findings of van Roosmalen and McDaniel (1992). Individuals are more likely to smoke and keep smoking if they socialise with smokers.

CESSATION/ ADDICTION

AIM: To identify individual's perceptions of addiction.

It is widely accepted that smoking is addictive, and nicotine is believed to be addictive in the same manner as heroin and cocaine (USDHHS, 1988). All participants in this study believed that addiction to cigarettes is possible, *"They just pull it (cigarettes) out all the time and they just get addicted... they smoke all the time, become chain smokers, oh real bad smokers."* (Participant 4).

All participants believed cessation to be difficult. Many gave personal accounts of smokers who have tried to quit and many participants mentioned 'cutting down' as a viable alternative to stopping smoking all together. Participants 1, 2 and 5 linked cessation to weight gain. Participants 2 and 3 linked cessation to improved health.

Participants 1, 3 and 6 believed cessation would be difficult because many smokers smoke in a social setting and this would make it difficult to avoid cigarettes. Participant 6 began to question addiction and wondered if others smoking in a social setting may play a more important role in cessation by encouraging smoking, *"I don't know if it's so much addiction or just wanting to have a smoke cos everyone else is."*

CONCLUSION

All participants accepted addiction to cigarettes is possible and all participants believed cessation to be difficult. Cessation was linked to improved health and weight gain. Participants suggested 'cutting down' as an alternative to quitting if cessation proved too difficult.

6.6 OVER ALL CONCLUSION

The inclusion of non-smokers in research into smoking is important. There were remarkably few differences between smokers' and non-smokers' knowledge, attitudes, thoughts and feelings toward smoking in this study. It is unclear precisely how one person becomes a smoker while another remains a non-smoker. It is necessary to determine how similar knowledge, attitudes, thoughts and feelings in smokers and non-smokers lead to different smoking behaviour.

It may be concluded from this and previous research that experimentation with cigarettes and initial smoking almost always takes place in a social setting. Smoking becomes a form of social bonding within a peer group. Smokers reported smoking or trying smoking in an attempt to feel closer to their friends and to feel more a part of their peer group even though they initially disliked smoking. Non-smokers reported feeling excluded form their peer group because they did not participate by smoking. Many participants reported feeling like smoking themselves because they saw family and friends smoking. So, social influences have an effect on an individual's smoking behaviour. However, social influence on smoking behaviour does not appear to take place in a cumulative manner as suggested by Stanton et al (1989). Participants identified with smokers from their peer group rather than other groups of smokers. This finding is also contrary to Stanton et al's (1989) cumulative theory.

Individuals may be drawn to some social groups and smoke to be part of them or individuals may be repelled by some social groups and smoke to be excluded by them. Smoking helps an individual belong to a peer group and gives an individual a sense of identity. Smoking may be linked to mana in this way.

Literature suggests there are a range of reasons for smoking. Reasons people smoke include feeling smoking is their only luxury available, because friends and family make it difficult for them to stop and because smoking is something to do. Other reasons for smoking include stress, addiction or habit and stimulation from

nicotine. For participants in this study these reasons for smoking were not yet important. However, reasons for smoking change over time.

There was a difference between explanations given by participants for their own smoking and explanations given by participants for their peers' smoking. Participants smoke to belong to their peer group. Yet participants believe their friends smoke to cope with stress or to create a favourable social image. Smokers were found to have a negative attitude toward smoking but still believed their friends smoked 'to look cool'. This is a new finding and is not yet supported by other research.

Smokers are able to distance themselves from the image of smoking. Consequently, young smokers do not always recognise themselves as smokers. Smokers are able to distance themselves from the health consequences of smoking, from their own and non-smokers' negative attitudes toward smoking, and from the possibility of addiction. Knowledge of the health effects of smoking fails to change smoking behaviour because smokers distance themselves from the health effects of smoking. Also, possessing a negative attitude toward smoking fails to change smoking behaviour because smokers distance themselves from their negative attitude toward their behaviour. Anti-smoking education programmes which teach the health effects of smoking and negative attitudes toward smoking fail because knowledge and attitudes fail to change smoking behaviour. This fact is not taken into account in education programmes. Education programmes as a method of changing smoking behaviour

are inadequate because they are based on the false assumption that knowledge and attitudes change smoking behaviour. This is a serious problem because current anti-smoking programmes such as the third form health syllabus and the 'Smokefree' campaign are based on this false assumption.

Cigarette smoking is a complex problem. Reasons for smoking change through out a smoker's lifetime (see Figure 1). Anti-smoking education and prevention programmes should not target smoking as a problem. Stages in a smoker's development should be the target of programmes instead. Different programmes are necessary at different stages in a smoker's life to prevent smoking, discourage smoking and encourage cessation.

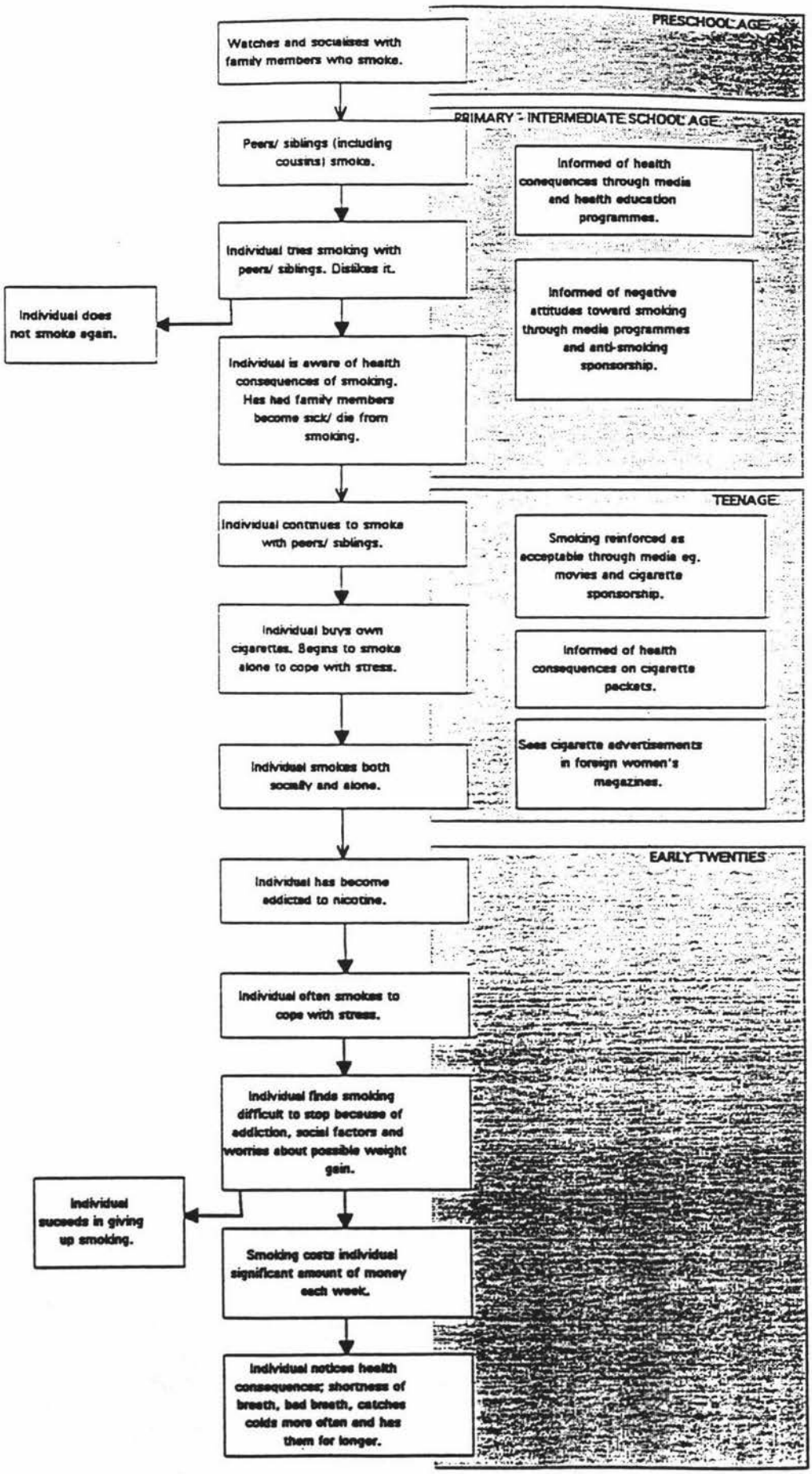
6.7 SUMMARY

FIGURE 1: TIME LINE MAORI WOMEN AND SMOKING

(please turn the page)

Figure 1 is a profile of the life of a Maori female smoker. This profile suggests how a smoker may progress and which interventions may be most appropriate as her reasons for smoking change through out her life. The timeline takes into account the results of this research and the results of past research. The aims of this timeline are to illustrate the influences a smoker's experiences and to suggest programmes that may be appropriate to intervene at each stage.

The individual watches and socialises from a very young age with family members who smoke. She is asked to 'get Mummy's smokes' and smoking is a part of her life. An anti-smoking campaign introduced at this point to discourage family from smoking in front of


PRESCHOOL AGE
Watches and socialises with family members who smoke.
PRIMARY - INTERMEDIATE SCHOOL AGE
Peers/ siblings (including cousins) smoke.
Informed of health consequences through media and health education programmes.
Individual tries smoking with peers/ siblings. Dislikes it.
Informed of negative attitudes toward smoking through media programmes and anti-smoking sponsorship.
Individual does not smoke again.
Individual is aware of health consequences of smoking. Has had family members become sick/ die from smoking.
TEENAGE
Individual continues to smoke with peers/ siblings.
Smoking reinforced as acceptable through media eg. movies and cigarette sponsorship.
Individual buys own cigarettes. Begins to smoke alone to cope with stress.
Informed of health consequences on cigarette packets.
Individual smokes both socially and alone.
Sees cigarette advertisements in foreign women's magazines.
EARLY TWENTIES
Individual has become addicted to nicotine.
Individual often smokes to cope with stress.
Individual finds smoking difficult to stop because of addiction, social factors and worries about possible weight gain.
Individual succeeds in giving up smoking.
Smoking costs individual significant amount of money each week.
Individual notices health consequences; shortness of breath, bad breath, catches colds more often and has them for longer.

their children.

During primary school, her peers and siblings experiment with cigarettes. She is informed of the health consequences of smoking through health education programmes. However, these programmes fail to influence her behaviour. She tries smoking with her peers/ siblings and dislikes it. A new prevention programme could be introduced here. The programme could aim toward reinforcing the individual's dislike of smoking.

The individual's knowledge of the health consequences of smoking are reinforced as she watches family members become sick and die from smoking. This has a greater effect than formal education programmes and makes her think about smoking. However, her behaviour does not change and she continues smoking with her friends. She is informed of negative attitudes toward smoking through the media, anti-smoking campaigns and 'Smokefree' sponsorship. She adopts a negative attitude toward smoking. Unfortunately, her attitude does not alter her behaviour and she continues smoking with her friends. Another anti-smoking campaign which promotes better things to do with friends than smoking could be introduced at this stage.

As the individual moves to high school, she continues smoking with her friends and siblings. Smoking is reinforced as acceptable and sometimes even 'cool'. She sees characters who smoke in movies (eg. current cult movie Pulp Fiction released in New Zealand February 1995) and she sees cigarette companies sponsoring sporting and

fashion events. She continues smoking, more frequently now and even begins to buy her own. At around $5.00 per packet of 20, they are expensive but not expensive enough to discourage her. On the packet she reads the health warning and remembers a family member who had cancer. She continues smoking. At this point, an anti-smoking campaign warning and frightening young smokers about addiction and a loss of control over their smoking could be introduced.

She sees eye catching advertisements for cigarettes in the foreign women's magazines she and her friends buy. She continues smoking both with her friends and alone. Some how she finds smoking helps her cope with stress. An effective campaign could be designed at this point to intervene by teaching smokers more effective ways to cope with stress.

As she becomes older, she realises she feels she needs to smoke. If she does not have a smoke for a while she craves one. She has become addicted. She smokes more often now to cope with stress. She thinks about giving up. She finds smoking difficult to stop because she is addicted, because her friends smoke and because she feels she will 'get fat' if she stops smoking. A cessation programme is necessary at this stage to give the individual support and coping techniques to quit smoking.

She continues smoking. It is costing her a significant amount of money. Each week she puts money aside to buy her cigarettes. She finds she is short of breath and she has bad breath. She also

catches colds more easily and has them for longer.

6.8 METHODOLOGICAL LIMITATIONS

SAMPLE SELECTION AND DISTRIBUTION

This is a study on the knowledge, attitudes, initiation and maintenance of cigarette smoking in young Maori women. The results of this study cannot be presumed to accurately apply to members from another gender, culture or age group.

The sample of participants from St Joseph's College was not randomly selected due to the fact that the school role is quite small. All third and fourth formers were approached to take part in this study. St Joseph's College is predominantly a boarding school. While this fact may have increased the generalisability of the sample as participants came from different parts of the country, it may have also decreased the generalisability due to socioeconomic and social factors. It is possible the participants in this study represented a higher socioeconomic group as they pay fees to attend a boarding school. It is also possible that the results of this study could be different if it had been conducted at a day school where pupils only attend school during week days.

It is also possible that the generalisability of this study may be restricted because of religion. St Joseph's College is a Catholic secondary school, and although it has been integrated, the majority of its pupils are from a Christian background. It is possible that the results of this study could be different in some way if the study had been conducted with participants from other religious

denominations.

There were constraints under which this study was conducted. The researcher was a person unfamiliar to participants. It was anticipated that interviews would be indepth, in order to be exploratory, yet focussed. It was expected that interviews would be completed within an hour. While most interviews ran from 25 to 40 minutes, one interview was only ten minutes long. It is possible that this particular participant had not thought about the research topic or that she did not have much to say about the topic being researched. This is a common concern when using qualitative research, particularly with younger participants. However, a qualitative methodology was still the most accurate way of investigating participants thoughts, feelings and experiences of cigarette smoking. Important explanations which were uncovered during the interview process were able to be further investigated because of the qualitative methodology employed.

MEASURE

The quantitative measure used in this study was pilot tested and no potential problems were discovered. Yet, there may be limitations which remained undiscovered during pilot testing in using scales with young Maori women which were developed and tested with people from North American cultures.

6.9 RECOMMENDATIONS FOR FUTURE RESEARCH

Smokers and non-smokers share similar knowledge, attitudes, thoughts and feelings toward smoking. Further investigation is necessary to determine precisely why one person becomes a smoker

while another remains a non-smoker. Effective evaluation of prevention and cessation programmes which try to alter smoking behaviour by attempting to alter attitudes toward smoking is also needed. Investigation into initiation into smoking is necessary to isolate which significant individuals in a smoker's life influence their decision to try and maintain smoking. Investigation is also necessary to determine exactly how watching other people smoking makes a smoker feel like smoking.

Research is necessary to examine the disparity between the reasons smokers give for smoking and why smokers believe other smokers smoke. Research is also necessary to further investigate why and how smoking is believed to help an individual cope with stress.

Investigation is necessary to determine smokers' feelings and beliefs about addiction. Is addiction to cigarettes feared by smokers? Do young smokers fear losing control over when and how much they smoke? It is also important to investigate smokers' beliefs about cessation. Is possible weight gain during cessation of smoking feared enough to discourage female smokers from trying to quit? Do some smokers believe cessation is impossible?

The self perception of smokers needs investigation. It appears possible for smokers to distance themselves from smoking. Little research has been done in this area. It is necessary to examine when a young smoker accepts the identity of a smoker. When does a smoker begin to buy cigarettes and smoke alone? When does a smoker begin carrying cigarettes in anticipation of smoking through

out the day? How does the realisation of being a smoker impact on smoking behaviour?

The relationship between knowledge of the health effects and smoking behaviour needs thorough investigation. There is an obvious mismatch between smoking behaviour and knowledge of the health consequences of smoking. How do smokers rationalise continuing smoking when they are aware of the devastating health consequences?

The relationship between negative attitudes toward smoking and smoking behaviour also needs investigation. How can a smoker rationalise continuing smoking when they disapprove of their habit?

Research which investigates the social factors and reasons why individuals, in particular women, smoke should be conducted. Theoretical research aimed at developing an in depth model of the initiation and maintenance of cigarette smoking must be conducted. Finally, non-smokers should be included in research into cigarette smoking as they are a valuable source of information.

6.10 PRACTICAL IMPLICATIONS

It may be concluded from this research and from previous research that smoking prevention programmes must continue to start young. Prevention and cessation programmes must also be gender and culture specific. It is necessary to develop a prevention programme which targets family and friends urging them not to smoke in front of children or smokers who are trying to quit. The mere act of watching

smoking can encourage people to smoke.

A prevention programme could be developed to target young smokers when they first begin smoking. Such a programme could advertise and reinforce how unpleasant smoking is by focusing on the smell, taste and feeling of breathing in smoke.

Intervention is necessary to alter smoking's image/ function as a bonding activity that a group of friends can do together. Intervention is also necessary to promote the fact that there are better ways to cope with stress than smoking.

An anti-addiction programme aimed at young smokers should be developed. Cessation programmes may be more successful if focused on management of smoking rather than the ultimate and sometimes impossible task of quitting smoking. Other cessation programmes could be based on reinforcing behaviour change. Smokers are rewarded for smoking socially, by other smokers and physically, because of nicotine addiction. Positive reinforcement for not smoking could be an effective option. Previous smokers could be employed in cessation programmes as they would have experience and understanding of how difficult it is to quit smoking. Previous smokers would also be able to share what they found were the most effective ways of quitting. Prevention and cessation programmes must consist of more than the teaching of the health consequences of smoking and must attempt to do more than change assumed positive attitudes toward smoking.

REFERENCES

Adams, J., Pulin, J., & George, J. (1992). Drug Statistics (rev. ed.). Wellington: Department of Health.

Barlow, C. (1991). Tikanga Whakaro: Key Concepts in Maori Culture. Auckland: Oxford University Press.

Beaglehole, R., Eyles, E., & Harding, W. (1978). Cigarette smoking habits, attitudes and associated social factors in adolescents. New Zealand Medical Journal, 87, 238-242.

Beckwith, J.B. (1987). Attitudes of adult women to drinking and smoking. Social Behaviour and Personality, 15, 145-159.

Berman, B.A., & Gritz, E.R. (1991). Women and smoking: Current trends and issues for the 1990's. Journal of Substance Abuse, 3, 221-238.

Bhatia, S., Hendricks, S., & Bhatia, S. (1993). Attitudes toward and beliefs about smoking in grade school children. International Journal of the Addictions, 28, 271-280.

Bogdan, R., & Taylor, S.J. (1975). Introduction to Qualitative Research Methods: A Phenomenological Approach to the Social Sciences. New York: John Wiley and Sons.

Bowen, D.J., Dahl, K., Mann, S.L., & Peterson, A.V. (1991). Descriptions of early triers. Addictive Behaviours, 16, 95-101.

Brandon, T.H., & Baker, T.B. (1991). The Smoking Consequences Questionnaire: The subjective expected utility of smoking in college students. Psychological Assessment, 3, 484-491.

Broughton, J., & Lawrence, M. (1993). Nga Wahine me te Kai Paipa. Dunedin: The Department of Preventative and Social Medicine.

Brownson, R.C., Jackson-Thompson, J., Wilkerson, J.C., Davis, J.R., Owens, N.W., & Fisher, E.B. (1992). Demographic and socio-economic differences in beliefs about the health effects of smoking. American Journal of Public Health, 82, 99-103.

Catalano, R.F., Morrison, D.M., Wells, E.A., Gillmore, M.R., Iritani, B., & Hawkins, J.D. (1992). Ethnic differences in family factors related to early drug initiation. Journal of Studies on Alcohol, 53, 208-217.

Chassin, L., Presson, C.C., Sherman, S.J., & Edwards, D.A. (1991). Four pathways to young-adult smoking status: Adolescent social-psychological antecedents in a mid-western community sample. Health Psychology, 10, 409-418.

Conrad, K.M., Flay, B.R., & Hill, D. (1992). Why children start smoking cigarettes: Predictors of onset. British Journal of Addiction, 87, 1711-1724.

Cronbach, L.J. (1951). Coefficient alpha and the internal structure of tests. Psychometrika, 16, 297-334.

Diehl, H. (1969). Tobacco and Your Health: The Smoking Controversy. New York: McGraw Hill.

Dielman, T.E., Campanelli, P.C., Shope, J.T., & Buchart, A.T. (1987). Susceptibility to peer pressure, self esteem and health locus of control as correlates of adolescent substance abuse. Health Education Quarterly, 14, 207-221.

Farquar, J.W., Maccoby, N., & Solomon, D.S. (1984). Community applications of behavioural medicine. In W.D. Gentry (Ed.). Handbook of Behavioural Medicine (pp. 437-478). New York: Gulidford.

Foddy, W. (1993). Constructing Questions for Interviews and Questionnaires: Theory and Practice in Social Research. New York: Cambridge University Press.

Gilchrist, L.D., Schinke, S.R. and Nurius, P. (1989). Reducing the onset of habitual smoking among women. Preventative Medicine, 18, 235-248.

Gray, A.J., Reinken, J.A., & Laugesen, M. (1988). The cost of cigarette smoking in New Zealand. New Zealand Medical Journal, 101, 270-273

Gritz, E.R. (1980). Problems related to the use of tobacco by women. In O. Kalant (Ed.), Advances in alcohol and drug problems in women: Vol. 5. (pp. 487-544). New York: Plenum.

Hawkes, M. (1994, April 28). The poor smoke more. The Dominion, p. 10.

Ikard, F.F., Green, D.E., & Horn, D. (1969). A scale to differentiate between types of smoking as related to the management of affect. The İnternational Journal of the Addictions, 4, 649-659.

Jacobson, B. (1986). Beating the Ladykillers: Women and Smoking. London: Pluto Press.

Kopeke, D., Flay, B.R., & Johnson, C.A. (1990). Health behaviours in minority families: The case of cigarette smoking. Family and Community Health, 13, 35-43.

Kalat, J.W. (1992). Biological Psychology (4th ed.). California: Wadsworth.

Klesges, R.C., Somes, G., Pascale, R.W., Klesges, L.M., Murphy, M., Brown, K., & Williams, E. (1988). Knowledge and beliefs regarding the consequences of cigarette smoking and their relationships to smoking status in a biracial sample. Health Psychology, 7, 387-401.

Lalinec-Michaud, M., Subak, M.E., Ghadirian, A.M., & Kovess, V. (1991). Substance misuse among native and rural high school students in Quebec. International Journal of the Addictions, 26, 1003-1012.

Livson, N., & Leino, E.V. (1988). Cigarette smoking motives: Factorial structure and gender differences in a longitudinal study. International Journal of the Addictions, 23, 535-544.

McInman, A.D., & Grove, J.R. (1991). Multidimensional self-concept, cigarette smoking and intentions to smoke in adolescents. Australian Psychologist, 26, 192-196.

Ministry of Women's Affairs, (1990). Smoking: A women's issue. Ministry of Women's Affairs Newsletter, 16, 1-12.

Newman, I.M., Martin, G.L., & Irwin, R.P. (1973). Attitudes of adolescent cigarette smokers. New Zealand Medical Journal, 78, 237-240.

New Zealand Health Department. (1988). The Big Kill: The Human Cost of Smoking in New Zealand. Wellington: New Zealand Department of Health.

Ngata, P. (1985). Health: A Maori view. Tu Tangata, 23, 20.

Nye, P.A., Haye, K.L., McKenzie-Pollock, D.J.B., Caughley, B.L., & Housham, R.W. (1980). What encourages and discourages children to smoke? Knowledge about health hazards and recommendations for health education. New Zealand Medical Journal, 91, 432-435.

Ockene, J.K. (1992). Are we pushing the limits of public health interventions for smoking cessation? Health Psychology, 11, 277-279.

Oei, T.P.S., Brasch, P., & Silva, P.A. (1984). The prevalence of smoking among Dunedin nine-year olds. New Zealand Medical Journal, 97, 528-531.

Oei, T.P.S., & Burton, A. (1990). Attitudes toward smoking in 7-to-9 year old children. International Journal of the Addictions, 25, 43-52.

Oliver, P. (1993). Bicultural issues in research. New Zealand Psychological Society Bulletin, 76, 44-46.

Patton, M.Q. (1990). Qualitative Evaluation and Research Methods (2nd ed.). California: Sage Publications.

Plunket Society. (1992, May). Plunket health study: One of New Zealand's biggest. Plunket Newsletter, pp.1-5.

Public Health Commission. (1984). Tobacco Products: The Public Health Commission's Advice to the Minister of Health 1993-1994. Wellington: Public Health Commission.

Quine, S., & Stephenson, J.A. (1990). Predicting smoking and drinking intentions and behaviour of preadolescents: The influence of parents, siblings and peers. Family Systems Medicine, 8, 191-200.

Reid, P. (1993). Tihei Mauri Ora: Quitting for Life. Auckland: Te Hotu Manawa Maori.

Reid, P., & Pouwhare, R. (1991). Te Taonga mai Tawhiti. Auckland: Niho Taniwha.

Ritchie, J. (1988). Health education: Children's knowledge of the health risks of smoking. New Zealand Medical Journal, 100, 220-222.

Robson, S., & Foster, A. (1989). Qualitative Research in Action. London: Edward Arnold.

Royal College of Physicians. (1983). Health or Smoking? London: Pitman.

Seidman, I.E. (1991). Interviewing as Qualitative Research: A Guide for Researchers in Education and the Social Sciences. New York: Teachers College Press.

Shaw, R.A., Crane, J., & O'Donnell, T.V. (1991). The changes in smoking habits in a rural adolescent population, 1975-1989. New Zealand Medical Journal, 104, 40-43.

Sheerin, J., & Laugesen, M. (1992). Tobacco Statistics 1991. Wellington: Departments of Health and Statistics.

Stacy, A.W., Bentler, P.M., & Flay, B.R. (1994). Attitudes and health behaviour in diverse populations: Drunk driving, alcohol use, binge eating, marijuana use and cigarette use. Health Psychology, 13, 73-85.

Stanton, W.R., Silva, P.A., & Oei, T.P.S. (1989). Summary and Recommendations. The Origins and Development of an Addictive Behaviour: A Longitudinal Study of Smoking. Dunedin: Dunedin Multidisciplinary Health and Development Unit.

Stiles, W.B. (1990). Narrative in Psychological Research. (occasional papers in psychology; visiting fellowship series 1). Palmerston North: Massey University.

United States Department of Health, Education and Welfare. (1979). Health: United States. Washington DC: U.S. Government Printing Office.

United States Department of Health and Human Services. (1988). The Health Consequences of Smoking: A Report of the Surgeon General. Maryland: Department of Health and Human Services, Public Health Service Centres for Disease Control.

Van Roosmalen, E.H., & McDaniel, S.A. (1992). Adolescent smoking intentions: Gender differences in peer context. Adolescence, 27, 87-105.

APPENDIX I

QUESTIONNAIRE AND CONSENT FORMS: KNOWLEDGE OF THE HEALTH CONSEQUENCES ASSOCIATED WITH CIGARETTE SMOKING

QUESTIONNAIRE

Please write the number which matches your answer in the box

1=agree
2=disagree
3=not sure

1. Heart disease is related to smoking ☐
2. Cot death is related to smoking ☐
3. Ulcers are related to smoking ☐
4. Heart murmurs are related to smoking ☐
5. Kidney stones are related to smoking ☐
6. Arthritis is related to smoking ☐
7. Skin cancer is related to smoking ☐
8. Lung cancer is related to smoking ☐
9. Flu is related to smoking ☐
10. Baldness is related to smoking ☐
11. Bronchitis is related to smoking ☐
12. Heart attacks are related to smoking ☐

In the next boxes please write Y for yes or N for no

13. Have you ever tried smoking? ☐
14. Did you smoke during August break? ☐

Please circle the number which corresponds with your answer

15. Smoking is
very beautiful 1 2 3 4 5 very ugly

16. Smoking is
very good 1 2 3 4 5 very bad

17. Smoking is
very clean 1 2 3 4 5 very dirty

18. Smoking is
very safe 1 2 3 4 5 very dangerous

19. Smoking is
very unpleasant 1 2 3 4 5 very pleasant

20. Smoking is
very nice 1 2 3 4 5 very awful

TE MAHI KAIPAIPA WAENGANUI TAMAHINE MAORI: NGA AHUATANGA E PA ANA KI ENEI TAWAITANGA
YOUNG MAORI WOMEN AND SMOKING: KNOWLEDGE, ATTITUDES, INITIATION AND MAINTENANCE
INFORMATION SHEET FOR QUESTIONNAIRE

Who are we?
My name is Claire Orbell. My supervisor is Hineuru Timutimu-Thorpe. I am a student at Massey University. The aim of this research project is to explore young Maori women's attitudes to cigarette smoking and their knowledge of the health effects associated with smoking. This project is comprised of two parts.

What does the study involve?
The first part of this project is a questionnaire. The questionnaire includes questions about smoking, and will take about ten minutes to fill out. If you agree to complete this questionnaire then the information you personally give will be kept strictly confidential. You have the right to refuse to answer any questions and withdraw from the study at any time. I will separate any forms which may have your name from your questionnaire after completion. The second part of this project involves talking with a few girls about their attitudes and feelings about smoking in general (I'm not interested whether you have smoked or not).

What can you expect if you take part?
Please feel free to ask any questions at any time. If there is anything you wish to know don't hesitate to contact myself or my supervisor, Hineuru, at the numbers below.

If you take part in this study, you have the right to:

*refuse to answer any particular question, and to withdraw from the study at any time

*ask any further questions about the study that occur to you while you are taking part in this study

*provide information on the understanding that it is completely confidential to myself and my supervisor, Hineuru. All information is collected anonymously, and it will not be possible to identify you in any reports that are prepared from the study.

*be given access to a summary of the findings from the study when it is finished. If you would like to receive a summary of the results from the questionnaire, leave your name and form in the space provided on the next page. This page will be detached from the rest of the questionnaire.

Thank you for your help.

Claire Orbell 8445 785
Hineuru Timutimu-Thorpe (06) 356 9099 extn 4139

TE MAHI KAIPAIPA WAENGANUI TAMAHINE MAORI: NGA AHUATANGA E PA ANA KI ENEI TAWAITANGA
YOUNG MAORI WOMEN AND SMOKING: KNOWLEDGE. ATTITUDES, INITIATION AND MAINTENANCE
CONSENT FORM FOR QUESTIONNAIRE

I have read the Information Sheet for this study and have had the details of the study explained to me. My questions about the study have been answered to my satisfaction. and I understand that I may ask further questions at any time.

I also understand that I am free to withdraw from the study at any time, or decide not to answer any particular question in the study. I agree to provide information to the researcher on the understanding that it is completely confidential.

I wish to take part in this study by filling out the questionnaire. under the conditions set out on the Information Sheet.

Signed: .....

Name: .....

Date: .....

I would like a summary of the results of the questionnaire.

Name: .....

Form: .....

VOLUNTEER FORM FOR INTERVIEW

The second part of this research involves talking with a few girls about smoking. If you would like to be selected for an interview with me please write your name and Form below. Not everyone who volunteers will be interviewed. Interviews will run for no longer than an hour and a half. They will take place outside of school hours at a location within the school grounds where you feel comfortable talking with me.

I would like to be selected for an interview.

Name: .....

Form: .....

MASSEY
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Private Bag 11222
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New Zealand
Telephone -04-0-356
Facsimile -04-0-330

FACULTY OF
SOCIAL SCIENCES

DEPARTMENT OF
PSYCHOLOGY

[redacted]

2 May 1994

Miss Georgina Kingi
Principal
St Joseph's Maori Girls' College
25 Osier Rd
Taradale
NAPIER

Dear Georgina

I'm writing to confirm that I have your permission, as acting legal guardian to the students at St Joseph's, to invite the third and fourth formers to take part in my research if they so wish.

As outlined last week I would like any third and fourth formers who are interested, to fill out the short questionnaire on attitudes and knowledge of the health consequences of cigarette smoking, with the assurance that any data collected will remain anonymous and confidential.

I would also like to interview volunteers hopefully 3 smokers and 3 non-smokers about their experiences and feelings towards cigarette smoking.

If this arrangement is still satisfactory, could you please sign the bottom of this letter to confirm I have received your permission.

Thank you for your help.

Yours sincerely

CLAIRE ORBELL

Georgina Kingi

GEORGINA KINGI
PRINCIPAL

NEWSLETTER TO PARENTS

With the consent of the Principal (Georgina Kingi) and the Board of Trustees, Claire Orbell, a Massey University student will be conducting a research project with Third and Fourth formers who give their consent to participate. She will be at the school between August and September.

Claire is interested in finding why our young women may start smoking and continue to smoke. She is also interested in what knowledge the girls may have of the effects of smoking on health and their attitudes to smoking. Her research is comprised of two parts. In the first part Claire would like to invite Third and Fourth formers to complete a very short questionnaire about smoking. She would also like to talk with a few girls about smoking.

If your daughter wishes to take part in this study, she has the right to:

*refuse to answer any question, and to withdraw from the study at any time

*ask any questions about the study

*provide information on the understanding it is completely confidential. All information will be collected anonymously and it will not be possible to identify your daughter in any reports that may be prepared from the study

*be given access to a summary of the findings from the study when it is finished.

If you would like more information or do not wish your daughter to take part in this research project please contact Claire by ringing:

Georgina Kingi (principal) 06 8448 461
or
Hineuru Timutimu-Thorpe (Claire's supervisor to the research) 06 356 9099 extn 4139.

APPENDIX II

SEMI-STRUCTURED INTERVIEW SCHEDULE AND CONSENT FORMS: INITIATION AND MAINTENANCE OF CIGARETTE SMOKING

SEMI-STRUCTURED INTERVIEW QUESTIONS

1.0 INITIATION: FIRST EXPERIENCE RETOLD

OVERALL AIM: Further understand thoughts, feelings & influences at time of initiation

NOTE: Issues are to be identified and investigated in more detail as the interview progresses

1.1 INFLUENCES
AIM: To isolate which groups have an effect at time of initiation
ISSUES: Parents, siblings, peers

SAMPLE QUESTIONS
-Think back to the very first time you came across cigarettes.

-Tell me what happened

-Did you think about smoking?

-Who were you with?

-Who smoked?

1.2 BACKGROUND
AIM: To isolate reasons for trying smoking
ISSUES: Curiosity, peer pressure

SAMPLE QUESTIONS
-Again, think back to the first time you came across cigarettes

-Why were the people you were with smoking?

-Why were you smoking? (if appropriate)

-When was it?

-How old were you?

-How did you feel?

-Where did you/they get the smokes from?

2.0 MAINTENANCE: GENERAL THOUGHTS

OVERALL AIM: To further understand individual's thoughts/ views on smoking

2.1 BACKGROUND
AIM: To understand the individual's opinions as to why people smoke
ISSUES: Stress, habit, addiction, pleasure, stimulation, sensorimotor manipulation, fear of weight gain

SAMPLE QUESTIONS
-Think about smoking.

-Why do you think people smoke?

-Why do you smoke? (if appropriate)

2.2 SOCIAL INFLUENCES
AIM: To understand social explanations for smoking & not smoking
ISSUES: Parents, siblings, peers

SAMPLE QUESTIONS
-Who do you know that smokes?

-Do you think their smoking has had an effect on your smoking/non-smoking?

-In what way has their smoking affected your smoking/non-smoking?

2.3 PERSONAL EXPLANATIONS
AIM: To identify the individual's understanding of reasons for smoking/ not smoking
ISSUES: peer pressure, stress, habit, addiction, pleasure, stimulation, sensorimotor manipulation

SAMPLE QUESTIONS

-When do other people you know smoke?

-Why do you think they smoke then?

-When do you smoke? (if appropriate)

-Why do you smoke then? (if appropriate)

2.4 CESSATION/ADDICTION
AIM: To identify the individual's perceptions of addiction
ISSUES: Addiction happens relatively easily, cessation becomes difficult

SAMPLE QUESTIONS
-What do you think would happen if you gave up smoking? (if appropriate)

-How would you feel? (if appropriate)

-Do you think it would be easy or hard?

-What would be easy/hard about giving up?

-Do you know people who have tried to give up smoking?

-What happened?

-Did they find it easy or hard?

-How did they stop?

-Did they go back to smoking? If so, why?

-What do you think are the best ways to stop smoking?

-Do you think people can become addicted to cigarettes?

-What happens if someone is addicted?

-How do you think they feel?

COMMON THEMES AND REFERENCES

*Negative Affect/Stress
Gilchrist et al, 1989; Brandon & Baker, 1991; USDHHS, 1988 Berman & Gritz, 1991

*Stress, Habit, Addiction, Pleasure, Stimulation, Sensorimotor Manipulation
Horn-Waingrow Smoking Survey; Ikard, Green & Horn, 1969; cited in Livson & Leino, 1988

*Age of Initiation
Oei et al, 1984; Stanton et al, 1989

*Influence of Peers/Parents/siblings
McInman & Grove, 1991; Quine & Stephenson, 1990; Nye et al , 1980; Ministry of Women's Affairs, 1990; Conrad et al, 1992; Oei & Burton, 1990; Stanton et al, 1989; Hunter et al, 1982

*Young Smokers not Addicted
Nye et al, 1980

*Personality as Addiction Factor
Warburton et al 1991

*Onset of Addiction
Public Health Commission, 1994, p 17; Gilchrist et al, 1989

*Advertising .
Jacobson, 1986

TE MAHI KAIPAIPA WAENGANUI TAMAHINE MAORI: NGA AHUATANGA E PA ANA KI ENEI TAWAITANGA
YOUNG MAORI WOMEN AND SMOKING: KNOWLEDGE, ATTITUDES, INITIATION AND MAINTENANCE
INFORMATION SHEET FOR INTERVIEW

What is this study about?
The aim of this research is to explore young Maori women's attitudes and feelings toward cigarette smoking to better understand how and why you may or may not begin smoking.

What does the study involve?
In the interview in which you are being asked to participate, we will talk about your attitudes and experiences of cigarette smoking. This interview will follow up some of the areas covered in the questionnaire which you filled out earlier. The interview will run for no longer than an hour and a half.

Your ideas will be reproduced and published but your name will be changed to ensure your privacy. It will be impossible to identify you from any publication.

With your permission, the interview will be tape recorded. This recording will be available to myself and my supervisor (Hineuru Timutimu-Thorpe) only and will be destroyed after this research is completed. All tape recordings will be stored in a locked cabinet in my supervisor's office.

Please feel free to ask any questions at any time. If there is anything you wish to know don't hesitate to contact myself or my supervisor, Hineuru, at the numbers below.

What can you expect if you take part?
If you take part in this study, you have the right to:

*refuse to answer any particular question, and withdraw from the study at an time

*ask any further questions about the study that occur to you while you are taking part in the this study

*provide information on the understanding that it is completely confidential to myself and my supervisor, Hineuru. All information is collected anonymously, and it will not be possible to identify you in any reports that are prepared from the study

*be given access to a summary of the findings from the study when it is finished

Thank you for your help.

Claire Orbell 8445 785
Hineuru Timutimu-Thorpe (supervisor) 06 356 9099 extn 4139

TE MAHI KAIPAIPA WAENGANUI TAMAHINE MAORI: NGA AHUATANGA E PA ANA KI ENEI TAWAITANGA
YOUNG MAORI WOMEN AND CIGARETTE SMOKING: KNOWLEDGE, ATTITUDES, INITIATION AND MAINTENANCE
CONSENT FORM FOR INTERVIEW

I have read the Information Sheet for this study and have had the details of the study explained to me. My questions about the study have been answered to my satisfaction, and I understand that I may ask further questions at any time.

I also understand that I am free to withdraw from the study at any time, or to decide not to answer any particular questions in the study. I agree to provide information to the researcher on the understanding that it is completely confidential.

I wish to take part in this study by being interviewed, under the conditions set out on the Information Sheet.

Signed: .....

Name: .....

Date: .....

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FACULTY OF
SOCIAL SCIENCES

DEPARTMENT OF
PSYCHOLOGY

[redacted]

Supervisor
Hineuru Timutimu-Thorpe
06 356 9099 extn 4139

17 October 1994

Dear

I am a Massey University student. I am currently conducting research at St Joseph's into why young Maori women begin or do not begin smoking. Your daughter has volunteered to take part in my research by being interviewed by me.

Interviews will run for the maximum of an hour. During this time I will talk with your daughter about her thoughts, feelings and beliefs regarding cigarette smoking. If you give your consent for your daughter to take part, she has the right to refuse to answer any questions and withdraw from the study at any time. All information provided will be collected anonymously and remain confidential. It will not be possible to identify your daughter in any reports prepared from this study.

If you have any questions, please don't hesitate to contact myself or my supervisor, Hineuru Timutimu-Thorpe, at the numbers above. If you give your consent for your daughter, to take part in the interviews, please sign the form below and return it in the envelope provided. Thank you for your help.

Yours faithfully

Claire Orbell

I/We NAME give my/our consent for NAME to take part in this research by being interviewed.

Signed

.....

Date .....