School of Public Health

The effects of health promotion on girls' and young women's health behaviours.

Helen Jane Mitchell

This thesis is presented for the award of the degree
Master of Science (Public Health)
of
Curtin University of Technology

May 2007

Acknowledgements

I am thankful to the Western Australian Centre for Health Promotion Research and the Women's Health Research Unit staff for providing me with the opportunity to gain the valuable research skills and knowledge necessary for me to complete my studies. In particular I would like to thank my supervisors Professor Peter Howat, Professor Donna Cross and the earlier supervision of Andrea Shoebridge and Ilse O'Ferrell. Their support and advice has been greatly appreciated.

I would also like to express my gratitude to all the schools, students and young women who participated in the study. These young women made studying this issue an enjoyable adventure and provided a rich insight into young women's perceptions of health and their behaviours.

Thanks also to the Western Australian Health Promotion Foundation (Healthway) for providing funding for this project and Curtin University for providing support through a Curtin University Postgraduate Scholarship.

Finally, a special mention must be made to my family and friends who have discussed and edited sections and encouraged me as I have completed this thesis. To Ian, Chloe, and Campbell your 'huggles' have kept me going and to you my debt will never be repaid, however I promise NO MORE HOMEWORK!!!.....for now.

Abstract

This formative research examines the effects of health promotion on girls' and young women's health behaviours. Health promotion campaigns targeting women have previously had variable success. Some have been criticised for containing unhelpful values and messages, for example, those that were seen to cause harm to women outside the target population or use of stereotypical symbolism to support the message. Within this study these are called 'unintended consequences'. The Young Women and Health Promotion (YW&HP) study examines the potential for unintended consequences (both negative and positive) of health promotion in general. The focus is then narrowed to examine in more detail whether the use of specific methodologies (such as social marketing), contribute to unintended consequences when promoting physical activity, nutrition and non- smoking messages to girls' and young women. These health behaviours were specifically targeted as they are known to be the major modifiable risk factors for women in the prevention of many chronic illnesses.

This formative research involved the collection and analysis of qualitative and quantitative data from 132 girls and young women across three age categories. These were Year 7 girls (Children - 11-12 years), Year 10 girls (Adolescents - 14-15 years) and young adults (18-25 years). Eighteen focus groups and 15 in-depth interviews were conducted to elicit responses to examine the effects of health promotion on girls' and young women's health behaviours, with particular focus on unintended effects. Current and past health promotion materials, plus a selection of commercial campaigns were utilized to prompt discussion within the groups. The discussion allowed the exploration of girls' and young women's motivators (enabling and reinforcing factors) for personal health behaviours, attitudes and responses to health promotion materials, and the longer-term impacts of health promotion campaigns. A self-administered questionnaire was distributed at the commencement of each focus group, which provided additional information and was later triangulated with the qualitative data.

Limitations due to the cross-sectional nature and sampling process of the study mean the results cannot be generalized beyond the study population. However the findings demonstrated that young women are motivated by a complex set of factors. The

most common factors influencing the study groups were body image, self-esteem, media and role models.

In addition young women of all age groups had a high awareness of the available messages in the areas studied. All groups discussed the increasing volume of health information available that is targeted at women. Participants noted much of the information originated from commercial sources. This in addition to public health initiatives resulted in increased 'health noise' to which they 'switched off'.

Furthermore the YW&HP study revealed the importance of written media for women. The young women in this study appreciated the need for mass media advertising, however, preferred to have take-home advice to process at their own time. Discussion of how women process information revealed these young women to be a critical and analytical audience that are often skeptical of health information. Prior to making a decision, therefore, most of the women underwent a process of internal and external validation which included cross referencing information with peers, friends, family and health professionals to establish its accuracy, credibility and validity. Hence the findings of this study would support the need for further exploration of media such as women's magazines to promote health to young women which may in turn prompt discussion with peers and therefore expedite the validation process.

Due to study limitations, results from this formative research need to be interpreted with caution. The results, however, would indicate the area of health promotion and how it communicates health information to young women would benefit from further investigation. The findings suggest many types of media currently being used to communicate health information to young women were useful and appropriate, specifically the use of social marketing media, which, was seen as a worthwhile and necessary strategy for this target group. Methods routinely used by commercial companies were also viewed as effective especially the use of women's magazines. As part of a comprehensive health promotion approach, this is a strategy, which may be an equally useful vehicle for public health messages.

In conclusion, discussion with participants revealed a number of negative and positive unintended consequences. This would, therefore, support the need for

further research in this area. Furthermore, the research has highlighted the importance of a comprehensive approach to the delivery of health information to young women. Best practice suggests this approach should adhere to ethical communication principles, which would enhance the intended outcomes of the communications whilst also assisting to maximize positive unintended consequences and minimize negative unintended consequences.

Table of Contents

List of Figures

List of Tables

1. INTRODUCTION

The Young Women and Health Promotion (YW&HP) study is a formative study that examines the effects of health promotion on girls' and young women's health behaviours. The study is funded by Healthway and consisted primarily of qualitative methods, however, quantitative methods were also employed. This combination of methodologies enabled the study to examine the effects (particular focus on unintended effects - positive and negative) of health promotion on girls' and young women's health behaviours. This was done through the exploration of young women's motivators (enabling and reinforcing factors) for personal health behaviours, attitudes and responses to health promotion materials, and the longer-term impacts of health promotion campaigns.

The study focused on the three key healthy lifestyle issues; nutrition, physical activity and smoking. Poor nutrition (over or under consumption), declining rate of physical activity and smoking are recognised as major modifiable risk factors for women in the prevention of many chronic illnesses including heart disease, many cancers, diabetes and osteoporosis [(1)]. Furthermore, women are constantly targeted with health messages through the media (both commercial and health promotion oriented) in these areas. Commercial media often use health related information and provocative appeals as part of marketing techniques to elevate the credibility of a product in the consumer's mind. This is most often seen with dietary related products marketed to women.

Social marketing media campaigns utilise similar techniques to promote health issues. Comprehensive social marketing has been utilised successfully in many fields of health (smoking, road safety, alcohol and fruit and vegetable consumption) [(2)]. Hence, when considering unintended consequences of health promotion, given the reach of such campaigns and the overlap of commercial messages, the YW&HP study recognised the importance of examining the extent of the affect such health promotion initiatives have on young women.

1.1 Objectives of the study

The aim of the YW&HP study was to examine the effects (particularly focus on - positive and negative) of health promotion on girls' and young women's health.

The objectives were:

1. To identify motivators (enabling and reinforcing factors) for young women's personal health behaviours.

2. To elicit young women's responses to current or past health promotion materials (audiovisual and print).

3. To assess the longer-term impact of public health campaigns on young women.

This thesis will report on the above objectives which are part of the Healthway funded research project.

1.2 Significance and benefits of the study

The project demonstrates national significance as it aims to address Priority issue 7: Health effects of sex role stereotyping and Goal A.3 to increase and improve women's participation in all levels of decision making on health as documented by Australian Health Ministers' Advisory Council, Subcommittee on Women and Health [(3)] in the 1994 Health Goals and Targets for Australian Women.

It is anticipated the application of the project's findings will help to reduce the potential for unintended effects and improve the appropriateness and effectiveness of health promotion materials by identifying communication styles and channels that are most suitable for young women. The results will also provide a benchmark from which to advocate for change of potentially harmful media messages to women.

In addition to this, data from this project may add to other research that encourages researchers and practitioners to investigate the potential for unintended consequences of initiatives and campaigns on a more regular basis. Hence, a long-term outcome of this study may be to establish mechanisms to promote accountability for unintended effects of health promotion (on a project by project basis at least). This is most

important when implementing powerful, emotive and expensive social marketing media campaigns.

Exploration of the unintended effects of health promotion to women in this study has highlighted the 'tip of the iceberg' concerning unintended effects in health promotion. It is anticipated, the results could be applied to the development of a framework for the content of women's health promotion materials, with particular reference to nutrition, physical activity and smoking. Application of the results to future planning, implementation and evaluation of health promotion to women will likely then have long-term benefits for women in terms of the amount of health information they receive, and regarding the accuracy and suitability of future materials.

1.3 Definitions

YW&HP – is the abbreviated title for the Young Women and Health Promotion Study.

Children - for the purpose of this study are girls in Year 7 (Y7) of primary school aged between 11-12 years;

Adolescents - for the purpose of this study are girls in Year 10 (Y10) of high school aged between 14-15 years; and

Young Adults - for the purpose of this study are young adult women (YA) aged between 18-25 years.

Young Women - for the purpose of this study when reference is made to young women the reference is to young women of all age groups in the study (ie. 12 – 25 years).

Unintended consequences - is defined as impacts often unexpected and ignored by the health promotion professional [(4)] that can be considered detrimental (negative) or beneficial (positive) for individuals or society [(5)].

Qualitative research - is any kind of research that produces findings not arrived at by means of statistical procedures or other means of quantification. It can refer to

research about people's lives, stories, behaviours, but also about organisational functioning, social movements or relationships [6].

Quantitative research - involves methods used to gain information from a larger number of individuals and findings are usually quantified and explicit conclusions can be drawn [7].

Focus groups - are a data collection technique that elicit descriptive data from populations and capitalises on the interaction within the group to collect rich experiential data on a topic decided by the researcher [8]. The technique requires the researcher to be active in creating group discussion for data collection purposes [9].

In-depth interviews - semi-structured interviews that intensively investigate a particular topic, the purpose of which is to gain as complete and detailed an understanding as possible of the topic at hand [10].

Research team – refers to the three chief investigators of the Healthway Grant which provided the funding for the project. Included in the research team was Associate Professor Peter Howat (School of Public Health), Andrea Shoebridge (Division of Health Sciences Curtin University) and Isle O'Ferral (East Perth Public and Community Health Unit) and the Candidate – Helen Mitchell (Centre for Health Promotion Research).

The researcher – refers to the Candidate who was the Project Officer on the project and coordinated and conducted all aspects of the study

2. LITERATURE REVIEW

2.1 Health promotion

2.1.1 Defining health promotion

There are many varied definitions of health promotion [11-15], all of which have common elements. For the purpose of this thesis health promotion is regarded as "a combination of educational, organisational, economic and political actions designed with consumer participation, to enable individuals, groups and whole communities to increase control over and to improve their health through attitudinal, behavioural, social and environmental changes" [11]. This definition was chosen as it acknowledged the impact of social determinants of health, which is significant given the evidence addressing the impact of these social determinants [16, 17].

Literature surrounding social determinants demonstrates most health problems are inextricably linked to the surrounding economic, social and political environment [16, 18]. Hence, health promotion strategies should aim to develop and change lifestyles and environments by including strategies that enhance these factors [13, 19]. Such strategies include social marketing media campaigns [14, 20-22], educational interventions [22], community development and community organisation [23, 24], policy development and environmental modification [25]. These strategies aim to promote awareness about health issues and change attitudes and beliefs that affect health behaviours.

2.2 A critical examination of the promotion of health

Given the outcomes of health promotion and its scope of influence, it is imperative to look introspectively at the actions, methods and motives used in promoting health. The following section presents a broad review of the literature in the area.

2.2.1 The significance of social determinants of health

The significance of the social determinants of health is increasingly debated [26]. Central to both political and economic aspects of the debate is health outcomes. Within this context, health outcomes are increasingly being utilised as a bargaining

tool in political economic forums with access to health services and information becoming an evident social divider [27-29]. Upon further examination it is often social determinants such as age, gender, income, employment and geography, which lie at the core of this division. These same determinants affect how individuals view their own health and how they process and apply health information within life [16, 30, 31].

2.2.2 The health promotion workforce

A knowledgeable, skilled workforce is a key component of the capacity needed by nations to promote health. The nature of health promotion (the discipline or area of practice), however, makes workforce development and standards a complex issue [32]. The pool of professionals from which health promotion practitioners are drawn along with the level of training is varied, therefore, so is the rigour of their methods and outcomes of their efforts [32]. This further serves to highlight the need to critically examine how health is promoted and the effects (both intended and unintended) on the population.

2.2.3 The 'greater good'

Foster believes it is logical for health promotion practitioners to believe that their tireless work will eventually improve the health of a nation [33]. As logical as this may seem, is it however incorrect to assume all that is done through health promotion is 'good'? This raises the question of how to ensure that 'we do no harm'. Ongoing evaluation that supports questioning what we do, how and why it is done and to whom it will assist at an individual, community and global level [19]. This is imperative, given individuals, communities and populations are frequently encouraged to make significant changes to their personal behaviours and environment [19], based on the latest health statistics and recommendations that are promoted by professionals. Given the amount of health information and conflicting advice, health promotion professionals need to remain aware of the impact of the information disseminated and how it will be perceived [34].

Empirical evidence globally shows health promotion does make a difference [13] with major health promotion programs in the last 20 years resulting in significant changes in many health attitudes, beliefs and behaviours [35]. For example, there has been a decrease in smoking, traffic injuries, and cardiovascular disease and an increase in

immunisation rates, sun safe practices, cancer detection and screening rates [35-39]. These are only a few of the successes. Many more examples were presented at the 18th World Conference of Health Promotion and Health Education held in Australia in 2004 [40].

From the successes listed it is evident that often health promotion initiatives are generally measured in terms of percentage shifts in attitudes, skills, knowledge or behaviour change of individuals or communities. It would be easy therefore to only measure the success of health promotion in terms of percentage shifts and ignore what Becker [19] believes is the 'dark side' of the profession. As a profession there is a continual promotion of a diverse array of behavioural, social and environmental changes that aim to enhance the health of individuals and the communities in which they reside. Is it not then an integral part of the responsibility of a professional working in the field of health promotion to be accountable for their actions and in doing so critically examine all possible effects of health promotion? This includes the intended impact of a program and any possible unintended effects (positive and negative) [41, 42].

2.2.4 Unintended consequences

Analysis of the literature revealed there is an apparent scarcity of documentation regarding the possibility of unintended consequences of health promotion, even though anecdotal evidence suggests they exist. Greenburg believes so strongly in the existence of such effects he has termed the condition resulting from these effects as an iatrogenic health education disease which he defines as "disease caused by, or its development aided by, health education practices" [42]. The terminology identifying unintended consequences varies in the literature. Unintended consequences are referred to as negative affective reactions [43], inadvertent harm [5], incidental effects [14], side effects [12, 44, 45], iatrogenic side effects [46], by-products [4] and unintended consequences [22] or outcomes [4, 5, 42, 43, 46].

For the purpose of this thesis such effects will be referred to as 'unintended consequences'. Unintended consequences are defined as impacts often unexpected and ignored by the health promotion professional [4] that can be considered detrimental (negative) or beneficial (positive) for individuals or society [5].

The following section discusses broad categories within health promotion, which the literature indicates may lead to unintended consequences. These are:

- the use of social marketing by health promotion
- the consequences of audience segmentation
- the consequences of an individual focus
- the cumulative effect of health promotion

Social marketing

Social Marketing is a behavioural change model that advocates using commercial marketing principles to influence consumer ideas, attitudes and lifestyles relating to issues of social concern [47]. The concept applies commercial marketing principles to social problems, thus the purpose is then to tell the public what to do by using a series of strategies to 'market good health' [20] and to sell a 'healthier lifestyle' [48]. In a recent publication Donovan and Henley refer to social marketing as an area of application for marketing techniques [22]. The following review of the literature focuses on a period prior to the publication of this text and therefore investigates the standard mass media approaches utilised in health promotion focused social marketing in the period prior to 1997.

Based on the assumptions of Lupton, [20] social marketing has originated from truly 'commercial roots' [49], with the focus of the approach being based on the application of the 'marketing mix' [20-22, 46, 49-53] to public health issues. The 'marketing mix' views information or 'correct attitudes' as the *product* [20] and advocates that the *price* of the recommended action not entail significant cost whether it be a cost of time lost or a physical loss (eg. pain, or loss of gratification) [14, 22, 53] and the *promotion* and *place* should contribute to the attractiveness and accessibility of the product [45, 53]. Hence, the central construct of social marketing promotes the idea that people's decisions are motivated by cost-benefit calculations. In developing social marketing campaigns, health promoters are advised to assume that people will opt for health only if the perceived benefits of any proposed behaviour change outweigh the perceived costs [47].

Social marketing has been perceived by some as a contradiction of terms and an odd fit for the public health professional [54], however, as a strategy it has gained

momentum. The last 20 years has seen the concept increasingly utilised in public health campaigns in America, South Africa, the United Kingdom and Australia[22]. It is important therefore to not only welcome the benefits but to query the costs inherent in the use of social marketing [20, 22, 46, 52, 54, 55].

If social marketing is applied in its purest form, taking into account all the assumptions for which it advocates [14, 52, 53], in theory, there should be little evidence of unintended consequences as all effects should be able to be accounted for. However, for reasons relating to political, social and the financial climate at the time of a campaign it is often a somewhat modified form of social marketing seen in action in health promotion. This form of social marketing is merely the use of commercial advertising to "sell good health behaviours" [20, 55]. In these campaigns there is little evidence of a comprehensive and well-planned ethical approach, which are proposed as best practice by Donovan and Henley [22]. A review of the literature [54] revealed concerns relating to the wider application of social marketing in public health, which includes concerns relating to:

- *Ethical issues* regarding the application of marketing techniques to sell health issues regarding victim blaming and the debate about persuasion versus coercion [22, 54].
- *Disempowerment of individuals* as often the messages are considered by some to be ineffectual or even counter productive [54] and serve often to create an imbalance of power in which a central agency seeks to dominate others by pushing their own agenda [48].
- *The commercialisation of health information* which some believe has begun to create confusion among consumers [54] and is contributing to people becoming de-sensitised to health information.

In addition, Donovan and Henley [22] present the following points that need to be viewed as unintended consequences of social marketing:

- The possibility of normalising behaviours that would not be advocated otherwise (eg an AIDS prevention campaign advocating condom use may inadvertently convey a message that promotes promiscuous sex.)
- The consequence of the message being overthrow by hard-core target markets so that negative role models become perceived as positive.

- A message may have an adverse affect on those people outside the target market.
- Some campaigns may trigger unwelcome associations.

In spite of the concerns, social marketing has made useful contributions to health promotion especially by emphasising the need to identify audience segments and to target messages specifically to them [48]. Social marketing is generally considered a useful practice and is widely applied, however, it seems it is not fully understood by many practitioners [54]. Donovan and Henley [22] put forward that ethical social marketers need to consider the possible unintended consequences of their actions.

The literature [4, 5, 43, 44] suggested there are some broad areas from which unintended consequences of social marketing media spring, these include:

- Use or over use of persuasive appeals (especially negative persuasive appeals).
- Promotion of social values and cultural ideals that reinforce stereotypes.

The use of persuasive appeals

The use of persuasive appeals has long been a part of social marketing based, health promotion media campaigns in the areas of nutrition [56], road safety (VIC road safety) [57], alcohol [38], smoking [20, 58], injury control and various other areas [2] where it is perceived the manipulation of human emotion will contribute to significant change in the target populations' behaviours [59]. Persuasive appeals can be used to convey positive messages about recommended behaviour change (eg. the benefits of giving up smoking) [57, 60] or alternatively negative appeals to promote behaviour change (eg. the consequences of continuing to smoke on the health of the individual and their loved ones)[20, 33].

Negative persuasive appeals

Negative persuasive appeals include those which invoke emotions such as fear, guilt, remorse, anger, insecurity, envy, regret and shame [5, 44, 61-63]. Negative persuasive appeals are pervasive messages that emphasise the harmful physical or social consequences of failing to comply with message recommendations [62]. These types of negative appeals play on the fears of people relative to their risk of developing disease or dying prematurely and are frequently used to promote health and to increase disease detection behaviours [64, 65]. Hale and Dillard [62] estimate that 26% of public service announcements use negative appeals [66].

A considerable amount of research has thus examined the effects of negative persuasive messages on attitudes about health behaviours and changes in health behaviours [65, 67] and has reached little consensus. However, Barsky [19] believes such widespread use of these techniques by social marketing based health promotion media has created an "epidemic of apprehension", resulting from a climate of anxiety, insecurity and alarm about diseases having the net effect of converting 'persons at risk' into 'anxious persons at risk' [19, 64].

Others support the use of negative persuasive appeals and believe they can be effective if they are implemented as part of a more comprehensive approach (eg followed up by health education, professional advice and adequate access to services) [58, 67-69]. The literature states, for negative persuasive appeals to be effective, the appeal must display the negative consequences of non-compliance with the recommended behaviours [61, 62]. The appeal must arouse emotions of fear which include threats of severe physical or social harm if the target audience does not comply with the recommended behaviour [61, 62], thus the individual must be able to personalise the risk [62]. The individual must feel vulnerable or susceptible to the negative consequences depicted in the message. In effect the benefits of compliance whether it be in physical, psychological or financial must outweigh the cost of non-compliance [62]. This school of thought is supported by the Health Belief Model [24].

At the same time, it is recognised that for best effect, negative persuasive appeals should be cautiously and carefully targeted [69]. Hale and Dillard [62] acknowledge the differences in the responses of volunteers to non-volunteers of persuasive messages (ie. high fear messages are no more effective than low fear messages for those who are anxious by nature (avoiders), however, high fear messages have a greater effect on those that are less anxious by nature (copers)) [62]. In addition it was revealed the age of the target audience makes a difference to the effectiveness of negative persuasive appeals [62]. For example Boster and Mongeau [62] reported fear appeals are more effective for older audiences, whilst Montazeri and McGhee [58] believe they can be equally effective in younger populations. The literature suggests the audiences' age, influences the audiences' perceived vulnerability to the threat. Hence, if negative appeals pinpoint the audiences' vulnerability effectively the behaviour change should be apparent. Examples of this are the feelings of

invincibility that are associated with youth or the threat of financial instability to those who are retiring or guilt harboured by a mother who continues to smoke whilst pregnant.

Highly negative persuasive appeals tend to be justified on the basis of utility [5, 63, 70]. For example, the use of fear tactics can be morally justified depending upon the extent to which respect for the individual's autonomy is disregarded and the importance of the problem [63]. Although the use of such techniques may be justifiable, many authors pose the question, "Is it ethical?" [5, 33, 43, 63, 70] Guilt is a often implied as a motivator, ignoring the fact that guilt itself has considerable potential for creating physical and emotional harm and illness [19].

Further investigation of the effects of negative provocative appeals on behaviour reveals although people claim to be influenced by 'shock' messages, such as seeing cancerous lungs there is little empirical evidence demonstrating that negative provocative appeals have any long term effect on behaviour change [60]. If change does occur it is often short term and transient [4, 5, 33, 43, 71]. Research conducted by Leathar [60] on the use of 'shock' in anti-smoking campaigns shows it is difficult to make people pay continued attention to heavily negative materials [60]. It was revealed for example, that individuals become resistant very easily and negative messages are quickly rationalised or dismissed [60]. In keeping with this a considerable proportion of the literature warns against the possible deleterious side effects of negative persuasive appeals [5, 33, 43, 61, 64, 72].

Positive persuasive appeals

At the time the research for this thesis was being undertaken, health promotion communication campaigns often relied on negative provocative appeals such as the use of 'fear' and 'shock' tactics to motivate behaviour change [60, 66]. The previous section has demonstrated the apparent confusion and ongoing debate regarding the limited benefits of such strategies. Some authorities, therefore, would suggest the time is ripe for a change in campaign approaches [60]. Instead of producing conventional negative and perhaps non-motivating messages, perhaps it is time to adopt some of the principles of positive commercial advertising [60]. There is growing research into the use of positive affective appeals or positive persuasive appeals and the effect they have on motivation and behaviour change [43, 66, 72].

Positive persuasive appeals are hypothesised to result in an approach to behaviours that enables an audience to feel open minded and positive toward an issue or campaign [66] by highlighting positive emotions (e.g. peace of mind, self-control and motivation and showing a caring for self and family) [72]. This works on the assumption individuals are more likely to be motivated by something that is attractive than by something that is not. Monohan [66] reveals positive appeals have been shown to encourage people to recall pleasant things, to judge things positively, to make faster decisions, to be more benevolent toward others and to be more compliant with recommended behaviours.

It is apparent, given these potential benefits, positive persuasive appeals are somewhat under-utilized [66] and it is argued that negative information is more likely to be used to rationalise a decision once it is made rather than to motivate it in the first place [60]. Consequently, although there is little evidence supporting the execution of one approach over another [61], it is thought by positively modelling safer behaviours there is less risk of the campaigns being counter productive (ie. promoting undesired behaviours) or being ignored [61].

The promotion of social values and cultural ideals

Pollay has published extensively on the issue of how the promotion of social values and cultural ideals within commercial advertising campaigns draws comparisons to public health campaigns [4, 73, 74]. Pollay [73] believes advertising may have many unintended consequences and perceives an advertising campaign's (both commercial and public health) ability to promote social values and cultural ideals is most concerning and remains unchecked.

Values are deemed indispensable for achieving human well-being and are an integral part of the deep structure of personality and influencing perceptions, attitudes, emotions and behaviours [4, 47, 74]. Cultural values are inevitably largely shared [4, 74], with values such as justice, caring and respect, patriotism, seeking health and freedom are some commonly shared by Western societies [4, 47, 74]. However, all the values we cherish as a culture may not be so wholesome [74].

There would be little harm in endorsing cultural values if it could be guaranteed that both values of 'virtue' and 'sin' were promoted equally [46, 73, 74]. However, herein

may lie the problem. Some values 'sell' better than others. Hence both commercial and public health campaigns reflect values on a selective basis [73, 75]. It is argued therefore that values reflected in campaigns are those which are more readily attached to existing products, easier to make visual or dramatic, or provoke more reliable and/or potent consumer responses [4, 73, 74].

DuBois [76] argues that social science research can not be 'value free'. Rudman and Hagiwara [75] agree with DuBois stating that the same applies to information campaigns. The literature explores the concept of public health professionals being no more able than others to pursue enquiries or promote messages free of the values of their own societies. It is considered that the closer the subject matter is to our own life experience, the more our own beliefs and values leak into and shape our work [76]. Therefore if the promotion of cultural values is inevitable it is perhaps not the values of the society we need to examine but the effect campaigns promoting select values is having on members of society. Social marketing media campaigns have the potential to produce and promote unhealthy stereotypes. Some of these identified in the literature are discussed in the next section.

The 'mother' stereotype

One such stereotype is that which defines women as mothers and carers [77]. Specific value dimensions such as maturity, practicality, modesty, courtesy, dignity, health, freedom, pride and security are often promoted as 'motherhood' criteria [74]. These values are reinforced and promoted widely though social marketing based health promotion and commercial campaigns that focus on the health of the family. By promoting this image, health promotion endorses the stereotype of women as guardians of their families, and by extension that of a country [20, 33, 78-80]. Persuasive techniques using guilt to motivate women are used to encourage woman as wives, mothers and as potential mothers to monitor the health of the family.

Healthy person stereotype

Yet another potentially dangerous stereotype beginning to develop is that of the 'healthy person' and what this constitutes. In a commodity culture the ideal body is lean, fit, controlled, toned, athletic and youthful [20, 81-84]. Such a body is also deemed to be a healthy one [20]. The cultural ideal of the 'slim body' is promoted widely

through both commercial and public health campaigns. The problem with this is two fold. To begin with, the reinforcement of the dominant cultural stereotype of the 'slim ideal' female form has largely been associated with both self-esteem and health problems [85], such as higher rates of eating disorders and smoking in young women and men [81, 86, 87]. The development of this 'cult of slimness' [84] represents the social pressure to conform to a socially and culturally reinforced stereotype [88]. It seems the widespread pursuit of thinness by women with a focus on weight and dieting behaviour has become normative [83, 86, 88-90]. Such social pressure stems from many sources, but is reinforced by nutritional scientists, doctors, dieticians and government health campaigns [84]. Results from research conducted by McKie, Wood and Gregory [89] with women aged 18-70 years in the United States revealed they were highly resentful of both external and internal pressure to conform to an 'ideal body image'. It was felt health issues were placed second to the attainment of an image. Yet somewhat ironically many freely admitted to attempting to attain the 'ideal body' [89, 90]. This may to some extent be due to health interventions for weight loss, nutrition and physical activity and although well intended have reinforced a culture of slimming [84].

Stigma of obesity

Secondly by reinforcing this ideal body we lend support to a form of weight discrimination known as 'fatism' [84]. 'Fatism' has been documented in many Western societies, with studies in the United States showing that some health professionals view overweight women as less successful and less intelligent, where the key assumption is that thin is always better than fat and where fat is a clear sign of a body out of control [19, 84, 91]. Germov believes the stigma of overweight is one of 'victim blaming' and moral failure; a failure of personal responsibility to control one's weight [84] and Campbell finds similar in a study investigating attitudes of health professionals to overweight people [92]. Germov suggests that health promotion fails to counteract this cult of slimness, reinforcing the pursuit of the slim ideal [84]. As a consequence the conflict between the cultural drive for thinness and the biological drive for food frequently sets the stage for a cyclical pattern of weight loss and gain [86].

Smoking stereotype

In health promotion campaigns, the use of graphical and persuasive messages to encourage the public to quit smoking has also contributed to the emergence of what could be viewed as a 'stereotype of a smoker'. Smokers in campaigns are often portrayed as unhealthy, dirty, lacking pride in themselves, physically unappealing and are seen as irresponsible and selfish because their actions may be harming others around them [20]. It is important to examine the effect this is having on both smokers and non-smokers. It could be argued that all this serves to do is encourage non-smokers to place value judgements on the individuals who smoke, further encouraging the public to blame the individual and not examine the problem. The problem is seen as the individuals, and the focus on the larger picture (the social, economic and political factors which reinforce smoking behaviours) is lost [5, 42].

Stemming from this stereotype is also the association of smoking and rebellion. In Western societies where smoking is gradually becoming stigmatised and socially unacceptable, the act of smoking may serve as an expression of rebellion [93]. Research has shown that this may be one of the things that makes smoking so appealing to adolescents, many of whom seek forms of rebellion to use as a tool for self expression [20, 93-95].

Healthism

Finally, it is proposed that by allowing the promotion of social and cultural ideals and values to go un-monitored as a profession we have assisted in the birth of 'healthism' [96]. 'Healthism' is an ideology in which maintaining health or avoiding illness becomes the supreme human value [84, 96]. In the construct of this ideology health becomes a metaphor for self-control, self discipline, self-denial and will power [5, 96]. In short, within healthism, healthy behaviour becomes the paradigm for good living. Healthy men and women become model men and women [96]. People who do not display good health are viewed as deficient and perhaps morally culpable. Professionals often unwittingly blame these people for their obesity, substance abuse, sedentary lifestyles and the like [64]. Therefore viewing health as an ultimate value might harm those who according to these criteria are not healthy, by making them feel punished or unworthy [5, 64].

In examining the consequences of healthism, health promotion professionals need to examine how health promotion has contributed to its formation. For example, we need to know how health campaigns serve to turn health into an ideal and if health campaigns contribute to making health a super value that should be pursued vigorously. [5, 96] Sharkey believes health promotion professionals have a responsibility to be clear and honest about the use of social values and cultural ideals to motivate individuals to change behaviours, both for the benefit of the profession and for those to whom it offers its services [41].

Consequences of audience segmentation

People have different interests, needs and concerns at different times in their lives. Very few messages work for everyone, hence the need to segment the audience and actively 'target' the population most wanted to be reached and influenced [49]. The majority of health promotion texts dealing with campaign planning and message design have a section on "how to target your audience" which outlines how to segment and target the audience by building a profile of their characteristics (much of the theory behind social marketing also relies on this to provide the foundations for campaigns). This profile usually takes into consideration factors such as socio-demographics, lifestyle, attitudes, geographic dispersion, language and mass media targetablity [21, 45, 49, 53, 97, 98]. However, it is not the need or purpose of audience 'targeting' that is the issue under examination as it is clearly justified on the grounds of efficient use of campaign resources and effectiveness, but rather the long term consequences of such practices on the general population.

Labelling 'hard to reach' populations

Segments of the population, despite accurate targeting, who do not respond significantly to promotional messages are often defined as 'hard to reach' [20]. It is presumed that the non-response of these 'hard to reach' populations is in part due to their inability to adopt behaviours and their ignorance about health issues. This focuses the blame on the individual and fails to examine the message or the way the message is promoted [20]. Lupton [20] believes health promotion has a tendency to 'hunt' the hard to reach populations and not just accept that perhaps they have chosen to continue with a health behaviour despite the fact that they know it is 'bad' for them – once again labelling them as 'hard to reach'. This continual process of

'hunting' and 'targeting' has contributed to stigmatising certain behaviours and reinforces the social judgements placed on the individuals whom have chosen to maintain them [20, 93] (eg. the woman who chooses to continue to smoke or to drink during her pregnancy and is judged as being irresponsible, selfish and in some cases ignorant because of the damage she may be causing her unborn child)[33, 45].

Message 'leakage'

Another aspect of audience targeting that needs examination is the life of campaign messages targeted at a specific group. Pollay [4] surmises that the seeds planted by campaigns may bear strange fruit. Hence, complete analysis of the important and attendant ethical responsibilities of professionals campaigns goes beyond obvious considerations of what is being said (the product) and how it is being said (the process). Such an analysis also needs to consider the effects (the by-products) of the communication in the hearts and minds of the audience [4, 99]. It needs to reflect upon the long-term impact of campaigns, both individually and collectively. This issue of the by-products or unintended consequences of campaigns, however, is rarely researched and discussed [4, 5] but is what all 'ethical social marketers' need to consider [2].

It is apparent there are two viewpoints from which the hypothesis of 'leakage' warrants further discussion. One is the 'leakage' or life of the message on the target group beyond the time frame of the campaign and the other is the 'leakage' of the message beyond the specified target group both immediately and over time [2, 22]. In both cases a critical factor is the difficulty in determining how a message will be interpreted and what exactly is seen by an individual at a given time and what the individual will do with information received [45, 60, 100]. For example, social marketing media campaigns have often explicitly directed their emotional appeals to incite women's anxiety around attractiveness and youthfulness [20]. The 'Pretty Face' campaign run by the WA Health Department in the late 1980s, targeted at 18-25 year old women, showed a young women smoking and her face slowly aging into that of an "old crone". This simultaneously devalued older women and attempted to manipulate young women's concerns about their future physical appearance or general attractiveness [20]. This is an illustration of how perceptions of growing old are portrayed as negative to one population with no recognition of the impact this

may have on the self-esteem of older women or on the negative stereotyping of aging when in reality this is unfounded [22, 101]. Similarly, campaigns that promote 'eat less fat and increase physical activity' which offer generalised messages to reduce fat consumption have contributed to young girls adopting anorexic and bulimic behaviours [102]. This may have continued adverse effects in terms of later development of osteoporosis due to severely reduced calcium intake during adolescence and adulthood.

The above examples imply the consequences of message 'leakage' are negative. However, this may not always be the case. Donovan [61] gives an example of a New Zealand drink driving campaign known as 'Morgue'. The campaign was aimed at 17-36 year old males which modelled desirable behaviours, used humour and although death was implied with a threat of self-death no negative consequences were shown. Research showed that 'Morgue' had more effect on passengers than on 'drivers' because the behaviour shown applied to passengers, even though the advertisement apparently modelled the driver's behaviour. Another example is the pilot media campaign conducted by Diabetes Australia – WA. Not only did the 'Don't Ignore Diabetes – Diabetes is too serious to ignore' campaign raised diabetes awareness (primary aim) but also prompted people with diabetes to be vigilant of on-going risk management [22, 103]. These results suggest that advertisements works in unintended ways and suggests thorough research and pre-testing to explore unintended consequences, especially counterproductive effects [61], is required.

Consequence of an individual focus

The assumption that the public are 'idiots'

For the most part, health professionals look to well targeted media campaigns as a way of influencing attitudes and beliefs which flow on to change behaviours [22, 99]. Becker [19] believes the notion that "if it is good for you, you must want it" still lingers in the health field. The underlying assumption is, people adopt risky behaviours because they do not fully understand the consequences of such acts or they lack specific information [46] – they just don't know better [99]. Such individuals seem to care little for their health status because of an urge to fulfil 'short term desires', and are viewed as needing more education [20]. Ignorance is seen to be the problem, and the solution is to package and target information just the right way [45, 46,

[99]. This limited approach does not consider that people behave as they do for different reasons. Even behaviours deemed unhealthy by public health authorities must have some perceived benefits for the people engaging in these behaviours [42].

According to Lupton [93], commercial campaigns view the target audience in a position of power whilst social marketing do not. Rather they routinely position members of the public as ignorant, apathetic and passive, needing guidance from state agencies to conduct their lives wisely. This is a fundamental philosophical difference which may go some way toward providing an understanding of the reasons why health promotion activities emulating commercial promotion sometimes fail [93]. Similarly campaigns that employ social marketing approaches in isolation, which focus solely on the individual and tend to emphasise and affirm mainly individual level solutions, also appear to have had limited success [42].

Victim blaming

In keeping with the above discussion (which focuses on the responsibility of the individual for their own health status) [42] is the topic of victim blaming, which is perhaps the most widely discussed ethical issue in the practice of health promotion [63]. Victim blaming is locating the cause of societal problems within the individual rather in social and environmental forces [5, 63]. In health promotion, victim blaming would presumably involve assigning responsibility to the individual for his/her health problems, and focus health promotion programs exclusively on individual behaviour change strategies [63]. This approach would have the effect of absolving the health, social and medical care system of any responsibility for the health of the population [19]. Health promotion professionals have been aware of this concept for many years. Many current campaigns continue to address social, political and environmental issues on in a broader context, however, some continue to focus health messages on the individual.

2.2.5 Cumulative effects of health promotion

The public have been targeted over many decades by social marketing media campaigns with relatively little thought being given to its cumulative effects. Greenburg argues the emphasis on preventing illness and disease may itself have unintended consequences [42]. For more than three decades the public has been told

about many health risks including smoking, lack of exercise, low fibre diets, stress, alcohol consumption, drug use, non-use of seatbelts and child restraints, lack of calcium in the diet, multiple sexual partners, breathing clean air, red meat, lack of social support, divorce and exposure to the sun [42, 63]. What is the public to make of all these risks and the continual promotion of ways to reduce them [42]?

The cumulative effects of health promotion need to be examined from two perspectives, the premature promotion of health behaviours over time [18, 19, 33] and the excessive or over promotion of health behaviours over time. Becker [19] argues that by prematurely exhorting the public to undertake a large number of different behaviours before the validity of study results and their recommendations are fully explored serves only to confuse the public. This in turn contributes to the public becoming sceptical and cynical especially since contradictory advice is often offered sequentially [19]. Greenfield observes [19, 104] the reaction of the public to this by saying "…by now the public suspects that what is banned today is likely to be administered intravenously in all the best clinics tomorrow!"

Hence, it seems the public audience is becoming cynical. Increasingly a wide range of dubious health advice is offered by essentially commercial food, diet and exercise companies (ie. Weight Watchers, Heinz etc) along with the more traditional public health campaigns [33, 105]. Such a volume of messages from a number of sources results in the promotion of mixed and competing messages engendering feelings of scepticism and confusion and contributing further to individuals feeling overwhelmed at the extent to which they must modify their behaviours. A study by Boush[106] shows even children view advertising with scepticism. The study investigated the level of scepticism of children toward advertising messages and found although all ages were sceptical of the information, adolescents were highest which positively related to adolescents having a more adult understanding of advertising tactics[106]. However, the fact that children of any age view promotional materials with scepticism and due to their inability to clearly discern between health promotion and commercial campaigns the need to examine the cumulative effects of campaigns is reinforced.

Furthermore, health promotion messages in some cases are in competition with commercial messages and can easily be confused with commercial messages making

it increasingly harder to determine what is a credible source of information [33, 89]. This subsequently contributes to information overload felt by the public [107]. Lupton[93] also acknowledges this as a problem and suggests that social marketing media campaigns should in fact minimise competition with commercial companies and look toward developing a synergistic relationship that works at decreasing message repetition and competition and moves towards promoting universal concepts regarding health behaviours.

Additionally the cumulative effect of campaign messages over time utilising social marketing techniques and provocative appeals has also contributed to framing health in terms of self denial and self-sacrifice further perpetuating the myth that being healthy requires hard work [42, 60]. It appears that when reviewing health promotion messages the public generally acknowledge that the message will attempt to persuade them to give up a pleasurable activity or to take up an unpleasant one; whether it is wearing condoms during sex or giving up smoking [93]. Agreeing with Lupton, Guttman[5] asks to what extent might health promotion seek to deprive people of pleasures by pointing out risks associated with certain behaviours or practises. Further what affect does this have over time? Greenburg[42] considers that by framing health in terms of hard work and sacrifice and ignoring the need for health to include pleasure and fun, individuals become frustrated and overwhelmed by the spectrum of behaviours that will cause them harm and those which they have to adopt to prevent harm. In turn the individual becomes frustrated and gives up, adopting the attitude that "Everything causes cancer! I can't give up everything!" [42]. As a report by the Social Issues Research Centre "… just about everything we eat or drink has at some stage been shown to be either good for us or very bad…" [104]. Consequently individuals are able to rationalise away what they find threatening and justify their behaviours of choice (eg. whether it be to continue to smoke or to engage in unprotected sex) whilst continuing to filter and switch off to many messages they do not perceive as relevant to themselves [42, 60].

2.2.6 Critical examination – putting it into perspective

The "dark side" [19] of social marketing based, health promotion media campaigns reveals some disconcerting, far-reaching effects and much may be gained from the critical examination of campaigns. It could be argued that such professional introspection is not only necessary but should also be viewed as essential for professional growth [42]. It is paramount that health promotion as a profession examines what it practices, because without identifying and acknowledging these unintended effects their occurrence is unable to be counteracted, prevented or even measured. Donovan and Henley[22] propose the use of a series of ethical questions when planning social marketing initiatives. These questions are based on the principles of non-maleficence (doing no harm), beneficence (doing good), justice (fair and equal treatment), and utility (providing the greatest good to the greatest number). These questions have relevance that is far-reaching and applicable to the broader definition of health promotion.

2.3 A critical examination of health promotion for women

The previous section has established the need for further investigation of the unintended consequences of health promotion. This section will investigate health promotion to women for evidence of any unintended consequences.

Health promotion targeting women comes from multiple sources. Therefore, it is important to establish what is meant when referring to health promotion for women. It is necessary to distinguish between health promotion and commercial sources of health information. Both of these are sources of advice which contribute to the plethora of health information readily available to women.

Commercial health information provision includes all forms of advertising media which conveys a message to women regarding health. Health promotion to women will be central to this study, with health promotion being inclusive of social marketing based health promotion media campaigns targeted specifically towards young women.

2.3.1 The evidence of unintended consequences of health promotion for women

There are a growing number of publications on health promotion and women's health. However, few address the communication modes used or assess the effectiveness of health promotion messages targeted at women. A retrospective look at health promotion for women reveals the frequent use of mass media campaigns designed to change knowledge, attitudes and behaviours [75, 85, 108, 109]. As discussed in the previous section, such campaigns are often modeled on the principles of social marketing and may have unintended consequences for the women being targeted and for those age groups that fall beyond the parameters of the target ages.

Foster[33] examined three key areas of health promotion strategy for women – smoking, alcohol and diet and found three key themes emerged from the analysis which can be extrapolated to other areas of health promotion for women.

The first presented is the scientific inaccuracy of the health education messages to women. As mentioned previously by Becker[19], health promotion can sometimes be accused of the promotion of behaviour change before adequate evidence is available with respect to the benefits advocated. For women this is of particular concern. Campaigns offering generalised messages to reduce fat consumption such as campaigns which promote '*eat less fat*' may contribute to young girls adopting anorexic and bulimic behaviours by making young girls 'hyper' aware of sources of dietary fat [102]. It is also evident that attempting to reduce dietary fats from sources such as dairy foods may have long term effects in terms of the later development of osteoporosis because of severely reduced calcium intake during adolescence and subsequent adulthood [102].

Hann [70] investigates the effect of campaigns using strategies, which manipulate statistics for the incidence of breast cancer in the UK in order to enhance attendance at breast cancer screening. The study revealed that campaigns utilizing strategies such as this have led to the confusion over incidence and mortality rates relating to breast cancer, with women generally overestimating their chances of developing breast cancer by 20-30 fold [70]. Such manipulation of the statistics raises questions about the wider ethical implications of professionals working in health promotion being completely truthful [70]. Furthermore what are the consequences of over-

inflating the risk of developing breast and cervical cancer amongst women? Perhaps the effectiveness of utilizing statistics when addressing women's health issues needs closer examination? A study conducted by Marshall, Smith and McKeon [72] revealed the use of statistics to promote attendance of screening programs for breast and cervical cancer was counter productive, with the women in the study agreeing that statistics were not meaningful and 'hard to relate to'.

The second issue addressed is the extent to which health promotion messages exert oppressive social control over women's lives. Foster [33] suggests that health promotion strategies aimed specifically at women have sometimes been clearly designed to control women's behaviour for the benefit of others, particularly their unborn children. Public health strategies have traditionally represented women as mothers, the guardians of their families' health, and by extension, that of the population, and have targeted them for intervention as agents of regulation. In this context women are expected to regulate the diet of their partners and children, to monitor their partner's weight and exercise habits, to ensure the cleanliness of their children, to make sure that their children are vaccinated and to desist from smoking and alcohol consumption while pregnant and even afterwards [20]. So too, contemporary social marketing media campaigns tend to place the emphasis or responsibility for health promotion upon women with text and images promoting and reinforcing gender roles [20, 33, 78, 79] with little concern for the women's own health status or the structural constraints under which they operate[20, 33]. It also does not take into consideration the creation of stereotypes such (eg. the mother stereotype) mentioned in the previous section.

Additionally, Quit campaigns in Western Australia were developed to target 16-29 year old women from 1991 – 1995 to promote the message *"Quit because you can"* [110-112]. This campaign included the *"Only Women Bleed"* advertisement aired in 1994 and 1995 [110-112] which used images and text focusing on women's reproductive potential and risk of harming their unborn child to motivate women to quit smoking. These campaigns included information on causal links between smoking and cancer of the cervix, problems with the pill, fertility, pregnancy, menstrual complications [110-112] and that smoking decreased babies' birth weights. An unintended consequence or misapplication of the information was some women perceived if they

smoked during their pregnancy they would have an easier delivery because their baby would be smaller [113].

Health promotion for women on the basis of gender roles is extended further when the question is asked 'why women continue to smoke during pregnancy?'. The literature concludes that a women's readiness to change (i.e. readiness to quit smoking) is at its peak during pregnancy indicating the time a women is pregnant as a 'window of opportunity' for the promotion of smoking cessation [114]. During this time women could be encouraged to quit with the aid of cessation appeals demonstrating the potential harmful effects that smoking will have on foetal and child health [114, 115]. Although the findings of the research are valid in their assumptions they serve to reinforce the call for women to place the needs of others above their own, hence serving to reinforce social stereotypes of women's roles in society.

The third theme discussed by Foster [33] was the inability of the health promotion industry to tackle the primary cause of women's maladaptive behaviours and health problems. The research reveals there is no evidence campaigns using emotive, persuasive appeals, which use fear and guilt as the primary motivators for women smokers to quit during pregnancy actually reduce smoking among pregnant women[33]. Women continue to be told about the harm smoking can cause their baby, assuming it will have a positive effect. However, many pregnant women continue to smoke despite being all too aware of the health hazards involved [33]. Studies conducted by Oakley and Graham [33] found that external pressures and stresses related to social and environmental factors (i.e. poverty, relationships and other children) additionally compromised their ability to cope. For women living with children in poverty, cigarette smoking was identified as a coping strategy and regarded as a necessity rather than a luxury[33]. Women looking after small children on very low incomes stated "…smoking is the one thing they do for themselves, it keeps them calm in extremely stressful circumstances and stops them taking things out on their children." [33]. Additional research into the maternal smoking found that although 20%-40% of women quit smoking during pregnancy, 70% - 80% of those who quit during pregnancy relapse within a year of the birth of their child[116].

Reasons for relapse included using smoking as a mechanism to combat the stress of having a small child and to aid post pregnancy weight loss.

Compounding Foster's[33] findings is literature suggesting women's health issues have typically been framed not only by traditional values [107] such as appearance, diet, and how to take care of the family but are also modeled on the basis of stereotypical assumptions about young women's behaviours and aspirations [105] to emulate the socially desired, ideal image of a women[108]. It appears campaigns which focus on manipulating young women's concerns about their physical appearance or general attractiveness (eg. to frighten them into avoiding or giving up smoking[20]) preys on women's insecurities and feelings of inadequacy rather than simply focusing on the seriousness of the health issue for the woman [79, 104, 107]. For example the *"Pretty Face"* campaign (launched in Western Australia in 1985) urged women to cease smoking to prevent their skin from aging prematurely. This use of a persuasive message that focuses on physical appearance simultaneously devalued older women in its attempt to frighten younger women with images of decay and ugliness.

Conversely, the use of glamorous models to personify the lives of young women in social marketing media campaigns can also prove problematic. In Western developed culture girls and women match their appearance to culturally based stereotypes of feminine beauty [86, 117] and openly admire and aspire to physical ideals that are promoted in the media and fashion [88, 118]. This could lead to the development and/or the reinforcement of dangerous stereotypes (such as the stereotypical healthy person) affecting long-term health outcomes [20, 93]. Therefore, where health promotion uses models and is based on the promotion of social and cultural values, there is an inherent assumption made about women's aspirations to emulate the model's characteristics. Continual exposure to these images may serve only to diminish women's self-esteem[86, 90, 108] as they perceive themselves to not meet society's standards of what constitutes a successful woman either because of personal inadequacies or because they reject the image of the models.

Finally when investigating health promotion for women the use of negative persuasive appeals using fear and guilt need to be investigated. Such appeals have been liberally used in many areas such as breast and cervical cancer screening and

smoking. Hann, [70] as previously mentioned, found that the 'selective quotation' of breast cancer incidence was used in order to 'frighten' women to undergo mammography screening. Anti-smoking campaigns are also guilty of the liberal use of fear, with gruesome portrayals of body parts damaged by the deleterious effects of smoking. However, there is a lack of consensus about the effects the use of fear has on women exposed to such messages. Marshall, Smith and Mckeon [72] show women in their study mentioned fear appeals would not work because they would heighten the many fears and 'horror stories' currently surrounding many behaviours. Sutton [67] would argue however, a use of fear is effective if an acceptable threshold is determined for the target audience and the message is accompanied by an appropriate release mechanism, which presents options and a clear path of action empowering the target group to act.

2.3.2 The Western Australian context

In examining the literature on how health promotion has been targeted at women globally the campaigns focusing on smoking and diet have been briefly explored. For the purpose of this study a closer examination of social marketing based health promotion media campaigns in the areas of smoking, nutrition and physical activity for women in Western Australia are presented below. This section takes into consideration those campaigns available until 1998, the time during which this research occurred.

In Western Australian, women have been targeted by formal health promotion initiatives produced primarily by the Health Promotion Service Branch of the Department of Health - Western Australia (DoH) (Table 1). Smaller initiatives relating to specific health issues have been addressed by other health agencies such as the Cancer Council of WA and Heart Foundation of WA. The majority of health promotion mass media campaigns produced that target women, focus on smoking (table 1). An extensive search of health promotion materials for women produced over the period (1990-1999) was unable to reveal any specific formal health promotion mass media campaigns developed in the area of nutrition or physical activity targeting women directly. However, there are a number of nutrition mass media campaigns aimed at children which utilize women as mother figures (Personal communication; Krista Williams Nutrition and Physical Activity Program – DoH 8th

March 2000). There is also extensive written information in the form of pamphlets and information booklets available for women regarding nutrition, although the primary focus of this information is on women during pregnancy (Table 1). The search for materials revealed that the majority of health promotion to women in the areas of interest over the last decade has focused on women's role in society as partners, wives and mothers.

When investigating this area evidence of evaluation was found lacking. Given what is known regarding the potential for unintended consequences resulting from the application of social marketing it seems inadequate campaign evaluations demonstrating the success of campaigns [101] did not investigate the existence of unintended consequences (either positive or negative).

Table 1: Health promotion initiatives targeting women in Western Australia in the areas of smoking, nutrition and physical activity from 1990 - 2000

Topic Area:	**Information medium**	
	Mass – media	**Written media**

Smoking	• Health Department of WA campaigns: 1991 – 1995
	  • *Target:* 16-29 year old female smokers
	• *Quit because you can campaign TV advertisements included:*
	  • Let go
	  • Smoking sucks us
	  • Only women bleed
	  • Perfume
	• Healthway funded program: Young People and Smoking project TV advertisements included: 1996-1998
	  • *Target:* 10-14 year (both genders)
	  • *TV advertisements included:*
	  • Talking cigarette
	  • Stressing out
		• Produced by the Health Department of WA:
		• Smoking and pregnancy
		• Passive smoking and children
		• Women and smoking facts and issues

Nutrition		• Produced by the Health Department of WA: • Nutrition during pregnancy and lactation • Diet and folate before pregnancy • Constipation in pregnancy • Listeria infection and pregnancy • High iron foods in pregnancy • High calcium food in pregnancy
Physical Activity		• Physiotherapy advice and exercise in pregnancy

At first glance it could be assumed there has been little focus on women's health over the decade, however this is not necessarily the case. Although there is a scarcity of campaigns that focus on women specifically, global health issues have been addressed by social marketing media campaigns developed by the WA Department of Health [112, 119] and the Commonwealth Department of Health and Aging [36, 120]. These campaigns were specific to sun safety, skin cancer, breast and cervical cancer,

smoking, alcohol and road safety and most likely did have an impact on young women's health behaviours.

The use of social marketing to raise awareness of health issues is well established, hence its application to women's health issues is probably inevitable. However, it is important to establish the need for health promotion initiatives for women (eg. does the status of women's health warrant attention as a stand-alone or simply as part of a population strategy). In addition when considering future efforts the lessons learnt from the critical examination of previous health promotion need to be applied. This will assist to ensure women are being targeted appropriately with the most appropriate messages in the format that will best be internalized and processed by women.

2.4 Australian women and health

2.4.1 Health status of Australian women

Statistics demonstrate the leading causes of death among Western Australian (WA) women are heart disease (25%), cancer (26.1%), cerebrovascular disease (11.4%), respiratory disease (11%) and type 2 diabetes (2.6%) [121]. These figures are comparable to other Western nations [122, 123]. Compounding this is the global rise in the rates of overweight and obesity. The rate of overweight and obesity has almost doubled amongst Australian adults over the last two decades with Australia now being ranked as one of the fattest developed nations, closely following USA rates [124]. The 1999/2000 Australian Diabetes, Obesity and Lifestyle Study [125] estimated 67% of adult men and 52% of women to be overweight or obese in 2000, or around 7 million Australian adults. Males are more likely than females to be overweight, with almost half (48%) of adult males estimated to be overweight compared to 30% of females. The levels of obesity are higher in females, with 22% of females estimated to be obese compared to 19% of males [125, 126]. In WA this is reflected by figures showing 35% of women are overweight and 13% considered obese [127].

A strong body of evidence exists to support the benefits of a healthy lifestyle in the prevention and management of chronic conditions [64, 101, 122, 126-132]. In recognition of this, considerable effort has gone into the development and promotion of national frameworks and guidelines for both physical activity [120] and nutrition [133-135].

Given the level of policy support and evidence supporting the effectiveness of preventive behaviours (particularly with physical activity, nutrition and smoking) in reducing or delaying the onset of chronic illness, the statistical trends surrounding these behaviours are of concern.

National data shows [126] from 1997 – 2000 the proportion of Australians who are not sufficiently active for health benefits increased from 49% and 54% in men and women respectively across all age groups, with 55% women not being sufficiently active. WA women are marginally more active, however statistics still show 47.8% are not sufficiently active [127]. These figures are not far behind the U.S. where 60% of adults do not engage in the recommended amount of activity [101].

Exploring nutrition trends both nationally and internationally showed, for women aged 25-64 the total fat intake is 33%. While this declined in the period from 1983 – 1995, it still exceeds the level of 30% recommended by the NH&MRC and is well above the recommended 20%-25% for anyone who is overweight [126]. This is comparable to the total fat intake in the U.S. (33%), which is 11% above the recommended level [126]. Also between 1983 and 1995 the average energy intake among comparable samples of 25-64 year old Australian women increased significantly, by about 350 kJ per day [126]. This is comparable to US energy intake increases [101].

In addition, based on a 2001 National Health Survey, generally more women than men met the recommend levels of consumption of five serves of vegetables and two serves of fruit per day. However 65% of women were not consuming the recommended serves of vegetables and 40% of women did not meet the recommended number of serves of fruit per day [126]. This is better than in U.S. which reports 80% of men and 70% of women age 20+ years consumed less than the recommended serves of fruit and vegetables per day [126].

When investigating tobacco consumption rates the OECD Health Database illustrating world consumption rates showed Australia to be towards the lower end of the scale. In addition, smoking rates among Australian adults have declined by 21% for males and 16% for females over the last decade. However, in 2001 an estimated 18% of females age 14 years and over reported being daily smokers, with the highest

rate of daily smoking occurring among men and women aged 20-29 years (26%). Beyond this age regular smoking declines. Of young people (aged 14-19 years) 15% were daily smokers [126].

Whilst recognising the high prevalence of modifiable risk factors in the population, it is also important to recognise the impact and prevalence of risk factors when they present in combination i.e. one individual presenting with multiple risk factors. The National Health Survey (NHS) 2001 [1] collected information on lifestyle behaviours and related characteristics which have been established as risks to health. The risk factors addressed were smoking, alcohol consumption, exercise, being overweight and some dietary habits. The report found that overall 89% of adult (18 years +) males and 87% of adult females had at least one of the four risk factors. However, more importantly when looking at the combined risk factors, over half (54%) of adult males and 45% of adult females reported two or more risk factors [1]

2.4.2 Determining women's health needs

It has been argued that women, as a group, have specific health needs aside from those of the community as a whole [136]. Women are seen as being poorly serviced by and frequently dissatisfied with existing health care delivery and as a consequence there has been a move toward increased "earmarked" funding for women's health [136]. However, the best method to determine priority areas for such funding within women's health is less than clear.[136]

Methods of assessing women's health needs and therefore generating priority areas for funding have typically been based on mortality and morbidity data or on the opinions of key informants, medical experts, other service providers and more recently, representatives of women's groups [136, 137]. The problem with this method of assessment is its reliance on mortality data, which is based on hospital admissions of women and other indices of health care utilisation which suggests women's needs lay in the areas of psychiatric disturbances and gynaecological and reproductive services [136]. It is argued that reliance on mortality data fails to identify accurately those aspects of women's health which could benefit most from increased funding [136]. So herein lays the dilemma, if the allocation of funding is not based on traditional methods of morbidity and mortality data, on what should it be based?

Given the burgeoning literature and epidemiology on women's health, it is surprising so little attention has been focused on women themselves. It seems the voices of ordinary women are seldom documented and we do not know much about whether their concerns and beliefs about health are accounted for when setting priorities and developing policy [137]. What do women consider to be the main problems they experience? What health issues do they worry about? [137]. In order to discern this we must initially determine how women define health and consequently its meaning and priority areas.

In examining how women define health Kenney [138] revealed that consumers view health in broader terms than clinical measures and the absence of disease. Redman, [136] when discussing women's health care needs alerts the reader to the World Health Organisation's definition of health. The author emphasises the importance of emotional and social well-being as well as the absence of disease or infirmity and thus argues the non-physical aspects of health are of relatively more importance to women [136].

Kenney [138] examined a study conducted by Woods and associates which asked 528 women 'What does being healthy mean to you?'. Woods and associates [138] indicated in the women's definition of health there is a move away from clinical and role performance definition as to one that emphasised the eudemonistic dimension. The eudemonistic dimension defines health in terms of exuberance, well being and realisation [138], encompassing concepts of health relating to body image, cognitive functioning, fitness, harmony, health promotion, positive mood, self concept and social involvement [138]. Further analysis revealed categories most frequently reported by women defining health were, clinical (referring the ability to recover quickly from illness), positive mood, fitness, practising healthier life ways and harmony [138]. With the exception of clinical, these categories all fell within the eudemonistic dimension. Findings documented by Charles and Walters [137] support the findings of Woods and associates [138] with reference to Canadian and Australian studies describing women's multi-faceted concepts of what constitutes health. Reflective of these definitions Redman's[136] study of 157 Australian women revealed they view their health needs in order of priority to be weight gain (16.4%), stress (16.4%), money problems (14.8%), smoking (11.7%), caring for elderly and sick

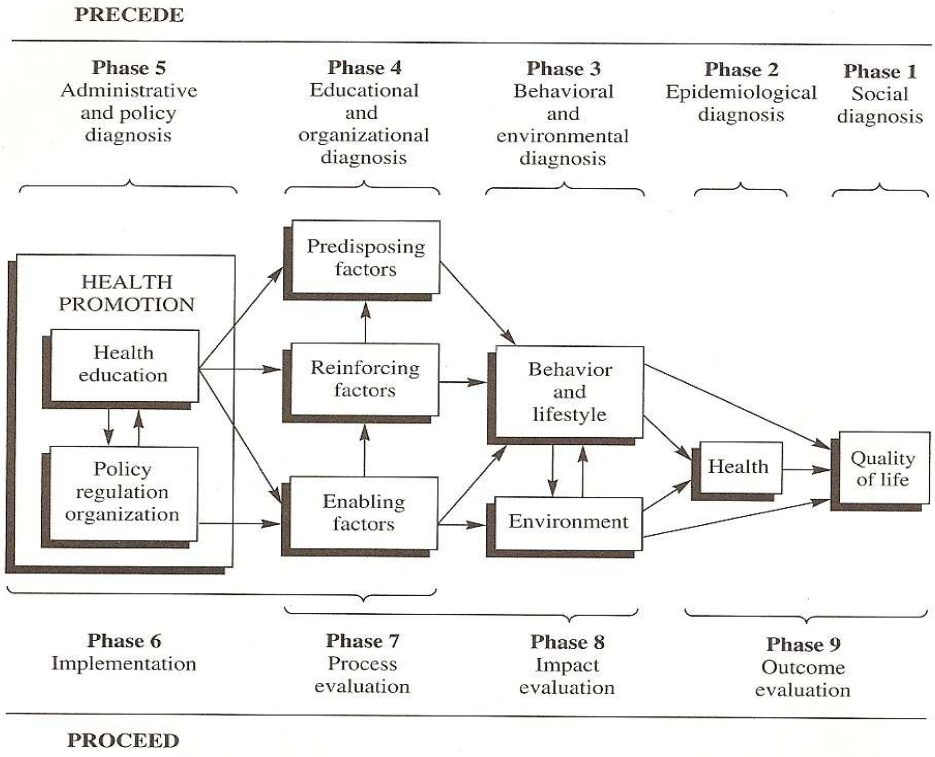
relatives (10.2%), period problems (10.2%) and the cost of medical care (10.2%). These findings support the belief that women's definitions of health are more than the absence of disease and women's health priorities need to be set in accordance with this evolving definition. It stands to reason that given the perspective of consumers of health, their opinions ought to be collected on a systemic basis and the resulting information included in health care planning [136]. This would ensure that health promotion advice is directly related to the consumer's health views, which in turn would enhance compliance and motivation to change lifestyle behaviours. The end result would be an enhanced quality of life for women [138].

2.4.3 Contributing factors to women's health behaviours

The relationship between knowing what is the right thing to do and doing it is a complex one as the statistics indicate. Women are aware of what they are supposed to be doing but only a small proportion are actually doing it on a regular basis [101, 120, 121, 126, 127, 139]. In order to explore this, the literature investigating the areas of young women's health and factors affecting physical activity, nutrition and smoking was explored. These health behaviours were chosen as they are seen as key health action areas for primary prevention initiatives. Investigating the literature unveiled an immense amount of studies and discussions that outlined a complex set of contributing factors affecting young women's health choices and decisions at various times in their lives.

In order to sort these factors to determine patterns and make comparisons for all the age groups of the study the findings were processed and categorised using the predisposing, reinforcing and enabling schema from Green and Kreuter's PRECEDE – PROCEED model [12]. The PRECEDE – PROCEED model is one of the most widely used planning models in health promotion literature and in practice [22]. The model provides a format for identifying factors related to health problems, behaviours, environments and program implementation [140]. PRECEDE, which describes behaviour, is an acronym for 'predisposing, reinforcing and enabling causes in educational and administrative diagnosis'[12]. The PROCEED portion of the model is related to implementation and evaluation. Figure 1 provides an illustration of the model.

Figure 1: PRECEDE – PROCEED Model[12]



Factors relating to Phase 1 – 3 of the model have been presented in previous sections of the literature review that have addressed women's heath beliefs (social diagnosis), health status (epidemiological diagnosis), current health behaviours and environmental factors that influence them (behavioural and environmental diagnosis). Contributing factors to women's health behaviours requires a more detailed examination of Phase 4 (educational and organisational diagnosis).

Phase 4 is the heart of the model: it identifies the factors that must be changed to initiate or facilitate the desired health behaviours and environmental changes[22]. In the case of this study it would mean changes to behaviours and environments to support a healthy lifestyle for women with particular focus on the areas of physical activity, nutrition and smoking. These factors then become targets for future interventions. The model proposes three types of factors:

Predisposing are those forces that function to motivate an individual or group to take action. Knowledge, beliefs, attitudes, values, cultural beliefs and folkways, genetic heritage, behavioural intentions, demographics and existing skills all may function as predisposing factors. The key to understanding predisposing factors is the extent to which behaviour can be forecast [140].

Enabling factors include both new personal skills and available resources needed to perform a behaviour. Enabling factors are those attributes of individuals, groups and health care delivery systems that make it possible or not possible (barriers) for actions to occur. The key consideration in understanding enabling factors as they relate to health behaviours or outcomes is the extent to which their absence will prevent an action from occurring. These factors could be created by societal forces or systems, limited facilities and/or resources, laws and statutes or lack of skills and knowledge [22, 140].

Reinforcing factors provide incentive for health behaviours or outcomes to be maintained. Reinforcement may come from an individual or group, from persons or institutions in the immediate environment, or from society. The key consideration in understanding reinforcing factors is the extent to which their absence would mean a loss of support for current actions of an individual or group. These can include feedback from others or environmental factors that serve to reward or punish behaviour (eg. social norms, approval or disapproval by significant others or peers, normative expectations, expense, laws, legislation)[22, 140].

Contributing factors described in the literature as affecting women's health behaviours and decisions regarding physical activity, nutrition and smoking have been analysed and are presented in the following section. The section provides a detailed examination of the patterns that occurred within and across the age groups for physical activity, nutrition and smoking.

Comparing across the age groups and health areas

A pattern exists regarding the increasing number of negative predisposing, enabling and reinforcing factors as the group's age increases. In general, there were also proportionally more negative factors in each category as age increased. The exception to this was smoking, where the largest body of literature identified was surrounding young women aged 13 – 17 year (adolescents). In this group many negative factors were found, however, positive legislative changes and supportive social norms and environments may have contributed to proportionately more positive predisposing, reinforcing and enabling factors across the age groups regarding this health issue.

Common themes across the health issues and age groups exist. Factors regarding body image and self-esteem were repeatedly discussed, along with the differing role peers and role models play in each age group. Evidence in the literature of the positive role of supportive environments (eg. environments which included legislative actions to encourage and support desired health behaviour changes) was found. Media also featured often in the literature and in most cases it was identified as a negative influence. Media advertising and images were thought to encourage and promote inappropriate food advertising and by using images of 'super thin' women, the perception of this as being the social norm was reinforced. This impacts negatively on women's and girls' self-esteem and body image. However, the use of media for social marketing purposes was viewed as positive in some cases.

The comparison provides an interesting overview of areas for action, which would become objectives for future interventions. The text below discusses the similarities and differences within each health area and factor.

Physical activity

Predisposing factors

The common predisposing factor across all ages was the impact of self-esteem on physical activity. Literature showed that those children and adolescents with raised self-esteem were more likely to feel confident in participating and to get greater enjoyment from physical activity [141]. In literature concerning young adults the focus on self-esteem differed. At this age raised self-esteem was associated with physical activity specifically when it resulted in weight loss or maintenance [61, 117, 142].

Three main differences existed across the ages. Firstly, for children, perceptions of the enjoyment and fun associated with activity played an important positive role [101, 141], whilst increased hours of screen time was a strong negative influence [143, 144].

For adolescents and young adults body image factored most strongly. The issue of body image is complex. Often negative body image is attributed to the impact of the cultural ideal of a 'thin body' on women and women's low perceived body attractiveness[61, 85, 145]. Adolescents also held a negative view of competitive environments [145] (eg. individual or team sporting events).

Enabling factors

Two enabling factors were observed across all ages. Overall increased levels of enjoyment and enthusiasm were positively associated with activity [141, 146], whilst cost[61, 146-148], access to facilities and equipment[61, 141, 145, 147] and personal safety[61, 146-149] were seen as barriers for each age group.

A number of differences existed across the age groups. When looking at children - there were some enabling factors both positive and negative that were specific to their age and ability to influence their circumstances or environments. For example, access to skilled people [150] and active environments [141] were listed as factors that were important in their ability to be physically active. However, they are factors that are external to their control. In addition, lack of physical skill was one area highlighted that would benefit from further investments of time and professional support [146, 149].

Adolescents and young adults shared some enabling factors. Weight control is one area in which a strong body of evidence regarding the positive effect of the benefits of activity existed. However, the benefit most often mentioned was weight control or loss [61, 85, 96, 131, 141, 145].

In addition, social benefits of activity were highly regarded by adolescents and young adults [61, 146, 147, 151]. Time management became more of an issue as age progressed as external demands (eg. study and work) compete with the desire to be physically active [132, 146, 148, 149, 152].

A strong negative enabler for both age groups was body image. How this was represented in the literature varied. For example, changes in adolescents' self-esteem was linked to the influence of media as it supports and promotes the 'slim ideal' and also links to sharing facilities with boys, whilst young adults felt discouraged by poor body image[61, 147, 148] and lacked will power and self motivation[132, 148, 153].

Young adults were aware of their own mortality more than the younger age groups. Hence, for this group the knowledge of the role of activity in maintaining good health and preventing illness was important [148, 152, 153].

Reinforcing factors

Two reinforcing factors for physical activity were observed across all ages. The first is the positive influence of peers and positive role models on each group. Common role models were seen as sports stars, music stars, media personalities and spokes-people [141, 143, 144]. However, variance could be noted as children looked mostly to parents and teachers as strong models, and for adolescents, peers are powerful reinforcers [141, 143, 144, 151] and to a lesser degree parents and teachers. This influence is strong when examining negative reinforcers for adolescents and many factors point to the need to fit in with a group and the avoidance of embarrassment in front of peers [85, 145]. In addition young adults acknowledged their position of influence, as active role models for their own children [143].

The second factor was technology, which was a notable negative reinforcer for all groups whether it was to do with how media promoted negative social cultural ideals or the impact of technology on sedentary behaviours [101, 120, 143, 144].

Body image as a factor that was noted to exist across the groups, as adolescents and young adults reporting being affected negatively by the promotion of unrealistic body shape and size ideals, which impact on self-esteem and body image for both groups [61, 85, 143, 145, 147].

In addition young adults were also affected by a greater awareness of threats to their mortality. Internal pressure exists in this group through feelings of guilt generated from performing or not performing health behaviours [61, 147]. This was not evident in the literature on other age groups.

Nutrition

Predisposing factors

A number of common predisposing factors were observed across all ages. The factors reflected a range of attitudes and beliefs held by young women that affect their nutrition choices. For example negative attitudes and perceptions expressed toward overweight and obese people and toward becoming overweight and / or obese [91] was a factor identified by all groups.

Body image featured as a factor, as there is a strong association within this literature between food and weight [108, 154, 155]. The perception that exists it seems, is the 'thin look' is a 'healthy look'. This look is desired by children and [108] linked to high levels of body dissatisfaction in adolescents and young adults [84, 89, 105].

It seems food habits and food associations are also considered predisposing factors. An example of this is a common food habit leading to the increase in consumption of energy dense soft drinks [156] which, for children is also compounded by the over consumption of energy dense snacks. Increased energy intake and decreased energy expenditure is discussed in the literature as one of a number of factors thought to be linked to the rise in obesity around the globe [150]. In conjunction with this Kausman [157] believes that many overeating issues relate to the psychology of eating and factors surrounding food association. Kausman [157] believes eating is strongly associated with emotions, eg. if the individual is feeling sad, angry, depressed or frustrated they are likely to seek comfort in certain types of food. Alternatively, food is also associated with celebration and happiness. Hence, people seek to change emotion through food consumption, which leads to overeating, which for women becomes a source of guilt.

The difference in predisposing factors amongst the age groups also relates to food association. Adolescents were most likely to associate junk food with pleasure and social experiences. In addition the fact that they associated junk food with independence may also be significant [154, 155].

Enabling factors

Common enabling factors for nutrition existed across all ages. The first was the degree of personal control the individuals felt they have over their nutrition intake. Girls and to some degree adolescents have little control over their dietary intake as parent / carer purchasing patterns largely dictate their intake [150, 158, 159]. Young adults, however, have increased nutrition knowledge and skills to make purchasing healthier foods easier [155].

Next was the evidence surrounding the need for supportive environments. For children and adolescents most of the literature centred around supportive school

environments [150, 160], whilst for young adults it was more likely to refer to work places [89].

Access to and availability of healthy food choices also proved to be a barrier to all age groups. Literature indicated that limited access to fresh fruit and vegetables is an issue for some [150]. Availability issues were two fold, firstly, availability of healthy choices, e.g. at home, in schools [150, 160] or in workplaces [89] and secondly, the availability of unhealthy choices which included vending machines[150, 156], energy dense snacks and unhealthy (obesogenic) environments[89, 150, 160].

Media marketing of foods also featured strongly in the current literature, with the main focus being the amount of television children watch and how it affects their food requests. Studies demonstrated highly visual products were requested more often by children [150, 159, 161, 162]. These products were usually energy dense snack foods. For adolescents this was further compounded by cinema viewing patterns [150, 162]. Whilst for adults comparative studies regarding television viewing patterns and food requests were not available, research suggests that adults are more likely to be influenced by food marketed as convenient and time efficient options [150, 159, 162]. Hindin [159] in a study investigating the effectiveness of adults / parents media literacy skills concerning nutrition advertising, concluded that with these skills increasing, adults are more equipped to decode advertising strategies and make more discerning food choices [159].

Differences did exist between the age groups on two issues. The first was regarding the perceived benefits of a healthy diet. Adolescents and young adults had begun to factor in weight loss as an important benefit that was not mentioned in the literature regarding children [84, 89, 155, 163, 164]. The second difference was convenience. Adolescents [160] and young adults [89] were more likely to state convenience as a barrier to choosing a healthy diet. In addition young adults most often thought healthy foods to be more expensive [89].

Reinforcing factors

Common reinforcing factors for nutrition were identified across all ages groups. Similar to physical activity and common across the groups were the positive influence of peers and the importance of positive role models. Common role models

seen on television that were cited in the literature by children and adolescents were, sports stars, music stars, media personalities and spokespeople [107, 108, 150, 158, 159, 161, 162, 165, 166]. Variation did exist, however, between nutrition and physical activity as children and adolescents looked mostly to parents and teachers as strong models for nutrition behaviours [158, 159]. The literature indicated adults also found role models to be important and also acknowledged their responsibility as role models for their children [159].

In addition peer influence for girls [158] and young adults [89, 107] was seen as positive with respect to nutrition. In adolescents there was limited literature available on the positive role of peers. However, from literature in the other health areas it could be speculated they would have similar influences.

Media food advertising had an impact across the age groups. Increased promotion of energy dense convenience foods through media advertising influenced food choices for all age groups and promoted incorrect, nutrition information. Therefore, the lack of skills necessary to decipher correct information from the incorrect nutrition misinformation is perpetuated [159]. Lack of more stringent food-advertising practices contribute to this [159, 161, 162].

Media images promoting the social value of the 'slim ideal' serve to further the diet culture that is emerging amongst adolescents and young women. The desire to confirm to this 'slim ideal' impacts negatively on adolescents and young women's self-esteem and body image [107, 108, 158, 165]. The images also perpetuate the normative belief that thin is the ideal beauty and to be obese is to be unattractive [84, 86, 91, 107].

Smoking

Predisposing factors

The common predisposing factor for smoking across all ages was knowledge of health risks and consequences associated with smoking. For children the literature mentioned short and long-term consequences equally [167, 168], however, for adolescents much more credence was paid to the short-term changes in appearance associated with smoking eg. yellow teeth, bad breath and bags under the eyes etc [81, 95, 167]. For young adults the literature mentioned both short and long term changes, however, threats to mortality were acknowledged more often [139, 169].

Differences that existed within the literature across all age groups was with regard to the uptake of smoking by children and adolescents. It suggested that they are less likely to begin to smoke if they have a negative attitude toward smoking [94, 95, 167, 168]. However, they are more likely to begin if they have low self-esteem [169-171]. Additionally, if adolescents believe smoking to be a morally wrong behaviour they are less likely to start the habit [2].

Finally, as adolescents are striving to establish their identity they under go a period of experimentation and risk taking. Literature suggests that experimentation with smoking may be apart of this social identity and boundary pushing exercise [94].

Enabling factors

There were two common enabling factors for smoking across the age groups. Firstly, and the most often discussed was the positive impact of legislative measures introduced to decreased access to tobacco products, increase the visibility of health warnings on products, restrict television advertising and sponsorship of key events and banning smoking in many public places [167, 172-175].

Secondly, was how tobacco companies are being forced to find new ways to market their products [2]. This usually involves sophisticated market research (the results of which are not openly accessible to the public), to determine how best to target and recruit potential new smokers.

There were two common differences that existed across the age groups. The first related to purchasing power. Positively, children have the least purchasing power of the groups when it comes to smoking due to lack of income plus strong legislative control over tobacco sales to minors [167, 172-175]. Adolescents have slightly increased purchasing power as they have greater access to funds if they are working, however, the legislative issue remains the same [167, 172-175].

The second was a demonstration of how knowledge of consequence of a health issue (in this case that smoking can suppress appetite) if not understood in context, can be more harmful than helpful. For example, both adolescents and young adults mentioned that smoking was a strategy that could be employed to prevent weight gain [81, 176, 177] and in both instances it was viewed as a positive outcome.

Reinforcing factors

A number of common reinforcing factors for smoking were identified across all age groups. For all age groups, peers and family played both a negative and positive role in reinforcing smoking behaviours. For girls and adolescents, peer and parent disapproval was seen as positive reinforcement [167, 168] for non-smoking along with parent rules and discipline about smoking [168]. Literature showed that adolescents who had strong bonds with parents, peers and society were less likely to smoke [171, 178]. For adults the positive influence came from peer and family disapproval [176].

Legislation regarding accessibility and exposure to smoking was a strong positive reinforcing factor for the same reasons outlined in the previous section discussing enabling factors [167, 172-175].

The non-smoking message has been actively promoted in Australia for the last twenty years with positive results. Large-scale population based and target specific (eg. women as target group) social marketing messages have contributed to increased awareness of the negative effects of smoking amongst all age groups [22, 101, 109, 167].

Evidence suggests that smoking is no longer seen as the social norm. Changes in tobacco consumption over time has lead to a change in society that as a whole generally supports non-smoking as the socially desirable norm [94, 166, 179].

The difference between the groups related to literature published in the area of supportive environments. From the literature it was evident that for children and adolescents the importance of a healthy school policy that included clear smoking policies and discipline guidelines was necessary[167, 168]. At the time of the study a relative lack of literature was available on the reinforcing factors and smoking in young adults. However, it can be assumed literature referring to the success of legislative change, given it is a population intervention, would have similar success across the age groups.

This wealth of information provided through the literature can be used to guide future health promotion interventions to women in the areas of physical activity, nutrition and smoking. The literature clearly demonstrates the scope of factors that need to be investigated when trying to determine what influences a woman's health

decisions. How best to utilise this information to target them with relevant and correct health information is the challenge for future interventions.

2.5 Conclusions

2.5.1 Unintended effects of health promotion

The context of health promotion and its successes in promoting behaviour change at individual and population levels are well illustrated. Given the scope of influence of health promotion it is necessary to closely monitor the effects. A summary of the literature that critically examines health promotion revealed:

- *The significance of the social determinants of health and how the political and economic factors play a role in how individuals views their health and how health promotion information is processed and applied from day to day*. It is important to acknowledge that social and/or biological determinants eg. income, age or gender often impact significantly on an individual's ability to adopt recommended health behaviours.

- *The differing expertise that comprises the health promotion workforce and how this may contribute to varying levels of rigour with which health promotion strategies are developed, implemented and evaluated.* This is important when utilising social marketing methodologies that include mass media strategies with the purpose of accessing large segments of the population and hence have the potential for wide spread positive as well as negative effects. Health promotion professionals need to be aware of how to monitor for all effects (intended and unintended). In addition health promotion professionals need to be aware of whether there is need to counter for the effects or if the effects could add value to an intervention, as may be the case with some positive unintended consequences.

- *In working toward the 'greater good', health professionals must be cautious in assuming all the impacts of their efforts in fact 'do good'*. It is perhaps more constructive to endeavour to 'do no harm'. To achieve this, the 'dark side' of health promotion needs to be explored. This includes acknowledging and exploring any unintended consequences (both positive and negative in nature) of health promotion messages.

Within the health promotion literature some broad categories were identified as areas worth exploration in terms of the existence of unintended consequences. The common thread throughout the literature examined was the impact of social marketing techniques. Key points can be taken from the literature surrounding:

- *The use of social marketing by health promotion:* It seems there is a fine ethical line when it comes to the use of social marketing techniques to promote health. Much of the literature agrees to its effectiveness, however, the unintended effects of the use of such techniques including provocative appeals (negative and positive) are highlighted.

  The role social marketing media campaigns play in the promotion of social values and cultural ideals is also questioned. It is argued that social marketing based health promotion campaigns and their commercial counterparts promote social values and cultural ideals on a selective basis. The result of this is the potential to produce or promote unhealthy stereotypes and cultural ideals. Some of these were identified as stereotypes regarding mothers, healthy people, obesity, smoking and cultural ideals surrounding health and body image.

- *The consequences of audience segmentation:* The need to accurately target messages is not questioned, however the effects of long term targeting and labelling populations needs to be. This is evident as targets labelled 'hard to reach' are branded in this way partly because they don't respond to messages or cannot be reached by standard approaches. Literature shows that doing this can contribute to stigmatising some behaviours and reinforce social judgements placed on the individuals whom exhibit certain behaviours.

  Message 'leakage' is also considered here and is explored in terms of leakage beyond the target group and beyond the timeframe of the campaign both of which can lead to unintended effects.

- *The consequence of an individual focus:* Literature centres around the tendency of social marketing initiatives to assume their audience are 'unintelligent' and in doing so do not view them as occupying a position of power. This practice contributes, along with interventions that use only elements of a social marketing

approach (instead of the currently recommended 'comprehensive approach' [(2)]), to the limited success of some health promotion initiatives.

Examining the available literature highlighted the cumulative effects of health promotion. The accumulation of health promotion on individuals needs to be considered in terms of what is the effect of promoting an ever increasing amount of recommended health behaviours to populations over long periods of time and the effect of the premature promotion of change eg. promoting behaviour change before the validity of the study results and their recommendations are fully explored. This accumulation of health promotion messages needs to be considered

Apparent consequences include individuals reaching saturation levels and 'switching off' from all messages (health promotion and commercial alike) and developing a sceptical view of health messages regardless of their origins. This opens the door for individuals to be able to comfortably rationalise choices to adopt or not to adopt certain recommendations. Compounding this is the fact that health messages have to compete with commercial marketing ploys utilising health aspects to sell their products, which creates further 'health noise'.

2.5.2 Health promotion for women

The current health status of women and what is known regarding how women themselves prioritise health issues, indicates the need for specifically targeted health promotion initiatives in this area. Issues that have been traditional targets for health promotion initiatives to women were identified as cervical and breast cancer, smoking and nutrition. Given the evidence of the role physical activity can play in preventing many major chronic conditions it is interesting that at the time this study was conducted women were yet to be formally targeted in this area.

In order to investigate how women respond to health promotion materials / messages it was important to fully explore how they process health information and the factors (predisposing, reinforcing and enabling) that affect their health choices and behaviours. Many health issues affect women; therefore, to narrow the focus of the literature, three issues were chosen as the focus (physical activity, nutrition and smoking). These issues were chosen partly because of the evidence regarding the role each can play in many chronic health conditions and because the data indicated

increased prevalence of physical inactivity, smoking and some nutritional indicators amongst women.

In this search an immense amount of literature was uncovered that discussed motivating factors (reinforcing and enabling) and predisposing factors for women's health choices and behaviours in regards to the three health issues. A complex array of factors was revealed that played a part in young women's health choices and behaviours. Although each age group presented differently, common elements did exist across the groups. These centred on normative expectations, body image, peer influence and role models. The knowledge of the motivating factors (reinforcing and enabling) and predisposing factors and the role they have in guiding women's health decisions may in the future provide a useful mechanism when planning future comprehensive health promotion initiatives for women.

The literature also revealed that women question the credibility of the sources of information as an integral part of their message processing and are particularly susceptible to social ideals and stereotypes throughout their lifetime. Hence the importance of exploration of the longer term impacts of health promotion. In addition it is evident that health advice and information for women comes from a number of fronts. Thus, it seems important to ensure the effect of this is examined.

At a policy level this is seen as imperative with the central components of the National Women's Health Policy being to support research and data collection and the provision of information to women and the health effects for sex role stereotyping. This provides the context for exploring how health is promoted to women. In light of the increasing use of social marketing media and what is known regarding the potential unintended consequences (both positive and negative) of its use, it seems necessary to examine in particular how these types of campaigns impact on women. This information can then be utilised in the creation of future social marketing media campaigns that are implemented in an ethical manner with the intention to 'do no harm'.

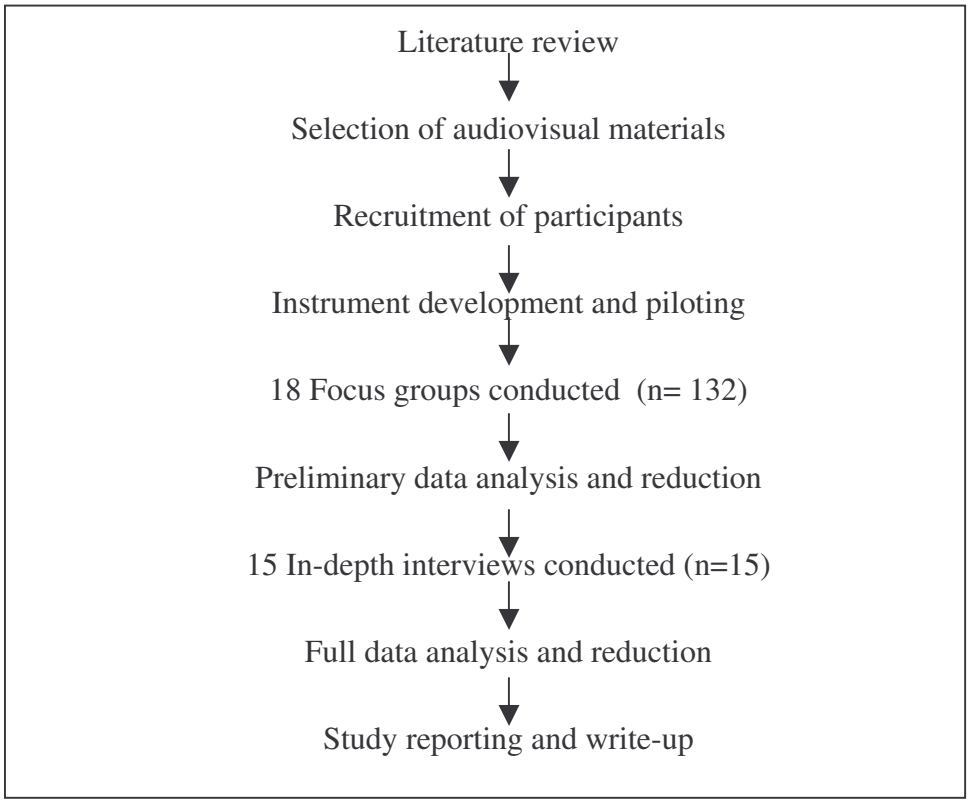
3. METHODOLOGY

A combination of qualitative and quantitative methods were employed by the study to examine the effects of health promotion on young women's health behaviours. (The use of two methodological paradigms increased the rigour of the research.) The research team for this project consisted of the three chief investigators of the Healthway Grant which provided the funding for the project and the candidate. Included in the research team was Associate Professor Peter Howat (School of Public Health), Andrea Shoebridge (Division of Health Sciences Curtin University) and Isle O'Ferral (East Perth Public and Community Health Unit) and the Candidate – Helen Mitchell (Centre for Health Promotion Research).

Qualitative methods (ie. focus groups and in-depth interviews) are the predominant research methods employed in this study. The suitability of this methodology lies in its ability to describe people's lives and behaviours and the social contexts, which strengthen, support or diminish health. The methodology is appropriate as the project explores young women's attitudes to health promotion materials, motivators for personal health behaviours and the long-term impact of social marketing media campaigns on young women's health behaviours.

The sequence of the research is illustrated in Figure 2: The study design.

Figure 2: The study design.



The following section describes the study's research design, issues involved in sampling, procedures, instruments used in the study and the method of data analysis.

3.1 Research design

This descriptive research is a formative study examining the effects of health promotion on girls' and young women's health behaviours. Information was sought from three groups of young women from the following age groups;

- Girls in Year 7 (Y7) of primary school aged between 11-12 years;
- Girls in Year 10 (Y10) of high school aged between 14-15 years; and
- Young adult women (YA) aged between 18-25 years.

3.1.1 Qualitative methodologies

Focus groups

Focus groups provide valuable insight into the complexity and range of human attitudes, values and behaviours [180-182]. Carey believes an integral part of the rationale for focus groups is that group members can describe the rich details of

complex experiences and the reasoning behind their actions, beliefs, perceptions and attitudes [181]. Within this study focus groups allowed the researcher to explore with greater depth and clarity, the type and quality of participants' responses to current and past health related advertising. The use of focus groups facilitated the exploration and discussion of the values held by young women when examining the content of health related television advertising.

Focus groups are multi-purposed, and although they have been used widely in the fields of marketing [183], psychology [184], nursing [185], medicine [186, 187] and public health [188, 189], each field places different emphasis on their purpose [9]. Despite differences in opinion as to the purpose of focus groups there is a common belief that their use is an effective technique to obtain data about feelings and opinions of small groups of participants about a given problem, experience or service [188, 189]. They also clarify how knowledge and ideas develop and operate within a cultural context [190].

Morgan [9] highlights the difficulty researchers face when attempting to accurately describe the level of moderator involvement in focus group research and the degree to which moderator involvement effects the dynamics of the group. In the current study the focus groups were semi-structured [61, 147, 181, 191] with a moderate level of moderator involvement [192]. The same moderator (in this case the candidate) conducted 17 of the 18 focus groups and all interviews, which assisted to minimise the impact the moderator would have on the dynamics of the group and ensured the questions were asked in a consistent non-leading manner.

A funnel approach to questioning, which involves beginning with broad questions allowing participants to freely express their views followed by a gradual narrowing of the line of investigation [193] was used. This sequence allows far more probing as the groups' conversations flow from general information to more specific expressions of participants' attitudes, values and feelings [193]. Overall, questions were intended to be open-ended and non-biasing. Although all questions revolved around the main research goals, varied questioning styles as described by Stewart and Shamdasani [193] were used throughout the focus groups. These are listed below.

Types of questioning styles:

Main research question: focused discussion directly on issues to be discussed within the session [193].

> *Eg. Today I would like to discuss with you, young women's perceptions of health promotion television advertising. To begin with I would like to know if you can recall any health promotion campaigns?*

Steering questions: are used to nudge the group back onto the main research questions, following its wandering off on an interesting tangent of irrelevant discussion [193].

> *Eg. I would like you to focus back in on what your thoughts were about the images used to promote this health issue?*

Feel questions: are used to ask for opinions surrounded by personal feelings. Feel questions ask participants to take risks and expose their personal feelings [193].

> *Eg. How do the images presented to you make women your age, feel?*

Silence; periods allow group members to formulate their thoughts for discussion before rushing to the next question [193].

The moderator used a variety of group facilitation techniques [61, 147] throughout the course of the groups' discussions. These included reflective listening practices and creative visualisation. The latter technique was used to encourage the Y7 and Y10 groups to think beyond the health slogan that accompanied the messages in the advertisements shown. This was done to assist them to critically examine the content of the advertisements in terms of their own values, attitudes and emotions.

In-depth interviews

In this study, the focus groups were followed by a series of in-depth interviews with individuals. The purpose of the interviews were to encourage the exploration of opinions and experiences of study participants in more depth [9, 191, 192]. This provided further information regarding the reach of current health promotion messages. Morgan [9] suggests this strategy has the advantage of first identifying a range of

experiences and perspectives through the group discussions, and then drawing from that pool to add more depth, where needed, to the research. The information provided by the combination of these techniques provided invaluable insight into the participants' attitudes, values and behaviours [194].

An informal general interview approach [195] was used for the interviews, with the researcher outlining a set of issues to be explored. A series of semi-structured [196] questions were developed and the interview guide was used to serve as a checklist to determine if all relevant topics were covered. This allowed the researcher to adapt both the wording and sequence of questions to the specific respondents in the context of the actual interview [195].

3.1.2 Quantitative methodology

Questionnaire

A brief questionnaire was administered prior to each focus group's discussion. It sought demographic information about participants and asked about their definitions of health, health-related activities, actual and preferred sources of health information, recall of health information campaigns and the degree to which these affected personal health choices. The questionnaire was also used to encourage participants to focus on health and its personal relevance, which assisted in maintaining the focus within the discussion groups.

3.1.3 Criteria for validity

Roche [187] and McDonald [51] describe qualitative and quantitative techniques as complementary paradigms with different criteria for validity. Just as the quantitative techniques or methods have predetermined criteria for assessing the internal and external validity, reliability and objectivity of research, qualitative methods have determinants of trustworthiness [197, 198]. Trustworthiness represents another dimension of methodological rigour [195, 197-199]. Table 2 provides an illustration of the comparisons of scientific rigour in qualitative and quantitative research.

Table 2: Comparative qualitative and quantitative criteria for rigour.

	QUANTITATIVE PARADIGM	Criteria for TRUSTWORTHINESS	QUALITATIVE PARADIGM	
Validity in general	*Internal validity*	**TRUTH VALUE**	*Credibility*	**Credibility in general**
	Reliability	**CONSISTENCY**	*Dependability*	
	Objectivity	**NEUTRALITY**	*Confirmability*	
	External validity	**APPLICABILITY**	*Transferability*	

Modified from (Hamberg, et al, 1994. And Rappaport, 1990.) [197, 198].

Trustworthiness is intended to parallel the dominant research approach [198]. In order to establish trustworthiness Lincoln and Guba [199] believe it necessary to pose four questions relating to the truth value, consistency, neutrality and applicability of the research in question. This is achieved by the incorporation of research practices into the study design ensuring the criteria for trustworthiness and therefore, credibility in general are addressed.

The qualitative criteria for rigour are explained as follows;

Credibility – examines whether the findings and interpretations are credible and truthful through prolonged engagement and observation, triangulation of sources [200] and methods and member checks [198, 199, 201]. This research established credibility through triangulation and member checks, both of which will be elaborated on later in this section.

Dependability – is a scientific indicator that can be adapted to accommodate the development of theory [199]. Dependability is also determined by the examination of process by a competent and disinterested party [198]. This research employed the expertise of peers and supervisors to review data throughout the data collection and analysis stages of the research in order to establish dependability.

Confirmability – implies that the research can be judged and understood by others eg. an external audit by a disinterested party will come to similar conclusions. Within this study two peers (not involved in the research) and three project supervisors were invited to read sections of transcripts to validate the coding process and to discuss the conclusions drawn from the research. This assisted with the confirmation of the researchers' findings.

Transferability – detailed description of the research is required to permit others to determine similarity to separate situations. A comprehensive audit trail, consisting of raw data, data reduction, process notes and instrument development information [199, 201, 202] was generated for this study. In addition the characteristics of the sample and how they were selected is detailed in this chapter. The combination of this information makes it possible for others to decide if the project processes and findings are transferable to other studies.

3.1.4 Data triangulation

The combination of quantitative and qualitative research paradigms (paradigmatic triangulation) viewed as most appropriate for this study, is considered an ideal and commonly know form of triangulation [195, 200, 203, 204]. Patton [204] defines triangulation simply *"as the combination of methodologies in the study of the same phenomena or programs"*. By utilising a number of different strategies to answer the same question the researcher ultimately strengthens the research by allowing for greater accuracy. This in turn contributes to increasing the rigour of the study [9, 200, 203]. Of the four types of triangulation mentioned in the literature [195, 199, 200] three were utilised in this study:

1. *Researcher triangulation* [200] – the use of a number of researchers in the data collection and analysis phase of this study. The research team consisted of professionals with a mixture of backgrounds in public health, health promotion, psychology and nursing. Although each of the researcher's primary area of interest is in the health field, the combination of backgrounds provided a mixture of theoretical and methodological perspectives that strengthened the total research project.

2. *Methodological triangulation* – the use of multiple methods to study a single problem or program [9, 195, 200]. Focus groups, in-depth interviews and a brief demographic questionnaire were used in conjunction to increase the rigour of the study.

3. *Data source triangulation* – the use of a variety of data sources in a study[195, 200]. This study compared the data from focus groups and in-depth interviews with

existing epidemiological and empirical health evidence examining the dieting behaviours, smoking incidence and levels of physical activity in young women.

3.1.5 Member checks

Member checks constitute critiques from individuals who are both "insiders" (to the culture) and "outsiders" (to the culture) [182]. As suggested by Lincoln and Guba [199] and Lindlof [182] member checking was carried out both formally and informally throughout the research process. Critiques from "insiders" occurred as participants reviewed portions of audio-recordings taken during the focus and in-depth interviews. This encouraged further discussion of themes and quotations drawn from the groups. "Outsiders" to the project reviewed portions of transcripts and audio tapes from the focus groups and interviews to further establish credibility. These "outsiders" are the expert reviewers as described in section 3.1.6 Expert Reviewers.

3.1.6 Expert reviewers

The project supervisors (experts in content) and two competent non-project professional colleagues performed the expert review of instruments to ensure face and content validity.

3.2 Procedure

3.2.1 Instrument development

Focus group moderator's guide

The researcher identified issues for discussion and exploration by conducting:

- A thorough review of relevant literature
- A series of informal discussions with a convenience sample of young women (n=132) from the target group
- Detailed discussions with the research team.

Once all the information was collated from the above sources a series of questions were developed which probed the issues relating to the aim of the study. Questions were then positioned in the guide according to their relevance to the study objectives.

Two separate guides were developed in recognition of the difference in the individual's cognition levels from Y7 to YA. The first guide for use with Y7 and

Y10 girls, consisted of a series of 10 questions (Appendix 1). The second guide was developed for the YA groups and consisted of nine questions with subsequent probe statements (Appendix 2). Although the guides varied slightly, where possible the researcher endeavoured to follow a similar line of inquiry in the focus groups to allow comparison across the groups during data analysis [192]. As suggested by Stewart and Shamdasani [193] the moderator's guides underwent constant revision as the focus groups progressed. The guides ensured a number of topics were covered, however strict order was not necessarily adhered to. This allowed for what Morgan [9] terms "emergence" of the research, which lets the questions and procedures shift from group to group in order to take advantage of what was learnt in previous groups.

Interview guide

Interview guides utilised in the study were developed using a similar process to the focus group guides. Once again two guides were developed, the first for the Y7 which was modified for the Y10 interviews (Appendix 3) and the second for the YA interviews (Appendix 4). Data from the focus groups were reviewed and issues highlighted that required further exploration. These issues were incorporated into the line of questioning in the interview guides. Statements made by girls and young women in the focus groups were included to prompt further discussion about the individuals' feelings and to uncover attitudes and beliefs about various health behaviours.

The guide for Y7 and Y10 interviews consisted of 19 questions, nine of which were structured from statements from the focus groups (Appendix 3). Not all questions were necessarily discussed with each individual. The interview guide for YA interviews consisted of 15 questions, a number of which required participants' reactions to statements from focus groups (Appendix 4). As with the focus groups, the interviews allowed for emergence [9] of new topics from one interview to the next. The guide was developed to allow freely flowing conversation which would ensure coverage of topics.

Pilot testing

Both the guides and the group process instruments were pilot tested with girls and young women from the appropriate target groups. One school class (15-20 students) was utilised for the Y7 and Y10 age groups and one group of 10 was used for pilot testing the 18-25 year old age group. Pilot testing also aided in determining if the questions were appropriate, whether they elicited discussion that was appropriate to the research objectives and identified whether questions were easily understood by participants. This process was also used to determine if an appropriate number of questions were included within the guide. Through this process it was recognised that despite the difference in ages between the Y7 and Y10 groups a similar guide could be used for both groups as it was clear by participants' responses that the questions were understood by both age groups and produced appropriate responses.

Demographic questionnaire

Two demographic questionnaires were developed for use before group discussion started. The demographic questionnaire for Y7 and Y10 girls consisted of seven questions (Appendix 5) whilst the YAs questionnaire included nine questions (Appendix 6). Questionnaires were designed to collect demographic data such as age, school and occupation. A mixture of open ended questions and forced choice questions gathered information concerning:

- Preferred source of health information
- Preferred methods / sources of receiving health information
- What participants viewed as motivators for their health behaviours
- How they defined health or what being healthy meant to them
- For the YA groups, which health promotion campaigns they recalled.

Standardised questions from previously validated instruments on employment were included in the demographics for the YA group. The questionnaire was pilot tested and assessed for face and content validity however, the results from this questionnaire cannot be generalised to the Western Australian population of young women.

3.2.2 Selection of related materials

It had become apparent through discussions held during the pilot testing with groups of girls and young women, that health promotion does not exist in a vacuum. Not only were social marketing based health promotion campaigns such as *Quit*, *Eat More Fruit and Veg* and *Drinksafe* readily recalled, so were advertising campaigns produced by commercial corporations. For example, promotions such as those conducted by the Western Australian Dairy Corporation, The Australian Meat and Livestock Corporation, Uncle Toby's and Sanitarium were recalled in this context, as was advertising for weight loss clinics such as Jenny Craig and health clubs such as BC the Body Club. Because such companies were recognised as sources of health information, and because there were very few formal audio-visual social marketing based health promotion campaigns specifically targeting women (either in dedicated campaigns or as sub-texts of general population campaigns), the research team determined it was important to include commercial campaigns in the project's areas of interest when selecting advertisements for inclusion in the study. Accordingly, a compilation of formal audiovisual health promotion and commercial product promotion material was used to facilitate discussion.

Each of the three commercials chosen for use in the focus groups addressed one of the key areas of interest. The commercials chosen were:

- *Nutrition oriented* - Milkshake advertisement produced by the Dairy Corporation in 1994
- *Smoking oriented* - Only Women Bleed advertisement produce by the Health Department of Western Australia in 1995
- *Physical Activity oriented* – Sue Stanley advertisement produced by the Dairy Corporation in 1994.

Time did not allow for all three advertisements to be shown and discussed in each focus group. Instead to ensure appropriate coverage and discussion of topics prompted by each of the advertisements, only two were shown per group. A process of systematic rotation of the advertisements through the groups ensured each advertisement was viewed by participants in each age group.

3.2.3 Planning

Focus groups:

As recommended in the literature, focus groups ideally should be conducted for 1 - 1½ hours [8, 192, 205], however, because the Y7 and Y10 groups were conducted within schools the sessions were restricted to 45-60 minutes to coincide with the school timetable. The YA focus groups were planned to run for 60 – 90 minutes.

The researcher was responsible for facilitating group discussion by following a semi-structured interview format using the moderator's guide developed by the research team. This informal approach to the groups was used to ensure maximum opportunity for description, clarification and discussion of issues arising throughout the focus group. Examples of past and current audiovisual social marketing based health promotion materials provided stimulus for discussion in the focus groups. All sessions were audio-recorded for later transcription and analysis. An observer/scribe was present at all sessions. This person also took responsibility for the operation of the recording equipment.

In-depth interviews

The focus groups were planned to run prior to the in-depth interviews to aid the generation of themes and discussion topics for the in-depth interviews. The in-depth interviews were scheduled to last 40-60 minutes each. All in-depth interviews were conducted by the researcher and followed a similar semi-structured format to the focus groups in order to provide opportunity for clarification and expression of ideas and beliefs by the participants. The interviews were audio taped for later transcription and data analysis.

Participants were given details of the dates, times and venues one to two weeks prior to all focus groups and in-depth interviews. Times were confirmed with schools and study participants the day before contact.

3.2.4 Moderators

All focus group moderators (only two were used) were members of the research team and, therefore, had an intrinsic knowledge and familiarity with the objectives and

background of the study. The candidate was the moderator for 17 of the 18 focus groups and all the interviews. This added to the consistency of information obtained from the focus groups. The moderators were involved in the development of the moderator's guide which aided in familiarity with the questioning sequence and issues that were covered. As recommended by Morgan [192] the same guide was utilised by all moderators to allow comparison across groups and consensus among researchers.

The interviewer had previous experience with group facilitation and interviewing. The repeated contact (through the group facilitation) with the young women in the study assisted in building positive rapport and maintaining trust with participants. This also facilitated open and honest discussion of the health issues amongst the group.

Debriefing sessions with members of the research team were conducted after focus groups and in-depth interviews. The researcher conducting the in-depth interviews kept a journal to record post interview notes as a form of debriefing and session evaluation.

3.2.5 Schedules

Focus groups

Scheduling the Y7 and Y10 groups had to be negotiated with the schools concerned. All the focus groups were conducted in the second term of the school year between May and June 1997. The focus groups for the YA group occurred in September 1997 and were scheduled to run in the evenings to accommodate those participants with work, study or family commitments.

Where possible only one focus group per day was scheduled. This allowed time between groups for the moderator's guide to be reviewed, for the necessary changes to be made and for an informal debriefing session and discussion of themes that had emerged from each group.

In-depth interviews

In-depth interviews were scheduled after the focus group transcripts had been reviewed to identify emergent themes that required further investigation. Once again

for the Y7 and Y10 participant's, time was first negotiated with schools, then with students to ensure the disruption to participant's study commitments was minimal. For the Y7 and Y10 participants, in-depth interviews were scheduled in August and September 1997. In-depth interviews of the YAs occurred in December 1997 and were scheduled at the convenience of the participant.

3.2.6 Venues

Venues for the Y7 and Y10 focus groups and in-depth interviews were provided by the schools that participated in the study. These venues were usually class rooms or rooms within the school library. The YA focus groups were conducted in the seminar rooms at the Alexander Library located in Northbridge, Perth, Western Australia.

The venues were chosen for their centrality and convenience to participants, consequently maximising group attendance. All of the focus group venues were well lit, reasonably quiet and comfortable.

3.2.7 Equipment

Equipment used in this study consists of:

- A tape recorder – for recording focus group and in-depth interview discussions
- A portable combined television and video player
- Two video cassettes with advertisements
- Thirty audiocassettes for recording focus groups and in-depth interviews.

3.2.8 Incentives

Incentives such as gift vouchers, movie passes and health promotion campaign promotional materials were used to enhance participation rates with the Y7 and Y10 focus groups and interviews. Once the school's involvement with the study was completed a gift certificate for Wooldridge Dominie School Centre was forwarded to them as an expression of appreciation for their involvement in the study.

The YA focus groups were recruited through a commercial market research company where the recommended incentive for participation in focus groups was $25. This was validated by Stewart and Shamdasani [193] in their discussion about provision of

incentives in focus group research and was accepted by the research team. A $30 Myer voucher was offered to YA consenting to participate in in-depth interviews.

The study satisfied NH&MRC guidelines for payment of participants in that it involves little personal risk, the participants were aware the payment did not depend on continued participation (ie. freedom to withdraw consent is preserved) and the incentive was not likely to make the participant dependent on the researcher [6].

3.3 Sample size and selection

3.3.1 Sample size and characteristics

A total of 132 young women aged between 11-25 years participated in the study. The sample was stratified according to age and socio-economic status (see Table 3).

Table 3: Sample description including number of participants for each group

	SOCIO-ECONOMIC STATUS			
GROUP	**low**	**medium**	**high**	**TOTAL (N)**
Year Seven (Y7) (11-12 years old)	14	16	16	46
Year Ten (Y10) (14-15 years old)	15	15	15	45
Young Adult (YA) (18-25 years old)	15	15	11	41
				132

3.3.2 Sample selection

One of the major differences between qualitative and quantitative research paradigms is sample selection [188, 195, 204]. Quantitative methodologies dictate the reason for using random sampling is to increase the likelihood that the data collected is representative of the entire population of interest [204]. The logic and power of probability sampling depends on selecting a truly random and statistically representative sample that will permit confident generalisation from the sample to a larger population [195].

Essentially, qualitative sampling strategies are designed to provide information rich cases which will yield in-depth understanding about particular processes or contexts [200]. Most commonly utilised are non-probability sampling techniques that are

tailored to the researchers' aims [188]. The most frequently employed form of non-probability sampling in qualitative research is 'purposeful sampling' [188, 195, 199, 204]. The logic and power of purposeful sampling then lies in selecting information-rich cases for in-depth study [195]. Patton [195] illustrates 16 different strategies of purposeful sampling. For the purpose of this study a combination of mixed purposeful sampling strategies were utilised. The literature states this form of sample selection employs approaches which are not mutually exclusive, with each approach serving a somewhat different purpose [6, 182, 189, 195]. This approach allows for triangulation, flexibility and meets researchers' multiple interests and needs.

Of the literature reviewed, none specified the precise number of groups that should be run. However, the general consensus was if the moderator could clearly anticipate what would be said next and a clear pattern was emerging with subsequent production of repetitious information then the research would be complete [7, 9, 187]. A total of eighteen focus groups were conducted in this study. Two focus groups were conducted per SES category with six focus groups conducted per age group (Table 4). Multiple groups were conducted per age group to ensure that the information gleaned from the groups reflected something about the segment and not just something about the particular group participants [192]. As recommended in the literature each of the focus groups consisted of 8-10 participants [8, 182, 189, 191-193, 206].

Table 4: Sample framework illustrating the number of focus groups per category

	SOCIO-ECONOMIC STATUS			**TOTAL**
GROUP	**low**	**medium**	**high**	**(N of groups)**
Year Seven (Y7) (11-12 years old)	2	2	2	6
Year Ten (Y10) (14-15 years old)	2	2	2	6
Young Adult (YA) (18-25 years old)	2	2	2	6
				18

The interview participants had all previously participated in the focus groups and were selected through a combination of participant self selection and researcher selection. Focus group participants in the YA group were provided with a form (Appendix 7), which enabled them to indicate whether they would be willing to be involved in a in-depth interview at a later date. Out of the 41 focus group participants 35 (85%) agreed to participate further in the study. After the focus

groups, the researcher selected 16 participants from all three SES categories. Fifteen of the 16 in-depth interviews scheduled were conducted (Table 5).

Table 5: Sample framework illustrating the number in-depth interviews per category

GROUP	SOCIO-ECONOMIC STATUS			TOTAL (N of interviews)
	low	medium	high	
Year Seven (Y7) (11-12 years old)	2	2	2	6
Year Ten (Y10) (14-15 years old)	1	2	2	5
Young Adult (YA) (18-25 years old)	1	2	1	4
				15

To counter the possibility of participant withdrawal or non-attendance at focus groups and in-depth interviews the study over recruited by 20% as recommended by Morgan [192].

3.3.3 Sample recruitment

The use of homogenous groups holds the advantage that friends and colleagues often relate to each other's comments and challenge each other on contradictions [189, 190]. Kitzinger [190] also acknowledges the traditional sharing nature of women is an advantage in focus groups as it contributes to the discussion. Morgan [207] additionally identified the greater the degree of homogeneity within the group the fewer that will be required. This is due to the ability of homogenous groups to discuss topics more freely, allowing for the emergence of similar themes in less time and therein restricting the necessity for a large number of focus groups [189].

The study sample was recruited from a subgroup of the population consisting of girls and young women between the ages of 11 years and 25 years. Homogeneity was ensured, as in most cases, the groups chosen all shared similar socio-cultural backgrounds and for the Y7 and Y10 groups they were also chosen in accordance to their pre-existing class groups. Pre-existing groups are defined as *"clusters of people who already know each other through working or socialising together"* [207].

Access to Y7 and Y10 participants was gained through government schools in the Perth metropolitan area. To determine which schools were selected, the schools' postal code areas were stratified according to the Australian Bureau of Statistics

Socio-economic Indexes for Areas (SEIFA) classification from the 1991 Australian census data. The generation of SES categories (low, medium and high) for metropolitan schools was based upon 25th and 75th percentile postal code ranking. After stratification, a table of random numbers [208] was consulted to select the required number of schools.

The YA group was recruited using a market research company. The SES categories for YA were determined by head of the household income: low <$20 000; medium $20 000 - $30 000; and high >$30 000 per annum (see Table 6 for their employment status). Head of household was established based on the head of the household in which was the YA primary residence in most cases this was at home with their parents.

The YA were asked to provide their occupation as an open-ended response. These responses were coded using the ABS (Australian Bureau of Statistics) employment categories which have been previously validated (see Table 6).

Table 6: Employment status of YA participants

OCCUPATION	
Full time student	8
Professional	5
Semi-professional	23
Unskilled blue collar	2
Home duties	2
Unknown	1
TOTAL	**41**

3.4 Ethical issues

This project was a research grant funded by Healthway. The Healthway grant approval process is rigorous and involves grants being reviewed by expert external reviewers which are appointed by the funding agency. These professionals are experts in the field of health promotion and public health research. This rigorous review process takes into consideration of the ethical issues associated with the research. Hence as part of the application for the Healthway research grant, this project was granted ethics approval by the Curtin University Human Research Ethics Committee. The ethics grant number for the project is HR 182/95.

3.4.1 Consent

The Curtin University Human Research Ethics Committee requires, and the NH&MRC recommends [6] that written consent be obtained prior to the commencement of any research.

Y7 and Y10 Participants - Initial contact with schools established that the principals would provide consent for the school to become involved in the study (Appendix 8-11). Once this had been established, passive consent for the focus groups and in-depth interviews was then gained from parents of students in participating schools (Appendix 12).

YA Participants - Each group member completed a consent form prior to the commencement of the focus group or in-depth interview (Appendix 7).

3.4.2 Confidentiality

As recommended by Gifford [6] and Punch [209] participants were informed of their right to:

- Withdraw from the study at anytime
- Refuse to answer questions or comment at any time without negative consequences (see front page of Appendix 1 & 2).

All data collected remained confidential.

3.4.3 Data storage

The data collected in this study did not include any personally identifying or sensitive items. Only codes and master lists of codes identified data. Names were kept separate from the data in a secure environment accessible only to the research team.

3.5 Data management

3.5.1 Qualitative data

All data from the focus groups and in-depth interviews plus the researchers notes where transcribed and formatted for analysis using NUD*IST version 7 (Non-numerical Unstructured Data Indexing Searching and Theorising) [210]. The data were

transcribed by a professional secretarial service with previous experience in transcription. Once transcribed, these data were cleaned by the researcher. This involved the researcher listening to the focus group discussion and in-depth interview recordings and to ensure that the transcriptions were accurate. If inaccuracies were detected they were corrected within the transcripts. At this time all personal identifiers were removed from the transcripts and replaced with the identification numbers which were coded according to group number, school and age group.

NUD*IST is a computer software package designed to aid users in handling data appropriate for qualitative analysis, by allowing the researcher to create a document management system that allows [210]:

- Management and exploration of documents
- Creation of coding categories and coding text
- Management and exploration of ideas about the data
- Importing, exporting and linking of internal and external sources of information
- Searching for word or phrase patterns within or across documents and in coding
- Clarification of ideas, discovery of themes and storage of memos about the data
- Stores and retrieves data allowing retrieval and intersection of themes created
- Construction and testing of theory
- Generation of reports such as the text and coding patterns and
- Writing and editing of documents.

3.5.2 Quantitative data

The data from the demographic questionnaires was coded according to school and focus group number and entered in to SPPS for windows version 7 for statistical analysis. Once the data were entered they underwent a cleaning process to detect any repeated cases (ie. id numbers) or inaccurate number entries. The process was completed by the researcher.

3.6 Data analysis

3.6.1 Qualitative data

There are a variety of recommendations for the analysis of qualitative data ranging from the grouping of similar ideas through to in-depth studies of discourse and

theory development [184]. However, a common factor for all forms of qualitative analysis is the recognition that qualitative data cannot and should not be quantified [8, 182, 184-188, 195, 200, 211]. The qualitative data analysis in the study therefore can only describe the range of responses by descriptions of "some" and "others" [7].

The data in this study underwent a process of subjective reduction and thematic content analysis [212] in which coding categories were developed by the research team. These coding categories were aligned with the relevant literature and the study objectives, that is; young women's responses to current or past health promotion materials, motivators for young women's personal health behaviours and the long-term impact of public health campaigns of young women's health behaviours.

Initially, the researcher utilised NUD*IST to organise the data and then to "freely" code data. The process of "free coding" allowed the development of a coding system from the "data up". Once developed, these coding categories were validated by the research team and the literature, and reduced into like groupings to create broader categories. Comparative analysis of data between the focus groups and interviews, and within groups in the three age categories was made possible as a similar format was used in the focus groups and in-depth interviews.

To ensure analysis was complete a four step data analysis process of organising, shaping, summarising and explaining outline was followed [7]. The four steps conducted in the data analysis were as follows:

Organisation of the data

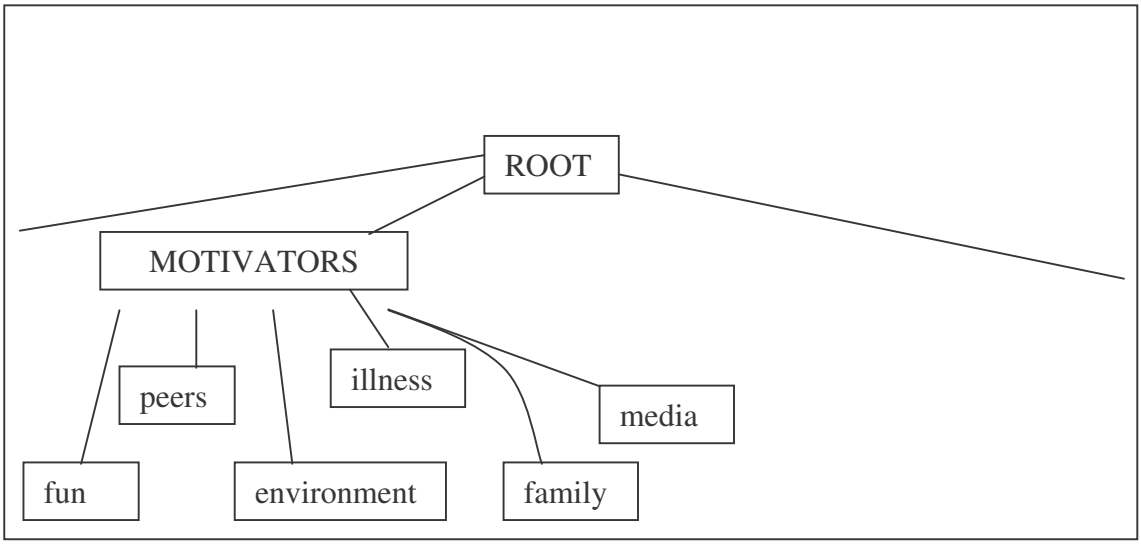
Focus group and in-depth interview audio-cassettes were fully transcribed with any data that was likely to personally link people with the data being removed. The transcripts were then formatted for introduction into the NUD*IST program for subsequent analysis.

Shaping the data

This process took place as the data were coded and grouped under various "nodes" that were part of the "tree structure" or information construction within the NUD*IST program. Nodes consisted of groupings of data that had been tagged with similar codes. The multi-dimensional tree structure of NUD*IST allows the creation

of complex dimensions within the study data thus providing a simple retrieval process of sections of transcripts whilst allowing the data to be stored in its entirety. Figure 3 illustrates how a broad category such as "Motivators" can be further divided into sub-categories within a node of the tree structure.

Figure 3: A tree structured indexing system



It also undertakes relational analysis that links text with affect and cognitive mapping to create a conceptual network of feelings, attitudes and responses to an issue. Major benefits of this methodology include identification of implicit information that is otherwise buried in the text and the construction of conceptual models that may be compared across groups. Notes taken during groups and individual discussions were also analysed to verify transcriptions.

Summarising the data

Data were summarised under major headings generated from the literature and coding and were then sorted under objectives. This is reported in the results chapter of this thesis.

Explaining the data

Explanation of trends and patterns in the data will be discussed in accordance with the themes that developed through the data analysis process and the relevant literature. Common and uncommon responses between the age groups and interviews will be discussed. Key quotes representing the participants' responses will

be reported on which will increase the meaning of the data. This is reported on in the results chapter and explored within the discussion chapter of this thesis.

3.6.2 Quantitative data

Descriptive statistics providing frequencies on the data from the demographic questionnaires such as preferred source of health information and preferred methods / sources of receiving health information were generated from the data using SPSS for Windows version 7 [213]

Open-ended questionnaire responses were subjectively reduced according to the organising, shaping and explanation process described above [7].

4. RESULTS

The following chapter will review the results of data collected from a sample of 132 young women aged between 11-25 years who participated in the study using the following three methods: focus groups, face to face in-depth interviews and a demographic questionnaire. The data gathered from the three age groups of young women are presented according to their relevance to each of the three study objectives.

4.1 Objective one results: to identify motivators (predisposing, enabling and reinforcing factors) for young women's personal health behaviours

This section presents data from the focus groups and in-depth interviews triangulated with information from the demographic questionnaire. A series of questions designed to explore motivational factors for young women were incorporated into the focus group moderator's guide and in-depth interview guide. The motivational factors were initially identified from the literature. Once the focus group data were collected and emergent themes identified these were triangulated with data collected by the demographic questionnaires to assist with the construction of probe questions for the face to face in-depth interviews.

The following results are factors identified by study participants, as motivators for their personal health behaviours, and where appropriate will be presented according to age group. In line with the literature, the motivational factors identified were classified using the predisposing, reinforcing and enabling schema from Green and Kreuter's PRECEDE – PROCEED model [(12)].

Perceptions of health

The World Health Organisation has defined health to be "*a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity*" [(214)]**.** This definition provides a broad social context for health that is not only instrumental as a framework of the public health agenda but it also accommodates the social values held by any individual, group or culture. It became

evident in this study that the way the young women defined health had a subtle but direct influence on their motives for adopting recommended health behaviours. Table 7 presents the results coded from an open – ended question in the demographic questionnaire that required participants to provide their definition of health.

Table 7: Participants' definitions of health

DEFINITIONS	Y7	Y10	YA
Being physically active	29	32	6
Having a well balanced diet	28	28	3
Looking good*	7	2	2
A sense of wellbeing	7	16	31
Absence of disease	7	3	2
Not smoking, consuming alcohol or illicit drugs	4	3	1
Miscellaneous	6	5	-

*being thin, pretty and not fat

All participants believed being healthy means living a balanced life including eating nutritious food, exercising and adequate, satisfying recreational time. This latter factor is particularly important for Y7 and Y10. As demonstrated below the data from this question are supported by comments by the young women in all age groups within the interviews and focus groups.

Y7 - Health to me is…

"…eating well and exercising a lot, being fit and able to run around and eating the right foods and being normal"

"…being able to do things, not going to die then and there, looking good …feeling well and not getting sick..."

"…being mentally healthy, spiritually healthy and feeling good about yourself and stuff…and having no alcohol or drugs and stuff…"

Y10 – Health to me is …

"…keeping fit, like I don't want to get fat and like when I get older not having problems with my heart and stuff…"

"… exercising and eating the right foods and stuff…"

"…just keeping everything in balance…"

YA – Health to me is…

"It's really physical, mental and emotional wellbeing…"

"It has got to be a state of mind as well as a state of body"

"Not being sick"

"… eating correctly and doing exercise and stuff mainly…"

It was stated that being healthy also means, to a lesser degree, being physically attractive and being thin. This association between health and physical form was explored mostly by the YA participants. With many of them thinking

"… if you are thin you are healthy and you don't have cellulite…"

"Health to me is basically staying thin!… but I know that's a stupid and superficial way of me looking at it but I consciously think it! Therefore I think if I look thin I'm healthy so I don't need to go out and jog around the block or cut out my odd chocolate a day because I am still thin!"

It is felt this is constantly being reinforced by the mass media's use of thin models not only in general media but also in health campaigns.

"… they're not going to have large people on the TV saying eat healthy and look like me you know what I mean… (giggles)…are they? There are going to have skinny and anorexic people who might be a little muscular promoting it! Everyone sees they're promoting it and associates that look with health … that's because our society thinks thin is healthy and large is unhealthy…"

The age groups' definitions of health offers valuable insight into what predisposes young women to adopt various health behaviours. For example, their knowledge, attitudes and beliefs about health predispose which health behaviours they chose to adopt or not to adopt. An example from the data is young women's values, attitudes and beliefs reflect that to be healthy is to be thin, they are more motivated to pursue and healthy lifestyle due to their desire and belief that they will attain the look they desire.

4.1.1 Desirable health behaviours

Desirable health behaviours identified by participants *("I know I should...")* and therefore can be considered predisposing, reflect those promoted by health professionals:

- Exercising daily
- Eating a balanced diet that is low in salt and saturated fats, high in fibre and foods rich in calcium and iron and fibre
- Having limited alcohol

- Being a non-smoker
- Not consuming any illicit drugs.

4.1.2 Adoption of recommended health behaviours

A complex mix of predisposing, reinforcing and enabling factors affect whether the girls and young women chose to adopt what they knew as the recommended health behaviours.

Many enabling factors affected the Y7 Group. For example the Y7s considered their health behaviours are very much in the control of their parents. It is their parents who do the grocery shopping and who are relied on heavily for health advice, and practical support such as transportation and fees. However, this group's attitude toward smoking was a predisposing factor that may affect their smoking status. This group seemed to be very anti-smoking. For the girls in the study, at this age smoking still seems to be *"disgusting"* and *"uncool"*.

Predisposing knowledge, attitudes and beliefs interacted with many reinforcing and enabling factors in the Y10 group. For example, Y10s were similar to Y7 in that a lot of their behaviour is dependent on how reliant they are on their parents for transport and finances. Y10 are very diet conscious although their diets are not necessarily balanced. A pattern seems to be that they watch their diet closely for a period of time (deprive themselves of desired food?), and then reward themselves with treat foods which are usually categorised as junk food. This cycle seems to be perpetual as fast foods are often more convenient and appealing to Y10 participants.

> *"I try to eat healthy foods but like there's so much junk food around that you just can't help it and when you feel like munching on something you really don't go and get an apple!…"*

The amount of physical activity reported related to a number of enabling factors including:

- How much time they have
- Whether or not their friends are doing it too
- How much *"effort"* is required on their behalf
- How much it costs to do the activity.

Similar to the other age groups many predisposing, reinforcing and enabling factors were noted to affect the YA adoption of recommended health behaviours. Some members of YA have established a lifestyle pattern that predisposes them to a more

healthy lifestyle which includes regular physical activity, a nutritionally balanced diet and what they consider to be a balanced and healthy lifestyle. However, a number of negative reinforcing factors including time, cost and convenience affect their choices. For example, for a majority of the women in this age group physical activity is not a high priority and they often only exercise formally when they have time or when they remember. It was evident that remembering to exercise is often prompted by media messages, personal guilt or physical illness. The women report they are conscious of their diet and where possible, they eat a healthy diet. However, they are more likely to find attractive foods that are quick and easy to prepare, as with Y10, time and convenience are important enabling factors in dietary behaviours. However for YA cost is an additional enabling factor as the cost of what they term *"health foods"* is higher compared to convenience foods. As with Y10, YA reported maintaining healthy eating patterns for a certain time before rewarding themselves with what they called *"unhealthy treats".* Or alternatively if they maintained a healthy lifestyle they were entitled to reward themselves with *"unhealthy treats"* for example;

> *"… if I am healthy and exercising regularly I don't need to feel guilty when I have a chocolate biscuit or some chocolate or something…"*

Time was also a factor identified by the YA that affected their ability to put into practice recommended health behaviours. Often they lead a *"hectic life"* which involves managing a combination of career, social life, study, relationships and sometimes even parenthood. In many instances it was said that the time it takes to incorporate *"healthy behaviours"* into their lives was "*a luxury they could not afford*."

Some of the women in these groups were smokers and mentioned they would continue until they decide to quit. Most of the smokers did believe that one day they would quit. A greater proportion believed that they would quit when they became pregnant.

4.1.3 Motivating (predisposing, reinforcing and enabling) factors affecting women's health behaviours.

The results of the YW&HP study found an intricate network of predisposing, reinforcing and enabling factors exist which play a role in motivating women to adopt recommended health behaviours. Some factors acted to support women's health behaviours (eg. positive role models) whilst others were clearly barriers (eg. social pressure). Other factors included physical appearance, personal experience, peer / family pressure, enjoyment, fear, guilt and personal achievement and will be discussed in the section below.

Modelling (reinforcing and enabling factor)

Modelled behaviours played a role in motivating participants from all groups to adopt recommended health behaviours. However, each group chose significantly different role models.

Y7 tended to admire and model the behaviours of their parents, successful athletes and other celebrities. When asked "who they admired" or who they would like to see in the health advertisements Y7 said;

> *"I think I would have put something like a swimming person or something. Probably a model that kids look at, like I dunno, like Kieran Perkins or.... Samantha Riley"*
>
> *"Yeah, Samantha Riley and they could be telling them because the kids would like them and do something to be like them."*

Other celebrities such as *"The Spice Girls", "Madonna"* and various stars from sitcoms were also mentioned as role models for this age group.

Y10 were less likely to model their parents but admired the behaviours of celebrities and sporting heroes. Other celebrities and rock stars were also mentioned as role models for this age group. When discussing role models with Y10 groups the following was said;

> *"If it was a more interesting role model. Like if it wasn't Sue Stanley like if it was someone that we liked it would be. Like a successful athlete like Susie O'Neill or…"*
>
> *"… or some cute guy athlete saying come exercise with me!! (giggles)…"*
>
> *"My Aunty Tracy my Dad's sister, she's into law and things like that and really fit and stuff or Cathy Freeman I think she's a good role model too."*

YA were most likely to model the behaviours of successful peers and athletes.

Social pressure (negative reinforcing factor)

Y10 and YA in particular mentioned the role the media plays in pressuring women to look a certain way.

> *"Definitely what you see, not only around you but what you see every day in magazines, on TV it really makes you think well gee I wish I look like that…"*
>
> *"… there is a lot of pressure on women to look good these days. Like you don't see a fat lady in there making up a full cream dairy milk milkshake do you!"*
>
> *"…advertising I'd say, being under pressure because you see all these skinny people and … you know people are just never happy like even if they're just a average size, you always want that little bit more…"*

These two groups were more likely to want to look like popular models and actresses. They were also fashion conscious and suggested that the introduction of a new season's range of clothing will contribute to women being particularly diet conscious for a short period of time. One YA commented in a discussion about factors that may contribute to behaviour change

> *"... it's putting on a swimsuit the start of summer that generally does it! (group agreement)."*
>
> *"Yeah Pull out the old summer clothes and go urgh!!!"*
>
> *"… also when you start getting into the new season and you, like you open a magazine and nobody's wearing anything and the things they are wearing you think I will never fit into them!"*

There was agreement with comment from group members that social pressure also contributed to creating an image of smoking as a rebellious behaviour.

Y7 also seemed aware of social pressure placed upon young women from sources such as the media, but seemed less likely to respond to this type of pressure at this stage.

Physical appearance (predisposing and reinforcing)

Participants in all three groups liked to *"look good"* and be *"slim"*. However, the way each group viewed the importance of physical appearance varied.

Y7 did not consider themselves to be overweight and did not want to be regarded so. They said that seeing people on the streets or on television who were considered to be overweight induced a fear of themselves being viewed as overweight, a fear that motivated them to exercise to prevent weight gain. While it was important to them

not to be viewed as overweight, it seemed equally important that they were not as *"skinny"* as the models they saw on television and in magazines whose appearance seemed *"unhealthy"* to them.

Y10 most often described themselves as being overweight and they reported frequent episodes of dieting and exercise to lose weight. This group also viewed physical signs of ageing such as developing skin wrinkles, as a factor that contributed to them wanting to *"look after themselves"*.

Concepts of looking and feeling old strongly affected YAs self image and health behaviours. Along with a focus on their weight, they viewed ageing negatively and believed that by leading a *"healthy"* lifestyle they could delay the onset of the physical signs of ageing.

> *"… we all don't want to get old and it... smoking is... speeding that process which makes us think twice about it… "*
>
> *"I think it's getting old that's the threat whereas once you're old I think it's death that's the threat …"*

Personal experience (predisposing factor)

For all groups, the personal experience of seeing someone close to them suffering from a debilitating disease, or suffering consequences of physical illness had a significant impact on their own behavioural intention. This was further reinforced in cases where the young women (especially the YA participants) considered the individual's lifestyle behaviours to be precursors to the physical illness ie. smoking and cancer. This statement from a YA clearly illustrates this point.

> *"… when you can feel things starting to fall around you … like if something about your health starts getting affected and you start thinking about other things that you can do to improve your health. I know if we've got a friend or relative that starts going down hill it starts making yourself think twice…"*

On another level, particularly for YA, personal experiences included any consequences their behaviours may have on others close to them such as children or friends.

> *"It's like that guilt thing again … like you can tell someone it's bad for your health but when it becomes your child's health then you think Oh I'll feel more responsibility…, for men they go stop smoking because it's bad for you but for women they go you stop smoking because otherwise you can't have children or your children will be ill and it, you know it's effective like that because it's not just you that your concerned with."*

"Because it's like you're not just feeling bad about yourself, you're feeling bad about how what you're doing to other people!"

"Because its like you're not only hurting yourself you're hurting other people by doing it"

YAs personal experience such as observing a friend or relative having difficulty changing their behaviour or if they observed what they considered to be a negative result from the behaviour change also had an impact on their intention to modify their behaviours. YAs when discussing this point reported it would be less likely for them to consider modifying their own behaviour. For example:

"Quitting smoking usually involves gaining weight which has been my general impression from seeing friends trying to quit and sort of give up the fag and … start eating instead. So they might quit but they just get fat! So that doesn't inspire me at all to quit!"

For Y10, avoiding embarrassment was a powerful motivator of their health behaviour.

Peer/family pressure (reinforcing factor)

Y10 reported greatest pressure from their peer group, often feeling obliged to adopt health behaviours such as smoking and other drug consumption to feel accepted.

"… sometimes you really are put in a position because they offer you one, like you'll be hanging around with friends and…there is pressure…"

"Yeah pressure, it pressures when you have friends who smoke."

"They say come on, come on just have one drag.

Y7 also mentioned similar pressure from peers, but to a lesser extent than the Y10 participants.

YA spoke of pressure applied to them by family and peers to change lifestyle behaviours perceived by others to be unhealthy. Conversely, Y7 reported enthusiastically pressuring parents and relatives. Participants from this group mentioned using emotive pleas to persuade their parents or grandparents to give up smoking. Some examples of this are:

"Mum … smokes and I say, cause this ad come on showing how … all of your lungs could end up with all stuff, I said please quit smoking and she said "oh one day if I die I will!" I said you had better do it before then cause I don't want you to die!"

"My Mum's friend smokes and she went up to her and said could you please stop smoking because it makes my asthma real bad …"

Enjoyment (reinforcing and enabling factor)

All groups reported a likelihood of adopting health behaviours if they were seen as being fun and could be performed with a minimum degree of disruption to their daily lives. This was particularly so for Y7 who mentioned *"fun"* most often during discussions of what contributed to them adopting recommended health behaviours.

Fear (predisposing and reinforcing factor)

A fear of becoming ill or dying played a major role in all groups' choice of health behaviours. In addition for Y10 and YA, the fear of their behaviours affecting their ability to have healthy children was reported to have a strong affect on their health choices.

Y10 commented:

> *"I reckon that ad is pretty good cause it says like you're going to harm your baby if you smoke and that, and most of the people I know, and that have sex and smoke and it really scares you and that, cause when you want kids and that, it could all stuff up."*
>
> *"Well, you know, I mean it's telling people like the song is saying (referring to the Only Women Bleed advertisement)...how it can screw up your periods and screw up having children and so on. It was appropriate for women."*

YA commented:

> *"Well if you're young and you do smoke then these things can happen! You might not be able to have children."*
>
> *"Cause lots of women want children and the caption about getting pregnant and that really hits home!"*
>
> *"Well for me umm, with the baby thing like you know, before I was pregnant I was into you know smoking, drinking and that was what my life was about really you know, and I was working and going out and getting smashed. But when I got pregnant you know my life completely changed, I had to be healthy because I want a healthy child."*

Although Y10 demonstrated the above concerns they were less likely to fear developing a severe illness from their current health behaviours and were less concerned about death. Y10 seemed to display a sense of "invincibility", believing most often that *"it would not happen to them"*.

Guilt (predisposing and reinforcing factor)

While a response of guilt to health messages was mentioned by all groups, it seemed more powerful for YA who advocated its use to persuade women to adopt recommended health behaviours because of the flow-on effect for significant others.

This was evident when smoking campaigns were discussed amongst YA participants.

> *"… it won't affect me but if they talk about the people around you and sometimes you care more about the people around you sometimes more than yourself, so if they do have them talking about what it's doing to other people rather than like what you are doing to yourself… like look you're doing this to somebody else! That'd have more impact on me, that's sad isn't it!"*

Personal achievement (predisposing and reinforcing factor)

A small number of Y7 participants mentioned receiving praise from parents and teachers for performing well in sporting teams or events led to a sense of personal achievement that contributed to them continuing to participate in physical activity.

The only external praise, which seemed to have an effect on the Y10 group was that which came from peers. Personal achievement for this group was measured more in terms of the extent to which they had achieved independence from their parents rather than a pride in their personal abilities and had little effect on their motivation to adopt health behaviours.

YA reported that the sense of personal achievement attained by adopting a lifestyle they considered to be healthy contributed to many of them maintaining that level of health and wellbeing. While many of this cohort had begun to exercise and eat a nutritiously balanced diet to lose weight, once they developed a routine they adhered to it because they felt better within themselves with increased energy levels and self-esteem.

> *"I exercise pretty much every day, … initially I was exercising to lose weight but, once I started noticing the extra health benefits it's like just basically you feel a lot more alive, a lot more vibrant, you feel, it gives you time to mentally relax because you can just think about whatever you want and I also noticed your immune system goes through the roof! … there's just a lot of other benefits of it besides losing weight and now I wouldn't give it up."*

4.1.4 Summary

The data indicated that the participants' perceptions, values, attitudes, beliefs and knowledge (predisposing factors) of health influenced their motives for the adoption of health behaviours. The YA deduced that their definitions of health were built upon the social and cultural values held by those close to them and society as a whole. Although it was not articulated as well by the Y7 and Y10 groups, it was

evident through the course of discussion that both groups felt their social and cultural surroundings played an important role in the motivation of their health choices.

All groups were aware of a number of currently recommended health behaviours and a complex mix of predisposing, reinforcing and enabling factors affected whether or not they chose to adopt recommendations. Many of the participants had or were endeavouring to adopt many of the recommended health behaviours, however, factors such as lack of time, lack of finances, reliance on others for transport and non-participation of peers were identified as barriers (negative enablers) to the adoption of health behaviours.

Many factors were identified in the study as motivators for young women's health behaviours. Table 8 presents an overall summary of motivators identified by the different age groups and their classification according to whether they were considered predisposing, reinforcing or enabling factors. The table shows common motivating factors across the groups eg. modelling of behaviours, social pressure, physical appearance, personal experience, peer/family pressure, enjoyment, fear, guilt and personal achievement. However, the importance placed on the factors varied eg. the Y10 participants appeared to place greater emphasis on peers than the Y7 participants.

Table 8: Summary by age group of factors affecting motivation to adopt recommended health behaviours

	MOTIVATION TO ADOPT RECOMMENDED HEALTH BEHAVIOURS								
	MODELLING *(Reinforcing & enabling)*	**SOCIAL PRESSURE** ***(Reinforcing)***	**PHYSICAL APPEARANCE** ***(Predisposing & reinforcing)***	**PERSONAL EXPERIENCE** ***(Predisposing)***	**PEER/FAMILY PRESSURE** ***(Reinforcing)***	**ENJOYMENT** ***(Reinforcing & enabling)***	**FEAR** ***(Predisposing & reinforcing)***	**GUILT** ***(Predisposing & reinforcing)***	**PERSONAL ACHIEVEMNT** ***(Predisposing & reinforcing)***
Y7	Parents Athletes Celebrities	Media *(less likely to respond)*	Concern of becoming overweight *(although didn't view themselves as overweight)* Concern about being too "skinny"	Seeing someone close suffering	Peers (more likely to be appliers of pressure to parents/grandparents)	Fun	Fear of illness/death	Guilt about unhealthy behaviours	Praise from parents/teacher for sporting achievements +
Y10	Athletes Celebrities	Media	Concern of weight gain (*more likely to view themselves as overweight)* Concern of aging	Seeing someone close suffering	Peers	Fun with least amount of effort required	Fear of illness/death Fear of affecting ability to have children	Guilt about unhealthy behaviours	Personal achievement was measured as the degree of independence from parents and had minimal effect on motivation to adopt health behaviours
YA	Celebrities Successful peers	Media	Concern of weight gain Concern of aging	Seeing someone close suffering Effect of behaviour on others Observation of negative effects of behaviour change in peers	Peers Family	Fun with minimum disruption to routine	Fear of illness/death Fear of affecting ability to have children	Guilt about unhealthy behaviours Guilt about effect their behaviours have on others	Sense of achievement contributed to behaviour maintenance

4.2 Objective two results: to elicit young women's responses to current or past health promotion materials (audio-visual)

Information addressed under Objective two examines the response of each of the age groups to three selected advertisements in the area of nutrition, smoking and physical activity. A basic description of the dialogue and setting for each advertisement is shown before the responses to the advertisement are presented.

A series of questions incorporated into the focus group moderator's guide were designed to explore the young women's immediate responses to the promotional message (Appendices 1&2). The data from the analysis of the focus group transcripts revealed a pattern of responses from each age group (Y7, Y10 and YA), which included the following:

- A profile of the character/s in the advertisement
- The depicted location
- Each participant's perception of the information the message conveys
- Participants' processing of the messages.

4.2.1 Nutrition advertisement – 'Milkshake'

The *Milkshake* advertisement was run by the Dairy Corporation of Western Australia in 1994, targeting 16-24 year old women to increase their milk consumption because of the importance of a calcium rich diet for women.
Scene:
A young woman in the kitchen preparing a milk smoothie with a tamarillo.
Text:
Everyone knows how important it is especially for girls like me, to get their calcium from two to three glasses of milk a day. But I don't particularly like milk straight, so one of the things I do is get some milk, a tamarillo and whatever else I feel like, and ta-daaa. Breakfast! Hey if you don't like tamarillo, invent your own combination.

Y7 response

Profile of the character

The character was considered most likely to be single, aged in her twenties and assumed to have no children because the depicted kitchen was clean and tidy and the house was quiet. As illustrated by Y7s responses:

> *"I don't think she has any children… because she looks pretty independent and not at that stage…"*
>
> *"I didn't think she had children cause her house was too tidy and quiet and it looked like she had enough free time to keep things clean, which you don't when you have kids!"*

She was believed to be most likely in the paid workforce with a busy lifestyle and little time to prepare meals, often eating on the run, hence the need for only a milkshake for breakfast.

> *"I think she might be an office worker…I think they would have, … milkshakes in the morning, cause that would be their breakfast…"*
>
> *"She reminds me of my aunty…(who works in an office)…she wakes up in the morning, she always has a milkshake or something and she puts fruit in it and like sometimes she has carrot juice and she has that before she goes to work. Sometimes she goes to work at 6.30 in the morning so she had to have something quick."*

Initially described to be *"healthy looking",* further discussion characterised her to have model looks - *"pretty*", *"skinny*" or *"thin"* and *"perfect looking" and "lucky to be thin".* The Y7s also mentioned the character to be *"pretty fit"* and that she was the type that would *"work out at a gym nearly every day".*

Depicted location:

The majority of participants placed the scene in the kitchen. It was assumed the character had just got out of bed and was preparing a milkshake for her breakfast.

Information the message conveys

In general, the Y7s indicated the advertisement was encouraging milk consumption by promoting a high calcium intake. They recognised that the strategy being modelled (to make milk more palatable by the addition of other flavours) was being used to encourage more women to increase their milk consumption as illustrated by one Y7s comment about the message:

> *"It shows that you could drink milk with anything really!"*

Processing of the message:

The majority of the groups assumed that the character was just a "*TV character*" and not a real person. She is just a model working on the advertisement. For example:

> *"while she is on the screen she has to act her part, she has to be fit and jumpy, real kind of nice healthy person but you never know off screen she could be real – you know, eat whatever you want type person"*
>
> *"yeah she is a person but not the person she is on the TV, she gets paid to act like that"*
>
> Off screen *"…she may like junk food not healthy food!".*

In general, the advertisement was described as unrealistic and somewhat misleading, with this group unable to relate to the character or her surroundings. The participants commented that the Dairy Corporation used the actress because she was *"thin and healthy looking"* and that her image would persuade people to drink milk because *"…she's persuasive, healthy, thin and beautiful. She's like the perfect role model and everybody'd follow her and what she does"* and they want you to think, *"if you drink milk you'll look like her and stuff"*. The Y7s also felt the advertisement implied that if you drink milk you will get *"skinny"*. The Y7s suggested that older women might find the advertisement *"depressing as they would look at the healthy thin woman on the advertisement and feel as though they need to diet to look like her"* which may then be counter-productive, and contribute to the audience feeling depressed or *"put off"*.

Those girls who felt the information in this advertisement was misleading often verified the facts with another source. For example, many of the girls indicated that if *"I don't know something I usually ask my older sister because she really looks after herself"* Many Y7s without older sisters consulted their mothers or on occasion a friend's older sister to clarify information.

Additionally, Y7s felt the advertisement was aimed at older people and did not hold much appeal for children, eg. the use of a tamarillo to put into the milkshake was particularly off putting, one Y7 saying *"make's me feel sick!… just the way it looks*." Most of this group were unfamiliar with the fruit and would have preferred something *"yummy"* to add to the milk, such as *"Milo or Qwik"*. A number of the Y7 groups felt the way to get children their age to pay attention is to promote products showing family activities and supported this with examples of food commercials such as Uncle Toby's muesli bars.

Y10 response

Profile of the character:

"Young healthy, twenty something… Perfect!" The character was considered to be a stereotypical young "*TV woman*" in her twenties. The stereotype included her being independent, confident, a bit selfish but ultimately happy with her life.

> *"She looks really comfortable with herself"*

> *"She would go to the beach a lot, she'd spend a lot of time by herself but also hang out with friends when she wants…"*
>
> *"I reckon she'd be a bit selfish, you know exercise all day…not care about anyone but herself…"*

They believe she would lead a *"…relaxed, healthy and happy life"*. However a number of the Y10s considered the character to also lead a busy life that could either involve a career or study or successfully juggling both. They considered her to be popular, but not the type of person to hang out with friends and snack on junk food as illustrated by the description one Y10 gave:

> *"…like the sort of person that would, have lots of friends over and they have, like all vegetarian food and has lots of pasta and go to the gym and that sort of thing."*

She was more likely to go to the gym or for a run or do *"healthy stuff"* with friends.

Again, the character was described as *"healthy looking"* with further discussion revealing the girls thought she was beautiful and thin with perfect skin, hair and teeth and *"physically fit."* The most common description used for the character was *"perfect"*.

Depicted location:

The majority of Y10s placed the scene in the kitchen, however, they differed from Y7s in that it was thought that the character had just returned from the gym or from performing some form of physical activity.

Information the message conveys:

Y10s most frequently reported the message being conveyed was the need to drink two-three glasses of milk a day to maintain an appropriate calcium intake *"to build your bones and teeth and stuff"*. This group immediately recognised that the advertisement targeted at women and associated lack of dietary calcium with an increased risk of osteoporosis as illustrated by the following comment *"and I guess they're trying to make it aim at young women as well, to try and prevent osteoporosis…"*.

The Y10s also felt encouraged to drink milk, as it is acceptable to mix it with other ingredients to make it more appetising or more appealing *"Making it okay to drink*

milk, if you don't like the taste of milk on its own." Unlike Y7, Y10 preferred to mix it with other fruits not with chocolate preparations for example:

> *"I wouldn't mix it with that yuck! (referring to the tamarillo)"*
>
> *"Strawberries maybe"*
>
> *"Yeah strawberries"*
>
> *"Bananas"*
>
> *"Yeah bananas yum!"*

Processing of the message:

The Y10s expressed interest in this style of advertisement as they felt the advertisement was aimed directly at the viewer. The suggestion that *"you drink milk because you like it not because you have to"*, was seen to be a positive approach. Y10s indicated, the advice being relayed to them by the young woman in the kitchen seemed similar to having a discussion with a friend.

Many of the Y10 participants mentioned they were envious of the character's independence and thin figure;

> *"… it's kinda like how I suppose everyone wants to be. Like she lives her own life and she is really energetic and healthy and looks good and thin…"*
>
> *"They have used her because she is skinny and healthy looking and most teenagers want to be like that!"*

However, overall, they thought she was not normal, describing her as *"fake"* and *"too perfect"* which made the concept of what she was doing unrealistic to them.

> *"…nobody ever takes time to make that kind of thing for breakfast… nobody does!"*
>
> *"I think it is unrealistic, because NOBODY looks like that in the morning!"*

The Y10 groups thought it would have been more effective if they had made the character:

> *"… a little bit more, imperfect! Like.... even something like, a gap between her teeth or something like that, that would kind of make you go, oh, yeah, she's real. She's normal. (giggles). She's not a plasticine person…a Barbie."*

The Y10s said they *"didn't relate"* to her, but did imagine *"being at her stage of life in ten years or so"*. They elaborated on this point by saying

> *"It's not (the ad) appealing to us. It is for older people, because it's an older chick on the video"*
>
> *"It is not motivating."*

This group was sceptical of the Dairy Corporation's motivation for the use of a skinny model to create a positive image of drinking milk, suggesting it gives an impression that drinking milk will cause individuals to be healthy, fit and slim *"just like me (the model)"*.

YA response

Profile of the character:

This group perceived the character to be an *"older, like about thirty something"* working woman that may or may not have children having a busy lifestyle. They described her as being a stereotype *"nicely dressed", "pretty", "slim"* and, once again, *"perfect"* looking. For example a YA participant mentioned:

> *"I suppose it's giving a stereotype really isn't it? We're the busy woman, you know, dashing in, making breakfast and you know, looking perfect, whereas in the morning I don't think anybody looks that perfect. (laughter)"*

It was said that she seemed to be a *"perky"* person with a positive, happy outlook and with nothing to worry about. One YA believed the advertisement *"tried to tap into that kind of pace of single people's lives…"*

Depicted location:

The majority placed the scene in the kitchen. The time of day varied with some participants assuming the character had just got out of bed and was preparing a milkshake for her breakfast and others who thought the character had just returned from the gym or from performing some form of physical activity. However, her *"perfect"* appearance in either scenario was dubious according to a majority of YA.

Information the message conveys:

The message was identified as *"it is important for women to ensure they have enough calcium in their diet to prevent developing osteoporosis"*. It was suggested the overall message was *"to drink milk because it's good for you and it's an easy source of calcium"*.

Processing of the message:

While recognising the information about dietary calcium and osteoporosis, the YAs felt the advertisement did not provide women with enough factual information about why you need calcium. As well, although alternative ways of flavouring milk to make it drinkable were modelled, there were no suggested alternative sources of calcium for those people who do not like milk or who are lactose intolerant. YA concluded that the advertisement was purely a promotion for milk and there were more serious health issues for women this age than dietary calcium.

The majority of responses indicated that the women found the advertisement to be unrealistic, though they thought the concept of depicting the hectic lifestyle of modern women as a strategy for disseminating health information to women was commendable. However, in general they expressed amusement at the advertisement because the thought of making a milkshake for breakfast was alien to them, as was the model's appearance ostensibly first thing in the morning or after exercise. YA mentioned they *"would love to be that perky in the morning but it will just never happen!"*

She was described as being *"too skinny and perfect to be real"* with comments that advertising images of this nature place unnecessary pressure on women to look *"good"* (ie attractive) believing the advertisement promoted the concept of *"drink milk and you will look like me (the model)*". As a consequence the YAs mentioned *'It doesn't relate to us because we're not like that. Our lives aren't like that!"*.

To these women, the advertisement did not stand out and did not inspire them to drink milk. It was felt to lack credibility and they viewed the health message sceptically, believing the WA Dairy Corporation was hinging its product sale on a health issue.

> *"I was a bit dubious because it was really an advert for the milk company and they're taking the health angle on it but it's not really about calcium because you know, if it was about calcium they might have tackled things like people who are intolerant to milk and other ways to get calcium so I sort of felt that it was more going that health angle for the milk company to sell West Australian milk."*

4.2.2 Smoking advertisement – 'Only women bleed'

The *Only Women Bleed* advertisement was part of the 1995 Quit campaign run by the Health Department of WA aimed at 18-25 year old women

Scene:

A variety of young women from various ethnic backgrounds were shown in still shots, using both close ups and distance views. The models were positioned in various poses, eg. sitting and laying on a bed and on a couch. One image of a pregnant woman wrapped in a sheet was shown. The advertisement used dull colours and, as each model was shown, messages appeared on the screen. It is left up to the viewer to read the scripted messages. A version of the song "Only Women Bleed", sung by a woman, played for the duration of the advertisement.

Text:

Women have unique problems
Especially those who smoke
You could develop cancer of the cervix
And problems with the pill
Your unborn child could suffer
That's if you get pregnant. Smoking reduces fertility
And it can screw up your periods
You already know what you should do
Please, please think about quitting.

Song lyrics:

A man's got his woman to take his seed/He's got the power, she's got the need.
She spends her life through, pleasing up her man/She feeds him dinner, Ohh, anything she can.
She cries alone at night too often/He smokes and drinks and don't come home at all.
(Chorus) Only women bleed, only women bleed (repeat)

Y7 response

Profile of the character:

The range of women depicted in the advertisement were thought to be in their twenties. They were described as looking *"tired", "sad"* and *"yucky"*. They were also described as looking *"skinny"* and *"depressed", "guilty"* and *"regretful"*. The Y7 groups thought the women would feel depressed, regretful and guilty because they had *"become addicted to smoking and bad things were happening to their bodies and now they can't stop smoking"*. It was also said that the depicted women had *"wrecked their bodies and had made all the wrong choices and it's coming back on them because their kids are going to suffer for it"*.

Information the message conveys:

It was clear to Y7 that it was unsafe to smoke and that smoking affected people of all ages. Further, because a lot of the information received from this advertisement was based on issues to do with pregnancy and fertility, the Y7s also felt the advertisement conveyed messages that smoking harms women's fertility and ability to have babies and that babies born to women who smoke will probably be deformed.

Processing of the message:

In general, the Y7 groups were of the opinion that the advertisement *"persuaded people not to smoke"* and *"made people aware of the dangers of smoking"*. It was determined from the advertisement that it was unsafe to smoke as *"smoking can ruin your whole life"* and *"if you smoked people wouldn't like you"*. They thought that if 18+ year old people who smoked watched the advertisement they would stop smoking *"because they would realise they want to have children and if they smoke while they are pregnant their babies will be deformed"*. The messages about infertility and foetal deformity were doubted by some of this age group. They indicated they knew mothers who had smoked during pregnancy and could see no harmful consequences for these mothers or their siblings.

It was thought that the music suited the advertisement's images because it was talking specifically about women. The Y7s reported the music made them feel sad and the song *"stuck in your head"* so being remembered and associated with the Quit message. Y7 participants understood the song Only Women Bleed to be *"about your periods"*. Having to read, rather than hear, the text was thought to be effective and to assist understanding the message. It was felt the song attracted the viewers' attention and reading the messages caught the viewers' attention although there was mention that some of the concepts and terms were confusing.

The majority of Y7s thought the advertisement was *"good"* and *"effective"* because it *"shows how you would feel after having a cigarette."* They reported feelings of sadness and worry and they expressed their concern about people they know who smoke and who are *"stuffing up their whole lives"* by doing so. It was evident from their responses, that at this age smoking is considered *"uncool"* and "*gross*", with much discussion occurring within the groups about the effects of smoking on their

health. Often the Y7 girls seem to look to each other for support on this issue. They thought it was good that the advertisement was targeted at *"young people in their twenties as that's when they start smoking not at old people when it's too late*". The depiction of a range of women was considered to demonstrate that smoking can affect anyone. This group believed that images of men were not used because *"men's bodies were tougher than women's so the effects of smoking can cause more harm to women than men"*.

The Y7s reacted strongly to the image of the pregnant woman, with the bulk of their discussion centring on this image. The group thought it was good because *"it made women think about what happens to your baby when you smoke"*. They all agreed that the woman looked sad and depressed because her baby *"will be deformed and sick because of her smoking"* and *"the baby would be retarded and she knows it's her fault"*. The Y7s also thought it might make women feel guilty about their actions. For example:

> *"I think she was feeling guilty and she was thinking I want a baby but hang on I'm smoking and my child is going to pay for this and I think she was just really sad that her choice had stopped her from doing something that's more umm a powerful thing for her…"*

The advertisement prompted the recall and discussion of more recent *Quit* campaigns such as the *Smoking-You're Smarter Than That Campaign* by the Young People and Smoking project and *Every Cigarette is Doing You Damage* by the Health Department of WA. All of the discussion about these campaigns was positive with participants reporting *"they made you really think about what was happening with your body when you smoke"*.

Y10 response

Profile of the character:

The women in the advertisement were estimated to be 25+ years of age. In general, it was thought the women were all models none of whom were *"ugly or overweight"*, and whose images suited the campaign. They thought the women looked *"sad"*, *"depressed", "frustrated", "scared", "regretful"* and *"sorry"*. These feelings were thought to stem from the guilt they felt from ruining their lives and those of other people such as their children, by smoking. Comments included *"the women looked*

alone emotionally and physically. It is like their problems come out when they're alone and no one else knows about them".

Information the message conveys:

All of the groups identified the *Quit* message and how to obtain help for those people who wish to quit. Other messages reported by Y10 participants were to;

> *"take care of your body and your health so you don't end up with cancer or harming your babies",*
>
> *"not to smoke or you can ruin your chances of having healthy children"* and
>
> *"you don't just get cancer from smoking that there are other serious effects too that can get you before cancer does".*

Processing of the message:

The majority of the adolescents considered the music appropriate for the advertisement, believing it was a serious topic and the song had a lot to do with later recall. They thought *"the music expressed the silent desperation of all women"* and only women bleed referred *to "only women feel pain".* Although Y10s interpretation of the song appeared more analytical than Y7s, they too commented that the song was about women's menstruation and pre-menstrual tension (PMT). One passage of text reveals a particularly strong reaction noted in a discussion between two Y10 girls, which also highlights the gender issues the advertisement evoked:

> *"The song was written originally by Alice Cooper (a man), he wrote it and the song's about that only women bleed as in talking about you know what (periods) and he's talking about how women are really agro and stuff and if you get in their way they will bite your head off (PMT)…things like that. That's what he is talking about and I don't really agree with it cause the way that it puts it is that only women should stop smoking but it's ok for men to keep smoking!"*
>
> *"Yeah and it's saying…that song makes you feel like they're telling only women to stop smoking because they have babies and stuff like that and men don't".*

The visual presentation of the text was considered to be very effective as it focuses audience attention on the messages and encouraged them to contemplate the message. The Y10s felt the text's simplicity increased their ability to understand the issue, particularly the text outlining the facts that smoking has consequences other than cancer. It was also commented that the text was unspoken because the issues presented were *"women's problems"* and these things aren't to be openly discussed.

While Y10 participants considered the advertisement was not necessarily aimed at young women their age, they felt all the issues presented would effect them *"later down the track"* if they smoked. They liked the cross-section of nationalities depicted in the advertisement because the Y10 group believe a lot of people just think *"it won't happen to me"*. Generally the message was received positively, because the advertisement *"provided you with information about the consequences of smoking and encouraged you to think about quitting, it didn't just tell you to quit"*. It seemed to offer choice, acknowledging *"the decision was yours to make"*. However, the Y10s thought it did not give enough options about techniques to help quit smoking, such as nicotine gum and acupuncture.

Prompted by the image of the pregnant woman, much discussion centred on the risk of delivering a deformed child if women smoked throughout their pregnancy. Their perceptions of this seemed to relate to their personal experience with family and friends. The advertisement was thought to be effective because *"you're not just feeling bad about what you are doing to yourself, you're feeling bad about how what you do affects other people around you"*.

The importance of family and friends was revealed from this discussion with the Y10s. Most groups expressed that if they are concerned about a health issue they are most likely to discuss it with *"their mates before they approach their families"*. The peer network identified this playing an important role clarifying and verifying information.

As with Y7s, this advertisement prompted the recall of many past and present anti-smoking campaigns, all of which were regarded positively especially those which, employed the use of threats to their physical appearance such as acne, yellow teeth and bad breath.

YA response

Profile of the character:

The YAs thought the modelled characters looked *"sad"*, *"depressed"* and *"desperate"*, and as though they were perhaps, contemplating their lives and making decisions about their behaviour. The serious expressions on the faces of the models

were thought to reflect the *"realism"* of the health problems smoking creates for women.

Information the message conveys:

Every group associated the *Quit* message with the campaign. However, various other concepts were reflected in discussions, primarily centring on women's ability to have children as a result of smoking.

Processing of the message:

The YA participants identified with the depictions of women in the advertisement, as they thought the women were all in their late twenties, an age at which women are contemplating having children. They also said that the way the models looked was trying to *"capture and display a level of intimacy that only women share"*. Many of the YAs believed the models used were appropriate for the campaign as *"there is such a wide range of different sorts of women portrayed, I mean everyone can relate to someone in there."* One YA that did identify with the women in the advertisement concluded that it *"…put us all in the same boat (women), you know, like showing us women have got that much to lose if they smoke…"*. Murmurs and head nodding from many in the group indicated they supported and agreed with this comment. However, a number believed the models were still stereotypical television images of women because none were overweight or unattractive. Associated comment was that *"the use of thin models reinforced the misconception that smoking reduced calorie consumption so that smokers stayed slim."*

YA participants either loved or hated the music used. Those that favoured it thought it was moving and appropriate for the advertisement and that it symbolised the:

> *"communal suffering of women"* and
>
> *"that is it's trying to bring us all in together and sort of link, I guess the experiences of womanhood…by using the women in the ad they are implying I am like these women and haven't you women suffered enough, please give up smoking!"*

Those who disliked it thought it was condescending and inappropriate as it reinforced the *"out of date concept that women must stay at home and look after their men"*. The text was perceived to be straight forward, not too scientific and presented a discussion between friends. Being forced to read the message gave it greater likelihood of being internalised by the audience.

Reception of the advertisement by the YA audience was mixed. Those who responded positively thought it gave a good representation of a cross section of women and showed the facts about the consequences of smoking while leaving the decision whether to quit or not with the individual. They also thought it was good because it showed *a "wider range of consequences other than only the onset of cancer in twenty years time"*. The majority of the YA participants approved of the use of guilt to affect women's behaviour; that is, their smoking harms others close to them as well as themselves. For example:

> *"It's like that guilt thing again … you can tell someone it's bad for your health but when it becomes your child's health then you think Oh I'll feel more responsibility so you know, we're talking about, … for men they say stop smoking because it's bad for you but for women they go you stop smoking because otherwise you can't have children or your children will be ill or whatever … you know it's effective like that because it's not just you that your concerned with."*

In general it was thought if women were shown the immediate consequences for their health and appearance from smoking then they are more likely to take notice.

Those who did not like the advertisement thought it was boring, condescending towards women and generally uninspiring. Those YAs who did not like the advertisement reacted negatively to the use of guilt. It was said *"I don't believe it's an effective message about not smoking, it just makes women feel guilty about their life choices"*. One YA who identified herself as a social smoker was not inspired to quit by the advertisement, however, she stated that *"I know that I will quit when I have a child, but until then I only smoke socially so I'm fine"*. This also illustrates that not only is she not responding to the use of the provocative appeal used in the advertisement but also that she doesn't see smoking as a long term threat to her health.

Past anti-smoking advertisements recalled during discussion were *Pretty Face*, *Only Dags Need Fags*, the campaign showing the life events scrolling down the page stopping abruptly for the smoker and the more recent *Every cigarette is doing you damage*.

4.2.3 Physical activity – 'Sue Stanley – power walking'

The *Sue Stanley – Power Walking* advertisement was run by the Dairy Corporation of Western Australia in 1994, promoting increased use of dairy products and the role of exercise in the prevention of osteoporosis to 45-60+ year old women.

Scene:
A group of women walking briskly through a park with Sue Stanley.

Text:
A good health message from Sue Stanley. These women may not realise it but the exercise they do now is having a huge effect on their health in more ways than one. I'm talking about osteoporosis. You see, one in four women suffer from the crippling effects of osteoporosis when they get older. Well it's never too late to start. The best way to avoid it is to start young with plenty of exercise and a high calcium diet, and dairy foods are your best source of calcium. Brought to you by the Dairy Corporation.

Y7 response

Profile of the character:

The Y7s estimated the women in the advertisement to be in their late thirties to forties. The women were thought to be elderly, exercising because they needed to *"burn off fat",* for *"company"* and *"to prevent getting osteoporosis".* It was thought they were most likely grandparents. They were said to be *"happy looking people who enjoyed the opportunity to get out of their houses."* However, although the Y7 girls thought the women used were *"largely normal looking",* there was something odd about them: for example, *"they had fake smiles and walked and dressed funny".* Sue Stanley, an aerobics champion, was considered to be a good model for talking about exercise although she did not really fit in with the group of women she was walking with.

Information the message conveys:

The advertisement was understood to encourage the consumption of milk to protect against osteoporosis. Other informative content was the need to exercise no matter at what age although, by starting young, there was a chance of significantly reducing the possibility of developing osteoporosis. A comment from one Y7 participant was that *"older women were depicted in the advertisement to show young people that it was never too late to start exercising."*

Processing of the message:

The Y7s said the advertisement was boring and that, because its characters were *"old women"* or *"grannies",* it held little appeal for girls their age. It was considered by the Y7 girls that *"…it all goes over our head cause they are all old people."* They believed it was more important for older women to be exercising because *"as you age you generally gain weight and are more likely to get diseases"* although it was *"probably too late for them to prevent osteoporosis".* Y7s suggested the information would be more relevant if younger models were used, or if its promotion was made more appealing to younger women. A number of groups mentioned the depiction of older women would *"shame"* younger women into exercising. Many comments were made about Sue Stanley's appearance: she was described as being *"too bulky",* with *"too many muscles"*, *"too tanned"* and *"too short".* Few of these girls thought they were ever likely to develop osteoporosis because it was largely *"a disease old people get."*

Y10 response

Profile of the character:

The women in the advertisement were described by the Y10s as being a group of *"old ladies"* aged 50+ years who lead very sedentary, lonely lives and would not get out into the community much. Paradoxically, they were also thought to look happy and healthy for their age. It was most often assumed these women lead very similar lives to participants' grandmothers. The majority of the Y10s found Sue Stanley to be unattractive.

Information the message conveys:

It was generally thought the advertisement encouraged older women to exercise to prevent osteoporosis although the information content received little attention by Y10 participants who instead responded to the advertisement with ridicule.

Processing of the message:

The primary and strongest reaction toward the advertisement was laughter. In general, Y10 described the advertisement as being exaggerated - *"their clothes were too bright",* the characters wore *"too much make up"* and *"fake"* smiles. Not only

was the advertisement regarded as a joke but the audience of Y10s were laughing so hard they did not notice what Sue Stanley was saying.

Sue Stanley herself was found to be unattractive because she was perceived to be too muscular: *"built like a brick"* and looking *"manly"*. It was suggested that her appearance may even make people *"scared of exercise",* fearing the development of a physique similar to hers.

The information conveyed in the message seemed to be irrelevant to them because the advertisement's characters were older people, therefore, it did not really apply to them, although it might in 40 years time. Y10 girls suggested the advertisement was targeting older women but did not see the logic of this when, in their view, it was probably too late for older women to gain benefit from exercise. The Y10 participants thought there should be a campaign aimed at younger women. Although, at the same time, they said that osteoporosis was not important to them at their age *"because it is a disease that you get when you're about eighty"* and *"if we aren't dead by then we won't be far off it"* which is a contradiction of their previous statements.

YA response

Profile of the character:

The women in the advertisement were believed by the YA participants to be aged in their mid to late sixties and described them as looking happy and cheerful.

Information the message conveys:

YA understood the message to be that, by starting early in life, a combination of exercise and dairy products would help prevent the development of osteoporosis.

Processing of the message:

The advertisement was perceived to be a very positive portrayal of women in their sixties. In most cases they thought the characters were relatively *"normal*" looking and there were no specific comments about the way the depicted women were dressed or the way they walked. However, as in Y10, some YA participants described the characters as being exaggerated.

The group was positive about the advertisement saying it suggested things that could be done to prevent osteoporosis without preaching. However, they were cynical about the message being presented by the Dairy Corporation, feeling a health problem was being used to sell the dairy product saying:

> *"I get really cynical when I see an ad like that… it is just the Dairy Industry trying to promote dairy products. All they are doing is using a health warning to sell their product."*

This also prompted discussion within the group about the amount of commercials on television that *"promote or sell different aspects of health"* to women. Some YAs expressed their frustration to this *"brain washing approach to disseminating information"* and expressed a preference for printed materials and accurate editorial in women's magazines allowing women to process information in their own time and act on it accordingly. Additionally, a number of YA groups expressed the need to verify or discuss any information they believed to be questionable through a process of inquiry with close friends and family members.

As with the Y10 groups the YAs did not identify themselves with the characters and found the *"power walking oldies"* to be comical. However, unlike the Y7 and Y10 groups the YA groups could visualise themselves at that age although perhaps not as *"daggy"* as those women. The following passage illustrates this:

> *"… I think I pictured what I would be like at that age …(giggles)… I think I'm not going to walk around like that!! (laughter). I kind of picture my mother or my grandmother walking around like that."*

Concern was expressed that campaigns are not targeting women of YA age. It was suggested that younger women would benefit more from such a campaign and that it was less effective in terms of health outcomes to target older women because, by that age, it is too late to do much about the problem.

The advertisement did prompt them to recall previous Dairy Corporation Campaigns such as the *B&S Ball* campaign and the more recent campaign targeting men and osteoporosis displaying an elderly man with the walking frame.

4.2.4 Summary

The three advertisements were used to prompt for the recall and discussion of a number of other past and present health promotion campaigns, and health information in general. Each group recalled and interpreted the information presented in health campaigns differently, depending on their, age, stage of cognitive development, social context, experience, and the differences in total exposure time to health promotion campaigns. Table 9 presents an overall summary of responses by age group. Although it is evident while each age group's interpretation of health information varies, their system of verifying information was similar. All three age groups reported they discussed messages or information (particularly where there was some doubt) with a network of peers, parents and teachers if they were unsure of its meaning or interpretation. Hence, the peer group for all age groups played an important role in this discussion and verification process.

Table 9: Summary of responses to campaigns by age group

Y7	Y10	YA
• Recognised little difference between formal health promotion and other, commercial advertising as sources of health information • Responded positively to advertising using well known athletes, to celebrities, to animated characters, and to models of their own age • Suggested the use of models of variable body shape, size and ethnicity in health advertising • Found commercials showing family activities to be appealing • Reported the family especially older sisters as sources of confirmation of health information and guidance for health behaviours • Wanted health information for their age group although were unable to provide specifics on topics	• Were increasingly sceptical about the credibility of advertisers • Wanted realistic images *("normal looking"* people) and content, not *"perfect looking and super thin"* models or situations that do not apply to them • Had high regard for their social image, if a behaviour results in any kind of embarrassment, it holds less appeal (eg, the Sue Stanley advertisements were mocked, in part, because the depicted activity was seen *as "too embarrassing"*) • Perceived that any threat to their physical appearance would be effective (eg, smoking causing pimples, teeth discolouration or bad breath) • Requested more health information on specific topics such as breast and cervical cancer, smoking and osteoporosis • Recognised the use of graphic images (provocative appeals) by health promotion as techniques used to provoke a response of fear or guilt, however although it caught their attention Y10 participants firmly believed is *"would not happen to them"*	• Were increasingly sceptical about the credibility of advertisers • Wanted their health information from a credible source, presented in understandable terms and to include practical advice that gives them options that allow choice about how to live their lives • Said they *"had to see what was happening to their bodies"* before the message really affected them, and the messages to be personalised • Were more likely to adopt recommended behaviours if they could be shown how their behaviours may affect others close to them, especially children • Preferred a more cognitive approach, saying that if they are required to read and think about a message it is more likely to be internalised (eg, previous *Quit* campaign displayed a scrolling message of parallel life events of a smoker and a non-smoker with the smoker's life line being considerably shorter) • Also preferred printed materials, citing pamphlets or articles in popular women's magazines, containing details that may be read in their own time • Recognised the use of graphic images (provocative appeals) by health promotion as techniques used to provoke a response of fear or guilt

4.3 Objective three results: to assess the longer-term impact of public health campaigns on young women.

This section will present the results from the study addressing the long-term impact of public health campaigns on young women's health behaviours. The study results for this objective are largely retrospective accounts of participants' behaviours and beliefs. Self reported responses to questions were incorporated into the focus group and interview guides which prompted the recall of public health campaigns and the discussion of the impact and effects of these campaigns on participants' lives.

The responses from the groups revealed that behavioural impacts identified by young women were often intended outcomes of campaigns. For example, most of the participants responded positively to health promotion initiatives and recalled a number of campaigns relevant to their lives. Health information was viewed favourably and young women were conscious of being well informed about current recommended behaviours. On the whole it was thought that health promotion was having a positive effect on their behaviour. However, deeper discussion and thematic analysis of transcripts unveiled apparent unintended consequences of the same campaigns. Therefore, this section will address the recall of health campaigns by the different age groups and illustrate what appears to be the emergence of unintended consequences of public health campaigns.

4.3.1 Message recall

All three age groups could recall a number of health promotion messages when discussed in the focus groups, interviews (Table 10) and on the demographic questionnaire (YA only,Table 11). The recall of both current and past messages and health information would suggest that health promotion campaigns over the years have successfully raised the awareness of the young women in relation to recommended dietary practices, recommended levels of physical activity and the dangers of smoking. However, it may be necessary for health promotion to share its success with commercial companies that have chosen health advertising as a marketing strategy. Many of the young women within the focus groups and interviews also recalled commercial advertisements that imparted health information (Table 12).

Table 10: Health promotion messages recalled by young women in focus groups and interviews

	Y7	Y10	YA
Campaign title/topic	• Fruit & Vege Just Eat It • Quit campaigns such as; ▪ *Every cigarette is doing you damage* ▪ *Talking cigarette* • Young People & Smoking Project campaigns • 100% Control • Heroin campaigns	• Quit campaigns such as; ▪ *Every cigarette is doing you damage* ▪ *Talking cigarette* ▪ *Pretty Face* • Young People & Smoking Project campaigns • 100% Control • Respect Yourself • Heroin campaigns	• Fruit & Vege Just Eat It • Quit campaigns such as; ▪ *Every cigarette is doing you damage* ▪ *Talking cigarette* ▪ *Pretty Face* ▪ *Only Women Bleed* ▪ *Life line* • Breast Screen • AIDS campaigns such as; ▪ *Grim Reaper* ▪ *Do you really know who you are sleeping with?* • Respect Yourself • Heroin campaigns • Speed kills • Immunisation

Table 11: Health promotion messages recalled by 18-25 year old women in demographic questionnaire

Campaign title/topic	**Campaign title/topic**
Quit campaigns	Rosemary Stanton – Balanced Diet
Fruit and Vege	Toxic Shock Syndrome
Breast Screen	Eat more fibre (Sanitarium)
Iron (lean beef ad)	Cervical Cancer Prevention
Heroin	AIDS
Drink Safe / Respect Yourself	Jenny Craig
Dairy Corporation	BC Body Club
Child Vaccinations	Folate in Pregnancy
Sue Stanley - Osteoporosis	Listeria in Pregnancy
100% control – (alcohol)	Jump Rope for Heart
Life Be In It	Promite Vitamin advertisement

In the self-completed demographic questionnaire, 95% (39 of the 41) of YAs listed at least three health promotion campaigns listed in Table 11, with 83% (34) reporting that formal health promotion influenced their health choices by increasing their awareness about current health issues, reminding them about recommended health behaviours and motivating them to adopt or maintain these health behaviours.

Table 12: Commercial messages presenting health information recalled by young women

	Y7	Y10	YA
Campaign	• Heinz • Dairy Corporation • Uncle Toby's • Sanitarium • Nestle	• Dairy Corporation • Australian Meat & Livestock Corporation • Uncle Toby's • Sanitarium • Jenny Craig • Gloria Marshall	• Dairy Corporation • Australian Meat & Livestock Corporation • Meadow Lea • Uncle Toby's • Sanitarium • Jenny Craig • Gloria Marshall

Factors influencing message recall

The recall of campaigns resulted in the disclosure of factors that influenced their ability to recall the health messages and to put the behaviour into practice. Factors mentioned were;

Length of time passed since viewing the message – for example, the more time that elapsed the less of the message they recalled. The Y7 and Y10 groups recalled current messages and information clearly. The YA group recalled campaigns but often remembering the vivid images in more detail than the recommended health behaviours.

Competing messages – all age groups discussed the issue of health promotion campaigns and commercial campaigns providing health information. However, the Y10 and more so the YA groups were more discerning than the Y7 group regarding the credibility of the messages and consequently the adoption of the recommended behaviours. As previously mentioned in Objective One, little distinction was made between health promotion to sell commercial products and formal health promotion by the Y7 group.

Social desirability – The young women from the Y10 and YA groups discussion of issues relating to their health behaviours was relatively uninhibited. Most of these young women encouraged each other to explore (through questioning and discussion) in detail all of the health issues mentioned. This demonstrated their reliance on their network of women to validate information. However, the Y7s opinions were generally reflective of their parents. In the focus groups and interviews it was evident they were eager to contribute with what they thought where

the *"correct or good"* answers. It was clear their intrinsic system of values and beliefs was strongly orientated to those of their parents and their formal education system.

4.3.2 Unintended consequences

As mentioned previously, unintended consequences have been determined according to how the young women in the study felt about health messages. For example, the young women discussed feeling:

- Bombarded by health information
- Overwhelmed
- That health is expected
- Deceived by advertisers
- Unable to relate to concepts presented.

The participants' responses are discussed in the section that follows.

Bombarded by health information

The Y10s and particularly the YAs often reported feeling *"bombarded"* continually with health advice or *"nagged"* to perform a multitude of behaviours to ensure a healthy lifestyle:

> *"It's just that... sometimes I think I'm being nagged. You're supposed to be drinking your milk and doing your exercise, eating your fruit and vege... and taking your iron and the blah blah blah, ...(giggles)"*
>
> *"I just sometimes I think maybe advertising is largely pretty ineffective just because we're bombarded with so many messages you know, whether it's a health message or just bombarded with advertising…"*

Overwhelmed

A contributing factor to this is the amount of health related advertising (not necessarily health promotion) that exists in the mass media. The YAs in particular commented that the amount of choice and the amount of changes you are supposed to incorporate into your life is overwhelming. This group reported finding it hard to find the time to fit everything in that is recommended and often it is all just *"too hard"* and requires *"too much effort"*. For example:

> *"I never have spare time. Not between a business, a husband and a baby forget it. So it's hard to find the time to fit in all that you have to do let alone finding the time for health stuff."*
>
> *"I find that umm... I have like such a busy lifestyle and all the stuff that I have to do for like Uni and everything that they have all these different health messages coming at me*

it's like which one shall I focus on you know, there's be fit okay so I now have to exercise as well as doing all this study and there's like the diet so you think okay yep and then there is more still!"

"… yeah and you feel that okay well I've got to do that as well, leave time for that, and then there's all the other aspects like getting enough sleep and water and all that kind of thing and I just think well it's all too much.(group agreement)"

Health is expected

The YAs opinion is that the adoption of recommended health behaviours is time consuming and hard work, often leading to feelings of guilt because they are unable to fit all the recommended behaviours into their busy lives. However, they expressed a willingness to try, if they could be shown how to incorporate the recommended health behaviours easily into existing demands on their time. This form of pressure is adding to a changing view of health that gives it a social value in its own right rather than it being a by-product of living and lifestyle. From the discussion, there seemed to be less tolerance of individuals who choose to ignore recommended health behaviours, eg. generalised adverse judgement of women who continue to smoke throughout pregnancy and/or child rearing.

All groups seemed conscious of what is the socially accepted and culturally ideal *"healthy"* body and strive to achieve this status, but experience feelings of guilt and frustration at not achieving the *"healthy look"*.

Deceived by advertisers

The feelings of deception related largely to young women particularly in the Y10 and YA groups questioning the credibility of the message source. For YAs, credibility is an issue of concern. They look critically at the source of the health information, tending to regard the motives of commercial companies with scepticism. Although acknowledging they acquired health information from such sources, they believed other agencies, such as the Health Department, have more credibility although the similarities between health promotion's social marketing strategies and commercial advertising is blurring the distinction.

A degree of mistrust was also expressed by Y10 and YA participants as they often felt their options for food choices were limited by the ability of the advertisers to successfully only promote one product or behaviour, for example, dairy products being the only source of calcium and red meat the sole source of iron. This mistrust

was more likely to be in relation to commercial campaigns used a health message to sell the product. This was often intensified by the seemingly conflicting advice promoted by competing companies.

Unable to relate to concepts presented

All age groups expressed frustration at the use of thin models and unrealistic situations in health advertising. Y10 and YA participants in particular mentioning that often the concepts and images used to promote health behaviours were viewed as unrealistic and they felt unable to relate them to their own lives. This was often exacerbated by the promotion of the messages and recommended behaviours by *"thin, gorgeous models"*.

4.3.3 Consequences

Often, the above feelings were exacerbated by longer-term exposure to health messages resulted in the following consequences:

- Young women "switching off"
- The creation of stereotypes
- Confusion
- Mocking.

The participant's responses are discussed in the section that follows.

"Young women switching off"

The overuse of negative provocative appeals, which inspire feelings of shock, guilt and fear about health behaviours with particular reference to smoking has resulted in the desensitisation of the population to such strategies. With women in the YA group in particular believing after their initial reaction to the shock of the image they often *"switch off"* when such messages come on the television. For example:

> *"I think people umm... initially they might be shocked …like the smoking ad but it just wears off, you just get desensitised from television and movies and things and just the graphics that you see in magazines … I think people, might get something out of the ad maybe if they wanted to give up smoking anyway. It might prompt them to fight on but if they're not interested in giving up smoking then they'll really laugh at the ad."*
>
> *HOW DO OTHER PEOPLE FEEL ABOUT THAT?*
>
> *(group agreement)*
>
> *"You just get sick of it."*
>
> *"Yes like just switch off..."*

"Or like it seems like there's too much there for you to actually do... You can't deal with it all so you switch off"

Alternatively some of the YAs in the study who smoke mentioned *"blocking out the gory images"* of recent anti-smoking campaigns and continued to smoke anyway.

The use of fear or guilt met with a varied response by the Y7 age group. All of them recalled the most recent *Quit* initiatives and the set of commercials run by the *Young People and Smoking Project*. In most cases they thought the imagery was *"gross"* and *"scary"* and worked to deter them from smoking at this stage. It also caused many of them to worry for the health of their parents or siblings who smoke.

The Y10s recalled health promotion campaigns, in particular the campaigns by the Health Department such as *Every cigarette is doing you damage* which were recognised for their use of provocative appeals. They remembered the campaign and their horrified response to the graphic representation of the effects of smoking was predictable. However, discussion revealed these reactions did not necessarily correspond with the young women's behaviours. They believed advertisements were most effective when demonstrating the likely health affects of the risk behaviour, although those affects had more relevance if they had immediacy, ie. a direct impact on current lifestyles. Successful examples of this were given as the series of commercials produced by the *Young People and Smoking Project* and the *100% Control* campaign run by the Health Department. Otherwise, depicted health consequences had to compete with the sense of invincibility evident in Y10s. Further discussions of this found that this often resulted in the Y10s "*switching off*" from the message. The one long-term effect that was of concern to them, more so than the possibility of developing cancer several decades hence, was a threat to their ability to have healthy children.

Creation of stereotypes

The discussion surrounding health messages revealed the creation of stereotypes by all age groups around what is viewed as being healthy, individuals who smoke and aging.

Healthy image – It was established earlier that Y10 girls commonly associated a healthy lifestyle and look with *"being thin"*. Even though Y10s commonly believe

this to be the description of a healthy person, it was evident from discussions that a low body weight was most often sought for appearance rather than health. This then makes the attainment of a *"healthy look"* an issue of body image. Body image was an issue of concern for most women and a health issue in its own right particularly for adolescent girls. Y10s attribute their perceptions of being *"healthy"* as *"being thin"* to years of exposure to thin models and social and cultural pressure.

As with Y10s, the YAs also associated being *"healthy"* with being *"thin"*. They said how *"stupid"* this was and that they knew it was not necessarily the case, but that it was most often the way they were made to feel. The YAs agreed with the Y10 group in their belief that years of exposure had contributed to this. Although they acknowledge the source of the stereotype, in most cases, it was how they judged their own health status.

Smoking - It was evident that a stereotype of the *"typical smoker"* seemed to be developing for the Y7 participants. It was one which characterised smokers to be old, depressed, sad, unattractive and unhealthy individuals. This was confusing for participants whose family members or family friends smoke and who do not fit the stereotype.

Two distinct attitudes about smoking seemed to be developing in the Y10s which built upon the stereotype developing amongst the Y7 group.

Firstly, the image of the *"typical smoker"* identified by Y7 had moved from creating confusion and conflict because of incongruence between the message of ill-health and the evidence of unimpaired health to offering a sense of security for Y10. The illnesses and physical symptoms known to be associated with smoking were believed by Y10 to be the consequences of habitual prolonged and heavy smoking. Because this cohort described themselves to be social rather than habitual smokers, they had little expectation of developing serious smoking-related conditions. However, the image of the *"typical smoker"* was characterised by similar features as the Y7 group.

Secondly, it was seen to be the classic demonstration of rebellion. Although the risks are well known to the Y10 participants, many of the participants reported that they smoke. That society regards smoking as *"bad"* is precisely what makes it appealing to them. They said that being *"preached at"* or *"told what to do"* made it less likely

that they would stop smoking, or adopt other recommended health behaviours. Instead, they said they wanted the information so they could make informed choices concerning their health.

The YAs held similar stereotypes of the *"typical smoker"* to those of Y7s and Y10s. However, the majority of YA smokers firmly believed they will be able to stop when they are ready, eg. when they have children.

Aging – A *Quit* campaign recalled by YAs was the *Pretty Face* campaign. Its image of *"a pretty young women becoming a wrinkled old hag"* was readily remembered, however, few participants thought it would contribute to them quitting. This campaign most often fuelled the discussion amongst the YAs about aging, with nearly all groups expressing a fear of aging and *"losing their looks"*. It seemed that the campaign did little but reinforce perceptions that age means reduced sexual attractiveness. Paradoxically, the YAs were of the view that older women exposed to the advertisement would not associate themselves with the negative image of the old woman.

From their discussion about the *Pretty Face* campaign it was apparent that these young women had begun to develop a stereotype of what life is like for an older woman. In most cases, young women considered elderly to be 40-50+ years of age and that, after marriage or beyond what they considered to be young, appearance became less important for women with them not having to worry maintaining vigorous exercise and dietary regimes to *"stay thin"*.

Confusion – Confusion was less of an issue for Y7 and Y10 age groups as their parents still maintained relative control of their health behaviours. However, the YAs often mentioned being confused about what is the current *"right"* things to do health wise. Their level of confusion was compounded by the amount and diversity of health advice available to them through the media, doctors, peers and other health professionals such as naturopaths. Often the YAs were sceptical of changing their behaviours too quickly as often they felt as soon as you change one thing they recommend you do something else, which can often completely contradict what you had previously been taught. Examples given included the allowance of *"red wine"* in your diet and the recommendation dietary allowance of dairy foods for women.

Mocking – The Y10s and YAs responses to the *"Sue Stanley"* advertisement was one of laughter. It was thought that the laughter triggered by the advertisement interfered with the reception of the message. In this case when the young women mocked the characters the core health message seemed to be missed. However, both groups mentioned the use of more abstract forms of humour often made campaigns more appealing and increased message retention.

4.3.4 Summary

Overall the young women responded positively to health promotion initiatives they could recall. However, the findings revealed that young women often felt bombarded by too much health information that seemed to be constantly changing. They feel overwhelmed and at times deceived by advertisers. Although feeling that they should make the effort to live a healthy lifestyle they have difficulty relating to the health concept presented to them. As a consequence of this, the young women often found themselves *"switching off"* from health messages, becoming confused by them or mocking them.

It was also evident that a number of stereotypes were beginning to develop amongst these young women relating to the image of a healthy person, aging and smoking. Although the Y7 girls in the sample seemed relatively untouched by many of these unintended consequences, it was evident that the long term impact of public health campaigns together with media pressure and socio-cultural influences have begun to contribute to the development of some possible unintended consequences of health promotion to young women.

5. DISCUSSION

A review of the literature demonstrates the importance of health promotion in promoting and assisting people to achieve behaviours beneficial to their health. However, the literature also refers to unintended consequences of health promotion. Further investigation identified social marketing mass media campaigns as powerful advocates for attitude and knowledge change, but paradoxically as contributors to the unintended consequences discussed. The unintended consequences were seen to be both positive and negative and were noted in the target group as well as those beyond it.

The Young Women & Health Promotion (YW&HP) study focuses on the unintended effects of health promotion messages in the areas of physical activity, nutrition and smoking on girls and young women. The two major reasons to focus on this target group are; the lack of literature on the effects of health promotion materials on this group over time and the timing of a push at national policy level to support research into the provision of information to women. As a result this study constructed a comprehensive review of the attitudes, values and beliefs, which affect women's and girls' health behaviours and choices. This section relates the findings from this study to those cited in the literature regarding communication and health promotion to women as well as unintended consequences and motivators for young women in the areas of physical activity, nutrition and smoking.

5.1 Limitations of the study

Prior to discussing the findings and results, it is useful to clarify the limitations of this study and the steps taken to minimise these. This study was a formative cross-sectional study involving the collection of both qualitative and quantitative data. The study provides a cross-sectional view of the attitudes, beliefs and perceptions of the effects of health promotion initiatives in the areas of physical activity, nutrition and smoking from a sample of girls and young adults in Western Australia. Limitations of the study that relate to the rigour and internal and external validity of the study will be discussed in this section. The study was primarily qualitative and is therefore not externally valid and cannot be generalised beyond the study group.

5.1.1 Threats to internal validity

Selection bias

An error in the estimation of effect happens when characteristics of the subjects selected for the study are systematically different from those of the target population [215]. In this study selection bias was addressed in the design stage in the following ways:

Recruitment into the study

The study utilised two different methods to recruit participants from the different age groups. Limitations to these methods of recruitment are discussed in this section.

To enhance group representation of the target population, the Y7 and Y10 schools were stratified into sub-groups by SES and were then randomly selected. However, a potential for bias occurred when two schools out of the 11 selected declined participation. Two replacement schools were selected from the appropriate categories and consequently agreed to participate.

The young adult participants were recruited by a market research agency. The agency randomly selected directory telephone numbers from the Perth metropolitan area. Participants were asked to nominate an income range for the head of the household, which was based on existing categories generated by Australian Bureau of Statistics (ABS) [216]. From this, participants were stratified according to SES categories provided by the ABS [216]. A series of screening questions were used in an attempt to minimise any 'volunteer bias' that may have been created through the process of recruitment.

Recruitment of focus groups and interview participants

The recruitment of Y7 and Y10 involved all girls in a class group being issued with consent forms. On the day the focus group was conducted the classroom teacher selected 8-10 girls from the class to participate. External factors (eg. children's behaviours, groups dynamics etc) may have influenced each teacher's choice, therefore there is a potential selection bias of participants.

The degree of 'self-select bias' [215] should be considered when examining the in-depth interviews conducted with the YA group. Participants were asked at the focus group to nominate if they would like to participate in further aspects of the study. Eighty five percent (85%) offered to participate in an in-depth interview if selected. Participants were then randomly selected from those who agreed. Multiple members from each group were sampled and random selection was used to minimise bias.

Information bias

Information bias distorts the estimation of parameters being measured during data collection [215]. A number of possible sources of information bias were present in this study.

'Inter-interviewer bias' [215] is possible in this study. Two facilitators conducted the focus groups. Both researchers were experienced interviewers and familiar with the research outcomes. In addition 17 of the 18 focus groups were conducted by the same researcher. This bias was not present in the in-depth interviews as one researcher conducted all the in-depth interviews. 'Inter-interviewer bias' [215] was minimised as only the primary researcher recorded the information collected in the interviews. The separate coding of interview data by two professional colleagues assisted in minimising any systematic bias that may have resulted from only one researcher collecting the interview data.

'Questionnaire bias' [215] may have been a possible threat to internal validity. Reliability testing of qualitative instruments is not appropriate. Unlike quantitative instruments, and in line with the nature of qualitative research, the focus groups and interview guides were designed to provide flexibility to the moderator to respond to the emergence of themes. Hence, within each interview or focus group all topics were covered, however, this did not necessarily mean all questions listed were answered. A panel of experienced researchers assessed face and content validity of the instruments and each instrument (focus group and interview guides and questionnaire) was pilot tested with 8-10 participants from each age group who were not part of the study sample.

Threats due to 'questionnaire bias' [215] resulting from the quantitative questionnaire were limited by utilising wherever possible previously tested demographic questions

administered by the ABS and social science research questionnaires. The questionnaire was also pilot tested with each age group and assessed for face and content validity [140].

'Recall bias' [215] was unlikely to have occurred as the research process investigated participants' knowledge, attitudes, beliefs and perceptions, not necessarily behaviours. Some recall bias may be evident in the self-complete questionnaire that required participants to recall past and present health promotion initiatives.

To increase validity, participants were not required to provide their names and were assured of confidentiality. Any identifying information from the focus group or interview recordings was removed when the tapes were transcribed for analysis.

Confounding bias

The major concerns associated with this study relate to data analysis and reduction. These include those relating to 'intra-rater' and 'inter-rater' reliability. The researcher attempted to minimise the bias as suggested by Morgan [217], by developing initial coding categories from the literature. Once the data were gathered a process of 'free coding' allowed for the codes to be expanded. The process of 'free coding' is described in Chapter 3 Methods: section 3.6.1. Free coding allowed for the addition of new codes to be developed from the data, which facilitated the ongoing content analysis of the rich qualitative study data [217]. All coding categories were validated by the research team and compared with the codes developed from the literature to ensure consistency. The same set of codes was utilised for focus groups and in-depth interview data.

In addition 'member checks' [182] of the transcripts and audio recordings were conducted throughout the research process to reduce bias and increase the rigour of the study.

5.1.2 Qualitative rigour

Choi and Noseworthy [215] discuss three general categories of biases that affect the internal validity of cross sectional studies. In addition Hamberg et al [197] and Rappaport [198] when comparing the qualitative and quantitative research paradigms discuss the criteria for trustworthiness and believe there are comparative criteria for

rigour between the two methods. According to this the corresponding qualitative criteria for internal validity is 'credibility' and study reliability is referred to as 'dependability'. 'Objectivity' in a quantitative study is compared to 'confirmability' in qualitative research. These elements of rigour for qualitative research are similar to those described in the quantitative paradigm. The limitations of each element of the study are described below.

Credibility examines whether the findings and interpretations are credible and truthful through prolonged engagement and observation, triangulation of sources [200] and methods and member checks [198-200]. Chapter 3: Methods, describes how this research attempted to maximise credibility through triangulation (section 3.1.4) and member checks (section 3.1.5) and is discussed here.

The criteria of dependability [199] was addressed through the examination of project methodologies and processes by two competent professionals who where experienced in qualitative research but were not involved in the study [198]. This process examined how dependant the findings of the study were on the methodology utilised.

Within this study two professional colleagues and the three project supervisors (experts in content) were invited to examine one transcript from each age group (same three transcripts) in order to correlate the coding process and to discuss the conclusions drawn from the research. This assisted with increasing the confirmability of the researcher's findings [197, 198].

5.1.3 Generalisability of the results

There are a number of threats to the external validity and generalisability of the results of this study. Threats to internal validity have been considered in previous sections. The following discussion focuses on the threats to the generalisability of the results.

The last comparative concept of Hamberg et al., [197] and Rappaport [198] is 'transferability' which equates to 'generalisability' in quantitative studies. To make 'transferability' judgements possible it's necessary to describe the context (eg demographics, settings, characteristics of the sample, family situation and socio-

economics) in which the study took place. Chapter 3 Methods: Section 3.3 'Sample size and selection' provides information on this. With this information plus knowledge of their own samples it is possible for others to decide whether the findings are relevant or 'transferable' in other situations.

In quantitative research, sample size is a predictor of generalisability [6]. Given the small sample size (n=132) the demographic questionnaire (quantitative component of the study) cannot be generalised beyond the sample. In qualitative studies size is not an issue, whereas how the sample was selected [6] and the point at which 'saturation' of ideas in the data is reached are important [6, 9, 218]. This study utilised a combination of mixed purposeful sampling [204], which provided an information-rich sample. After 18 focus groups and 15 in-depth interviews saturation of ideas was reached, increasing the transferability of the results.

Three forms of triangulation were utilised to increase the scientific rigour of the study. Researcher triangulation [200] was obtained via a number of the research team actively participating in the data collection and code development. Methodological and data source triangulation [192, 195, 200] was obtained through the collection and comparison of data using the following methods; focus groups, in-depth interviews and questionnaires.

In summary, the results obtained in this study cannot be generalised to girls and young women in Western Australia. However, steps were taken to increase the transferability of the research by addressing the qualitative criteria for rigour. Utilisation of the three forms of triangulation also adds to the credibility and transferability of this study's findings.

5.2 Discussion of methodology

The YW&HP study utilised a mixed methods approach to examine the effects (particular focus on unintended effects – both positive and negative) of health promotion on girls' and young women's health. Qualitative methods (ie. focus groups and in-depth interviews) were the predominant methods employed. Other studies have shown this methodology provides valuable insight into the complexity and range of attitudes, values and behaviours [180-182, 199]. The study found, similar to Carey [181] that qualitative methodologies proved useful in allowing participants to

describe in rich detail, complex experiences and the reasoning behind their actions, beliefs, perceptions and attitudes toward an issue.

Many other studies have successfully utilised similar methodologies (focus group and in-depth interviews) when examining the health beliefs, attitudes and behaviours of women and girls. For example, focus groups have been used when exploring women's definitions of health and values associated with food [89], barriers to physical activity and factors associated with sedentary behaviours [61, 147], exploration of effective anti-tobacco message concepts with teenagers [219], social and cultural influences on body image [90] and examining the meaning of foods within adolescent female culture [155]. In-depth interviews were used by Redman [136] to explore health and social problems experienced by Australian women. And similar to this study Chapman [155] and Clarkson [167] found the combination of focus groups followed up with in-depth interviews to be effective in the exploration of adolescent girls' food associations [155] and for the formative research for a Young People and Smoking Project media campaign [167]. Similar to this study, both were conducted with school groups. The limitations of conducting research in a school based setting were not outlined in the above studies, hence comparison of limitations in relation to this is difficult.

In the studies examined, the sample size, selection and composition all varied [61, 95, 136, 147, 155, 167]. The largest sample size was 157 women interviewed by Redman [136] and the smallest was the study by Corti et al. [61] in which 24 people participated in four focus groups. In comparison this study involved 132 participants who contributed in 18 focus groups and 15 in-depth interviews. Similar to this study, other studies reviewed had set screening criteria [61, 95, 136, 147, 155, 167] and some were stratified according to SES [61, 147]. In addition both studies by Corti et al. [61, 147] provided cash incentives for participation in the focus groups and in the Young People and Smoking Project, [167] school aged participants were provided with non-monetary incentives for participating. Incentives to secure participation utilised by these studies were similar to those employed by the YW&HP project.

Most studies utilised either random sampling [136] or convenience sampling through market research companies [61, 147] or with existing groups eg. schools [167] or community groups [89, 155]. None of the studies utilised the same combination of

mixed and purposeful sampling methods as used in this study. Not finding a matching methodology is not unusual when drawing comparisons in qualitative studies. This is because the non-probability sampling methods commonly employed by qualitative studies need to be tailored to the research aims [188, 195, 199, 204]. This means the sampling method is 'purposeful' and is able to narrow the selection of participants to provide information-rich cases for in-depth study [195].

In addition none of the studies discussed aspects of credibility, dependability, conformability and transferability (the recommended criteria to increase rigour in qualitative research) [197, 198], when addressing the limitations of their work, as was done for this research.

5.3 Objective one: to identify motivators (predisposing, enabling and reinforcing factors) for young women's personal health behaviours.

5.3.1 Perceptions of health

Studies [136-138] indicate women have broad definitions of health, which include clinical, eudemonistic (eg. positive mood, fitness and practising healthy lifestyles), social and economic elements. The YW&HP results are consistent with these results, however, for the young women in the YW&HP study being healthy was also linked to being physically attractive and thin.

All the studies concurred, women's definitions of health are broader than earlier surmised [136-138]. Previous research, however, did not consider how a broader definition of health affects women's health decision making. For example, inherent to a women's definition of health is a level of knowledge, values, attitudes and beliefs. According to the PRECEDE – PROCEED model [12] these are considered predisposing factors and would influence a woman's health decision making. Therefore, if a woman is faced with a health decision (eg. to be more physically active) she will draw on her knowledge of the issue, her past experiences and her values and beliefs in order to make the final decision. Hence, it seems pivotal to explore further the link between how women define health and how women make health decisions. Acknowledging this may include adjustment in the current framing of health information to women.

5.3.2 Motivating (predisposing, reinforcing and enabling) factors affecting women's health behaviours.

Examination of the literature and studies exploring motivation and women's health has revealed that an array of predisposing, reinforcing and enabling factors help determine how and why women make various health choices. The study identified common themes relating to motivation, which extended across health issues and age groups and included a mixture of predisposing and reinforcing factors. Common themes discussed were body image and self-esteem, and the influential role that peers, role models and the media play for each age group.

The following section of this thesis compares the motivational factors identified by study participants to predisposing, reinforcing and enabling factors identified in previous research.

5.3.3 Predisposing factors

According to the PRECEDE – PROCEED model [(12)] predisposing factors play a role in motivating young women to act in a certain manner. This study explored how girls' and young women's perceptions and beliefs predisposed them to choose certain health behaviours. In doing so, the study found most participants were aware of health recommendations and understood what contributed to a healthy lifestyle. As discussed in section 5.3.1 young women's definitions of health were much broader than previously thought. Hence all of these elements; previous knowledge of health recommendations and consequences, beliefs and perceptions regarding health behaviours in essence predispose them to a set of health behaviours. The role predisposing factors such as personal experiences, self-esteem, body image and habits play with young women is discussed in the following section.

Personal experience

What constitutes personal experience is a complex framework of knowledge, attitudes and beliefs, which is reflected in the literature and the findings of this study. For example, participants in the YW&HP study identified personal experiences such as observing someone close to them suffering from a debilitating disease or physical illness as a powerful factor that played a significant role in their behavioural intent. Interestingly, negative experiences and resulting consequences were the most often

discussed themes with much of the discussion around the consequences of smoking. Specific references to how young women's personal experiences may affect their health behaviour choices were not found in other studies. This is most likely because the exploration of personal experiences can be framed in a number of ways. For example, within the smoking literature much of the discussion surrounding the short and long term consequences of smoking required focus group participants to draw on their personal experiences which affected their behavioural choices concerning smoking [95, 114, 167]. McKenna [219] found personal experiences relating to exposure to smoking role models within and external to the family increased the up-take of smoking in Y10, a finding also highlighted in this study. Paradoxically, however, in the YA group, while awareness of their position as role models within families was discussed, the behaviour most often referred to was their smoking status and how it affected their families.

Young women are aware of the responsibilities of being viewed as role models for family members as highlighted in studies regarding physical activity [143] and nutrition [159]. Both these studies confirmed young women (especially young mothers) often experience guilt regarding the effect of their behaviours on their families. The YW&HP study found similar results with the participating YAs expressing guilt in relation to these behaviours. The complexity of behavioural choices is highlighted by these findings, as there is notable overlap of predisposing and reinforcing factors such as personal experience, role modelling and guilt.

Body image & self-esteem

Body image and self-esteem are complex issues that affect women's health on a number of levels as do predisposing factors such as social values, cultural beliefs and attitudes. The impact of these factors on the young women in the current study were evident as the adolescent and young adult groups expressed concern about being overweight or obese or being perceived as such. In this context participants revealed negative attitudes toward overweight and obese people, believing these people lack control and were viewed as unattractive. This concurred with other studies examining perceptions and attitudes regarding obesity [19, 84, 91, 92]. In addition the concerns of the young women are further validated as Puhl's [91] study of employers

in the health industry found people who were perceived as obese or overweight were discriminated against.

As with other studies [85, 108] body image was an issue discussed across all age groups of this study, with participants expressing concern over the Western culture's portrayal of the 'ideal healthy body' which is inexorably linked to thinness [20, 81, 84, 85]. Young women in the current study believed the media played a significant role in reinforcing these perceptions, thus placing undue pressure on women to lose weight and conform with the ideal body shape [84, 108]. Seddon [86] concurs that a conflict is created between cultural expectations to be thin and the biological need for food, which leads to further unhealthy patterns of weight loss and gain.

Cultural norms and social ideals promoted by society (in this case associating thinness with health) appears to have a negative impact of women's self-esteem and body image. McKie [89] also found women are highly resentful of pressure to conform to such an ideal, a finding mirrored by the older age groups in the YW&HP study.

The range and volume of weight management information and programs targeting women, although well intended, may increase pressure on women by reinforcing this unrealistic ideal [84]. The problem remains, however, that a significant number of women are overweight or obese and further increases are predicted [125, 126]. Therefore, weight management is a legitimate public health concern, with the evidence mounting in support of continued lifestyle weight management interventions [101, 126, 130]. What is needed is the exploration of new and innovative methods to promote and frame messages and interventions to women to ensure unhelpful stereotypes and cultural ideas are not dominant. This is an area of health communication that would benefit from further investigation.

5.3.4 Reinforcing factors

A number of reinforcing factors such as modelling, social pressure, peer and family pressure were identified in the literature and this study in relation to physical activity, nutrition and smoking and will be discussed in this section. This section will also address the role the environment plays in reinforcing women's health choices (including physical, socio-cultural, economic or political).

Modelling

Modelling behaviours were found to play an important role in motivating participants across all ages, however, the types of role models to which each group referred to were different. Among the Y7 groups, positive role models were more likely to be teachers or parents. These findings were similar to those findings of other researchers across the areas of nutrition [107, 108, 150, 158, 159, 165, 166], physical activity [141, 143, 144] and smoking [167, 168].

In this study and in studies by Krohn and Conrad [171, 178] adolescents felt they had strong bonds with their parents. Nevertheless they were more likely to identify successful peers, media personalities, spokespeople and popular musicians as influential role models [108, 143, 144, 158, 161, 162, 165].

Interestingly Campaigne [143] discusses the growing awareness of young women (especially young mothers) and their position as role models for their children. Although this did not emerge in this study, the young women felt a level of guilt associated with unhealthy behaviours and the affect their own behaviours had on their family.

Social pressure

The YW&HP study identified the media as the main negative reinforcing factor for study participants, especially in the Y10 and YA groups. The young women in these age groups acknowledged pressure to appear like popular models and actresses and the negative effect this had on their body image and self-esteem. The role of self-esteem and body image as predisposing factors has been previously discussed. Further exploration of the role the media plays in reinforcing unhelpful stereotypes and cultural ideals remains. Many studies (especially in the nutrition literature) [107, 108, 158, 161, 162, 165] explore the power of the media to promote cultural ideals, the predominant one to young women being the 'slim body ideal' and diet culture. Puhl and Seddon refer to examples of current media trends (magazines and television) which demonstrate where thinness is promoted as an ideal whilst obesity is unattractive [86, 91]. In this way the media may directly contribute to the downward spiralling self-esteem and body image of many women.

Literature on the impact media images have on younger girls was harder to obtain. The results of the YW&HP study indicated Y7 and Y10 girls were aware of the stereotypical nature of images used in the media. The participants felt uncomfortable to a degree about the promotion of certain stereotypes and 'thin' models as the norm. Given the average hours spent viewing television is increasing [150] and media personalities are referred to as role models for this age group, it is unlikely that young girls are completely unaffected by this exposure. Hence, further exploration of the effects of the promotion of social ideals is warranted.

The extent to which media images exert social pressure on women and the impact of media is of concern. Pollay [4, 73] refers to the media, as a mirror that simply reflects social values and cultural ideals and argues mass media is merely a tool utilised to promote a chosen set of values and ideals. Extending this idea further and its application to the findings of the YW&HP study means if media is merely the tool then the social pressure described by the participants in the YW&HP study is more a symptom of the promotion of one set of social values and cultural ideals over another. The major concern then becomes why certain values and ideals are chosen over others, how they are chosen and by whom and for what reasons. Pollay [73] believes the answer to these questions lies within the ethical struggle of how to make communication values-free, when clearly some values 'sell' better than others. Given the literature [4, 73, 74] presents evidence demonstrating the values reflected in campaigns are those which are more marketable, easier to make visual or dramatic, or provoke more reliable or potent consumer responses, it could be argued that communications are unlikely to ever be completely value free. When it comes to how these values are portrayed in the media the solution rests with the ability of health promotion professionals to closely consider the full impact of media campaigns. This is most likely where the role of ethical social marketing principles as discussed by Donovan and Henley [2] will emerge as an essential starting point.

Peer / family pressure

The influence of peers and family as reinforcing factors were discussed in the areas of physical activity [141, 143], nutrition [89, 158] and smoking [176, 220]. Families were especially influential for the Y7 groups whilst peer influence was noted in all age

groups. The role of peer and family pressure has been identified to have both positive and negative aspects.

In Y10 groups the influence of peers plays a powerful role. The YW&HP study found peer pressure was a factor in adolescents' decisions to start smoking. This is a similar finding to many of the researchers [95, 167, 220] who have studied the relationship between peer pressure and smoking in adolescents. Research [95] indicates that smoking forms part of the risk taking 'rebellious phase'. At this time adolescents strive to be independent, struggle with the creation of their own social identity, whilst paradoxically trying to fit in with peers. Peer pressure has been shown to have a positive association with smoking (increased peer pressure to smoke leads to increased smoking). Literature also shows peers are equally as influential when it comes to making other health decisions (eg. relating to diet [155] and physical activity [143, 151]). Influence in these two areas was noted to have a positive influence [151] in some cases and negative in others [155]. This was not discussed as part of the current research but would benefit from further exploration.

In this study the influence of families dominated discussions with participants, particularly in relation to parents and children. Discussions centred on smoking and the guilt parents felt about smoking and the pressure children put on parents to stop smoking, which is consistent with that of other research [176]. Positive relationships were not explored, however, other researchers discuss the positive influence of families (eg. siblings and parents) on the adoption of a healthy diet [158, 159] and increased physical activity [143] .

Environments

The impact of un-supportive environments (whether they be physical, economic, social and/or cultural) has been previously discussed in this study and many others [61, 131, 146-148] as barriers to physical activity. Environmental reinforcing factors were not fully explored within the context of this study.

The Western developed culture has elements, which reinforce unhealthy behaviours in young women. Many of our cultural traditions (eg. feasting and fasting) and social norms surrounding food reinforce the over consumption of certain foods. Kausman [157] examines the use of food for comfort and reward and the impact

attaching values and emotions to food has on women's dietary patterns. In addition, other studies [131, 155] identify the paradox that exists when adolescents discuss food. Chapman [155] notes that adolescent girls associate 'junk food' with friends, pleasure, independence and weight gain whilst healthy food is associated with weight loss, parents and being at home. Discussions initiated in this study support this where the groups stated an integral part of their socialisation involved the consumption of 'junk or comfort food'. This sense of freedom or being unsupervised by parents meant they were more likely to consume junk food than healthy food in these situations.

5.3.5 Enabling factors

For the three health areas investigated, more negative enablers were found than positive across all age groups. Similar to other research, the positive enablers identified for physical activity centred on opportunity and access to a supportive environment, equipment and skilled people [141, 145, 150]. Nutrition and smoking shared common positive enabling factors, which included lack of purchasing power (eg unable to purchase cigarettes or have little control over what ends up in the shopping basket was most relevant to the Y7 and Y10 groups). The ability of supportive environments to positively reinforce healthy behaviours was studied widely. Studies investigated the association between parental influences, schools and workplaces and made comparisons between them with strategies and policies in place supporting healthy choices compared to those that did not. [150] The studies found the stronger the environmental support the more likely people were to make healthy choices. In the case of smoking the role of legislation in decreasing access and purchasing power was noted in the YW&HP study and concurred with the other substantive studies in this area [167, 172-175]. Purchasing power was the one factor, as expected, that altered over time. The Y7s and to some extent the Y10s have little control over the food purchased for the households and when discussing cigarette smoking limited funds and legislative barriers were also identified.

Negative enabling factors for each of the health behaviours are discussed at length in the literature. As for the previous research, the most common negative enabling factors across all age groups were the issues of cost [61, 146-148], access to facilities [61, 141, 145, 147], safety [61, 131, 146-148, 153] and lack of environments conducive to physical activity

[146, 148]. Cost, access to facilities and safety were key factors that were revealed in discussions with the young women in this study.

As the participants' age increased, issues such as a lack of time [131, 132, 146, 148], lack of motivation [132, 148, 153] and lack of social networks [61, 131, 146, 147] played a more dominant influence on physical inactivity, as found in the Y10 and YA groups in the YW&HP study. Changes in technology negatively affected all age groups as screen-viewing time increased and labour saving devices became factors [85, 101, 120, 145]. This was noted by the YAs in the study as an issue of concern for themselves and for children in general. The influence of increased screen time in the wake of the pandemic of obesity warrants further research.

There were many other negative enabling factors relating to food identified in this study. Those common to all age groups and outlined in previous research included a lack of availability of healthy choices (either in the home, at school [150, 160] or at work [89]), increased access to high energy dense snack foods and soft drinks [150, 156], and the perceived high cost and inconvenience of healthy foods [89, 160].

There were a number of common limiting factors for smoking identified in the literature. The lack of confidence to effectively utilise cigarette refusal skills [109] that was found in previous research was highlighted as an issue for adolescent girls in the YW&HP study. In addition, the inappropriate extrapolation of the knowledge of the consequences of smoking (eg. smoking decreases appetite therefore helps with weight loss) [81, 164] found in previous research was also evident in the discussion regarding smoking consequences with the Y10 participants. The YA participants also recognised the impact of the increasingly sophisticated marketing strategies of tobacco companies which Clarkson et al [167] also explored in their study of adolescent smoking.

5.3.6 Combined factors

In recognition of the complexity of motivation, some factors in the current study overlapped. These included physical appearance, personal achievement and emotions such as enjoyment, fear and guilt. The influences these factors had on young women's choices of health behaviours are discussed below.

Physical appearance (predisposing and reinforcing factor)

The physical appearance of participants was an important factor that emerged amongst study participants. All groups discussed the importance of *"looking good"* and *"being slim"*. What each of these terms means to each age group varied as did the emphasis put on them by the participants. The Y7 participants in the study perceived being overweight as out of control and *"skinny"* as unhealthy. Whilst the Y10 participants viewed themselves as overweight and wished to lose weight, exercising and diet practises were viewed as a mechanism to achieving this goal. Additionally, the Y10 girls had started to think about aging and listed it as a reason to continue to look after themselves. The YA groups were also concerned with their weight and appearance, however, they too had negative views of aging and for this reason were motivated to have a healthy lifestyle.

This indicates that the link between how women feel and their appearance plays a role in their perceived body image and self-esteem. A study by Martin [165] revealed the intricacies of the inter-dependence between body image and self-esteem for young women, suggesting that a number of psychological, relationship and cultural factors affect women's body image. These included the predisposing nature of self-esteem and the reinforcing role of parent and peer relationships, the school environment, women's magazines, fashion, trends in body shape, models and celebrities plus the exercise and diet culture. All of these were reported across the age groups in this study.

Although recent dieting patterns were not the focus of the YW&HP study they were mentioned in the research. The Y10 and YA participants' discussed how many of them had recently been on a diet or had increased their physical activity as a weight control measure. These findings are similar to those reported in other recent research indicating up to half of girls and women aged 12 – 27 years have dieted or were dieting at the time of the survey [117]. Other research [221] indicated that on any given day it is estimated at least 60% of Australian women are on a diet of some form. In addition a study conducted by Crawford [117] reported that equal portions of slim and overweight women reported exercising for weight control.

Personal achievement (predisposing and reinforcing factor)

Positive personal experiences were linked with behavioural intention across all age groups of the YW&HP study and were closely aligned with peer and family issues. While most of the discussion was regarding physical activity, it appeared that if participants reported a sense of achievement in a given activity they were more likely to continue. This has strong links to the issue of self-esteem and is well supported by other studies in the areas of physical activity [141, 143] which highlight the positive association of personal success in activities and increased self-esteem which led to increased participation. Studies in the area of nutrition [135, 158, 159] focused on the ability of individuals to make and maintain changes to their behaviours over time.

Enjoyment (predisposing and enabling factor)

Across all age groups perceptions of fun and enjoyment were seen as factors that predisposed participants to certain health behaviours and were a positive enabling factor for them to continue. This was most evident in the area of physical activity. As with other research [141, 143, 146], this study found that if participants enjoyed an activity they were more likely to maintain it. For Y10 and YA groups, however, it also needed to require minimal effort to participate and cause a minimum of disruption to daily routines. This is a finding that supports the research of Corti et al [61, 147] which investigated barriers to physical activity.

Fear (predisposing and reinforcing factor)

As with enjoyment, fear was a factor mentioned by all age groups. The source of the fear, however, differed by age group. For the Y7 and YA fear was expressed in relation to death and/or suffering a disability. This fear was most often related to smoking and was similar to the findings of other research with children [167, 168] and young women [101, 114, 115, 139]. The Y10s on the other hand were less fearful of the long-term consequences but motivated more by the short term consequences of their behaviours eg. having yellow teeth, bad breath and wrinkles as a result of smoking. This concurs with the findings of other studies [95, 167]. Additionally, as with other research [167, 168], the YA and Y10s (to a lesser degree) were fearful their current behaviours (smoking) may affect their ability to have children. Detailed discussion of the consequences of smoking and the exploration of the participants' fears were most likely prompted in this study by the *"Only women bleed"* advertisement. This

advertisement with an image of a pregnant young women who smoked was utilised to trigger discussion amongst the groups.

Guilt (predisposing and reinforcing factor)

Guilt was an emotion mentioned by all age groups, however, the YA group found it to be the most powerful motivator of behaviour. The YAs in the study expressed that the more often they felt guilty about behaviours (predominantly smoking) the more likely they were to consider changing it. The irony of this was not lost on them, as they realised they were more motivated by how other people felt about the behaviour or the effect it was having on others rather than any concern for their own health.

Guilt is a widely targeted emotion in many health campaigns that utilise provocative appeals. Given the evidence surrounding the creation of an apprehensive generation [19, 64] it seems the investigation of the longer-term effects of such provocative appeals is warranted. This study supports further investigation into this area of women's health as women are often targeted as wives and mothers and guilt is a common form of appeal.

5.3.7 Summary

Examination of the application of the PRECEDE – PROCEED Model [12] to women's health would indicate that no one factor could be used with any certainty to predict the respondents' health behaviours. From the range of factors explored in this study, however, it is most likely a complex combination of factors are at play (ie body image, self-esteem, media and role models), which concurs with the findings of previous research. From this it seems that careful consideration and analysis of such factors (predisposing, reinforcing and enabling) would prove to be useful in determining effective ways to communicate health information, tailor health interventions[222, 223] and build supportive environments to assist women to sustain behaviour change over time with minimal negative unintended consequences.

5.4 Objective two: to elicit young women's responses to current or past health promotion materials (audio-visual)

Studies evaluating the effectiveness of health promotion interventions and campaigns have been conducted in many areas including smoking [110-112], nutrition [102], breast and cervical cancer [70, 72]. Process evaluation results of intervention materials and strategies utilised within the studies are not clearly defined. Further, studies on the effects of commonly utilized techniques (eg. social marketing, mass media and provocative appeals) are extensive [2, 20, 56, 57, 67] and outline the longer-term effects of campaigns and interventions. These findings will be discussed in relation to the YW&HP study as part of Objective Three. This section examines the YW&HP participants' reactions to intervention materials and information. Results indicated viewing materials prompted participants to critically analyse the information presented. Consequently, before deciding what action to take participants sought ways of validating the information and key messages. Evidence of this process was not found in other studies.

Evidence of the process commenced as soon as the groups viewed and reacted to the materials presented to them. For the most part participants critically analysed the information to discern the relevance of the key messages for them, prior to deciding on a path of action. In keeping with the Health Belief Model [224, 225] personal relevance depended on the young women's perceived severity and susceptibility to the issue. If these factors were perceived as low they were unlikely to adopt the recommendations, however, others could influence young women's perceived severity and susceptibility. The YW&HP study found that participants' perceptions of susceptibility and severity could be increased or decreased by their perceptions of the experiences of their peers and/or family or other external factors (eg. media). These factors often reinforced beliefs (positive or negative) or enabled them to change behaviours [224-226].

In addition, the young women in the study often sought to validate the credibility and relevance of the information through discussion with others (eg. peers, friends, family and health professionals). The outcomes of these discussions played an important role in the decision making process for most women. Evidence of this process is not described in previous studies, however, theoretical evidence from

Social Learning Theory [226, 227] suggests it is integral to the process of 'observational learning'. This supports the findings of this study which identified the validation process observed in the young women who sought to 'try the issue on for size', before committing to a change in behaviour

The presence of a system of validation supports Fosters [33] findings that women are essentially a critical audience. In addition to being critical of materials, women were also highly sceptical, especially regarding mass media. Boush [106] examined levels of scepticism expressed by children and adolescents toward television advertising and found all ages were sceptical of the promotional information. These findings highlighted the need for closer monitoring of the cumulative effects of campaigns [106]. Discussion in the YW&HP study also revealed high levels of scepticism of the participants toward health information. This appears due in part to the volume of health information being promoted by commercial and health promotion organisations and also in part because advice appeared to be competing or conflicting.

As in other studies [33, 89] this study found that because of this scepticism women questioned the credibility of the source of the information. Foster [33] believes this is due to commercial companies utilising clever marketing practices which sell products based on their purported health benefits, making it difficult for the consumer to determine who exactly is promoting the product and what the underlying motive is.

Given young women of all ages in the study (12 – 25 years) are sceptical of information, engagement of the validation process previously outlined would therefore seem important. What is not known, however, is how they assess the credibility of those with whom they chose to discuss the issues. For example, different knowledge levels exist between peers, women's media (commercial magazines) and health professionals.

Further investigation regarding this process of validation would benefit from probing the question of 'how do women prefer to receive health information?'. Discussion of the media material in the YW&HP study revealed all age groups prefer to receive information through a variety of mediums. Many expressed the desire to receive

evidenced based written information, which, provided them with the opportunity to analyse all the details of a particular issue in their own time. Historically, written information in the form of direct mail and opportunistic displays eg. doctor's surgeries and shopping centres have been utilized effectively to reach women. Others, however, preferred the convenience of mass media.

Although television was seen as a powerful medium, women's magazines featured as an often-accessed source of health information. Women's magazines are easily accessible and often prompt discussion of issues. These informal discussions are an important step in the validation and decision making process discussed earlier. The utilisation of women's magazines is relatively new and untapped by health promotion but is fully exploited by commercial companies. These findings indicate that further investigation of these magazines, as a medium to communicate public health information to women, may be worthwhile.

5.4.1 Summary

The study results appear to highlight the unique and complex way in which women process and validate the health information they receive. This study also suggests that women gather health information from multiple sources (commercial and non-commercial), and prefer to have time to review the information individually. Women seem to then utilise social networks to discuss any information they are unsure of prior to making any decisions on whether or not to proceed with any advice received. This method of internal processing and external validation is one that does not appear to been fully utilised in women's health initiatives to date. It seems close social groupings such as peers, friends and family members are central to this process. This knowledge could be utilised to more effectively target and put into context health promotion initiatives for women.

5.5 Objective three: to assess the longer-term impact of public health campaigns on young women.

Longer-term impact refers to the impact of public health initiatives on women beyond the life of any one campaign or intervention. How to determine or extract what these effects may be, has involved a multi-layered process, which included the review and triangulation of data across the study. Each objective has revealed to some extent the longer-term impacts public health campaigns have on women. For example, discussion of motivators for young women's health behaviours (Objective 1) revealed evidence of an extensive array of predisposing, reinforcing and enabling factors. Longer-term exposure may have influenced some of these factors. In addition, examination of how young women responded to health promotion materials (Objective 2) showed they are a critical, sceptical audience often questioning the source and the authenticity of information presented. Further analysis uncovered a complex validation process within the study group. This process seemed to be integral to the health decision-making framework for young women in the study and could be classified as a longer-term impact.

What remains to be examined is the cumulative effect of the longer-term use of health promotion strategies with young women. Effects linked mainly to the use of mass media strategies in the delivery of public health and health promotion interventions will be discussed. Most of the discussion will be centred on social marketing given its increasing application in the field.

Literature supports the use of health promotion and public health initiatives to influence attitudes, skills, knowledge, beliefs and ultimately health behaviours [13]. Evidence shows morbidity and mortality rates relating to issues such as cancer, smoking, road safety and many other public health issues have seen a significant decline. Research indicates some of this decline is the result of well planned, comprehensive public health initiatives [35-38]. In addition Donovan and Henley's [2] examination of social marketing initiatives reveal most often public health campaigns are well received by their audiences, which correlated with the findings of the YW&HP study. As with other research, however, [5, 22, 44, 45, 71] the YW&HP study did identify some unintended consequences of health promotion campaigns and interventions.

An effect identified in the study was the development of unhealthy stereotypes (regarding smoking, aging and health), which were seen to have a negative impact on women's body image and self-esteem. Other studies examining issues regarding self-esteem and body image in women have found similar results [34, 86, 90, 117]. In addition smoking was seen as a form of rebellion by the Y10 group in the YW&HP study, a factor which studies by Banwell [95] and Lloyd [94], believe may make smoking appealing to adolescents.

Stereotypes regarding aging, health and obesity observed in this study were all linked by the underlying desire to achieve and maintain the ideal of the 'thin body'. Pursuit of this thin ideal is reinforced and promoted widely by public heath and commercial initiatives alike and has been found to have some detrimental health effects [81, 86, 87]. The continual promotion of images which encourage women to strive to attain this 'look' are unrealistic and potentially harmful. The potential for harm is related to how young women attain the 'slim ideal look', which is often through a cycle of unhealthy dieting.

Other longer-term effects are the result of message leakage, both beyond the target group and beyond the life of the campaign. In the YW&HP study these effects included the association of graphic images with behaviours such as smoking, which were often recalled beyond the life of the campaigns as well as the recall of certain images, which reinforced previously discussed stereotypes regarding aging and smoking. In addition many of the Y7s in the study had already picked up on the need to maintain a healthy diet. What the study participants perceive as a healthy diet, however, would benefit from further investigation.

The anecdotal evidence of leakage identified within the study was largely associated with the use of mass media campaigns. Previous research has highlighted the effects and incidence of leakage relating to road safety, nutrition, smoking and diabetes campaigns [2, 22, 61, 103]. Both negative and positive effects have been recorded as a result of the leakage from these campaigns. Therefore the challenge is no longer proving that they exist but in determining how to measure leakage and what to do about it [60, 100, 228].

Given the powerful reach of mass media it is impossible to ensure that only the intended target receives the media message, therefore, leakage to some degree should be expected. Given the increasing and wide spread use of social marketing mass media in health promotion and the increasing volumes of commercial health based advertising it is no wonder young women in the study expressed feeling overwhelmed and bombarded by 'health noise'. This contributes to the participants becoming sceptical of recommendations and thus choosing to 'switch off' to important health advice. 'Switching off' was a consequence also noted by Ling [54] and colleagues who concluded the commercialisation of health has created confusion among consumers which has resulted in people becoming de-sensitised to health information.

Hence, health promotion professionals employing the use of social marketing need to be aware of the potential for leakage. Message leakage and the possible unintended outcomes need to be monitored and in some instances countered. Donovan and Henley [2] believe this can be achieved by ensuring that social marketers adhere to the following communication principles, which include:

- The receiver is an active processor of incoming information
- Different target audiences may respond to different messages
- Formative research, including message pre-testing is essential
- Comprehensive coordinated interventions are most successful
- Use multiple delivery channels and multiple sources
- Stimulate interpersonal communications
- Campaigns must be sustained
- Use a theoretical framework.

The principles recommended by Donovan and Henley [2] may lead to decreasing leakage but would also serve to ensure campaigns remain ethical in their approaches. This comprehensive approach to social marketing also would serve to strengthen future campaigns as it encourages professionals to address the foundation principles of health promotion such as the Ottawa Charter as part of the process.

In addition adherence to the ethical principles, also proposed by Donovan and Henley, [2] would also reduce the likelihood of any possible negative unintended consequences. These include the principles of:

- Non-maleficence: do not harm to others
- Beneficence: give help to others when they need it
- Justice: treat everyone fair and equally
- Utility: make choices that produce the greatest good (or happiness) for the greatest number of people
- Non-interference with the liberty of others: allow everyone the freedom to exercise their fundamental rights as long as they don't infringe upon the rights of others.

5.5.1 Summary

Based on these findings, further investigation of the application of ethical and effective communication principles to women's health initiatives is warranted to determine their effectiveness in minimising the impact of negative longer-term and unintended consequences resulting from health promotion initiatives. Given the impact and volume of commercial advertising and mass media campaigns aimed at women the greater challenge exists in the application of ethical principles to these areas.

6. CONCLUSIONS AND RECOMENDATIONS

The YW&HP study engaged young women aged 12 to 25 years in a qualitative research process to encourage discussion on the effects of health promotion, focusing particularly on any unintended consequences on their behaviours. Integral to this research was the exploration of the young women's responses to several current and past health promotion materials (derived from both public health and commercial sources) and other factors. Based on this sample of women from different age groups the following conclusions have been drawn regarding the long-term effects of public health / health promotion on the health behaviours of young women. Due to the nature and design of the study the conclusions drawn from this research cannot be generalised beyond the study group.

6.1 Motivation of young women's health behaviour

Young women's health definitions are more holistic than previously thought, they extend beyond clinical parameters and place increased importance on physical, emotional and social elements. The study found the Y10 and YA participants pursue health in order to attain what they perceive as society's view of a healthy image. For the majority of Y10 and YA participants this was synonymous with being physically attractive and thin. This has contributed to the creation of the 'thin body as the ideal body' as a cultural norm. Many women in pursuing health find themselves in an unhealthy dieting cycle that encourages the pursuit of thinness. This creates unhealthy expectations in women, which further feeds the issues of poor body image and low self-esteem shared by many women.

In addition, for these young women the culturally reinforced 'thin ideal' is a powerful driver for the pursuit of health and secondary only to the avoidance of disease. Avoidance of disease as a motivator was observed in all age groups (12 – 25 years) and increased in importance with age. In addition, the link between chronic illness and obesity, which was well known by women, further confirmed their perceptions that to be healthy is to be 'thin'.

Although the pursuit of the 'ideal body' was noted as a powerful motivator, other factors were also identified. This study suggests a complex array of factors need to be examined to determine what motivates women across age groups to pursue health. The study results suggest that a combination of factors including body image, self-esteem, media, role models and environmental reinforcers contribute to motivating women to change their health behaviours. Careful consideration and analysis of all factors (predisposing, reinforcing and enabling) would provide insight into what might be effective methods to communicate health information to women and ways to build supportive environments to assist women to sustain behaviour change over time as well as minimizing the unintended negative consequences of health promotion initiatives.

6.2 Impact of health promotion on young women

The study revealed many of the young women across the age groups were aware of the key messages and lifestyle choices recommended in the areas of physical activity, nutrition and smoking. When discussing public health many recalled a number of current and past health promotion campaigns and initiatives. In addition many women across the age groups also highlighted the significant overlap in what they defined as commercial health promotion and public health.

From a young age (as young as 12 years in this study) women are increasingly targeted with enormous volumes of health related information. There is a steady flow of information directed at women on diet, physical activity, smoking, cancer, stress, mental health, drugs (including alcohol) and hygiene. Much of what the young women saw as 'health noise' stems from commercial sources, however, public health initiatives also intersects with many of these issues with campaigns and interventions. This overload of information and recommendations may have contributed to evidence of unintended consequences. The unintended consequences highlighted within this study include message leakage, (eg women other than those in the target group picking up the key messages) and the development of unhealthy stereotypes (regarding smoking and obesity), that negatively affect body image and self-esteem. Women also felt overwhelmed and bombarded by multiple health messages, and thus chose to 'shut off' to important health advice. Although some of

these effects are undesirable and could be considered harmful, some positive effects were also observed.

One positive impact is that the discussion of health issues amongst women has become more common. With this they are becoming increasingly aware of the benefits of adopting health recommendations and being healthy has started to become a priority in young women's lives. The escalation of the importance of health for young women is mirrored by the use of health as a marketing tool for commercial companies and the increase in social marketing efforts in health promotion. The rise in the importance and pursuit of healthy lifestyle behaviours could be a mechanism that is useful in assisting to improve the range of services, advice and information for young women.

Leakage was a long-term effect, which was noted within the study. The use of social marketing based media strategies has increased over the last few decades. Given the blanket nature of media interventions, it is impossible to completely restrict viewing to a single target group, therefore, leakage of key messages needs to be considered as a natural by-product when utilising social marketing media campaigns. The application of public health and health promotion models that examine knowledge, attitudes and behaviours at the planning stage of campaigns and interventions would assist in identifying possible message leakage. The application of the communication and ethical principles outlined by Donovan and Henley [2] will assist with the avoidance of potentially harmful or negative effects and maximise any unintended positive effects [2, 12, 226].

This leads into the debate as to the application of social marketing in health promotion. Historically many social marketing media campaigns have employed persuasive appeals, which include the use of shock tactics and graphic images as part of their approach to disseminate key messages. Although some women felt uncomfortable and confronted by the use of persuasive appeals many women perceived such campaigns to be a necessary part of public health initiatives and was a factor which encouraged people to act on recommendations [67]. Hence, given the evidence of the effectiveness of social marketing and that many of these campaigns are well received by women and viewed as effective in promoting health it would seem their continued use is warranted.

6.3 Communicating health information to women

Young women in the study believe mass media to be a necessary vehicle for conveying health information to women and acknowledge the power and reach of media. Many women stated they derive their health information and advice from various sources including family, peers, health professionals and commercial company promotions. Often this advice was gained via word of mouth, however, the majority sought written information in the form of pamphlets, fact sheets, articles and case studies in women's magazines. Written information was seen as important because it allowed women the freedom to read it in their own time and space.

This desire to process all the information before making a decision revealed these young women to be an essentially critical and analytical audience. Exploration of this issue revealed the young women in this study viewed commercial companies, which utilised health to sell a product with scepticism. Public heath initiatives were thought to have more credibility as a source of health information, however, due to clever marketing tactics and increasingly sophisticated market research (on behalf of commercial companies) many women often found it confusing and increasingly difficult to establish the true source of the information, and therefore to determine how credibility, believability and accuracy of the information. In addition the volume and complexity of the recommendation created by the promotion of health by both sources also often caused frustration and confusion.

Born from this volume of confusing information was a complex process of internal and external validation, which these women used to determine what advice to follow or discard. This essentially involved cross-referencing information with peer networks, families and health professionals. This process of validation was viewed as an important step in women's health decision making. Also, commercial media and advertising companies employ many strategies to mask their true intent and although women in this study recognised the deception, many were unable to sufficiently decode the advertising message to determine what to believe. These issues would benefit from further research.

In addition, the YW&HP study found these young women felt commercial media often reinforced social stereotypes regarding thinness and health, obesity and aging. Reinforcement of such stereotypes and unrealistic cultural ideals has a negative

impact on self-esteem and body image for women of all ages [84, 85, 91, 108]. Public health and health promotion social marketing media campaigns, which utilise similar marketing strategies, were also seen (to a lesser extent) to reinforce the same potentially harmful cultural norms and social ideals [33].

6.4 Recommendations from this study

Further research into a number of key issues raised by this study is recommended. These include:

The determination of what constitutes best practice in social marketing health promotion to women. The application of a comprehensive approach that adheres to ethical guidelines and communication principles for successful communication campaigns as outlined by Donovan and Henley [2] would need to be the foundation for future research interventions in this area.

Ongoing impact evaluation is required to measure the cumulative effects of the delivery of key health messages to women over time. This would assist in monitoring the cumulative effects of multiple health messages to women and to provide further evidence regarding positive and negative unintended consequences. Further research would also assist to determine the extent to which unintended effects are generated from public health initiatives and/or from commercial campaigns and also identify areas of overlap that might benefit from a collaborative approach.

The development and pilot of ethical guidelines to be utilised as the foundations for a collaborative partnership model between health promotion/public heath agencies and commercial organisations, which share an interest in promoting a given key health issue.

Formative research to investigate how to best frame health information to women so it is viewed as credible and relevant for further validation (identified as inherent) in the decision making process for young women. An important element of this research would include mapping the networks most commonly utilised in the process of validation by young women. This information could then be used to pilot an intervention that drip-feeds information through existing networks of women.

The exploration and trial of mediums such as women's magazines and other innovative strategies, which expedite the validation process, may also be called for on the basis of these research findings. Suggested for inclusion in a trial would be the development of a collaborative partnerships model with women's media publications and advocacy strategies which work toward eradicating unrealistic and unhealthy images of women and decreasing the volume of unhealthy dietary and weight loss information (eg. publication of fad diets) published.

Finally, given the mounting evidence on unintended consequences and health promotion and the increasing amount of health advice being promoted by both commercial and public health sources, it would be advisable to explore the longer term effects of health promotion on other population groups. One such group should be young men as this may provide an insight into the impact of cultural stereotypes and the media's portrayal of men and health.

7. REFERENCES

1. Australian Bureau of Statistics, *National Health Survey - Summary of Results, Australia*. 2002, Canberra: Australian Bureau of Statistics.
2. Donovan, R. and N. Henley, *Social Marketing Principles and Practice*. 2003, Melbourne: IP Communications. 415.
3. Australian Health Ministers' Advisory Council Subcommittee on Women and Health, *Health goals and targets for Australian women*. 1994, Canberra: Australian Government Publishing Services.
4. Pollay, R.W., *Campaigns, change and culture: on the polluting potential of persuasion*, in *Information campaigns: balancing social values and social change*, C. Salmon, Editor. 1989, London: SAGE Publications.
5. Guttman, N., *Ethical dilemmas in health campaigns.* Health Communication, 1997. 9(2): p. 155-190.
6. Gifford, S., F. Baum, and S. Encel, *Ethical aspects of qualitative methods in health research; an information paper for ethics committees*. 1995, Canberra: National Health and Medical Research Council.
7. Hawe, P., D. Degeling, and J. Hall, *Evaluating health promotion: a health workers guide*. 1995, Sydney: Maclennan and Petty.
8. Asbury, J., *Overview of focus group research.* Qualitative Health Research, 1995. 5(4): p. 414-420.
9. Morgan, D.L., *Focus groups.* Annual Review of Sociology, 1996. 22: p. 129-152.
10. Hudelson, P., *Qualitative research for health programs*. 1996, Geneva. Switzerland: World Health Organisation - Division of Mental Health and Prevention of Substance Abuse.
11. Howat, P., Maycock, B., Cross, D., Collins, J., Jackson, L., Burns, S., and James, R., *Towards a more unified definition of health promotion.* Health Promotion Journal of Australia, 2003. 14: p. 82-85.
12. Green, L. and M. Kreuter, *Health promotion planning: an educational and ecological approach*. 3rd ed. 1999, Mountain View: Mayfield Publishing Company. 506.
13. Frankish, J., *Participatory Research: Royal Society of Canada guidelines and applications to health promotion.* 1997, Vancouver: University of British Columbia.
14. MacDonald, G., C. Veen, and K. Tones, *Evidence for success in health promotion: suggestions for improvement.* Health Education: Theory and Practice, 1996. 11(3).
15. World Health Organization, *The Ottawa Charter for Health Promotion.* 1986, Geneva: WHO.

16. Marmot, M., *The solid facts: the social determinants of health.* Health Promotion Journal of Australia, 1999. 9(2): p. 133-139.

17. Dahlgren, G., Whitehead, M., *Policies and strategies to promote social equity in health*. 1991, Stockholm: Institute of Future Studies.

18. Pasick, R.J. and L. Wallack, *Mass media in health promotion: a compilation of expert opinion.* International Quarterly of Community Health Education, 1989. 9(2): p. 89-110.

19. Becker, M.H., *A medical sociologists looks at health promotion.* Journal of Health and Social Behaviour., 1993. 34(March): p. 1-6.

20. Lupton, D., *The imperative of health : public health and the regulated body.* 1995, London: SAGE Publications.

21. Egger, G., R. Donovan, and R. Spark, *Health promotion and the media: principles and practices for health promotion.* 1993, Sydney: McGraw-Hill Book Company.

22. Carter, O., Donovan, R., Jalleh, G., *Pre and post testing of multiple versus television only Diabetes awareness advertising campaigns in Geraldton and Bunbury.* 2003, Perth: Centre for Behavioural Research in Cancer Control, Curtin University. p. CBRCC Report 030822.

23. O'Connor - Fleming, L., Parker, E., *Health Promotion Principles and Practice in the Australian Context*. 2nd ed. 2001, Sydney: Allen & Unwin.

24. Egger, G., Donovan, RJ., Spark, R., Lawson, J., *Health Promotion Strategies and Methods*. 1999, Sydney: The McGraw-Hill Companies Inc.

25. Watson, C. and R. James, *What is a health promotion campaign?* Health Promotion Journal of Australia., 1991. 1(1): p. 3-5.

26. Kawachi, I. and B.P. Kennedy, *The health of nations: why inequality is harmful for your health.* 2003, New York: The New York Press.

27. Kaplan, G., Haan, MN., Syme, SL., Minkler,M., Winkleby, M., *Socioeconomic status and health*, in *Closing the gap: the burden of unnecessary illness*, R. Amler, Dull, HB., Editor. 1987, New York: Oxford University Press.

28. Swerissen, H., Dukett, SJ., Daly,J., Bergan, K., Marshall, S., Borthwick, C., Crisp, BR., *Health Promotion and Evaluation: a programmatic approach.* Health Promotion Journal of Australia, 2001. 11(1): p. 1-28.

29. Muntaner, C., *Commentary: social capital, social class, and the slow progress of psychosocial epidemiology.* International Journal of Epidemiology, 2004. 33: p. 674-680.

30. World Health Organisation, *Reducing inequalities in health: proposal for health promotion policy and action*. 1999, Copenhagen: Health Documentation Services.

31. Lynch, J., *Social epidemiology: some observations about the past, present and future.* Australiasian Epedimiologist, 2000. 7(3): p. 7-15.

32. Rissel, C., Wise, M., Bauman, A., *Advancing health promotion through professional development.* Health Promotion Journal of Australia, 2003. 14(1).

33. Foster, P., *Women and the health care industry: an unhealthy relationship?* 1995, Philadelphia: Open University Press.

34. Noy, S. *Body Image; the new issue in public health.* in *Body Image Research Forum Proceedings*. 1998. Deakin University Melbourne: Body Image and Better Health Program Inc.

35. Redman, S., *Towards a research strategy to support public health programs for behaviour change.* Australian and New Zealand Journal of Public Health, 1996. 20(4): p. 352-358.

36. Commonwealth Department of Health and Ageing, *Returns in investment in public health.* 2003, Canberra: Commonwealth Department of Health and Ageing.

37. Howat, P., Sleet D., Elder, R., Maycock, B., *Preventing alcohol related traffic injury: a health promotion approach.* Journal of Traffic Injury Prevention, 2004. (In Press).

38. Babor, T., R. Caetano, and S. Casswell, *Alcohol, no ordinary commodity; research and public policy.* 2003, Oxford: Oxford University Press.

39. Freimuth, V. *Effectiveness of mass media campaigns*. in *2nd International Symposium on Effectiveness in Health Promotion*. 2001. Toronto.

40. International Union for Health Promotion and Education, *The 18th World Conference of Health Promotion and Health Education*. 2004, Melbourne. p. Session Abstracts on-line.

41. Sharkey, P., S. Graham-Kresge, and G. White, *Defining health education: health, values and professional responsibility.* Health Values, 1995. 19(6): p. 23-29.

42. Greenburg, J.S., *Iaterogenic health education disease.* Health Education Journal, 1985(Oct/Nov): p. 4-6.

43. Hafstad, A. and L. Aaro, *Activating interpersonal influence through provocative appeals: evaluation of a mass media - based antismoking campaign targeting adolescents.* Health Communication, 1997. 9(3): p. 253-272.

44. Huhmann, B.A. and T.P. Brotherton, *A content analysis of guilt appeals in popular magazine advertisements.* The Journal of Advertising, 1997. 26(2): p. 33-45.

45. Tones, K., S. Gifford, and Y. Robinson, *Health education; effectiveness and efficiency*. 1990, London: Chardan and Hall.

46. Buchanan, D.R., S. Reddy, and Z. Hussain, *Social marketing: a critical appraisal.* Health Promotion International, 1994. 9(1): p. 49-57.

47. Buchanan, D., *An ethic for health promotion: rethinking the sources of human wellbeing*. 2000, New York: Oxford University Press.

48. McAlister, A., *Behavioural journalism: beyond the marketing model for health communication.* American Journal of Health Promotion, 1995. 9(6): p. 417-420.

49. Ministry of Health Ontario, *Social Marketing in Health Promotion: a communications guide*. 1992, Ontario: Queen's Printer for Ontario.

50. Hastings, G.B. and A.J. Haywood, *Social marketing: a critical response.* Health Promotion International, 1994. 9(1): p. 59-63.

51. McDonald, I. *Multidisciplinary research is essential: a clinicians perspective.* in *The social sciences and health research: the report of workshops on the contribution of the social sciences to health research.* 1990. Ballarat: Public Health Association.

52. Tones, K., *Marketing and the mass media: theory and myths.* Health Education Research, 1994. 9(2).

53. Solomon, D., *A social marketing perspective on communication campaigns.*, in *Public communication campaigns.*, R. Rice and C. Atkin, Editors. 1981, Newbury Park: SAGE Publications. p. 87-104.

54. Ling, J., Franklin, BK., Lindsteadt, JF., Gearon, SN., *Social marketing: its place in public health.* Annual Review of Public Health, 1992. 13: p. 341-362.

55. Dorfman, L. and L. Wallack, *Advertising health: the case for counter-ads.* Public Health Reports, 1993. 108(6): p. 716-726.

56. Murphy, M., Wise, A., McLeish, A., *Persuasiveness of nutritional messages.* Journal of Human Nutrition and Dietetics, 1993. 6: p. 49-55.

57. Donovan, R., G. Jalleh, and N. Henley. *Road safety advertising.* in *Symposium on mass media campaigns in road safety.* 1996. Scarborough, Western Australia: Road Accident Prevention Unit, Department of Public Health, University of Western Australia.

58. Montazeri, A., McGhee, S., *Health education campaign: positive image or fear-inducing? Results of two pilot projects.* Journal of the Institutes of Health Education, 1994. 32(3): p. 72-75.

59. Aaker, J. and P. Wiliams, *Empathy versus pride: the influence of emotional appeals across cultures.* Journal of Consumer Research, 1998. 25(3): p. 241-261.

60. Leathar, D.S., *Images in health education advertising.* Health Education Journal, 1980. 3(4): p. 123-128.

61. Corti, B., R.J. Donovan, and C.D.J. Holman, *Factors influencing the use of physical activity facilities: results from qualitative research.* Health Promotion Journal of Australia, 1996. 6(1): p. 16-21.

62. Hale, J. and J. Dillard, *Fear appeals in health promotion campaigns: too much , too little or just right.*, in *Designing health messages: approaches from communication theory and public health practice.*, E. Maibach and R. Parrott, Editors. 1995, London: SAGE Publications. p. 65-80.

63. McLeroy, K., N. Gottlieb, and J. Burdine, *The business of health promotion: ethical issues and professional responsibilities.* Health Education Quarterly, 1987. 14(1): p. 91-109.

64. Kimiecik, J. and H. Lawson, *Toward new approaches for exercise behaviour change and health promotion.* QUEST, 1996. 48: p. 102-125.

65. Millar, M. and K. Millar, *Processing messages about disease detection and health promotion behaviours: the effects of anxiety.* Health Communication, 1998. 10(3): p. 211-226.

66. Monahan, J., *Using positive affect when designing health messages.*, in *Designing health messages: approaches from communication theory and public health practice.*, E. Maibach and R. Parrott, Editors. 1995, London: SAGE Publications. p. 81-98.

67. Sutton, S., *Shock tactics and the myth of the inverted U.* British Journal of Addiction, 1992. 87: p. 517-519.

68. Beck, K., *The effects of threat and perceived threat control upon preventive heath behaviour.*, in *Health Education and the Media*, D. Leathar, Hastings, GB., Davies, JK., Editor. 1981, Oxford: Pergamon Press. p. 17-55.

69. Campion, P., Owen, L., McNeill, A., McGuire, C., *Evaluation of a mass media campaign on smoking and pregnancy.* Addiction, 1994. 89: p. 1245-1254.

70. Hann, A., *"Contoversy" - Propaganda versus evidence based health promotion: the case of breast screening.* International Journal of Health Planning and Management, 1999. 14: p. 329-334.

71. Hafstad, A., L.E. Aaro, A. Engeland, A. Anderson, F. Langmark, and B. Stray-Pederson, *Provocative appeals in anti-smoking mass media campaigns targeting adolescents - the accumulated effect of multiple exposures.* Health Education Research, 1997. 12(2): p. 227-236.

72. Marshall, A., S. Smith, and K. McKeon, *Persuading low-income women to engage in mammography screening: source, message, and channel preferences.* Health Communication, 1995. 7(4): p. 283-299.

73. Pollay, R.W., *The distorted mirror: reflections on the unintended consequences of advertising.* Journal of Marketing, 1986. 59(April): p. 18-36.

74. Holbrook, M., *Mirror, mirror , on the wall, what's unfair in the reflections on advertising?* Journal of Marketing, 1987. 51(July): p. 95-103.

75. Rudman, W.J. and A.F. Hagiwara, *Sexual exploitation in advertising health and wellness products.* Women and Health, 1992. 18(4): p. 77-89.

76. DuBois, B., *Passionate scholarship: notes on values, knowing and methods in feminist social science.*, in *Theories of women's studies.*, G. Bowles and R. Klein, Editors. 1983, London: Routledge & Kegan Paul. p. 105-116.

77. Turnbull, S., *The media: moral lessons and moral careers.* Australian Journal of Education, 1993. 37(2): p. 153-168.

78. Lantos, G., *Advertising: looking glass of moulder of the masses?* Journal of Public Policy and Marketing, 1987. 6: p. 104-128.

79. Broom, D. *Gendering health beyond sex differences*. 1994. Public lecture at Curtin University.

80. Broom, D.H., *Sexing the diseased heart*, in *Health sharing women's resource service newsletter*. 1994.

81. Waldron, I., *Gender and health related behaviour*, in *Health behaviour emergency research perspectives*, D. Gochman, Editor. 1988, New York: Plenum Press. p. 193-205.

82. Varadarajan, T., *How body shape dominates the sad minds of young girls.*, in *The Australian*. 1997. p. 13.

83. Markula, P., *Firm but shapely, fit but sexy, strong but thin: the post-modern aerobicizing female bodies.* Sociology of Sport Journal, 1995. 12: p. 424-453.

84. Germov, J. and L. Williams, *The epidemic of dieting women: the need for a sociological approach to food and nutrition.* Appetite, 1996. 27: p. 97-108.

85. Shaw, S.M. and L. Kememy, *Fitness promotion for adolescent girls: the impact and effectiveness of promotional material which emphasises the slim ideal.* Adolescence, 1989. 24(95 Fall): p. 677-687.

86. Seddon, L. and N. Berry, *Media - induced dis-inhibition of dietary restraint.* British Journal of Health Psychology, 1996. 1: p. 27-33.

87. Kablean, C., *Fashion's big problem*, in *The Australian*. 1997. p. 15.

88. Hirschman, E.C. and C.J. Thompson, *Why media matter: toward a richer understanding of consumers relationships with advertising and mass media.* The Journal of Advertising, 1997. 26(1): p. 43-60.

89. McKie, L.J., R.C. Wood, and S. Gregory, *Women defining health: food, diet and body image.* Health Education Research, 1993. 8(1): p. 35-41.

90. Murphy, M., *"Drop a dress size by the weekend... yeah, sure!" : a qualitative study of young women and the social and cultural influences on body image.* 1997, Victoria: Body Image and Better Health Program Inc. 65.

91. Puhl, R., Brownell, K., *Bias, discrimination and obesity.* Obesity Research, 2001. 9: p. 788-805.

92. Campbell, K. *Attitudes of health professionals to overweight people*. in *Body Image Research Forum Proceedings*. 1998. Melbourne: Body Image and Health Inc, Victoria.

93. Lupton, D., *Consumerism, commodity culture and health promotion.* Health Promotion International, 1994. 9(2): p. 111-118.

94. Lloyd, B., K. Lucas, and M. Fernbach, *Adolescent girls' construction of smoking identities: implications for health promotion.* Journal of Adolescence, 1997. 20: p. 43-56.

95. Banwell, L.L. and D. Young, *Rites of passage: smoking and the construction of social identity.* Drug and Alcohol Review, 1993. 12: p. 377-385.

96. Crawford, R., *Healthism and the medicalization of everyday life.* International Journal of Health Services, 1980. 10(3): p. 365-388.

97. Grunig, J., *Publics, audiences and market segments: segmentation principles for campaigns.*, in *Information campaigns: balancing social values and social change.*, C. Salmon, Editor. 1989, Newbury Park: SAGE Publications. p. 199-228.

98. Slater, M., *Choosing audience segmentation strategies and methods for health communication.*, in *Designing health messages: approaches from communication theory and public health practice.*, E. Maibach and R. Parrott, Editors. 1995, Thousand Oaks: SAGE Publications. p. 186-198.

99. Atkin, C. and E. Arkin, *Issues and initiatives in communicating health information to the public*, in *Mass communication and public health; complexities and conflicts*, C. Atkin and L. Wallack, Editors. 1990, Newbury Park: Sage Publications. p. 13-40.

100. Kilbourne, W.E., *Female stereotyping in advertising: and experiment on male-female perceptions of leadership.* Journalism Quarterly, 1990. 67(1): p. 25-31.

101. U.S. Department of Health and Human Services, *Physical activity and health: a report of the Surgeon General*. 1996, Atlanta: U.S. Department of Health and Human Services, Centres for Disease Control and Prevention, National Centre for Chronic Disease Prevention and Health Promotion.

102. Newby, J., *The confessions of a 16 year old anorexic*. 1995: Ockhams Razor, ABC National Radio.

103. Carter, O., R. Donovan, and G. Jalleh, *An investigation of strategies to increase public awareness of diabetes in Western Australia*. 2002, Perth: Centre for Behavioural Research in Cancer Control, Curtin University. p. 15.

104. Social Issues Research Centre, *SIRC bulletin: the side effects of health warnings*. 1999: Social Issues Research Centre.

105. McKimmie, M., *Warnings target good looks*, in *The West Australian*. 1993, Perth. p. 9.

106. Boush, D., M. Friestad, and G. Rose, *Adolescent scepticism toward TV advertising and knowledge of advertiser tactics.* Journal of Consumer Research, 1994. 21(June): p. 165-175.

107. Signorielli, N., *Mass media and impact on health: a source book*. 1993, Westport: Greenwood Press.

108. Tiggeman, M. *The role of the media in adolescent women's drive for thinness.* in *Changing society for women's health: Proceedings of the third national women's health conference.* 1995. Canberra: Australian Government Publishing Service.

109. Worden, J., B. Flynn, L. Solomon, R. Secker-Walker, G. Badger, and J. Carpenter, *Using mass media to prevent cigarette smoking among adolescent girls.* Health Education Quarterly, 1996. 23(4): p. 453-468.

110. Smoking and Health Program Health Promotion Services, *1991/1992 Young Women and Smoking Campaign summary*. 1996, Perth: Health Department of Western Australia.

111. Smoking and Health Program Health Promotion Services, *1994 Young Women and Smoking Campaign summary*. 1996, Perth: Health Department of Western Australia.

112. Smoking and Health Program Health Promotion Services, *1995 Young Women and Smoking Campaign summary*. 1996, Perth: Health Department of Western Australia.

113. Frape, G., *Personal communication detailing findings from market research during a NSW Quit campaign*. 1995.

114. Crittenden, K., Manfredi, C., Lacey, L., Warnecke, R., Parsons, J., *Measuring readiness and motivation to quit smoking among women in public health clinics.* Addictive Behaviours., 1994. 19(5): p. 497-507.

115. Walsh, R., S. Redman, M. Brinsmead, and B. Arnold, *Smoking cessation in pregnancy: a survey of the medical and nursing directors of public and antenatal clinics in Australia.* Australian and New Zealand Journal of Obstetric Gynaecology, 1995. 35(2): p. 144-150.

116. Severson, H., J. Andrews, E. Lichtenstein, M. Wall, and L. Akers, *Reducing maternal smoking and relapse: long term evaluation of a paediatric intervention.* Preventive Medicine, 1997. 26: p. 120-130.

117. Crawford, D. and A. Worsley, *Dieting and slimming practices of South Australian women.* The Medical Journal of Australia, 1988. 148(April): p. 325-331.

118. Epaminondas, G. and T. Sutherland, *Diet of denial thin end of the wedge.*, in *The Australian*. 1997. p. 8,14.

119. Health Department of Western Australia, *Nutrition WA: 1995-2000.* Newsletter, 1995. 4(May, 2).

120. Commonwealth Department of Health and Family Services, *Developing and active Australia: A framework for action for physical activity and health*. 1998, Canberra.

121. Women's Policy Development Office, *Women in Western Australia: fact sheet*. 1999, Australian Bureau of Statistics WA office.

122. Blumenthal, S., *Introduction to the National leadership conference on physical activity and women's health.* Women's Health Issues, 1988. 8(2): p. 71-73.

123. Sallis, J., A. Bauman, and M. Pratt, *Environmental and policy interventions to promoted physical activity.* American Journal of Preventive Medicine, 1998. 15(4): p. 379-396.

124. Australian Government - Department of Health and Ageing - Population Health Division, *About overweight and obesity*. 2004, Canberra: Australian Government.

125. Dunstan, D., *Diabetes and associated disorders in Australia 2000: The Accelerating Epidemic. Australian Diabetes, obesity and lifestyle report.* 2001, Melbourne: International Diabetes Institute.

126. Australian Institute of Health and Welfare (AIHW), *Australian Institute of Health and Welfare (AIHW) - Heart, stroke and vascular diseases -*

Australian facts 2004. 2004, Canberra: Australian Institute of Health and Welfare (AIHW).

127. McCormack, G., Milligan, R., Giles-Corti, B., and Clarkson, J.P., *Physical Activity levels of Western Australian adults 2002: results from the adult physical activity survey and pedometer study.* 2003, Perth: Western Australian Government.

128. Hillsdon, M. and M. Thorogood, *A systemic review of physical activity promotion strategies.* British Journal of Sports Medicine, 1996. 30: p. 84-89.

129. Jones, D., B. Ainsworth, J. Croft, and C. Macera, *Moderate leisure - time physical activity: who is meeting the public health recommendations: a national cross sectional study.* Archives of Family Medicine, 1998. 7(3): p. 285-291.

130. National Heart Foundation, *Exercise: an information paper for the general community*. 2000: National Heart Foundation.

131. Bock, B., B. Marcus, J. Rossi, and C. Redding, *Motivational readiness for change: diet, exercise and smoking.* American Journal of Health Behaviour, 1998. 22(4): p. 248-258.

132. Lutter, J., D. Simons-Morton, A. Kriska, P. Freedman, and B. Marcus, *Promoting physical activity among women throughout the lifespan: barriers and interventions.* Women's Health Issues, 1998. 8(2): p. 81-88.

133. National Health and Medical Research Council (NHMRC), *Acting on Australia's Weight: a strategic plan for the prevention of overweight and obesity*. 1997, Canberra: Australian Government Publication Services.

134. National Health and Medical Research Council (NHMRC), *Food for health: Dietary guidelines for Australian adults*. 2003, Canberra: Commonwealth of Australia.

135. Strategic Inter-Governmental Nutrition Alliance of the National Public Health Partnership, *Eat well Australia: A strategic framework for public health nutrition*. 2001, Canberra: National Public Health Partnership.

136. Redman, S., A. Hennrikus, J. Bowman, and R. Sanson-Fisher, *Assessing women's health needs.* The Medical Journal of Australia, 1988. 148(February): p. 123-127.

137. Charles, N. and V. Walters, *Women's health: women's voices.* Health and Social Care, 1994. 2: p. 329-338.

138. Kenney, J., *The consumer's views of health.* Journal of Advanced Nursing, 1992. 17: p. 829-834.

139. Smoking and Health Program - Health Promotion Services, *Women and smoking: facts and issues*. 1999, Perth: Health Department of Western Australia.

140. Dignan, M., Carr, PA., *Program planning for Health Education and Promotion*. 2nd Edition ed. 1992, Philadelphia: Lea & Febiger.

141. Welk, G., *The youth physical activity promotion model: a conceptual bridge between theory and practice.* QUEST, 1999. 51: p. 5-23.

142. Godin, G. and R. Shepherd, *Use of attitude-behaviour models in exercise promotion.* Sports Medicine, 1990. 10(2): p. 103-121.

143. Campaigne, B., S. Thompson, K. Spangier, and T. Harrell, *Community fitness model programs.* Women's Health Issues, 1998. 8(2): p. 89-95.

144. Gabbard-Alley, A., *Health communication and gender: a review and critique.* Health Communication, 1995. 7(1): p. 35-54.

145. James, K., *Deterrents to active recreation participation: perceptions of year 10 girls.* Health Promotion Journal of Australia, 1998. 8(3): p. 183-189.

146. Henderson, K., *Marketing recreation and physical activity programs for girls and women.* Journal of physical education, recreation and dance (JOPERD), 1995(August): p. 53-57.

147. Corti, B., R.J. Donovan, R.M. Castine, C.D. Holman, and T.R. Shilton, *Encouraging the sedentary to be active everyday: qualitative formative research.* Health Promotion Journal of Australia, 1995. 5(2): p. 10-17.

148. Eyler, A., E. Baker, L. Cromer, A. King, R. Brownson, and R. Donatelle, *Physical activity and minority women: a qualitative study.* Health Education and Behaviour, 1998. 25(5): p. 640-652.

149. Marcus, B. and L. Forsyth, *Tailoring interventions to promoting physically active lifestyles in women.* Women's Health Issues, 1998. 8(2): p. 104-111.

150. Swinborn, B., Caterson, I., Seidell, JC., and James, WPT., *Diet, nutrition and the prevention of excess weight gain and obesity.* Public Health Nutrition, 2004. 7(1A): p. 123-146.

151. Booth, M., A. Bauman, N. Owen, and C. Gore, *Physical activity preferences, preferred sources of assistance and perceived barriers to increased activity among physically inactive Australians.* Preventive Medicine, 1997. 26: p. 131-137.

152. Marcus, B., V. Selby, R. Niaura, and J. Rossi, *Self-efficacy and the stages of exercise behaviour change.* Research Quarterly for Exercise and Sport, 1992. 63(1): p. 60-66.

153. Sternfeld, B., B. Ainsworth, and C. Quesenberry, *Physical activity patterns in a diverse population of women.* Preventive Medicine, 1999. 28: p. 313-323.

154. Brook, U. and I. Tepper, *High school students' attitudes and knowledge of food consumption and body image: implications for school based education.* Patient Education and Counselling, 1997. 30: p. 283-288.

155. Chapman, G. and H. Maclean, *"Junk food" and "Healthy Food" : meanings of food in adolescent women's culture.* Journal of Nutrition Education, 1993. 25(3): p. 108-113.

156. Wiehe, S., Lynch, H., Park, K., *Sugar High.* Archives of Paediatrics & Adolescent Medicine, 2004. 158(3): p. 209-211.

157. Kausman, R., *If not dieting then what?* 1998, Melbourne: Allen & Unwin.

158. Nowak, M. and R. Speare, *Gender differences in food-related concerns, beliefs and behaviours of North Queensland adolescents.* Journal of Paediatric Child Health, 1996. 32: p. 424-427.

159. Hindin, T., Contento, IR., Gussow, JD., *A media literacy nutrition education curriculum for Head Start Parents about the effects of television advertising on their children's food requests.* Journal of the American Dietetic Association, 2004. 104(2): p. 192-198.

160. Gracey, D., N. Stanley, V. Burke, B. Corti, and L. Beilin, *Nutritional knowledge, beliefs and behaviours in teenage school students.* Health Education Research, 1996. 11(2): p. 187-204.

161. Hill, J., Radimer, KL., *A content analysis of food advertisements in television for Australian children.* Australian Journal of Nutrition and Dietetics, 1997. 54(4): p. 174-81.

162. Hammond, K., Wyllie, A., Casswell,S., *The extent and nature of televised food advertising to New Zealand children and adolescents.* Australian and New Zealand Journal of Public Health, 1999. 23(1): p. 49-55.

163. Balch, G., K. Loughrey, L. Weinberg, D. Lurie, and E. Eisner, *Probing the benefits and barriers for the national 5 a day campaign: focus group findings.* Journal of Nutrition Education, 1997. 29: p. 178-183.

164. Baghurst, K., *Evaluation of the effect of a media-based campaign on population consumption patterns, knowledge about and attitudes to breads and cereals.* Health Promotion Journal of Australia, 1993. 3(1): p. 32-33.

165. Martin, M. and J.W. Gentry, *Stuck in the model trap: The effect of beautiful models in ads on female pre-adolescents and adolescents.* The Journal of Advertising, 1997. 26(2): p. 19-33.

166. Witt, S., *Parental influence on children's socialisation to gender roles.* Adolescence, 1997. 32(126): p. 253-259.

167. Clarkson, J., R. Donovan, K. Jamrozik, K. Sydney-Smith, and S. Frizzell. *"Smarter than Smoking" - development and evaluation of a media campaign to reduce teenage smoking in Western Australia.* in *Tackling Tobacco. Proceedings of the International Health Promotion Conference*. 1998. Cardiff.

168. Henriksen, L. and C. Jackson, *Anti-smoking socialisation: relationship to parents and child smoking status.* Health Communication, 1998. 10(1): p. 87-101.

169. U.S. Department of Health and Human Services, *Preventing tobacco use among young people: A report to the Surgeon General*. 1994, Atlanta, Georgia: U.S. Department of Health and Human Seri vices, Public Health Service, Centres for Disease Control and Prevention, National Centre for Chronic Disease Prevention and Health Promotion, Office of Smoking and Health.

170. Flay, B., *Adolescent smoking : onset and prevention.* Annals of Behavioural Medicine, 1985. 7: p. 9-13.

171. Conrad, K., FLay, BR., Hill, D., *Why children start smoking cigarettes: predictors of onset.* British Journal of Addiction, 1992. 87: p. 1711-1724.

172. Commonwealth Department of Community Services and Health, *National Women's Health Policy: advancing women's health in Australia*. 1989, Canberra: Australian Government Publishing Service.

173. Major, C., Woods, C., *Smoke gets in your eyes: tobacco policy.* Connexions, 1995. 15: p. 8-14.

174. Hawks, D., Lenton, S., *Harm reduction in Australia: Has it worked? A review.* Drug and Alcohol Review, 1995. 14: p. 291-304.

175. Borland, R., *Minimising the harm from nicotine addiction.* Health Promotion Journal of Australia, 1997. 7: p. 138 - 141.

176. Royce, J., K. Corbett, G. Sorensen, and J. Ockene, *Gender, social pressure, and smoking cessation: the community intervention trial for smoking cessation (COMMIT) at baseline.* Social Science Medicine, 1997. 44(3): p. 359-370.

177. Camp, D., Klesges, RC., Relyea, G., *The relationship between body weight and concerns and adolescent smoking.* Health Psychology, 1993. 12: p. 24-32.

178. Krohn, M., Naughton, MJ., Skinner, WF., Becker, SL., Lauer, RM., *Social disaffection, friendship patterns and adolescent cigarette use: the Muscatine study.* Journal of School Health, 1986. 56: p. 146-150.

179. Weintraub - Austin, E., *Reaching your audiences: developmental considerations in designing health messages*, in *Designing Health Messages: approaches from communication theory and public health practice*, E. Maibach and R. Parrott, Editors. 1995, Thousand Oaks: SAGE Publications. p. 114-144.

180. Baum, F., *Researching public health: behind the qualitative - quantitative methodological debate.* Social Science Medicine, 1995. 40(4): p. 459-468.

181. Carey, M.A., *The group effect in focus groups: planning, implementing and interpreting focus group research.*, in *Critical issues in qualitative research methods.*, J.M. Morse, Editor. 1994, Thousand Oaks: SAGE Publications. p. 395.

182. Lindlof, T.R., *Qualitative communication research methods.* Current communication: an advanced text series., ed. J.G. Delia. Vol. 3. 1995, Thousand Oaks: SAGE Publications. 314.

183. Steckler, A., K.R. McLeroy, R.M. Goodman, S.T. Bird, and L. McCormick, *Toward integrating qualitative and quantitative methods; an introduction.* Health Education Quarterly, 1992. 19(1): p. 1-8.

184. Carey, M.A. and M.W. Smith, *Capturing the group effect in focus groups: a special concern in analysis.* Qualitative Health Research, 1994. 4(1): p. 123-127.

185. Kingry, M.J., L.B. Tiedje, and L.L. Freidman, *Focus groups: research technique for nursing.* Nursing Research, 1990. 39(2): p. 124-125.

186. Holman, H.R., *Qualitative inquiry in medical research.* Journal of Clinical Epidemiology, 1993. 46(1): p. 29-36.

187. Roche, A.M., *Making better use of qualitative research: illustrations from medical education research.* Health Education Journal, 1991. 50(3): p. 131-137.

188. Basch, C.E., *Focus group interview: an underutilized technique for improving theory and practice in health education.* Health Education Quarterly, 1987. 14(4): p. 411-448.

189. Kitzinger, J., *Focus groups with users and providers of health care*, in *Qualitative research in health care*, C. Pope and N. Mays, Editors. 1999, London: BMJ Books. p. 20-29.

190. Kitzinger, J., *The methodology of focus groups: the importance of interaction between research participants.* Sociology of Health and Illness, 1994. 16(1): p. 103-121.

191. Merton, R., *The focused interview*. 1956, USA: The Free Press.

192. Morgan, D.L., *Focus groups as qualitative research.* 1988, Newbury Park: Sage.

193. Stewart, D. and P. Shamdasani, *Focus groups: theory and practice.* 1990, Newbury Park: Sage.

194. Bauman, L.J. and E. Greenburg, *The use of ethnographic interviewing to inform questionnaire construction.* Health Education Quarterly, 1992. 19(1): p. 9-23.

195. Patton, M.Q., *Qualitative evaluation and research methods*. 1990, Newbury Park: SAGE.

196. Britten, N., *Qualitative interviews in health care research*, in *Qualitative research in health care*, C. Pope and N. Mays, Editors. 1999, London: BMJ Books. p. 11-19.

197. Hamberg, K., E. Johansson, G. Lindgren, and G. Westman, *Scientific rigour in qualitative research - examples from a study of women's health in family practice.* Family Practice, 1994. 11(2): p. 176-181.

198. Rappaport, J., *Research methods and the empowerment social agenda.*, in *Researching community psychology: issues of theory and methods.*, P. Tolan, et al., Editors. 1990, Washington DC: American Psychology Association. p. 51-63.

199. Lincoln, Y.S. and G.G. Guba, *Naturalistic inquiry*. 1985, Beverly Hills: SAGE.

200. Gifford, S., *Qualitative research: the soft option?* Health Promotion Journal of Australia, 1996. 6(1): p. 58-61.

201. Morse, J., *Designing funded qualitative research.*, in *Handbook of qualitative research.*, N.K. Denzin and Y.S. Lincoln, Editors. 1994, Thousand Oaks: SAGE. p. 220-235.

202. Leininger, M., *Evaluation criteria and critique of qualitative research studies.*, in *Critical issues in qualitative research methods.*, J.M. Morse, Editor. 1994, Thousand Oaks: SAGE Publications. p. 95-115.

203. Jick, T.D., *Mixing qualitative and quantitative methods: triangulation in action.* Administrative Science Quarterly, 1979. 24: p. 602-611.

204. Patton, M.Q., *Qualitative research methods*. 1980, Newbury Park: SAGE.

205. Murphy, B., J. Cockburn, and M. Murphy, *Focus groups in health research.* Health Promotion Journal of Australia, 1992. 2(2): p. 37-40.

206. Krueger, R.A., *The future of focus groups.* Qualitative Health Research, 1995. 5(4): p. 524-530.

207. Morgan, D.L., *Why things (sometimes) go wrong in focus groups.* Qualitative Health Research, 1995. 5(4): p. 516-523.

208. Anderson, D.R., D.J. Sweeney, and T.A. Williams, *Statistics concepts and applications.* 1986, St Paul: West Publishing Company.

209. Punch, M., *Politics and ethics in qualitative research.*, in *Handbook of qualitative research.*, N. Denzin and Y. Lincoln, Editors. 1994, Thousand Oaks: SAGE. p. 83-97.

210. Qualitative Solutions and Research, P.L., *QRS NUD*IST 4 User Guide*. Second Edition ed. 1997, Melbourne: Qualitative Solutions and Research Pty Ltd.

211. Silverman, M., E.M. Ricci, and M.J. Gunter, *Strategies for increasing the rigour of qualitative methods in evaluation of health care programs.* Evaluation Review, 1990. 14(1): p. 57-74.

212. Pope, C., S. Ziebland, and N. Mays, *Analysing qualitative data*, in *Qualitative research in health care*, C. Pope and N. Mays, Editors. 1999, London: BMJ Books. p. 75-87.

213. Norusis, M., *SPSS advanced statistics 6.1*. 1994, Chicago, Illinois: SPSS Inc.

214. The Jakarta Declaration on Health Promotion. *The Jakarta Declaration on Health Promotion into the 21st Century*. in *The 4th International conference on Health Promotion - Players for a new Era: leading Health Promotion into the 21st century.* 1997. Jakarta.

215. Choi, B.C.K. and A.L. Noseworthy, *Classification, direction and prevention of bias in epidemiologic research.* Journal of Occupational Medicine, 1992. 34(3): p. 265-271.

216. Castle, I., ed. *Socio-economic indexes for areas; information paper 1991 census*. 1994, Canberra: Australian Bureau of Statistics.

217. Morgan, D.L., *Qualitative content analysis: a guide to paths not taken.* Qualitative Health Research, 1993. 3(1): p. 112-121.

218. Bertrand, J.T., J.E. Brown, and V.M. Ward, *Techniques for analysing focus group data.* Evaluation Review, 1992. 16(2): p. 198-209.

219. McKenna, J. and K. Williams, *Crafting effective tobacco counter advertisements: lessons from a failed campaign directed at teenagers.* Public Health Reports, 1993. 108(Suppl 1): p. 85-89.

220. Hafstad, A., L. Aaro, and F. Langmark, *Evaluation of an anti-smoking mass media campaign targeting adolescents: the role of affective responses and interpersonal communication.* Health Education Research: Theory and Practice, 1996. 11(1): p. 29-38.

221. Healy, K., ed. *Body Image*. Issues in Society. Vol. 105. 1999, Sydney: The Spinney Press.

222. Skinner, C., V. Strecher, and H. Hasper, *Physicians' recommendations for mammography: do tailored messages make a difference?* American Journal of Public Health, 1994. 84(1): p. 43-49.

223. Kreuter, M., D. Oswald, F. Bull, and E. Clark, *Are tailored health education materials always more effective than non-tailored materials?* Health Education Research, 2000. 15(3): p. 305-315.

224. Rosenstock, I., *The health belief model and preventive health behaviour.* Health Education Monograph, 1974. 2(4): p. 354-386.

225. Janzs, N. and M. Becker, *The health belief model: a decade later.* Health Education Quarterly, 1984. 11: p. 1-47.

226. Nutbeam, D., Harris, E., *Theory in a nutshell: a practitioners guide to commonly used theories and models in health promotion*. 1998, Sydney: National Centre for Health Promotion, University of Sydney.

227. Bandura, A., *Social foundations of thought and action: a social cognitive theory.* 1986, Englewood Cliffs, NJ: Prentice Hall.

228. Tones, K., *Models of mass media: hypodermic, aerosal or agent provocateur?* Drugs: education, prevention and policy., 1996. 3(1): p. 29-37.

8. APPENDICES

Appendix 1:

Y7 & Y 10 Focus group moderators' guide

YOUNG WOMEN AND HEALTH PROMOTION

MODERATORS GUIDE

GENERAL INTRODUCTION

My name is _____ and this is _____. We are both from Curtin University and are here today to hear your opinions about some television commercials. To start off with I would like you all to fill in the short questionnaire that is in front of you

Read through it and explain that we want them to complete the questionnaire on their own without the help of a friends.

EXPLAIN THE PROCESS

Today we are doing what is called a focus group. A focus group is a group discussion. We will be asking for your opinions about some advertisements we have to show you.

GROUP RULES

Confidentiality

We are taping the session. This is because we consider all the information you give us is important and don't want to miss any of it. The information will be typed up and your names will not be used.

Honesty

Please answer honestly. There are no right or wrong answers and we are interested in hearing your opinion. Tell us what you really think and feel not what you think you should feel or what you think we want to hear.

Speaking

So everyone get a chance to speak we ask that only one of you at a time speak. If some one is speaking wait until they are finished and then speak. You may not always agree with what another person has said but remember that we all have the right to express our own thought and feelings.

Freedom to leave

If any one is uncomfortable with any thing that we talk about at any time please feel free to leave the room or to sit quietly and not comment

Ok lets begin.

Moderators guide

Icebreaker

Go around the table ask each person to say their name and favorite television program.

Firstly I am going to show you an advertisement and I would like you to write you opinions about the advertisement on the piece of paper you have been given and then we will discuss the advertisement. After we have veiwed and discussed the first advertisement we will repeat the process for the second advertisement.

Show the advertisement
Writing time (approx 1 min)
Discussion

Questions - For each advertisement

We have thought about the health messages in this advertisements already. We know one is about smoking, one is about calcium and one is about exercise. We know the ads contain health messages and health information.

(This visualization is for primary school children only)
What I want you to do now is close your eyes and imagine that your putting all the health information from the ads into a box, your closing the lid and know your going to place it under your chair for the session. Know you all have a box under your seat that contains the health messages from the ads that you have seen. Open your eyes.

Remembering the health message from the advertisement is in the box under your chair I want you to focus on what the ad is made up of. So I want you to think about the people they used, the music, the wording and the way the images are presented.

1. How does these make you feel?
2. What do you think the people are like?
3. What sought of lifestyle do you think they lead?
4. What would be important to them?
5. Why do you think they used those people for the advertisement ?

6. If you could have chosen the characters for the ad, what type of person would you have used?
   Why would you have used those people ?

7. Would you say that you relate to the people in the ad?
8. Are they similar to you and your friends?
9. Why do you think the producers of the ad chose this format to promote this message ?
10. Do you see any other messages in this advertisement?

Motivators

12. How would you describe health?
    (holistically - physical, mental, spirituality)
13. What type of thing do you to keep healthy?
14. What stops you doing some of these things?
15. What encourages you to do these things?

Wind up discussion, thanking participants for attendance.
Finish

Appendix 2:

YA Focus group moderators guide

YOUNG WOMEN AND HEALTH PROMOTION

MODERATORS GUIDE

GENERAL INTRODUCTION

My name is _____ and this is _____. We are both from Curtin University. We are here this evening to discuss with you young women's perceptions of health promotion television advertising. As you are all young women, we consider you to be experts in the area and therefore we are here to hear your opinions.

Before we start the discussion I'd like to get a few formalities out of the way. You will notice that you have consent form in front of you. We require written consent for ethical reasons. If you do not wish to sign the consent form please feel free to withdraw from the group.

I would also like you to fill in the short questionnaire. You are not required to give your name. However on the second sheet there is room for you to fill in your name, address and phone number if you would like to be involved in the second stage of the project which consists of a one of interview. The interview will be arranged at a time suitable to you, should you wish to participate.

Your name is required for the consent form and the questionnaire (should you choose to participate in the interview), however your name will be coded which helps to ensure you that the information will be treated as confidential.

Complete the questionnaire (2-3 minutes)

EXPLAIN THE PROCESS

The purpose of the focus group is to discuss your opinions about some advertisements that we have to show you. Just before we get started I would like to go through some information about the procedure of the focus group.

GROUP RULES

Confidentiality
We are taping the session. This is because we consider all the information you give us is important and don't want to miss any of it. The information will be typed up and your names will not be used.

Honesty
Please answer honestly. There are no right or wrong answers and we are interested in hearing your opinion. Tell us what you really think and feel not what you think you should feel or what you think we want to hear.

Speaking
So everyone gets a chance to speak we ask that only one of you at a time speak. If some one is speaking wait until they are finished and then speak. You may not always agree with what another person has said but remember that we all have the right to express our own thoughts and feelings.

Freedom to leave
If any one is uncomfortable with any thing that we talk about at any time please feel free to leave the room or to sit quietly and not comment

Moderators guide

Icebreaker
That's the formal part of the evening out of the way. As previously mentioned tonight I'd like to discuss with you your opinions about health promotion to women. To get started I would like to go around the table and ask each person to say their name and their favorite television program.

1. a) Can you recall any past health promotion campaigns ?
   If yes which ones ?
   b) What do you think it is about these campaigns that makes you remember them ?

Discussion of the advertisement

I'd like to show you two advertisements containing health messages that are primarily aim at women. We will watch each ad and then discuss them.

Show the advertisement

We have thought about the health messages in this advertisements already. We know this ad is about (quitting smoking), (calcium) and (exercise). We know the ad contains a health message and health information.

Seeing that we are already aware of the message in the advertisement I would like you to focus on what the advertisement consists of. There have been suggestions that models and storylines of some health promotion to women can be harmful in that they reinforce pressures on women to look or behave a certain way. It is due to this information that we are interested in your response to the images used in this ad and your opinion of the rationale for the ad. For example I would like you to think about what this ad is made up of, focusing on the people they used, the music, the wording, the way the images are presented and any messages that you get from these things.

2. With this in mind does anyone wish to comment on the ad ?
   b) How do you think the ad would make women your age feel ?
   b) What information do you think women your age get out of this advertisement ?
   c) Do you think young women would relate to the people used in the ad?
   e) What do you think of the characters in the advertisement ?
   f) Are they similar to you and your friends?

I would like you to re-focus on the format of the ad once again keeping in mind that we already know the ad presents a message about (smoking), (nutrition) or (physical activity).

3. Do you think the way they have presented this message is relevant to young women ?
   If yes how ?
   If no why ?

4. Why do you think the producers used this format to promote this message ?
   (listen for avenues to follow in the discussion determining if there are any other messages that are picked up from the ad)

Discussion of motivators

(After the advertisements have been reviewed we will progress to discuss motivators.)

We have know viewed some health promotion ads and we all probably realize that there is some health information women should know such as smoking causes lung and other cancers, calcium is vital particularly during teenage years to build bone density to ward off osteoporosis when we're older and so on.

5. If you were wanting to get these messages across to young women, how would you do it ?
   a) How would you like it to be presented ?
   b) Is there any information about health that you think young women would find particularly relevant or useful ?
   c) Does health promotion advertising affect your health behaviour in any way ?
      If yes how ?
      If no why do you think not ?

We want to know what "health" means to you. For some people it is being fit for others it's feeling good, for others it is not feeling unwell or all of the above.

6. What is health for you ?
   a) How would you describe health?
      (holistically - physical, mental, spirituality)
   b) Is health important to you ?
      If yes, why ?

7. What activities do you enjoy doing in your spare time ?
      Do you consider them to be important to your health ?

8. Does anything prevent you from taking measures to keep yourself healthy ?

9. Is there anything that motivates you to adopt healthy behaviours?

Is there any questions that you would like to ask me before we conclude ?

Wind up discussion, thanking participants for attendance. Remind them about the section in the questionnaire about interview participation and distribute incentives.

Finish

Appendix 3:

Y7 & Y 10 In-depth interview guide

YOUNG WOMEN & HEALTH PROMOTION PROJECT

Interview Format

We have been talking to young women around Perth about Health Promotion messages. You have already been involved in the first stage of the project which was the focus groups where we watched some ads and discussed them. Today I would like to explore some of the issues that were raised in the focus groups.

Everything that you have to say is of interest to us and is important therefore I would like to tape our discussion. Please feel free to say exactly what you think as our discussion will be confidential. If at any time you feel uncomfortable and don't wish to talk about a topic you can stop the interview.

Questions

What sought of things are important to you ?

Is their anything that is going on in your life that makes you feel good about yourself at the moment?

If yes what ?

What sought of things help you to feel good about yourself ?

Is their anything that makes your life difficult ?

If yes what ?

What do you do to cope with difficulties ?

What sought of things might influence you when you make a decision ?

ie about clothees, music, sport you play, what you eat or what to do on the weekend ?

What do you do for enjoyment ?

When you think about health what do you think about ?

How do you feel about health personally ?

We've talked to groups of girls about the things they do to keep healthy ? Do you think a health promotion campaign on the subject would have made any difference to your activities ?

If yes how ?

If no why not ?

What would influence you ?

Questions drawn from comments from the focus groups

Some young women your age, stated that in health ads the people were *"not realistic looking people"*.

What do you think they would have meant by this comment ?

Some young women your age have said "*health ads should use a mixture of people in them"*.

Why do you think they thought that ?

When health behaviours promoted on television were discussed with young women your age, the following comment was made *"they think it only happens to pretty skinny people like the ones on the ads"*.

Why do you think they thought that?.

Do you agree with this ?

In focus groups with young women your age looking at health ads, the following comment was made *"the ad makes me feel put off, cause she is already skinny and she is going on about how healthy she's got to be."*.

What would put you off ?

How does it put your friends off ?

When talking about images used in ads promoting health, the following comment about an ad was made *"using big people would set a bad example"*.

Why do you think the comment was made ?

Do you agree with it ?

If yes why

If no why ?

Young women your age, when discussing images used to promote health in television ads said *"as long as the message gets through it doesn't matter what they look like"*.

What are your thoughts on this ?

How do you think ads get their message across ?

What makes them effective ?

What makes them in-effective ?

Young women your age, made the following comment about an ad promoting milk *"she is thin and pretty and they have gone to an extreme"*.

Do you think health promotion sometimes uses extremes to promote health messages ?

Do you agree with this comment ?

If yes, why ?

If no, why ?

Young women your age, made the following comment about a health ad *"Sue Stanley is an aerobics champion and she would know what's good for them"*.

Would this type of ad help motivate you to exercise or to change your health behaviours ?

After viewing an ad using a model to promote milk young women your age stated that *"she's really bouncing around saying this is what I need so every one else needs it just because I have it"*.

How does it make you feel when you see this type of ad ?

Do you think health promotion campaigns influence your health behaviours in anyway ?

Appendix 4:

YA In-depth interview guide

YOUNG WOMEN & HEALTH PROMOTION PROJECT

Interview Format

Thank you for agreeing to meet with me, I appreciate that your time is valuable. I would like to commence by refreshing your memory about the Young Women & Health Promotion Project. In the initial phase of the project we have talked to groups of young women throughout the Perth Metropolitan area. You have already been involved in this phase of the study through your participation in the focus group you attended. The second stage of the project involved randomly selecting participants from the groups whom consented to be contacted for a further interview session. The interview will allow us to explore some of the issues that have arisen out of the focus groups and will last approximately 1 hour.

I consider everything that you have to say to be of interest to me and is important therefore I would like to tape our discussion. Please feel free to say exactly what you think as our discussion will be confidential. If at any time you feel uncomfortable and don't wish to talk about a topic you can stop the interview. Before we start do you have any questions?

QUESTIONS

When you think about health what do you think about?

How do you feel about health personally?

What do you feel are health priorities for women your age?
Why these things in particular?

What sort of risks to health do you think women your age are most aware of?
What do you think has contributed to raising young women's awareness in these areas?

What do you think affects the way young women prioritize their health needs?

Do you find keeping healthy requires a lot of effort?
What makes it such hard work?
What would make it easier?
(some young women have commented that they feel bombarded by health messages and that it is all too hard?)
(To hard, to much to do, not enough time)

What type of health campaign catches your attention?
Can you recall any health promotion campaigns that have caught your attention over the years?
Which ones?
Why are they memorable to you?
Do you think that they have had any effect on your health behaviours, or lifestyle choices.

We've talked to groups of young women about the things they do to keep healthy and the role media has to play in their decision whether to adopt a health behaviour or not. With this in mind;

Do you think a media campaign on nutrition would influence you to change your behaviour?

If yes, how?
If no why not?
What would influence you?

Do you think a media campaign on smoking would influence you to change your behaviour?

If yes, how?
If no why not?
What would influence you?

Do you think a media campaign on the need for regular physical activity would influence you to change your behaviour?

If yes, how?
If no why not?
What would influence you?

Many young women commented in the focus groups about the use of guilt in women's health messages. (ie. health messages showing pregnant women asking mothers to consider the effect that smoking may have on their child's life).

How do you respond to this technique?
Do you think it is an appropriate way of getting a health message across to young women?

Do you think society places a value on health?

If yes, what?

"Health to me is staying thin… but that's a really stupid way of me looking at it too and I know it's stupid but I consciously think if I look thin I'm healthy."

A young woman made this comment from one of the focus groups. What are your thoughts on it? (if any)

Do you think body image or body size is related to health?

If yes, how?

Do you feel there is any pressure on young women today to look, act or behave in a certain manner?

(If yes, then explore)

Appendix 5:

Y7 & Y 10 Demographic questionnaire

YOUNG WOMEN & HEALTH PROMOTION PROJECT

Focus group No ☐☐

1. Age: _____
2. School: _____

3. What does being healthy mean to you ? (eg. how would you define health?)

_____

_____

4. What sort of things motivate you to do things that you think are healthy ?

_____

_____

_____

5. Do you receive **any** information about health from the following sources ?
(please circle one response for each)

	Yes / No	
School	1	2
Parents	1	2
Friends	1	2
Television	1	2
Magazines	1	2

6. Where do you receive **most** of your health information from ?
(please circle one number)

School	1
Parents	2
Friends	3
Television	4
Magazines	5
Other (please specify)	6

_____

7. If you could choose where you got your health information from, where would it be ?

_____

Thank you for your assistance with this questionnaire.

Appendix 6:

YA Demographic questionnaire

YOUNG WOMEN & HEALTH PROMOTION PROJECT

Focus group No ☐☐

1. Age: _____

2. Occupation: _____

3. How would you define health ? _____

   _____

4. What sort of things do you do to keep healthy ?

   _____

   _____

5. What motivates you to do things that you think are healthy ?

   _____

   _____

   _____

6. Do you receive **any** information about health from the following sources ?
   (please circle one response for each)

	Yes / No	
Doctors	1	2
Parents	1	2
Friends	1	2
Television		
advertisements	1	2
current affairs	1	2
Magazines	1	2
Workplace	1	2
Newspaper	1	2
Partner	1	2

6. Where do you receive **most** of your health information ?
(please circle one number)

Doctors	1
Parents	2
Friends	3
Television	4
Magazines	5
Newspaper	7
Videos	8
Partner	9
Other (please specify)	10

_____

7. If you could choose from where you got your health information, where would it be ?
(please number these in order of importance, where 1 is most important and 7 is least important)

Doctors	☐
Parents	☐
Friends	☐
Television	☐
Magazines	☐
Newspaper	☐
Videos	☐
Other (please specify)	

_____

8 a) Can you recall any health promotion campaigns on television ?
(please circle one number)

Yes / No	
1	2

8 b) If yes please list them
(list up to three response).

1. _____
2. _____
3. _____

9 a) Do you feel that health promotion messages influence your lifestyle in any way ?
(please circle one number)

Yes / No
1 2

9 b) If yes how ?

_____

_____

Thank you for your assistance with this questionnaire.

✂ ----------

☆ ☆ A chance to participate further and be in the running for Myer voucher to the value of $50. ☆ ☆

Would you like to participate in a one off interview discussing issues emerging from tonight's focus group ?

The time and venue for the interview can be arranged according to your schedule. We aim to allow as much flexibility as possible to ensure a time and location most convenient for you. The interview will last approximately one hour.

If you wish to participate please complete the following section.

Name : _____

Address : _____

Phone Number (H) :_____ (W) _____

Best time to be contacted : _____

This slip will be separated from the questionnaire on collection to ensure your answers remain confidential.

Thank you for your cooperation

Appendix 7:

YA consent form

Interview No. □□

Young Women and Health Promotion Consent Form

I agree to participate in the Young Women and Health Promotion study and understand I may withdraw at any time.

Name : _____

Signature : _____

Witness : _____

Please record your address if you'd like a copy of the results of this study.

Address : _____

_____ P/Code _____

Appendix 8:

Letter to the school principal

School of Public Health

GPO Box U 1987
Perth 6001

Telephone: 3513833
Facsimile: 351 2958

Facsimile Cover Sheet

To Fax Number:	383 7701	**Date**:
Attention:	**PRINCIPAL NAME - SCHOOL**	
From:	Helen Dent	**Number of Pages**: 1
	Project Coordinator	(including this one)

Dear Principal Name

My name is Helen Dent and I am the Project Coordinator for the Young Women and Health Promotion Project. After speaking with you on (insert date), I was delighted to hear that you might consider becoming involved in this innovative study which examines the content of health promotion campaigns targeted at young women.

I have included with this fax a synopsis which outlines the project's aims, objectives and collaborating organizations. Also included is a project outline which details exactly what would be required from your school, should your school choose to participate and a registration form. If you require any further information or wish to meet with me to discuss the project, please do not hesitate to contact me on (09) 351 3833.

Thank you for your expression of interest in the "Young Women and Health Promotion" project and I look forward to your reply.

Yours sincerely

Helen Dent
Project Coordinator - Young Women and Health Promotion Project
Email: denth@health.curtin.edu.au
Fax (09) 351 2958

Appendix 9:

Young Women and Health Promotion Project synopsis

YOUNG WOMEN AND HEALTH PROMOTION PROJECT

PROJECT COORDINATOR
Miss Helen Dent
School of Public Health
GPO Box U1987
Perth WA 6001
Ph: 08 9266 3833 Fax: 08 9266 2958
Email: denth@health.curtin.edu.au

MANAGEMENT COMMITTEE
Ms Andrea Shoebridge - Director of the Women's Health Research Unit, Curtin University
Ms Ilse O'Ferrall - Deputy Head of the Public and Community Health Unit - East Perth Health Area
Dr Peter Howat - Co-Director Centre for Health Promotion Research, Curtin University

PROJECT FUNDING
BY: Healthway
TYPE: Research Project Grant
AMOUNT: $45 000

COLLABORATING ORGANIZATIONS
Women's Health Research Unit, Curtin University
Public and Community Health Unit - East Perth Health Area
Centre for Health Promotion Research, Curtin University

PROJECT SYNOPSIS

Central components of the National Women's Health Policy are research and data collection, the provision of health information and investigations into the health effects of sex role stereotyping on women.

Health promotion campaigns targeting women have had variable success. Some have been criticized for containing unhelpful values and messages; for example, those that were seen to cause harm to women outside the target population or use stereotypic symbolism to support the message. It is these types of effects that this project hopes to discern through the use of focus groups and in-depth interviews. Three age cohorts (11-12 yrs, 14-15 yrs, and 18-25 yrs) of young women will be recruited. Through the application of qualitative research this project will

(i) illicit responses to past and current health promotion materials

(ii) assess the relevance and persuasiveness of those materials to achieve behaviour change.

It appears health promotion campaigns are often laden with the values held by the advertising executives and health promotion campaign managers that are responsible for the delivery of campaign messages and consequently these values may not be relevant or applicable to the target audience of young women. It is this concept of values transference that necessitates the need for further research into this area. As the concerns about adolescent women's nutritional status, incidence of eating disorders and impaired body image are current issues, the project has chosen to examine messages pertaining specifically to the areas of nutrition, smoking and physical activity.

It is planned that the information elicited from this research will be applied to the development of a framework for the planning of women's health promotion materials, with particular reference to nutrition, smoking and physical activity.

Appendix 10:

Young Women and Health Promotion Project outline

YOUNG WOMEN AND HEALTH PROMOTION

PROJECT OUTLINE

What the project will be providing the schools :

- an opportunity for young women to express their views and opinions about health promotion campaigns and to comment on the relevance of the messages to their lives.
- a unique opportunity to contribute to the development of guidelines for future health promotion campaigns.
- a summary of the outcomes of the study.

What will be required of schools :

- **Consent** - Previous experience has revealed that often the school principal prefers to deal with issues regarding consent, however if the principal would prefer parental consent to be obtained, then forms will be provided. We are open to the schools suggestions about best practice in dealing with the issue of consent.
- Provide **access** to a (grade 7) or a (year 10 class) of girls for 40-60 minutes to conduct a focus group. From the class involved 10-12 students will be selected to participate in the focus group.
- Provide **access** to 2-4 students from the focus group for an in-depth interview at a later date.
- To identify a convenient **time** for the focus group and interviews to be conducted.
- **Venue** - it would most likely be more convenient for the school if you were able to provide a room in which to conduct the focus groups and follow up interviews. However, if no such venue is available within the school we are happy to make other arrangements.

Procedure

- **Focus Groups**
  Upon receiving cooperation from the school and parental consent a trained focus group facilitator such as myself or a fellow researcher will conduct 1-2 focus groups. Each focus group will ideally have 10-12 group members, however this depends on the number of students who consent to being involved. At the commencement of the focus group the participants will be required to complete a short questionnaire which is designed to obtain basic demographic data and to determine what health messages participants may have received from television or magazines. The focus groups will be observed by a second researcher and recorded on tape for transcription and analysis.
- **In-depth Interviews**
  As part of the preliminary questionnaire the students will be given the option to be involved in an in-depth interview. Only 2-4 students will be selected from the group to participate in these interviews. The students will be randomly selected from the students in the focus group who indicated that they would like to be involved in the interviews. The interviews are designed as an extension of the focus groups and allow further exploration and investigation of concepts and issues that may have arisen within the focus group discussions. The interviews will be arranged for a later date and will last approximately 30-40 minutes.

We will provide:

- Trained staff to facilitate and observe the focus groups and interviews.
- Equipment (ie. tape recorder)
- Small incentives for participants
- Questionnaires
- Consent forms

Appendix 11:

Young Women and Health Promotion Project school registration form

YOUNG WOMEN AND HEALTH PROMOTION

REGISTRATION FORM

Please complete this form and return it in the enclosed reply paid envelope.

SCHOOL : **«SCHOOL»**

Are you able to participate in the "Young Women and Health Promotion" study?

(Please circle one answer) Yes / No

If the school is able to participate who would be the best person to contact in the future:

Name: _____

Position: _____

Best time to be contacted: _____

Thank you for your support.

Appendix 12:

Parental letter of consent

Dear Parent/Guardian

The Women's Health Research Unit at Curtin University is conducting a study funded by Healthway, investigating the effects of health promotion media messages on young women. To achieve this we require the assistance of schools and their students. The school Principal has agreed that your daughter's school may participate in this project.

Your daughter may be selected to participate in a group discussion and an interview. The group discussion will focus on the images used to promote health in a series of television commercials. The health messages examined in the commercials are on smoking, nutrition and physical activity. As a part of the group, the students will also be asked to complete a short questionnaire relating to health messages and the media. These activities will be conducted during class time.

Should you prefer your child not to be included in the study, please contact me on (08) 9266 3833 before the 29th July 1997.

If you have any queries or would like more information about this study please contact me.

Yours sincerely

Helen Dent
Project Coordinator - Young Women and Health Promotion Project
Ph: (08) 9266 3833
Fax: (08) 9266 2958