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Crossing over the line: becoming a marijuana user alters perceptions of source and message credibility in anti-drug campaigns

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Crossing over the line: Becoming a marijuana user alters perceptions of source and message credibility in anti-drug campaigns

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Submitted: August, 2002
USE OF THESIS

The Use of Thesis statement is not included in this version of the thesis.
Refereed conference papers generated by this study


Abstract

Illicit-drug use is a major problem in our society. Policing, charging and incarcerating offenders incurs a significant strain on government resources, and results in criminal records for those found guilty. This study examined the attitudes and beliefs of young adults (18-24 years) toward social marketing messages about marijuana and other illicit-drug use. The purpose of this study was to investigate the effect various levels of marijuana use have on young people's acceptance of anti-drug messages. That is, do source and message credibility change as a result of young people's experience of marijuana use?

Three background studies investigated the issues surrounding the main study:

- An expert interview study;
- A content analysis of the speeches and policy documents of the Minister for Family and Children's Services, The Hon. Ms. Rhonda Parker MLA; and
- A small projective technique study.

In the main study, eight focus groups were conducted with 18-24 year olds, one male group and one female group for each of the user level categories: non-user, light/occasional user, heavy/regular user and ex-users. Then ten in-depth interviews were conducted to explore issues raised by the groups and to compensate for the low attendance that occurred in two of the groups.

There were 3 major findings from this study. Firstly, crossing the line from being a non-user of marijuana to becoming a user of marijuana signified a shift in young people's perceptions of source credibility and message credibility in anti-marijuana campaigns. Traditional sources of information (including social marketing) lost credibility with users of marijuana who saw them as untrustworthy and inexpert. This loss of credibility affected the willingness of marijuana users to receive messages relating to the use of any illicit drugs.
Secondly, the study offers a segmentation strategy for future research to differentiate between user levels, and identifies the potentially significant difference between trier/rejectors and ex-users. This is an important distinction which has not already been made in the literature, and which has implications for further research on user levels.

Thirdly, this study identified three potential unintended consequences of anti-marijuana campaigns that should be considered in the development of future campaigns:

a. **Using parents as a social marketing distribution channel for anti-drug messages might be damaging connectedness in families;**

b. **Loss of credibility in anti-marijuana campaigns damages the credibility of illicit-drug campaigns generally;** and

c. **Anti-marijuana campaigns may shift marijuana users’ (and potential users’) product preferences to other illicit drugs.**

This study suggests that social marketing practitioners should consider avoiding prohibitive anti-marijuana messages, as it appears they could create harm. This study, and the literature, supports the use of social marketing to implement harm minimisation strategies that seek to reduce the potential harms of using illicit drugs.
Secondly, the study offers a segmentation strategy for future research to differentiate between user levels, and identifies the potentially significant difference between trier/rejectors and ex-users. This is an important distinction which has not already been made in the literature, and which has implications for further research on user levels.

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Declaration

I certify that this thesis does not, to the best of my knowledge and belief:

(i) Incorporate without acknowledgment any material previously submitted for a degree or diploma in any institution of higher education;
(ii) Contain any material previously published or written by another person except where due reference is made in the text; or
(iii) Contain any defamatory material

Signed by the candidate

Fiona Perman B.Bus, Grad.Dip Journalism
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Chapter 1: Introduction

This thesis explores how young people respond to anti-drug messages. In particular, it focuses on marijuana use by young people and considers whether use/non-use of marijuana influences young people’s interpretation of anti-drug messages.

Firstly, this thesis draws on communication theory to consider whether marijuana use by young people affects the source credibility and message credibility of anti-drug social marketing.

Secondly, this thesis explores whether cognitive dissonance theory plays a role in the decision-making process of young people who use marijuana. Cognitive dissonance theory proposes that when a person makes a decision, they overvalue information and sources that support their decision and disregard information and sources that oppose it. This thesis explores whether this phenomenon is occurring when young people decide to use marijuana and whether this results in the rejection of all anti-drug message and sources.

This chapter will outline the purpose and significance of the research, the problem under investigation and the research questions this study is addressing. Chapter 2 provides a review of the literature and explains what we know about young people and their use of marijuana.

Chapter 3 provides an explanation of the theories that underpin this study, in the areas of Communication Theory and Cognitive Dissonance Theory.
Chapter 4 provides the findings of three preliminary studies. Firstly, an Expert Interview study probed the area of illicit drug management from the perspective of those dealing with these issues from a policy and functional decision-making perspective. Secondly, a content analysis of speeches and policy documents from the (then) Minister for Family and Children's Services, The Hon. Rhonda Parker MLA, provided additional data to supplement the Expert Interview study. Finally, a small study conducted with the target market using projective techniques, explores some of the dimensions of source credibility.

Chapter 5 discusses the methodological basis of the main study, explaining the methods used and rationale for the design of the main study.

Chapter 6 provides the results from the main study, while Chapter 7 discusses these results in light of studies conducted in the field previously. Chapter 7 also considers the limitations of the study and provides practical recommendations that offer alternative approaches to social marketing on illicit drug issues.

1.1 Purpose of the Study

Illicit-drug use is a major problem in our society. Courts are filled with drug-related cases; gaols are crowded with drug-related criminals, and the medical system faces the consequences of drug-related illness and injuries (Resignato, 2000). Despite successive Governments attempting to stem the use of illicit drugs, the trend toward uptake of illicit-drug use continues to grow and cause concern in the community (Kelly, Swaim, & Wayman, 1996; Schoenbachler & Whittler, 1996; Wright & Pearl, 2000).

This study provided insight into young people's perceptions of anti-drug messages. Specifically, it explored whether a young person's use/non-use of
marijuana influenced their perception of the source credibility and message credibility of social marketing campaigns. Based on this research, it is possible to make recommendations that may improve the effectiveness of anti-drug campaigns.

1.2 Significance of this research

This study looks at young people’s level of marijuana use to determine the impact of this use on their interpretation of marketing messages designed to prevent illicit-drug use. Marijuana-use status provided an appropriate basis for assessing source and message credibility in anti-drug social marketing for two reasons. Firstly, marijuana is the most commonly used drug by young people in our society (Australian Institute of Health and Welfare, 2000; Preboth, 2000). Secondly, marijuana is the illicit drug that young people try before any other illicit drugs in most cases (Preboth, 2000).

This study offers significant value for social marketing practitioners who aim to communicate illicit-drug related messages. Social marketing practitioners could benefit in three main ways:

- By differentiating between segments of the youth market according to their usage of marijuana to ensure that campaigns are focused on, and relevant to, each segment. Understanding the dynamics of source and message credibility by segment allows appropriate choices and maximises the efficient use of promotional funds.

- Segmenting the youth market to acknowledge existing marijuana users and targeting messages that are credible to this audience presents a significant challenge to practitioners. Nonetheless, acknowledging this segment allows social marketing strategies to take in to consideration
their perspective, and to minimise the potential harm caused by using inappropriate sources and messages that could lead to maladaptive responses in some segments.

- The approach of differentiating between levels of use may prove an important method of interpreting data evaluating social marketing campaigns. To date, studies that have measured the efficacy of social marketing messages have tended to sample the population on age and gender demographics, but no information is available to segregate the responses according to levels of usage. This leads to the potential for data to misrepresent the audience by over-sampling one segment. Analysing the data according to use status provides the opportunity to identify important characteristics of each segment. Knowing which segment the data comes from ensures appropriate strategies can be designed to appeal to the targeted segment.

This study provides one of the first analyses of anti-drug social marketing according to marijuana-use status, and to the author's knowledge is the only study using a qualitative approach. This research offers the opportunity for a new approach to segmenting and targeting young people with effective social marketing messages about illicit-drug use.

1.3 Research Problem

Marijuana-related offences comprised 85 per cent of all drug charges in Western Australia in 1993 (Lenton, Ferrante, & Loh, 1996). Of these offences, 6 per cent related to trafficking or dealing charges, 80 per cent related to possession/use of marijuana or possession of smoking implement, and 14 percent related to growing offences (Lenton et. al., 1996). These crimes require policing time, court time and result in criminal records for those found guilty.
Traditionally, the laws in Western Australia contain the strongest penalties for marijuana use in Australia, with up to two years' gaol for possession of small quantities of marijuana, and three years for possession of a smoking implement (Lenton et al., 1998). Despite these strong penalties, marijuana use has continued to grow among young people. The 1998 National Drug Strategy Household Survey (2000) statistics indicated the prevalence and growth of marijuana use in the adult population of Western Australia:

- Forty-five percent of the total population over the age of 14 years had ever used marijuana (up from 37% in 1995);
- Seventy-three percent of 20-29 year olds had ever used the drug, 78.3% of males and 66.9% of females (Australian Institute of Health and Welfare, 2000).

These statistics are similar across Australia. The following diagram illustrates the Australia-wide results of the National Drug Household Survey, 1998 (Australian Institute of Health and Welfare, 2000).

Figure 1.1 Percentage who have tried marijuana by age and sex, Australia, 1998

Similarly, the Western Australian statistics show that 67% of males and 31.3% of females in the 20-29 year old age group had used marijuana in the past 12
months. Criminal sanctions, school based education, and social marketing campaigns have failed to dissuade these young people from using marijuana.

1.4 Research Questions

The purpose of this study was to investigate the effect various levels of marijuana use have on young people's acceptance of anti-drug messages. That is, does the credibility of anti-drug messages, and the level of source credibility, change with personal marijuana-use experience, in the young adult age group?

This study primarily investigates:

- Does use of marijuana alter the source credibility of anti-marijuana messages? If so, how do perceptions of source differ according to use levels?
- Does use of marijuana alter the message credibility of anti-marijuana messages? If so, how do perceptions of message credibility differ according to use levels?

Other secondary research questions were:

- Does marijuana use influence the credibility of other illicit-drug messages? If so, how do perceptions of credibility differ according to use levels?
- Do perceptions of the physical and social risks of using marijuana and other illicit drugs vary according to levels of use?
- Is there evidence of cognitive dissonance affecting young people's decision making about using illicit drugs?

The design of this study ensured that results were practical, and actionable by health promotion professionals. The main study involved focus groups and in-depth interviews with members of the target audience, i.e. males and females.
aged 18-24 years. To allow the data to be analysed according to user status, the sample was divided according to level of experience – non-users, light/occasional use, heavy/regular users and ex-users.

1.5 Terminology

The words cannabis and marijuana are used interchangeably in this paper. Cannabis is derived from the botanical name *cannabis sativa* (Hail & Solowij, 1998). Marijuana is the popular name for cannabis, originating as a Mexican slang term in the 1930s (Brian, n.d.). In Australia, both words are in use; however, of these two terms, marijuana is the most commonly used name by young people.

1.6 Conclusion

This chapter has identified the need for research to investigate the differences in young people’s perceptions of social marketing campaigns relating to illicit drugs, according to their levels of marijuana use. This approach provides opportunity for social marketing practitioners to target messages at segments in a way that has not previously been reported. The following chapter reviews studies that relate to illicit-drug use in youth populations, and the various strategies that have been used to communicate messages about drug use to young people.
Chapter 2: Marijuana and its Role in Society

This chapter examines the studies and theories that have shaped current knowledge about illicit-drug use, particularly the use of marijuana in society.

Firstly, a brief overview of the history of illicit drugs provides perspective on the present legal standing of marijuana in Australia and the world. The legal and political background to illicit-drug policies and the origins of international policies illuminates how illicit-drugs management has changed over time. The debate between prohibitive approaches to illicit-drug management and harm-minimisation approaches illustrates the politically-sensitive nature of policy making in relation to illicit drugs.

Secondly, this chapter reviews what marijuana is, the known risks associated with its use, and the extent to which marijuana has become normalised in adolescent populations.

Thirdly, this chapter considers studies that have provided insight into the motivations and experiences of young people making the transition from childhood to adulthood. This section investigates beliefs about the pressures and motivations that lead to young people using illicit drugs, and provides some understanding of the role illicit-drugs play in young people’s lives.
2.1 A Brief History of Drug Prohibition Laws

Australia's approach to drug use has been led by the introduction of international laws and treaties. The strongest advocate of anti-drug legislation and prohibition has been the United States (Independent Drug Monitoring Unit, n.d.).

2.1.1 The Introduction of Drug Laws

The United States has become a world leader of drug policies. Australian governments have generally followed the U.S. approach to illicit drugs (Hall, 1997). Firstly, this section explains the introduction of drug-laws in the United States. Secondly, it outlines the evolution of drug laws in Australia.

2.1.1.1 Drug Laws in the United States

In the United States, the first laws designed to control the use of drugs were introduced in 1868. The Pharmacy Act of 1868 required registration of people who dispensed drugs. In 1914, the Harrison Act introduced the first laws restricting the availability of narcotic drugs (Bonnie & Whitebread, 1970). This act was introduced in a period when the temperance movement held significant influence in the United States. It was the first of a number of Acts designed to restrict the use of intoxicating substances, including alcohol (Bonnie & Whitebread, 1970; Wibberley & Whitelaw, 1990).

The U.S. stance on drug control and prohibition was out of step with the rest of the world in the 1920s. The United States walked out of the 1925 Geneva Convention on Opium and Other Drugs following the rejection of their attempt
to instigate a worldwide ban on opium within ten years (Independent Drug Monitoring Unit, n.d.). The United States refused to sign the convention and continued to champion their strong anti-drug agenda.

Post World War II, the United States’ growing power on the international political stage saw a shift in policy leadership from Europe to the United States (Webster, 1998). In 1970, the U.S. Congress passed the Controlled Substance Act, providing legislation for the prohibition of all non-medical use of drugs (Casey, 1978).

The following is a discussion of how Australian laws on illicit drugs have developed through to the present.

2.1.1.2 Drug Laws in Australia

In Australia, drug laws were introduced following the 1925 Geneva Convention on Opium and Other Drugs. At this convention, the United Kingdom represented all of the countries in the British Colonies (including Australia). The 1925 Convention saw cannabis added to the agenda for the first time. The convention agreed that member countries would restrict the availability of cannabis to medical and scientific purposes. This convention remains as the international law on cannabis today (Commonwealth of Australia, 1994).

In 1928, Victoria was the first state of Australia to introduce laws in response to the Geneva Convention, prohibiting the use of Indian hemp and resin. Other states and territories followed. Illicit-drug use was a marginal activity during the early 1900s in Australia. There was little demand for laws, or opposition to them. Thus, these laws were a response to international laws, rather than a measure to control an actual problem. The use of cannabis as a recreational drug
became popular in Australia in the 1960s (Commonwealth of Australia, 1994). The popular use of marijuana and other illicit drugs led to the Commonwealth Government introducing laws, the first of which was the Narcotic Drugs Act 1967 (Commonwealth of Australia, 1994).

During the 1960s and 1970s, penalties relating to growing, possessing and using cannabis in any quantity were severe. For example, knowingly cultivating cannabis in South Australia attracted a maximum penalty of $4000 and/or up to 10 years imprisonment. Possession of cannabis and/or using cannabis incurred a $2,000 fine, and/or two years imprisonment (Commonwealth of Australia, 1994). Similar laws existed in all of the States and Territories of Australia.

The late 1970s and early 1980s saw a reduction in penalties for minor offences involving small quantities of cannabis. The most liberal of these changes have been in South Australia (1987) and the ACT (1992) where ‘on-the-spot’ fines apply to persons committing minor offences (Lenton et. al., 1998). If fines are paid on time, no criminal record or court appearances result.

In 1998, three regions of Western Australia conducted trials of ‘on-the-spot’ fines. Following these trials, a review recommended an extension of the program throughout the state (Pentor, Walker, & Devenish-Meares, 1999). This recommendation had not been supported by legislation in Western Australia at the end of 2001. However, recommendations from the Western Australian Drug Summit in 2001 indicated a need for reduced penalties for minor cannabis possession offences. The Western Australian Government has signalled a review of legislation relating to marijuana use, with a view to reducing penalties in the near future (Government of Western Australia, 2001).
2.1.2 Prohibition and Harm Minimisation

This section of this thesis will discuss two philosophical approaches to illicit-drug management.

Throughout the Western World, debate rages between those who support the concept of harm minimisation (with some supporting de-criminalisation or legalisation of some drugs, such as marijuana), and those who champion the need for 'zero-tolerance' prohibition (Hall, 1997; Smith, 1995). Prohibitionists seek to prevent all illicit-drug use. Social marketing designed to encourage young people to reject drug use is one method of attempting to achieve this goal.

Harm minimisation is a pragmatic approach that focuses on reducing the harm of drug use to the individual and society. Advocates of harm minimisation have a spectrum of beliefs ranging from a neutral stance toward legislative approaches, through to actively campaigning to remove criminal sanctions for illicit drug use (Smith, 1985; Hughes, 1997; Levine, 1997; Staples, 1993).

Prohibitionists are concerned that promotion of harm-minimisation strategies incurs implicit endorsement of illicit-drug use (Australian Parents for Drug Free Youth, n.d.; CASA, 1994; Dale, n.d.). In contrast, advocates of harm-minimisation generally believe that efforts to prevent illicit-drug use through prohibitive measures have failed, and that the risk of appearing to endorse illicit-drug use is preferable to allowing harm to occur that could be prevented through harm-minimisation strategies (Hall, 2000; Levine, 1997; Smith, 1995).

2.1.2.1 The Australian Position on Harm Minimisation

Australia has a three-pronged approach to illicit-drug management; supply reduction, demand reduction and harm minimisation.
The first two are prohibitive measures used in an attempt to prevent/reduce illicit-drug use:

- **Supply reduction** is the realm of the police and customs departments who seek to reduce drug supplies through detection and conviction of drug suppliers, and preventing drugs entering the community. Despite extensive efforts to prevent the supply of illicit drugs, prohibition has never succeeded in eradicating drug availability (Webster, 1998).

- **Demand reduction** is the concerted effort of government to educate the public to reject drug use, and sanction those who use drugs through legal penalties (Commonwealth of Australia, 1994). Prohibitionists believe that strong legal penalties and police enforcement coupled with public education can achieve a reduction in demand for illicit drugs (Australian Parents for Drug Free Youth, n.d.).

- **Harm reduction or harm minimisation** is a response to the reality that despite the concerted efforts of numerous Governments to achieve supply and demand reduction in an attempt to prevent drug use, people will still obtain and use drugs. Harm minimisation is an approach that strives to reduce the potential harm created by these drugs (Single, 1996). Social marketing has a significant role to play in achieving these objectives.

In Australia, the *legal* status of illicit-drug use has followed the prohibitive approach of the United States. The *management* of illicit-drug use however, shifted in Australia in 1985 with the introduction of the National Campaign against Drug Abuse (NCADA). This was Australia’s first formal policy shift toward the concept of harm minimisation (Single, 1996). This shift signalled a
new recognition by the Australian Government that young people who use drugs needed information to reduce their individual risk (Single & Rohl, 1997).

2.1.2.2 The U.S. Position on Harm Minimisation

The 'War on Drugs' in the United States is a response to the use of illicit drugs that focuses on total prohibition and zero tolerance. The United States has actively encouraged other Western Countries to join their campaign (Webster, 1998). This prohibitive stance has been criticised by Webster (1998) as the spreading of a policy destined to fail. Some critics have pointed out that the implementation of strict prohibition is expensive (criminal courts, gaols and drug enforcement) and has been wholly ineffective (Erickson, 1997; Hall, 2000; Lenton et. al., 1998).

Webster (1998) claimed that the U.S. Government has actively campaigned against Australian attempts to conduct heroin trials, and is regularly involved in "bullying" western countries that show an inclination to move towards harm minimisation policies (Webster, 1998). Despite these pressures, the failure of drug prohibition through supply and demand reduction strategies is leading to increased calls for harm-minimisation approaches (E.M.C.D.D.A., 2000; Hughes, 1997; Levine, 1997; Redfern Legal Centre, 1996; San, 1999; Smith, 1995; Sullivan, 2001; Webster, 1998).

A critical shift in the response of governments worldwide toward harm minimisation occurred when the AIDS epidemic threatened the general population in the 1980s. Governments, concerned that drug-injectors would pass the virus into the general community, implemented harm-minimisation strategies. Needle-exchange programs were introduced for drug injectors, to reduce the risks associated with needle sharing and use of infected needles.
(Wibberley & Whitelaw, 1990). Despite this move toward harm minimisation, Wibberley and Whitelaw (1990) suggested that the decision to acknowledge the need for needle exchanges was born of necessity, and a desire to reduce the risk to the general community, not a commitment by legislators to reduce the risks of drug use. They believed that removal of the AIDS threat would see a return to the ‘demonising’ of drug-users, typified by the U.S. zero-tolerance approach (Wibberley & Whitelaw, 1990).

Despite the pressure from the U.S. to maintain prohibition worldwide, many countries have decided to pursue alternative approaches to their growing drug-related problems. Britain, the Netherlands and Switzerland have all actively pursued a range of harm-minimisation strategies (Levine, 1997; Webster, 1998).

2.1.2.3 The Prohibitionist Opposition to Harm Minimisation

Evidence that prohibition is failing has not altered the resistance of prohibitionists who continue to argue that “zero-tolerance” is the only option. Prohibitionists view harm minimisation as an implicit endorsement of drug abuse (Single & Rohl, 1997). In a speech at the Drug Reform Forum held at Christ Church Grammar School (Perth, W.A.), The Hon. Rhonda Parker MLA claimed that any perceived failure of the drug policy in Australia was a direct result of harm minimisation policies (Parker, 1999).

Australian Parents for Drug Free Youth (APDFY) support Ms. Parker’s view of harm minimisation. On their website, the APDFY have a page called “The fallacy of harm minimisation” (Australian Parents for Drug Free Youth, n.d.). This page outlines the reasons they object to harm minimisation policies. Essentially, they argue that harm minimisation implies that safe-use of illicit drugs is possible. They believe that this approach will result in increased use
and trial of illicit drugs by young people (Australian Parents for Drug Free Youth, n.d.).

2.1.3 The History of School-Based Drug Education

One method of demand reduction is to educate the population against drug use. The following section explains the approach used in the United States, where school-based education has a long history. This is followed by a discussion of the Australian approach to school-based drug education.

2.1.3.1 The U.S. History of Drug Education


Many reports have questioned the effectiveness of school-based drug education (Beck, 1998; Bonnie & Whitebread, 1970; Brown, D'Emidio-Caston, & Pollard, 1997; Gorman, 1997; Health and Welfare Canada, 1992; San, 1999; Warner, Albanes, & Amitay, 1999; Warner, Fischer, Albanes, & Amitay, 1998). There are a number of areas where critics claim school programs are failing. Brown (1997) determined that there were two issues undermining school-based drug-education programs. His study, conducted in the United States, involved 40 focus groups with school students (n=240 students). He found that most of the
participants believed that (1) the school-based programs were ineffective because of the low credibility of the source (teachers); and (2) that fear-based messages based on prohibition were ineffective (Brown, 1997).

Other researchers have echoed these criticisms. Coggans (1997) found that messages focusing on primary prevention tend to be fear-based approaches, which 'wear off' and/or induce scepticism in students as they progress through school (Coggans, 1997). Warner et. al. (1998, 1999) raised concerns that teachers who ran drug education classes lacked credibility in the eyes of their pupils. Achieving credibility as a teacher providing a prohibitive message is difficult. Teachers were viewed as either:

- Having personal experience of drug use themselves, and therefore seen as hypocritical, or
- Lacking any personal experience with illicit drugs, and thus lacking the credibility of expertise (Warner et. al., 1999; Warner et. al., 1998).

2.1.3.2 The Australian History of Drug Education

In Australia, the history of drug education has been quite different to the United States. Until recently, the Australian approach was to resist school education in relation to illicit drugs, due to concerns that such education would create curiosity in young people (Munro, 1996). For the ten years up to the mid 1990s, school programs focused on legal and prescription drugs (Munro, 1996). In 1997, this policy changed when Western Australian secondary schools participated in the ‘School Drug Education Program’ as part of the “Together against Drugs – the WA Strategy against Drug Abuse” program (Parker, 1999). In line with the state government stance, this program focuses on primary prevention (i.e. preventing use) rather than harm minimisation (Parker, 1997).
In New South Wales, the Department of Education and Training have published a study by Copeland (2001), which involved 100 current or former secondary students who have used marijuana. In contrast to the studies reported above, Copeland found that school drug education had credibility with marijuana using students, and concluded that this education had been influential in modifying usage behaviour. Though this is a relatively small sample, this study indicates that recent educational training in New South Wales may be achieving credibility where overseas efforts have failed (Copeland, 2001).

2.1.4 Social Marketing and Illicit-drug prevention

As has been discussed, social marketing has been used as a tool of prohibition, attempting to reduce demand for illicit drugs. The following discussion outlines the U.S. approach to social marketing in relation to illicit-drug issues. This is followed by the history of social marketing on illicit-drug issues in Australia and finally, Western Australia.

2.1.4.1. The U.S. Approach to Social Marketing

While school-based education against drug use has a long history in the United States, the use of social marketing as a part of the strategy to prevent drug use is more recent.

In the 1960s, the U.S. introduced public education programs focusing on informing the public about the dangers of illicit-drug use. Based on the assumption that young people were ignorant about the consequences of drug use, this strategy assumed that providing information about the risks of illicit-drug use would be sufficient to stem demand (Bell & Battjes, 1985).
The 1970s saw a shift toward teaching interpersonal skills as a means of providing young people with the skills to 'Say NO' to drugs. These campaigns were premised on the belief that young people were using drugs as a social crutch, or found it difficult to reject drug offers from peers. This strategy assumed that if young people learnt social skills and strategies to reject peer pressure, the need for drugs would cease (Bell & Battjes, 1985). Further variations on this theme were programs designed to encourage alternative activities for young people in an attempt to keep them busy and reduce social alienation (Bell & Battjes, 1985). Though methodological inconsistencies provided a barrier to direct comparison of results from these studies, the dominant conclusion was that these attempts to use social marketing to reduce/prevent drug use were generally ineffective (Bell & Battjes, 1985).

The 1990s heralded a new frontier for social marketing. Previously public education in the United States used free-to-air public service announcements that aired at low-viewing times (Beck, 1999). In 1998, the U.S. Congress approved a plan to spend $1 billion over five years to promote the anti-drug message (Beck, 1999; Fitzgerald, 1998). This plan enlisted the support of media channels, which met the Government’s request to provide an additional dollar’s worth of space/time for every dollar the Government spent. Thus, in effect, the commitment to the social marketing of the prohibitive message is valued at $2 billion over 5 years (Beck, 1999).

2.1.4.2 Social Marketing in Illicit-drug Management in Australia

In Australia, there are two sources of social marketing messages; firstly, the National campaign run initially under the branding of the National Campaign Against Drug Abuse (NCADA) and later named the National Drug Strategy (NDS) (Australian National Council on Drugs, 2001). Secondly, there are
individual state-based campaigns under each state government umbrella. In Western Australia, the W.A. Health Department and Western Australian Drug Abuse Strategy Office (WADASO) were responsible for implementing the illicit-drug management policies for the W.A. government. The Health Department produces social marketing messages under the branding of 'Drug Aware' (The Health Department of WA, 1999).

The National Drug Strategy follows a harm-minimisation approach (Single & Rohl, 1997), while individual state governments have had a variety of policy responses (Lenton et. al., 1998). The following sections explain the background to the National Drug Strategy and the history of the Western Australian State Government approach.

2.1.4.2.1 National Campaigns

In 1985, the National Campaign Against Drug Abuse (NCADA) was launched as an outcome of a special Premiers' Conference. Designed to address the need for a national approach to drug management, NCADA was renamed the National Drug Strategy (NDS) in 1987 (Australian National Council on Drugs, 2001). The NDS comes under the control of the Ministerial Council on Drug Strategy (MCDS) consisting of Health and Police Ministers from each state (Australian National Council on Drugs, 2001).

Two leading academics, Professor Single, University of Toronto and Professor Rohl, Australian Institute of Police Management, conducted an independent evaluation of the National Drug Strategy. Their final report highlighted the importance of harm minimisation in the work done by the NDS (Single & Rohl, 1997). Consequently, harm minimisation remained a cornerstone of the National Drug Strategic Framework 1998-99 to 2002-2003. This five-year plan
for the strategic direction of National Drug Policy clearly states that harm minimisation is the philosophy underpinning its approach to illicit-drug use (Australian Department of Health and Ageing, n.d.).

In 1998, the appointment of a new council, the Australian National Council on Drugs (ANCD) provided a forum for experts, non-government organizations and individuals to influence national policy development. This council reports to the MCDS and Federal Government on an annual basis (Australian National Council on Drugs, 2001).

2.1.4.2.2. Western Australian Campaigns

In Western Australia, the history of anti-drug social marketing campaigns is also relatively short, beginning with the introduction of the 1996 ‘Drug Aware’ campaign. This campaign aimed to inform parents about the ‘symptoms’ of drug use and to encourage parents to discuss drug-use with their children.

In response to a number of deaths from heroin use in 1997/98, the Health Department launched a heroin campaign aimed at preventing or delaying the onset of heroin use among young people aged 16-24 years of age (The Health Department of WA, 1999).

In 1998, a marijuana campaign was launched with the following objectives:

- “To prevent or delay the onset of marijuana use among young people aged 16 to 20 years of age;
- To motivate regular, dependant marijuana-users to quit;
- To increase parental knowledge of illicit-drug related issues; and
- To encourage effective communication between parents and young people about drug use issues” (The Health Department of WA, 1999, p.14).
Reported studies of these campaigns are limited to a narrow frame of reference. Research designed to measure results of specific communication campaigns, such as the 1998 Marijuana Education Campaign, have provided encouraging results, with high levels of message recognition and recall (The Health Department of WA, 1999). However, recognition and recall of a message does not necessarily translate into behavioural change. For instance, in the United Kingdom research into warning labels on alcohol has identified high recognition and acceptance of the messages, but the desired changes in risk behaviour have not occurred (DeCarlo, 1997). To date, no data is available from the Health Department of Western Australia to suggest that behavioural changes have occurred as a result of the Drug Aware campaigns.

Under the State Liberal Government's policies in Western Australia, the primary focus of policy development was on prevention (Government of Western Australia, 1995). The more recent election of the Labor Government has led to a greater emphasis on harm minimisation. The Labor State Government has indicated future legal and policy changes will emphasise the role of harm minimisation (Government of Western Australia, 2001).

This section has considered the history of various government policies and laws in relation to the management of illicit-drug issues. The following section reports on research into the efficacy of these social marketing campaigns.

2.2 Research into Anti-drug Messages

This section will consider the evidence that exists with regard to the efficacy of anti-drug messages. Many studies look at the treatment and prevention of drug use from a medical or psychological perspective (Hall & Solowij, 1998; Preboth,
While many areas of education and behaviour are considered, direct reference to the role of social marketing is less common. This section will review the studies that refer specifically to the role of social marketing, or public health campaigns, in the area of illicit-drug use.

Glassner and Loughlin's (1987) book on illicit-drug use by adolescents describes a one-year in-depth ethnographic study of a community with mean demographics for the United States. This study provided insight into some of the categories used in the current study, non-users and users. Glassner and Loughlin did not seek to investigate the impact of social marketing messages, but they did refer to the messages society sends to young people. Glassner & Loughlin found that non-users strongly believed the messages promoted by government campaigns and the general media about the dangers of illicit-drug use (Glassner & Loughlin, 1987). Anti-drug messages reinforced the beliefs of non-users. The authors reported that users were more sceptical when it came to government messages about drugs (Glassner & Loughlin, 1987).

Brandweek, a New York marketing publication, reported in April 1998 that it requested 'Mad Dogs and Englishmen', a New York Advertising Agency, to undertake research into anti-drug marketing messages (Kouns & Danielson, 1998). The objective was “to see what kids have to say about using drugs, the ads that try to dissuade them from using, whether they do or do not indulge, and why” (Kouns & Danielson, 1998, p. 1). The research used focus groups of children aged 8 – 16 years, recruited off the streets of New York. The top line findings of this research included that young people knew that drugs were bad for them, but felt that the messages they received about drugs overstated or exaggerated the situation (Kouns & Danielson, 1998). This research reported that young people felt that marijuana was 'demonised' by these messages, which
led to reduced effectiveness and credibility in all anti-drug advertising. These findings closely mirror the issues investigated in this research.

Several other researchers in the United States (Brown et. al., 1997; Wright, 1998) have also raised concerns about the impact of “demonising” drug use. Quoting research conducted by Dr. Joel Brown of Berkeley University, Wright states that “research shows that kids who are taught that pot is as bad as heroin are more likely to experiment with heroin if they tried marijuana and experienced few consequences. Those kids suspect that if they were lied to about pot, then they were probably lied to about hard drugs as well” (Wright, 1998, p. 2).

Other researchers have also highlighted concerns about the credibility of social marketing messages that try to prevent drug use. Beck (1998) refers to the U.S. campaign “Just say NO” to drugs. “Once again, American youth appear to be serving ... notice of a growing rejection of what many dismiss as ‘Just Say No’ propaganda. Perhaps the most alarming casualty of this approach has been the substantial loss in credibility inevitably fostered by such drug education. Particularly among target populations possessing considerable drug experience, reliance on disinformation should be regarded as contraindicated” (Beck, 1998, p. 45).

Jones and Rossiter (2001) recently presented a paper at the ANZMAC 2001 conference titled “Believability of anti-drug advertising as a function of marijuana usage experience.” This research considered a similar premise to that explored in this thesis; that use of marijuana would influence the credibility of other drug messages. Jones and Rossiter used a quantitative approach and measured the believability of messages relating to cocaine and heroin based on the subject’s usage of marijuana. They concluded that marijuana use was related
to a reduction in the believability of anti-marijuana messages (Jones & Rossiter, 2001). Further, Jones and Rossiter found that ex-users of marijuana were more likely to believe negative messages about the risks of drug-use than either non-users or current users (Jones & Rossiter, 2001). (More in-depth discussion of Jones and Rossiter's paper in relation to this thesis is given in Chapter 7.)

This section has examined the studies that have investigated the efficacy of anti-drug social marketing. The following section looks at what marijuana is, and reviews studies that have looked at youth behaviour in relation to drug use.

2.3 Marijuana as a drug

Marijuana is the most widely-used illicit drug in the Western World (McMiller & Plant, 1996; Poulin & Elliott, 1997; Preboth, 2000). Firstly, this section looks at what marijuana is; secondly, it considers the extent of marijuana use in youth populations; and thirdly it examines the known effects and risks associated with marijuana use.

2.3.1 What is Marijuana?

Marijuana is derived from the female plant of cannabis sativa. Marijuana is the dried leaves and flowering tops of the plant. Hashish also comes from the female cannabis sativa plant, and consists of dried resin and compressed flowers. Another form of hashish is hashish oil, which is the liquid resin. The psychoactive constituent of these products is known as THC (d-9-tetrahydrocannabinol). Levels of THC typically vary from 0.5%-5% in marijuana, 2%-20% for hashish, and 15%-50% for hashish oil (Hall & Solowij, 1998).
Marijuana and hashish may be smoked or eaten. A “joint” comprises cigarette papers to roll a cigarette with either a mixture of marijuana and tobacco, or straight marijuana. Another method of smoking marijuana and/or hashish is to smoke it through a water pipe, often called a “bong”. Both forms can include tobacco to assist burning. Both hashish and marijuana can be eaten, usually as an ingredient of food, such as cookies, cakes and so on (Hall & Solowij, 1998).

2.3.2 Is Marijuana Use ‘Normal’ Adolescent Behaviour?

One area of debate in the management of illicit-drug use is the status of drug use in the community. Social marketing strategies in the United States assume that marijuana is viewed as normal behaviour (McCaffrey, 1998). McCaffrey (1998) has initiated a campaign to ‘de-normalise’ marijuana, striving to reduce the perception that marijuana use is normal. Shiner & Newburn (1997) argued that the facts do not support the concept of normalisation. They believed that efforts to “de-normalise” marijuana use may backfire, creating a self-fulfilling prophecy, breeding an environment in which drug-taking may be seen as normal (Shiner & Newburn, 1997).

Statistics from the 1998 National Drug Strategy Household Survey suggest that normalisation may have occurred in Australia for marijuana use in the youth market, with 73% of 20-29 year olds having ‘ever’ used marijuana. The same study found that 45% of the total population over the age of 14 years had tried marijuana (Australian Institute of Health and Welfare, 2000). Research in the United Kingdom (Sullivan, 2001), throughout Europe (E.M.C.D.D.A., 2000) Canada and the United States have supported the concept of normalisation in the young adult populations of these countries (Zoccolillo, Vitaro, & Tremblay, 1999).
2.3.3 Known Risks

All drugs affect different people in different ways (Zimmer & Morgan, 1997). Thus, the side effects of marijuana use are not consistent to all users. The variance in reactions to marijuana intoxication tends to lead to counter claims about the impact of use. Further, some studies have questioned why drugs such as alcohol and tobacco are legal despite the vast evidence of significant health and social impacts associated with their use, while marijuana is illegal. These researchers question the hypocrisy of this situation, claiming that this leads to credibility issues that undermine the health message (Smith, 1995; Zimmer & Morgan, 1997).

Hall and Solowij’s (1998) extensive review of previous research into the behavioural and medical consequences of marijuana use provides a number of known consequences. It is known that anxiety and panic can occur in naive users. Motor performance, memory and attention can be impaired while intoxicated, and those vulnerable to psychosis have increased risk of a psychotic episode (Hall & Solowij, 1998). It is believed that bronchial problems can be aggravated by marijuana use, and histopathological changes may lead to the development of cancers (Hall & Solowij, 1998). Other risks associated with cannabis that are presently under examination include: reduced fertility, a causal relationship with depression (particularly in women) and Cannabis Addiction syndrome (Hall & Solowij, 1998).

Studies seeking to determine the health risks associated with marijuana use are often contentious (Hall, 2000). For instance, despite findings that marijuana can cause cognitive impairment (Hall & Solowij, 1998), the extent of this impairment, and whether it is a permanent impairment or a temporary state while intoxicated, leads to a variety of interpretations of the potential risk. One
study in the United States (n = 2,635 middle and senior high school students) designed to measure the impact of marijuana use on school performance hypothesised that young people who used marijuana would have lower grades than those who do not. The results did not support this hypothesis with the report concluding that marijuana-use was unrelated to school performance (Raskin, Novacek, & Hogan, 1992).

Another area of concern for lawmakers and the community is the influence of illicit-drug use on criminal and anti-social/violent behaviour (Zimmer & Morgan, 1997). In a review of the scientific evidence relating to marijuana, Zimmer and Morgan (1997) reviewed existing studies and concluded that research overwhelmingly disproved any relationship between marijuana use and violent criminal behaviour. Both human and animal studies have found that marijuana use leads to passive rather than aggressive behaviour (Zimmer & Morgan, 1997).

2.3.4 Perceptions of Risk

Some researchers have suggested that the rise in marijuana prevalence during the 1990s resulted from a reduction in young people's perception of the risks associated with marijuana use (Bachman, Johnson, & O'Malley, 1998; Preboth, 2000). U.S. studies of risk perceptions have found that the number of youths who think smoking marijuana once or twice a week is a 'great risk' has decreased from 59% in 1994 to 53% in 1999 (NHDSA, 2001).

There is debate about the causal relationship between risk perception and risk-taking behaviour (Lee, Su, & Hazard, 1998). Lee et. al. found that the relationship between risk perception and risk-taking behaviour was not a simple one. They concluded that behavioural-specific factors, such as orientation
toward ‘fun’ activities were compounding influences on the likelihood of marijuana use (Lee et. al., 1998). In other words, even for those people who still perceive marijuana use to be a high-risk behaviour, this perception of risk will not prevent some youths from using marijuana (Lee et. al., 1998).

A study of young people’s attitudes toward tobacco and marijuana use examined whether the perceived risks of use change according to the level of an individual’s use. The study considered how the perceived risk of regular use of both substances compared to occasional use (Resnicow, Smith, Harrison, & Drucker, 1999). Resnicow et. al. (1999) found that regular users perceived less risk in regular use than occasional users did. In other words, regular users did not see their use pattern to be as risky as occasional users perceived regular use to be. This study also found that both regular and occasional users perceived the risk of occasional use to be low. Resnicow et. al. (1999) claimed that their study provided evidence that occasional users were practicing harm minimisation by restricting or controlling their use of these drugs to occasional use, based on their perception that this was a low-risk level of use (Resnicow et. al., 1999).

2.4 Youth Culture

Over time, society has evolved to create a new life stage that was virtually non-existent in the 19th Century – the period of life between childhood and adulthood (Arnett, 2000). In the past, marriage and family responsibility quickly followed childhood; today the gap constantly widens. Shifting social roles and values have led to later marriages and the relatively new, youth culture (Janssen, Dechesne, & Knippenberg, 1999). Youth culture expresses itself through the norms, values and behavioural practices of adolescents (Rice, 1996). Janssen et. al. (1999) noted that the role of youth culture can be important to the self esteem
of young people who are shifting away from childhood but lacking an established adult identity (Janssen et. al., 1999). The following section of this report will examine the extent to which experimenting with and using marijuana is a part of this cultural identity.

2.4.1 Definition of Self

Developing a sense of ‘who you are’ or ‘self-concept’ is a major role of adolescence (Raskin et. al., 1992; Vartanian, 2000). Self-definition can include the physical aspects of an individual (size, shape, health, fitness) as well as self-perceptions relating to sexuality, personality type and ability/skills (Roid & Fitts, 1994).

Group membership is also a function of self-definition. Being part of a group involves assuming the culture of the group and the values, beliefs and behaviours that define the group identity. Raskin et. al. (1992) investigated the relationship between the knowledge of drug culture and substance use. Their study found that drug use is part of social identity and indicates an individual’s membership of the drug culture. Such membership involves taking on the group identity, and the roles and behaviours that define the group (Raskin et. al., 1992).

Raskin et. al. (1992) suggested that membership of groups provide individuals with a sense of identity. As a result of this link, Raskin et. al., believed that policy makers should consider the implications of asking young people to cease using drugs. They believed it is important to recognise that such a request is also asking young people to remove themselves from a group that provides them with a sense of self-identity and a way of life that extends into the core of who they think they are (Raskin et. al., 1992; Zuckerman, 2000).
2.4.2 Multiple Selves

The concept of multiple selves comes from the recognition that people's roles vary, and their definition of self alters according to which role they are 'playing' (Aaker, 1999; Roid & Fitts, 1994). For adolescents the roles of childhood are broadening to include a proliferation of role-related selves such as a friend, student, romantic self, sexual self and so on (Harter & Monsour, 1992). Harter and Monsour (1992) determined that as children grow into adulthood, their awareness of multiple roles grows. Young adolescents have limited or singular concepts of self; during mid-adolescence the ability to compare and acknowledge different presentations of self develops, though the ability to reduce the conflict of contradictory selves is not developed until late adolescence (Harter & Monsour, 1992). Dealing with conflicting concepts of self (i.e. Mummy's good girl and class rebel) can lead to increased conflict in parental relations in early adolescence, though evidence suggests that this adjustment resolves itself in late adolescence (Steinberg & Morris, 2001).

2.4.3 Why do Adolescents Take Risks?

Theories that explore why adolescents partake in risk-taking behaviour provide a number of relevant issues for consideration. Risk-taking is a normal, necessary part of development (Dekovic, 1999) for adolescents who are exploring their world and seeking a sense of self. Risk-taking can be positive, putting your name forward for the debating team, or negative, use of illicit substances, tobacco and alcohol use, stealing and so on. Many studies have examined the factors influencing the decision to choose negative risk-taking behaviour over positive options (Cox & Cox, 1998; Dekovic, 1999; Donohew, Hoyle, & Clayton, 1999; Fergusson, Woodward, & Horwood, 1999; Lindaberg, Boggess, & Williams, 2000; Porter & Lindberg, 2000; Resnick et. al., 1997). The following section considers theories about low self-esteem, peer pressure, social
conformity, and sensation seeking to provide some insight into why young people choose to use illicit drugs.

2.4.3.1 Self Esteem

One popular belief is that low self-esteem leads to problem avoidance through drug use (Finke & Bowman, 1997). Researchers have sought to prove the relationship between low self-esteem and substance abuse but the results have been inconsistent and unconvincing (Moore, Laflin, & Wies, 1996). Moore et. al. (1996) suggested that many preventative campaigns base their strategies on the assumption that raising self-esteem will reduce drug use. Moore et. al. (1996) conducted a study of 2000 young people to establish the role that self-esteem and cultural norms play in drug use. Whilst presenting a number of limiting issues that may have influenced the results, Moore et. al. concluded that it is ‘likely’ that drug-using behaviour and self-esteem have no causal relationship (Moore et. al., 1996).

2.4.3.2 Peer Influences

The influence of peers is widely recognised as a contributor to involvement in high-risk adolescent behaviour (Fergusson et. al., 1999). This relationship is often viewed as a negative, overt influence i.e. pressuring other peers to participate in drug use (Cox & Cox, 1998). Studies into the development of deviant behaviour and peer influences have demonstrated however, that rather than being pressured into behaviour, adolescents choose their peer groups out of common interests and desires. In the case of deviance or risk taking, this behaviour can provide a basis for peer clustering (Cox & Cox, 1998; Fergusson et. al., 1999).
Problematic peer relationships (difficulty making friends) has also been linked to later deviant behaviour (Fergusson et. al., 1999). Reviewing the link between life experiences and later deviant behaviour, Fergusson et. al.'s (1999) 15-year longitudinal study indicated that it was early conduct disorders (such as behavioural disorders) that predicted later deviant behaviour, not peer rejection (Fergusson et. al., 1999).

There is no doubt that peers play an important role in the lives of adolescents (Steinberg & Morris, 2001), and that peers influence each other's behaviour, and provide access to illicit drugs (Raskin et. al., 1992).

Cox and Cox (1998) described normative peer influence as occurring when the observation of peers' behaviour alters an individual's belief about the consequences of participation (Cox & Cox, 1998). This explanation for peer influence is more complex than the popular view of 'peer pressure'. According to Cox and Cox, peers influence each other in three ways. The first type of peer influence is normative peer influence, which has two forms:

a. **Conformity**: occurs when a young person participates in behaviour for positive social rewards (acceptance) or to avoid negative social consequences (exclusion/riddicule). This is the popular view of what peer pressure involves (Cox & Cox, 1998).

b. **Contagion** is a less recognised form of normative influence and is the inversion of conformity. Contagion influence occurs when an individual feels released from a perceived social norm by the observation of others rejecting these norms (Cox & Cox, 1998). In the case of drug use, contagion influences would occur when a young person believed, for instance, that 'only dumb people take drugs'. When a young person with this belief sees
people they know to be intelligent taking drugs they are led to one of two conclusions; either the person I thought was intelligent is actually dumb, or the belief I held that said dumb people do drugs is incorrect. Accepting the second option alters the individual’s beliefs about the consequences of using drugs, and thus reduces (or removes) the previous barrier to participating in the behaviour.

The second form of peer influence is *informational influence*. This occurs when a peer provides information that influences another to participate in behaviour. This can occur through:

- direct verbal instruction (eg. “Here, have some mull, it will calm your nerves”);
- vicarious learning (eg. Observing a friend having a great time on ecstasy);
- syllogistic reasoning (John smokes dope all the time, John is intelligent – these campaigns that say people who smoke dope are stupid, must be lying) (Cox & Cox, 1998).

Finally, a third form of peer influence comes from *facilitative influences*, where peers provide the opportunity, or make it easier, to participate in a risky behaviour. This does not necessarily mean that there is overt peer pressure occurring, but rather that a friend’s supply of marijuana provides the opportunity for a youth to experiment (Cox & Cox, 1998).

Thus, social influences are likely to be far more complex than the image of a peer pressuring another to use drugs.

One of the influences on adolescent peer behaviour may be sensation-seeking orientation, discussed below.
2.4.3.3 Sensation Seeking

Zuckerman (1979) proposed that sensation seeking is a personality trait that influences the degree of stimulation people need. High sensation-seekers looked for novel, complex and intense stimulation, and were more likely to take risks to achieve the stimulation they seek than low sensation-seekers. Zuckerman (1979) has linked sensation seeking to the tendency to use illicit drugs, and early onset of drug use. Zuckerman found that the transition from legal drugs, such as alcohol and tobacco, to illicit drugs is a transition that can occur with high or moderate level sensation-seekers, but it is unlikely that low sensation-seekers will make this transition (Zuckerman, 2000).

Zuckerman’s studies have spanned four decades and investigated many aspects of sensation seeking as a biological personality trait. Zuckerman (2000) found that a person’s sensation-seeking behaviour is around 60% inherited, with the remaining 40% accounted for by the environment outside the home. Interestingly, Zuckerman’s (2000) reports of identical and fraternal twins separated at birth suggest that the shared family environment does not contribute to sensation-seeking behaviour. Thus, it is the combination of inherited sensation-seeking orientation and the experiences of life outside the home that combine to create an individual’s level of sensation-seeking orientation. Influences outside the home include peer groups and accidental life experiences (Zuckerman, 2000).

Donohew, Hoyle, & Clayton (1999) conducted a study of sensation-seeking orientation and the influence of peers. They concluded that there is a significant tendency for adolescents to cluster according to their sensation-seeking characteristics. Furthermore, sensation seeking outperformed any other measure as a risk factor for substance use (Donohew et. al., 1999). Lorch and colleagues
(1994) looked at Zuckerman's theory of sensation seeking and determined that high sensation-seekers will pay more attention to high sensation-seeking orientated advertisements in high sensation-seeking orientated programming (Lorch, Palmgreen, & Donohew, 1994; Palmgreen, Lorch, Donohew, & Harrington, 1995). As a result, the Sensation-seeking Targeting Prevention Approach (SENTAR) was developed (Palmgreen, Donohew, Lorch, Hoyle, & Stephenson, 2001). This concept was based on using sensation seeking as the targeting variable. This concept suggested that targeting high sensation-seekers with prevention messages designed to appeal to a high sensation-seeking audience and placing these messages in a media context that appeals to high sensation-seeking audiences, would increase the efficacy of anti-drug messages (Palmgreen et. al., 2001). Palmgreen et. al. tested this concept in a targeted public service announcement (PSA) campaign using two communities in a controlled design, over a period of 32 months. They concluded that a campaign designed for high sensation-seekers and placed in high sensation television programming could reduce substance use in the high sensation-seeking (therefore high-risk) population (Palmgreen et. al., 2001).

Pederson et. al. (1991) also considered sensation-seeking behaviour in a study designed to test the influence of two constructs, mental health and sensation seeking, as predictive tools for illicit-drug use. Pederson et. al. found that mental health issues did not predict a tendency to future drug abuse, but sensation seeking did (Pedersen, 1991).

Concurring with Pederson et. al. is a study by Wills, Vaccaro & McNamara (1994) who investigated the relationship between personality type and substance use. This study concluded that sensation seeking had a significant correlation with substance use. Wills et. al. also found significant gender differences, with males demonstrating greater risk-taking orientation than females.
Sensation seeking may be related to the findings of Lee et. al. (1998), discussed in perception of risk (2.3.4. above). Lee et. al.’s reference to ‘fun’ orientation may be a similar measure to sensation-seeking orientation. They found that the perception that behaviour is high-risk is not sufficient to prevent some people from participating in the behaviour (Lee et. al., 1998).

2.5 The Gateway Hypothesis

The gateway hypothesis suggests that marijuana use leads to the use of other illicit drugs. This hypothesis is highly contentious, with prohibitionists arguing that marijuana is the first step on the road to hard drugs, and people who favour legalisation pointing to the fact that while 70+% of young people try marijuana, less than 2% use heroin.

There are three theoretical models used to explain the use of illicit drugs, and the potential to progress through different levels of use (Evans, 2001).

1. *Non-synergism* suggests that there is no relationship between a person’s tendency to participate in one form of risk behaviour and the likelihood of them engaging in other such behaviours (Evans, 2001).

2. *Simple synergism* suggests that a person who has a tendency to participate in risk-taking behaviour is likely to participate in other risk-taking behaviours, but that this does not indicate a causal relationship between one behaviour and subsequent behaviours (Evans, 2001). This theory appears consistent with the sensation-seeking model (Zuckerman, 1979).
3. *Gateway synergism*, which suggests that the act of performing one
behaviour (such as smoking marijuana) leads to experimentation and use
of other risk behaviours (using harder drugs) (Evans, 2001).

U.S. research conducted in 1994 claimed to have found 'evidence' of the
gateway theory by studying the 1991 National Household Survey on Drug
Abuse. This study highlighted the high incidence of cocaine users who had
smoked tobacco, drunken alcohol and smoked marijuana. The report looked at
'children' (12–17 year olds) and reported that ninety percent of children who
used marijuana had used alcohol and tobacco first; children who drink alcohol
were 50 times more likely to use cocaine than those who have not; and tobacco
smokers were 19 times more likely to use cocaine than non-smokers (CASA,
1994).

Reporting of this gateway connection between drugs has led to an outcry from
those who advocate decriminalisation. Critics point out that the fact that a
young person who uses cocaine also drinks alcohol and smokes cigarettes is not
evidence that one substance led to another (Morgan & Zimmer, 1995). The
statistical conclusions of the report have also been criticised. Morgan and
Zimmer (1995) rejected the CASA (1994) claim that young people who use
marijuana were 85 times more likely than non-marijuana users to try cocaine.
Morgan and Zimmer (1995) pointed out that this statistic was achieved by
dividing the small sample of marijuana users who have used cocaine (17%) by
the proportion of the sample who had not used marijuana, but have used cocaine
(0.2%) (Morgan & Zimmer, 1995). This explanation of the statistics implies
that marijuana users are destined to move on to heavier drugs, when in fact the
CASA study also found, but chose not to emphasise, that 83% of marijuana
users have never used cocaine (Morgan & Zimmer, 1995).
Another difficulty with the gateway theory is that tobacco and alcohol are legal drugs, and generally, alcohol precedes tobacco, which precedes marijuana use (CASA, 1994). Thus, to successfully argue the gateway theory it would be necessary to argue that both alcohol and tobacco should be prohibited. As Morgan and Zimmer pointed out, the vast majority of marijuana users never use any other form of illicit drug; thus marijuana use is a "terminus" rather than a gateway for most people (Morgan & Zimmer, 1995).

2.6 Gender Issues

Research indicates that males use cannabis more frequently and in greater quantities than females (Grella & Joshi, 1999; Raskin et. al., 1992). Western Australian statistics reflect these findings. Whilst the number of females who have used marijuana in their lives has increased significantly from 32% in 1995 to 42% in 1998, males were still three times more likely to have used cannabis in the past 4 weeks, and three times as likely to have used it in the past week (Australian Institute of Health and Welfare, 2000). Research has also identified that males are at greater risk of coming into legal difficulties as a result of their drug use, as they tend to be more likely to use drugs in a public place, and more likely to be involved in dealing or purchasing drugs from dealers (Hammer & Pape, 1997; Warner, 1999).

2.6.1 Gender Stereotyping

Research into the role of gender in illicit-drug use has reported that 'masculine' ownership of substance use extends to alcohol, cigarettes, and amphetamines (Raskin et. al., 1992). Historically the rules of conduct for genders has led to an expectation that females will behave in a 'respectable' manner, and it appears that this divide continues within society today, where being intoxicated is
considered 'normal’ for young males, but deviant for young females (Warner, 1999). This double standard leads to the perception that women who use cannabis regularly are behaving in a masculine way (Hammer & Pape, 1997).

2.6.2 Access to Marijuana

Further examination of this issue raises the possibility that differences in the usage patterns between males and females may be a question of access, rather than gender inclination (Van Etten & Anthony, 1999; Van Etten, Neumark, & Anthony, 1999). Examining the data from the National Household Survey on Drug Abuse in the United States (NHSDA), researchers acknowledged the greater incidence of males using marijuana, but found an interesting reason for it. Studying the data, Van Etten and Anthony (1999) determined that when the opportunity to use marijuana presents itself, females were just as likely to try marijuana as males. Therefore, a more complex scenario is proposed, where gender roles result in females having limited access to marijuana, leading to less use (Van Etten et. al., 1999). If females had equal access to marijuana sources, they were just as likely to use it as males.

2.6.3 Difference in Social Behaviour

In another study of gender difference in drug use situations, Moon, Hecht, Jackson and Spellers (1999) also found that social settings differ for drug offers between young males and females. In addition, this study examined the ways in which males and females are offered and respond to offers to use drugs. They found that females were able to say 'no' without explanation, but males tended to explain their refusal, opening the opportunity for peers to counter their arguments (Moon et. al., 1999).
Thus, there are differences between male and female access to, and use of, drugs. Some of these differences may be related to social expectations and the role of gender stereotypes. An important issue arising from these studies is that different social behaviour between the genders leads to greater access for males, but females provided with access to marijuana were just as likely to use it as males (Van Etten & Anthony, 1999).

2.7 Consumption Behaviour

Researchers have identified a relationship between use of alcohol and the use of marijuana. One of their findings is that the use of alcohol is more common among marijuana-using adolescents than non-marijuana users (Poulin & Elliott, 1997). Research has also established a link between problem alcohol use and marijuana use (Hammer & Pape, 1997). Similarly, there is a strong relationship noted between cigarette use in adolescents and marijuana use (McMill & Plant, 1996).

Understanding the links between these consumption behaviours can assist in determining appropriate strategies for social marketing campaigns, but there is debate about the role these products play from an economic perspective. Two opposing models have been proposed to explain the relationship between alcohol and marijuana use: (1) Substitution, and (2) Complementary products.

The substitution perspective argues that marijuana and alcohol are substitute products; thus when the price or availability of one substance alters, the demand for the substitute product moves inversely (Chaloupka & Laixuthai, 1997; Hammer & Pape, 1997). Hammer and Pape (1997) found that laws increasing the consumption age of alcohol in the U.S. from 18 to 21 years had seen a rise in the use of marijuana in young people. Chaloupka and Laixuthai (1997) found that if alcohol prices rise, marijuana use increased. They stated that the
decriminalisation or legalisation of marijuana would lead to a reduction in the price of marijuana, and thus an increase in marijuana use. This concept is based on substitution theory where a product (marijuana) is seen as a direct replacement of another product (alcohol). The premise of their study suggests a decrease in the price of marijuana at a time when alcohol prices remained stable or increased, would lead to substitution of marijuana, thus a decline in the use of alcohol by adolescents. Importantly, Chaloupka and Laixuthai (1997) believed that this shift would also reduce the use of other illicit drugs. They proposed that this change in consumption behaviour would have impacts on the social costs of alcohol and other illicit drugs, reducing motor vehicle accidents, violent crime and other medical emergencies. They concluded that a shift of resources away from these areas would provide greater funding for enforcement measures against the use of other illicit drugs (Chaloupka & Laixuthai, 1997 p. 275).

Conlin, Dickert-Conlin & Pepper (2001) also supported the substitute model in their paper which reviewed the unintended consequences of alcohol prohibition. Conlin et. al. (2001) claimed that their study highlighted the biases in other studies that have shown alcohol and marijuana to be complementary products.

This debate is significant; in contrast to the studies quoted above, the studies that have found a complementary relationship between alcohol and illicit-drug use argue that prohibiting supply or raising prices of one product will reduce the use of another. Thus, several studies have claimed that increasing the price of alcohol will reduce the use of illicit drugs generally (Farrelly, Bray, Zarkin, Wendling, & Pacula, 1999) and marijuana specifically (Pacula, 1998). The substitution perspective has opposite implications, where the restriction of supply or increase in price of one product will lead to increased use of the substitute. Clearly, the contradiction between substitution and complementary product usage is one issue that requires clarification before social marketing
strategies can assume a relationship between restrictions of one product to influence the use of another.

These studies focus on economic theories, and use data relating to outcomes, such as Conlin’s (2001) review of drug-related crime. This could provide only part of the picture, as it does not take into consideration use behaviour among the many young people who do not commit crime, but use marijuana and/or alcohol. Furthermore, these studies do not examine primary data from drug users, which would provide valuable insight into their perceptions of substitution vs. complementary use behaviour.

2.8 Conclusion

This chapter has highlighted the historical background to prohibition, the history of social marketing messages designed to achieve primary prevention, and the debate surrounding the perceived failure of this policy. The literature raises the debate between those who advocate ‘no-tolerance’ prohibition and those who promote the philosophy of harm minimisation.

This review of studies has also highlighted some of the behavioural influences on young people dealing with drug-use issues in their social world. The potential measure of sensation-seeking orientation combined with an understanding of how peer pressure scenarios can occur, offers an alternative understanding to traditional beliefs about low self-esteem.

The following chapter will look at a theoretical framework for assessing the influence of levels of drug use on source credibility and message credibility. Chapter 3 also presents Festinger’s (1957) model of Cognitive Dissonance Theory as a potential basis for understanding present and future decision-making by young people who use marijuana.
Chapter 3: Theoretical Framework

This chapter examines the theories that underpin the research questions in this study. Two fields of theory are explained, firstly, communication theory, which includes source credibility and message credibility; and secondly, Cognitive Dissonance Theory which provides a basis for interpreting the decision-making process.

3.1 Communication Theory

3.1.1 Source Credibility

Source credibility relates to the role of the source of a message in the communication process. The concept of source credibility is based on the premise that no message is received independently of its sender. In other words, when a message is received, the source of the message influences the receiver’s interpretation of the message. Thus, the persuasion and influence the message has on the receiver is influenced by the receiver’s image of the sender (Hovland & Weiss, 1951; Petty, Cacioppo, & Goldman, 1981; Booth-Butterfield & Gutowski, 1994; Stern, 1994; Hamilton, 1998; McCroskey & Teven, 1999).

The origins of source credibility date back to Aristotle, who believed there were three dimensions to source credibility: intelligence, character, and good will (McCroskey & Teven, 1999). Hovland and Weiss (1951) identified expertness and trustworthiness as the key dimensions of source credibility. Expertness is the degree to which the audience perceives the source to be competent in the field. Competence comes from the source’s training, ability, and experience with the message subject. Trustworthiness is the extent to which the audience believes the source will be truthful (Hovland & Weiss, 1951). The perception that a source has specialised knowledge and is willing to share this knowledge
honestly, creates credibility. Source credibility requires both of these constructs. That is, to have expertness but lack trustworthiness or vice versa reduces the credibility of the source in the eyes of the audience.

The role of source credibility has been the focus of a number of studies. Hamilton (1998) investigated the influence of a receiver's response to the source when processing messages. This study found that receivers of the message who were influenced by 'authoritarianism' were more likely to be influenced by the credibility of the source, and that receivers of the message who were 'emotionally based' were more influenced by their liking of the source (Hamilton, 1998).

Hamilton (1998) also investigated the way receivers of a message respond to the message sources. Anxiety toward the source is likely to occur in people who respond with fear toward threat-based messages. This anxiety leads the receiver to avoid any further communication with the source. For those that respond to threat messages with anger, hostility toward the source is the likely result, which can result in aggressive responses to future messages from that source. Anxiety and hostility were both found to invoke resentment toward the source of these messages, creating barriers to future communications (Hamilton, 1998).

In summary, the way a message is received is influenced by the receiver's interpretation of the source's trustworthiness and expertise in the subject area (Lovland & Weiss, 1951). Evoking fear or hostility through threat-based messages can damage the opportunity for further communications from the source (Hamilton, 1998). Thus, the role of source credibility appears to be vital to achieving persuasive communication of social marketing messages.
In Western Australia, the Government has placed significant emphasis on targeting parents of young people to encourage parents to act as a social marketing distribution channel, providing messages about drug use to their children. For parents to be effective communication channels they must be seen as a credible source of information on drug issues. Qualitative research conducted by the Health Department of Western Australia indicated a problem with parental credibility among some research participants, who saw parents as uninformed and out of touch (Health Promotion Services, 1996). Despite these findings, the Western Australian Drug Aware policy focuses on the credibility of parents and teachers as sources to communicate with young people.

The decision to use parents as a focus for its campaigns was based on research conducted in the United States (Health Department of Western Australia, 1999). Three research papers relating to the influence of parents on substance use are referred to in the Health Department’s strategy of targeting parents (Health Promotion Services, 1996). One of these papers investigated source credibility in drug messages to determine that parents and teachers were the most trusted and credible sources among a sample of 223 adolescents (Mayton, Nagel, & Parker, 1990). Twenty-seven secondary school principals selected the respondents to provide a cross-section of the school community (Mayton et al., 1990). Given that the overall objective of this research was to measure the effectiveness of drug education, and was funded by the U.S. Department of Education, the likelihood of school principals providing an unbiased selection of students is open to question. Furthermore, the research did not report any measurement of the respondents’ experience with drug use.

The two other papers referred to in the Health Department’s strategy related to the communication relationship between young people and their parents. Kafta and London (1991) reported findings from a study of 37 students in New
England, which identified that non-users have open communication channels with parents but users do not. Again, this study should be viewed with caution, as the small sample is not generalisable. The third paper by Coombs, Paulson, & Richardson (1991) investigated the role of parental influence on 446 Anglo and Hispanic youths, aged 9-17. This study determined that youths who have 'a viable' relationship with their parents were less involved in drug use and less influenced by drug-taking peers. These papers all indicated that parents were a credible source of information for young people who do not use drugs. They also indicated that parents were not a credible source for young drug-users.

3.1.2 Message Credibility

Message credibility relates to the role of the message in the communication process, and assumes that messages in themselves have credibility issues independent of the sender and receiver (Slater & Rouner, 1996). Communication involves a complex interaction between many factors. Hovland and Weiss (1951) determined that attitude change required learning and acceptance of a message, and though learning was not dependent on source credibility, acceptance was. This definition implies that it is possible to learn the contents of a message, but the receiver must see the source as credible if the message is to be internalised.

Slater and Rouner (1996) determined that the components of the message do influence the believability of a message, regardless of source, in low-involvement situations. Thus in situations where the receiver of the message has low levels of involvement in the content of the message, the source has less influence (Slater & Rouner, 1996).
Hamilton's (1998) research (referred to in the above section under source credibility), determined that the quality of the argument (i.e. the message) was most persuasive with receivers who were rationally based (as opposed to emotionally based). Emotionally based receivers were more influenced by their liking of the source or their emotional response evoked by the message.

Given the complex nature of communication, there are many factors that impact on the process of message processing (Booth-Butterfield & Gutowski, 1994). For instance, the mode of the message (e.g. radio, television, newspaper) and the credibility inherently associated with that mode (WHO magazine vs. Business Review Weekly) has a role to play in the credibility of a message (Booth-Butterfield & Gutowski, 1994). The interaction between message, source and modality is an extremely complex model that has multiple possibilities.

Though debate about the roles played by message, source, and mode continues, there is no doubt that both source and message credibility play an important role in effective social marketing campaigns. This research investigates the possibility that personal experience of drug use will reduce (1) the credibility of a source that advocates a prohibitive stance to drug issues, and (2) the credibility of prohibitive anti-drug messages.

3.2 Theory of Cognitive Dissonance

Festinger (1957) introduced the theory of Cognitive Dissonance, which states that when making a choice between two conflicting options the subject will experience discomfort until they make a decision. Following the choice, the subject will then overvalue the option chosen and devalue the rejected option.
Post-decision dissonance is the term used to describe doubts or concerns that individuals experience following a decision. The process of relieving post-decision dissonance involves selecting information that confirms the decision, and avoiding or discounting information that contradicts the decision. Research into this phenomenon has discovered consistency in this behaviour over a wide range of decision-making settings, including purchase, business and personal issue decision-making (Jonas, Schulz-Hardt, Frey, & Thelen, 2001).

In the case of this study, we expected dissonance to occur when the subject’s beliefs (based on messages from parents, society and teachers) about drug use conflicted with information from peers or their personal experience. Cognitive dissonance theory says that this contradiction will cause a state of discomfort that is relieved by seeking information to determine the most credible source. The level of discomfort experienced will depend on the extent of the difference between the initial beliefs and experience.

In a major study conducted in the United States into the effectiveness of drug education campaigns, Brown (1997) identified the problem of cognitive dissonance among the students. Brown found that to resolve the conflict students experienced between the information they were receiving in school drug education and their own experiences, students concluded that educators were lying to them. “Our survey results are also consistent with this contention... beginning in middle school, the resolution of cognitive dissonance appears to result in many students asserting their own decision-making power and dis-identifying with educators and programs” (Brown, 1997, p. 67).
Glassner & Loughlin (1987) point out that all young people were once non-drug-users. Those who remain non-users receive consistent reinforcement of their decision through traditional sources (media, parents, police, governments). Cognitive dissonance theory suggests that this reinforcement of their decision would result in low levels of dissonance, and the credibility of traditional sources would remain high.

This study investigates whether young people experience cognitive dissonance when presented with the opportunity to use marijuana. It proposes that when presented with conflicting information, through a pleasurable experience of taking drugs, or witnessing others enjoying themselves, some individuals may experience cognitive dissonance. Cognitive Dissonance Theory suggests that as the level of dissonance rises, the subject looks for information to reduce the discomfort. At this point, the credibility of the source becomes critical. The initial source (society) may be less credible in the light of personal experience; thus other sources, such as peers, are sought to provide additional confirming or disconfirming information. If the peer group reinforces the individual's experience (feeling lied to, feeling that society has cheated them of something good) the credibility of the peers rises, as the credibility of the initial source declines. Comfort comes from rejecting the previously held beliefs (and in the case of Brown's (1997) study quoted above, seeing the source as liars), and adopting the new source.

Once the non-user has moved to user status, cognitive dissonance theory suggests that they will seek information that confirms their decision. In the case of using illicit drugs, they will seek grounds on which to discredit traditional sources. If this scenario holds true, the power of the peer group is evident. Furthermore, this study raises the question whether this process leads marijuana users to be more resistant to anti-drug messages for other illicit substances.
3.3 Conclusion

The theoretical underpinnings of this research revolve around communication theory (the role of source and message credibility) and decision-making theory (the theory of cognitive dissonance). This study looks for evidence of these theories influencing the decision-making and behaviour of young people when talking about illicit-drug issues. The following chapter presents three preliminary studies. The first study looked to experts in the field of drug prevention to review the issues raised by the research problem. This study provided insight into the political realities that lie behind drug-management strategies. The second small study is a document review of policies and public statements made by The Hon. Ms. Rhonda Parker MLA, then Minister for Family and Children’s Services. This secondary data study was necessary as Ms Parker was unavailable to take part in an interview as part of the expert interview study. The third background study investigated the target market using a projective technique to explore source credibility.
Chapter 4: Background Studies

Three background studies investigated the issues surrounding the research question of the main study.

- Firstly, interviews with experts in the illicit-drug prevention and social marketing fields provided their perspective on issues surrounding the research questions.
- Secondly, a content analysis was conducted of the speeches and policy documents of the Minister for Family and Children’s Services, The Hon. Ms. Rhonda Parker MLA, to supplement the expert interview study.
- Thirdly, a small projective technique survey with members of the target group (18-24 year old males and females) investigated the dynamics of source credibility.

This chapter outlines the results of these three studies.

4.1 Expert Interviews

Expert interviews investigated the issues that influence Government decision makers and lobbyists regarding illicit-drugs policy. These interviews provided insight into the perspective of those working in the field, and their perception of the issues surrounding the research proposed in the main study. Expert interviewing is a method of data collection that uses purposive sampling (Trochim, n.d.). Purposive sampling is used when a sample is needed that represents specific characteristics, such as expert knowledge (Trochim, n.d.), as was the case in this study. Some of the respondents were selected because they held positions involved in decision-making about drug policy, or at least the
interpretation and/or implementation of that policy. Others were selected because they represented organizations lobbying for drug policy change. A deliberate process of seeking a wide range of political views was undertaken to ensure a broad perspective of the issues involved was gathered.

In a couple of cases, the appropriate experts to interview were identified through a snowballing technique, where discussion with one individual highlighted the value of interviewing another (Trochim, n.d.). This process ensured that the participants chosen were actively involved in the drug policy process.

4.1.1 Interview Method

In-depth interviews conducted with five key players in the drug debate provided a cross section of perspectives and political agendas. One-hour interviews were conducted with each of the participants, in their offices. Each interview was tape-recorded for transcription.

The interviews were unstructured, and each interview involved different questions, depending on the interviewee's role. Unstructured interviewing is a form of exploratory research that deliberately avoids pre-arranged questions (Trochim, n.d.). In this case, a broad range of relevant topics guided the interviewer. The objective of this study was to seek knowledge about the realities of illicit-drug policies making in W.A. To achieve this, the researcher guided the interview, but allowed the respondents to explore issues that they saw as relevant.

One of the limitations of using unstructured interviews is that the data can vary significantly between interviews, making analysis difficult (Trochim, n.d.). In this study, the focus was on one topic, and the respondents were each well
informed on the topic, thus this limitation did not obstruct the value of the research.

The lack of anonymity implicit in expert interviews (Jankowicz, 1995) can lead participants to mislead or disguise their personal attitudes and beliefs. This process was evident with some participants, who were initially anxious to avoid politically sensitive issues around the State Government’s drug policy. Nonetheless, as the interviews progressed they became more candid, and the responses appeared more genuine. In two cases participants requested that some of the opinions they disclosed be withheld from publication. The researcher has complied with this request.

Individuals, and the organisations they represent, have not been identified in this section. Identifying organisations leads to defacto identification of individuals in some cases, and therefore it was decided that anonymity would be maintained in all cases.

Interviews were conducted with representatives of the following organizations: the Western Australian Health Department, the Police Department, Western Australian Drug Abuse Strategy Office (WADASO), the Australian Drug Law Reform Foundation, and the advertising agency responsible for designing social marketing messages for the Health Department.

4.1.2 Interview Analysis Methodology

This background study looked at (1) developing an understanding of the local issues relating to illicit-drug use, and (2) to identifying areas of congruence, and areas of disagreement. The transcripts were coded for themes relating to the research question, and for other themes that emerged. These transcripts were
then viewed as a whole, looking for overall congruence, and for congruence between specific participants. Throughout the results section, verbatim are shown in italics.

4.1.3 Background to the Western Australian Policy Position

To understand the Western Australian "Together against Drugs" strategy, there are a number of concepts that require explanation. The strategy is based on a three-pronged approach – supply reduction, demand reduction and harm minimisation. These concepts, discussed in Chapter 2, are restated here.

1. The police and customs departments undertake supply reduction strategies. The police attempt to prevent supply by detecting and incarcerating drug dealers. Customs seek to prevent illicit drugs entering the country through border controls.

2. Demand reduction is the Government's attempt to reduce the demand for drugs through education and legislation. Education is a method of primary prevention that seeks to convince the public to reject drug use. Legislation is used to sanction those who ignore this education.

3. Harm reduction (or harm minimisation) requires the implementation of strategies to educate drug users to minimise the risks they take through personal drug use. These strategies include programs such as the needle exchange for injecting drug-users, and methadone programs for reforming heroin addicts. Harm minimisation assumes that educating young people to use drugs responsibly can reduce the risks associated with illicit-drug use.
4.1.4 Results

One issue all of the respondents agreed on is that anti-drug social marketing is a highly politicised area. The sample represented many points along the political continuum, from the conservative right which believes in zero tolerance and total prohibition, to the far left, which believes that drugs are not an issue that can be dealt with through legal sanction.

4.1.4.1 Harm Minimisation Debate

A debate exists among those dealing with illicit-drug use as to the type and extent of harm minimisation that should occur. Given that illicit drugs are by definition, illegal, it is inherently difficult to promote harm minimisation without implying acceptance of drug-taking behaviour. This quandary places the Government and those responsible for government policy in a difficult position.

Whilst some respondents believed that harm minimisation was already being implemented in Western Australia, one person stated that: 'The Australian Government and the WA government are very conservative governments. They are following the U.S. line, marketing the whole thing as this evil... thing we have to have a war on... Illicit drugs are illegal because they are dangerous. In fact, all drugs carry dangers, including the legal ones, and making drugs illegal like they are at the moment leads to more dangers being associated with them. I don't advocate free availability of all drugs by any means, but I think that what we have at the moment is a harm maximisation policy.'

The following perspective provided one view of how the political agenda influences policy: 'what they (the previous Liberal WA Government) promote is total abstinence. I think the way it seems to work with this government is they
listen to the general ill-informed population, hear what they want – you know they want to be able to lock up their kids, they want to be able to stop their kids using. I really do believe that to keep their jobs most government advisers will basically tell the Government what they want.’

All respondents provided some level of support to harm minimisation as an unavoidable need born out by the reality that drug abuse does and will occur. One perspective was that the harm-minimisation approach was a functioning part of the drug strategy: ‘... one thing I don’t see the strategy as is a crusade against drugs. I think a crusade against drugs would end up like the Crusades, it would be a bloody mess. We would just have people bashing each other over the head. Our job is to put forward a coherent strategy that has an impact on the amount of drug abuse, and the harm that that causes.’

The position of the Police as law keepers makes the role of law enforcement extremely complex when dealing with harm minimisation issues. The following verbatim was provided by a representative of the Police Department: ‘Where do we sit? I think we have to sit more to one side than to the other. We certainly have to oppose drug use, but we are not right on the end of the scale. Understand that there is a reality involved that people are going to use drugs; we are not going to be able to stop drug use completely. So although our efforts are mainly to that aim, there are two other aspects there, harm reduction and demand reduction, and we need to supplement those two strategies as well.’

4.1.4.2 Message Backlash

Whilst all of the respondents supported the idea that some degree of harm minimisation is necessary, most felt that harm-minimisation social marketing has the potential to encourage drug use by raising awareness in the youth
population: 'I think there is a fear associated with drug information too, that you might awaken that curiosity and encourage experimentation. '

'The difficulty with messages aimed at youth and drug education, with too much information around it does actually inspire people's interest as well. '

'School drug education is your classic, talking about drugs in class will have the opposite effect from what you seek, for some kids. You can do all the group data and hope that the 99% will have the desired effect, and for the other 1% it is neutral, but in fact you have the opposite effect for some kids.'

Jaynes (1988) and Peele (1985) expressed concerns that promoting drug prevention creates a backlash effect. They indicated that increasing adolescent awareness of illicit drugs through social marketing could lead to experimentation (Jaynes, 1988; Peele, 1985).

4.1.4.3 Normalisation

Normalisation is the process of a behaviour becoming so common in society that it is seen as 'normal'. The idea that adolescents see marijuana use as 'normal' teenage behaviour was referred to: 'We are still battling against it [marijuana use] but it is expected to be around and it is expected, I think, that young people have that choice.

Another respondent referred to the prevalence of use illustrated by statistics: the figures now are showing that it is so widespread it is scary.' All respondents expressed the belief that marijuana use among young people had reached normalisation level in Australian society.
4.1.4.4 'Denormalisation'

The dilemma facing social marketing in the area of marijuana and normalisation is that, to 'denormalise' it as the United States Government is endeavouring to do (McCaffrey, 1998), there is a need to raise awareness of the negative side effects of cannabis use: 'We need to chip away at the myth that marijuana is a harmless drug.' The difficulty with 'de-normalisation' is achieving source and message credibility with a sceptical target audience. The following is a discussion of how these experts view source and message credibility with illicit-drug campaigns.

4.1.4.5 Source and Message Credibility

Some of the respondents saw source credibility as a critical issue that may be undermined by the Government branding of illicit-drug campaigns: 'Credibility is a huge issue for us. Where we are run by political need, there is always going to have to be the branding on it, the Government branding. It is not necessarily long term the best way to go, in my mind, but we are constrained by that.' The contentious nature of the Government branding used in anti-drug social marketing was acknowledged by some respondents: 'It is an interesting question ... it is put forward ... that the Government undermines the credibility of health messages with illicit behaviours ... I guess for those people that we are trying to reinforce negative attitudes, no worries -- no detriment at all I suspect. I am sure it is a disadvantage with some, but I don't know whether it is a disadvantage with all.'

Some respondents believed that the Government's desire to be "seen to be doing something" in the eyes of a worried electorate was the motivation behind government branding of social marketing messages.
The government was not the only source that was considered to have credibility problems. The focus on parents as a credible information source about drug use was an area of debate among the professionals interviewed when dealing with this issue. In line with the U.S. approach, the first and highest priority of the Government’s social marketing efforts was to raise parental knowledge about illicit-drug use and encourage informed discussion between parents and children on this issue. There is a parent education phase in each stage of the drug strategy.

Some of the respondents expressed cynicism about the concept that parents were a credible information source: ‘The Health Department are giving a lot of information to parents. I believe parents don’t want to talk about it, and kids don’t think their parents are credible, because they get pissed, or they hold their peers in higher regard than their parents. The only time parents are credible is with young children, maybe to the early teens. Anyone over 14 is starting to develop their own identity and they are not going to say, “yeah ok Mum and Dad.” ’ One respondent pointed out that parents could lack credibility when their personal behaviour contradicts the message: ‘The credibility of the presenter is important. I mean, they see adults saying to them “don’t use cannabis”, but watch their parents get smashed every weekend or whatever. So no wonder they say, “Yeah sure Dad!” ’

Some support for parent involvement was given, but with a different agenda to the present government programs: ‘I actually think that it is useful having a focus on parents, but the focus needs to be helping parents communicate with their kids, helping parents to understand drug abuse, and what is going on. How to negotiate all that stuff with their kids, how to maintain a relationship with their children and continue loving them even if they are doing these other things. How to react appropriately to drug use without making them feel
rejected.’ This respondent was advocating maintaining parent/child relations, regardless of drug use, and encouraging parents to act as a source for harm minimisation, not prohibition.

4.1.4.6 Research Question Testing

To conclude the interviews, respondents were asked to comment on the following opinion relating to user status:

It has been suggested that young people are very open and accepting of anti-drug messages before having any personal experience with drugs. As they get older and come into contact with drugs through their peers or elders, they are confused by the conflict this causes – the messages they have believed and accepted on one hand and the evidence before them that drugs are fun and harmless on the other. This confusion forces them to make a decision, reject drugs and their personal experience, or reject the social messages and thus discount the credibility of society’s knowledge about drug use. If their own experience leads them to perceive that the messages they have previously believed are wrong, they will not only reject those beliefs, but will also become unreceptive to any further messages from this source. This will make it very difficult for society to communicate important information about risks of other drugs, as the channel of communication has been damaged, or severed.

All of the respondents, including those on the conservative end of politics, deemed this opinion feasible and worthy of examination: ‘It sounds plausible and reasonable. I haven’t seen any evidence or proof. I probably say it would go that way.’
'Yeah, Yeah, absolutely. That would be very helpful research. Intuitively I think it is very relevant. The way we respond to that, knowing it is intuitive. When we pitch at the margins, say, in order to be effective, marijuana users have to see our campaign and say, "yeah, that's fair enough". Certainly not, reject it out of hand. We have to have credibility with those users, otherwise they will totally undermine our credibility.'

'I completely agree with you about that. It makes absolute sense. I think that really reinforces... the need for high school kids that are using to somehow get access to really good harm reduction information and really good accurate information that they are going to believe about drug use.'

'Those who have tried cannabis are less negative to ecstasy and LSD, those who have tried LSD are less negative to ecstasy and heroin, there is a definite increase in tolerant attitudes, or increasing, I guess, positive perception toward what the experience is going to be like. I think that backs up your hypothesis. One of our main problems in this area - we are a government organization putting out the information. So, we have an immediate credibility problem. WADASO are directed to take a total abstinence message, and we are to a certain extent here, so you can't put out a booklet that says these are the good things, these are the bad things, here is how to use the drugs safely. And yet it is my personal belief that that is how you get credibility with young people.'

This background study supported the need for research that investigates the issue of source credibility with young people, according to their user status. Further, this study supported the need for investigating cognitive dissonance responses toward other illicit-drug messages from young marijuana users.
4.2 Content Analysis of The Hon. Rhonda Parker MLA's Drug Policies

As a result of The Hon. Rhonda Parker being unavailable to assist with this study, a content analysis was undertaken of various public documents relating to her role as Minister for Family and Children’s Services. Analysis of the speeches and policy documents of the The Hon. Rhonda Parker MLA provided some clear statements in relation to the issues discussed in the expert interviews. She stated her perspective of the harm minimisation debate in a speech at the Drug Reform Forum held at Christ Church Grammar School, Perth: ‘I believe, and the Government believes, that the policy that has failed Australia has been the unchallenged and non-quarantined pursuit of harm-minimisation policies right around the country throughout the eighties and early nineties’ (Parker, 1999, p. 1).

Ms Parker advocated a strong stand against illicit drugs. One of the objectives she stated when she launched the Drug Aware Marijuana Public Education Campaign in August 1998, was to increase the target audience’s perception of risks associated with using marijuana: ‘A large body of research is available to counteract the myth that has developed over recent years that marijuana is not harmful. This myth has strong currency, particularly with young people and needs to be counteracted as a matter of urgency’ (Parker, 1998, p. 3).

Though Ms Parker clearly believed that young people see marijuana as ‘not harmful’ she states that the Government is not willing to accept normalisation as a reality. ‘This Government will never give in to drug abuse as an entrenched reality in our community. The second Together against Drugs strategy to be launched in August this year will further expand and strengthen the comprehensive set of strategies released two years ago. It will maintain as its first principle opposition to drug abuse. I have said before, and I say it again,
the Government will not engage in the politics of surrender and capitulate to drugs in our community' (Parker, 1998, p. 5).

4.3 Source Credibility: A Projective Technique Study

4.3.1 Introduction

This exploratory research was conducted using a projective technique (Donoghue, 2000; Fram & Cibotti, 1991; Miller, 1991; Richman, 1996) to access underlying beliefs held by respondents toward three stimuli depicting stereotypical images. The images were of a teacher, parents, and an X generation male wanting to talk to them about drugs. This background study was undertaken to inform the methodology of the main research question.

4.3.2 Stereotypical Images

All three images were chosen to project a similar happy, friendly approach, so that variance in perceptions would not be based on facial expressions. All three images were unanimously recognised by participants as representing the roles they were chosen to portray. It should be noted however that the teacher image was of an older female teacher, and may not project and appropriate image to assess teacher credibility.

Firstly, the teacher image was female, middle-aged, and positioned in front of a blackboard to clearly denote the teacher role. Secondly, the parent image
showed a couple aged in their late 30s to mid 40s, sitting on a couch and looking happy and welcoming. The generation X male image was difficult to choose, as many media images tended to be negative or unfriendly. The image chosen was of Mark Occopuluka, a world surfing champion. This image was friendly and his surfy appearance was presumed to appeal to the target audience.

The three images had speech balloons that contained the words ‘I/We want to talk to you about drugs’. These words were chosen to avoid any direct inference as to whether the images would present a positive or negative view of illicit-drug use.

4.3.3 The Sample

The sample selection matched the main study category - aged between 18 and 24 years. Four males and four females participated.

Participants were recruited using convenience-sampling strategies. Three males and one female were recruited at the University of Western Australia refectory during lunchtime. The remaining participants were recruited through personal contacts.

All of the participants were asked if they would be willing to participate in the research. They were informed that they would be asked to look at a number of images and write their impressions on a piece of paper. Respondents were informed that they were free to write anything that came to mind and that there were no right or wrong responses. After they had responded to the images, they completed a brief survey on personal drug use (see appendix 1).
4.3.4 *Analysis Methodology*

Content analysis (Donoghue, 2000) was used to derive meaning from the data. The responses were categorised according to drug experience to determine similarities and differences between the responses.

4.3.5 *Results*

4.3.5.1 *Drug Experience*

All but one of the respondents had some personal experience of being with people using illicit drugs. Of those who had used marijuana, most had used very lightly. Two of the respondents had used illicit drugs other than marijuana, one moderately heavily.

**Table 4.1 Incidence of Drug Use by Sample**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Female</th>
<th>Male</th>
<th>Male</th>
<th>Male</th>
<th>Male</th>
<th>Female</th>
<th>Female</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>19</td>
<td>18</td>
<td>22</td>
<td>18</td>
<td>24</td>
<td>20</td>
<td>23</td>
<td>18</td>
</tr>
<tr>
<td>Marijuana</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-4 times/week</td>
<td>Once/month</td>
<td>Twice</td>
<td>Once</td>
<td>Once</td>
<td>Nil</td>
<td>Nil</td>
<td>Nil</td>
<td></td>
</tr>
<tr>
<td>Ecstasy</td>
<td>Monthly</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dexamphet-amine</td>
<td>7 times in life</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Speed</td>
<td>2-4 times/yr</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LSD/Trips</td>
<td>Twice</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4.3.5.2 The Teacher Image

The teacher image was problematic in this study, as the style and age of the teacher in the image was outdated. The following section is a brief review of the response elicited from respondents. Some said: 'Inadequate ... unknowledgeable ... not telling me from experience'; 'No idea... Old'; 'Out of touch'. These respondents also related their imagined feelings on hearing her message: 'Tune out'; 'Not listening... switch off.' One of the respondents perceived the message she is sending to be: 'Drugs kill... Youth Today ... Death ... Police.'

Some perceptions of the teacher image were more positive, describing the teacher as: 'A friendly mother-type figure.' All of these respondents, however, saw her as the type of teacher who would tell but not listen: 'Happy smiling, like she wants to talk to you, but doesn't want to listen and talk about real issues.'; 'I would not feel comfortable talking to her openly and honestly about drugs.'

Thus, it appears that the teacher image may have been too old and not sufficiently approachable for any of the sample. One respondent commented that she was a 'traditional-looking teacher', but it is possible that this image was too limited by her stereotypical appearance to encourage a discussion on the validity of teachers as a source of credible drug information.
The parent image provoked a variety of responses. Of particular interest was the fear that this image evoked in some respondents: 'Parents – Punishment'... 'In Trouble'... 'What would they know?' Some respondents also saw some positives associations in this image: 'homely'... 'support'; but these responses came as secondary thoughts to predominantly negative comments. One respondent saw the image quite positively: 'parents trying to discuss drugs in a friendly, caring environment.' She noted however that this response is dependent on the relationship the child has with their parents.

Other positive responses related to the impression that they were happy and relaxed and were seeking an open discussion: 'Non-threatening'... 'informal'... 'make you feel at ease.'

Another factor that may affect the data in this study is the age of the participants. The two respondents, who were highly negative about the parental image were both 18-year-old males. Their relative youth may have affected their perception of parents in a controlling, punitive role. If their age is a significant issue in interpreting parental roles, it should be noted that the Western Australian Government drug strategy focuses on parents of young people (16-20 years) to
access information and discuss drugs with their children (Health Department of Western Australia, 1999).

4.3.5.4. Male Youth Image

The image of the young man also provoked a mixed responses. Some viewed the presenter to be incongruent to the message: 'Paid'; 'Advertising'; 'False, forced to say it'; 'Quote doesn't really seem to fit'; 'Doesn't appeal to me'.

Others perceived that he might have been involved in drugs and trying to help others: 'someone who may have been there himself, trying to make kids listen'.

In contrast some perceived him as 'cool' and 'more in touch with issues actually faced by young people.' 'Drugs are cool... he is cool... you feel happy to speak to him about drugs and other problems.' The interpretation that this young man was saying that drugs were cool was a strong contrast to the respondents who assumed that he was going to give an anti-drug message.

This sample is clearly too small to provide generalisable results. Furthermore, there may also be other factors, such as social class or youth culture orientation
(i.e. surfing vs. skateboarders) that influences the appeal of this particular image.

Being with Peers Using Drugs

In response to an open-ended question on the experience of being with people who were using drugs, some responded that the experience had been a negative one. This experience had confirmed one girl's decision not to use drugs, and raised concerns among others about the impact drugs have on the user: 'Not much fun or very social'.

One respondent commented that he had a friend who had died of a drug overdose, but on the other hand, he had: 'seen and had lots of great times.' Another perspective: 'When drugs are used irresponsibly and control lost, people tend to lose respect in my eyes. Need to have a mature outlook and realise other things are more important.'

4.3.6 Discussion

This study provided some very exploratory data in relation to the experiences of young people when dealing with illicit drugs. Though the sample size was inadequate to draw any significant conclusions, it did provide some insights into the vast array of perceptions that can exist in the area of source credibility

4.4 Conclusion

These studies were conducted to provide insight into the dynamics of the issues influencing the research question. The findings provided an understanding of 'expert' perspectives of the research problem, and validated the importance of the research question. The projection study provided some insights into the dynamics of source credibility. This information provided background information that assisted in the development of the main study research methodology, which is presented in the next chapter.
Chapter 5: Methodology of the Main Study

This study employed two forms of qualitative research to explore the research question. Firstly, focus groups investigated the effect that levels of marijuana use have on young people’s acceptance of anti-drug messages. Secondly, in-depth interviews examined further the issues raised in the focus groups, and supplemented the groups with low attendance.

This chapter examines the issues involved in using a qualitative framework and the limitations that are inherent with this methodology. The sampling frame, sample size and recruiting methods are described. The chapter concludes with a description of the analysis methodology.

5.1 Qualitative Research

Giacomini & Cook (2000) defined qualitative research as “a process of summarizing and interpreting data to develop theoretical insights that describe and explain social phenomena such as interactions, experiences, roles, perspectives, symbols, and organizations” (p. 478).

Qualitative research methodologies are used when the research question requires exploration, either due to the lack of knowledge in the research area, or due to the sensitive nature of the topic (Sampson, 1996). The research question in this thesis is both exploratory and sensitive in nature. This study seeks to investigate the role of social marketing as a preventative influence for young people dealing with illicit-drug issues. There is little previous research on which to base this study; thus an explorative approach is appropriate. Furthermore, the question
requires a qualitative approach to delve into the private and sensitive nature of youth decision-making regarding an illegal substance (E.M.C.D.D.A., 2000).

Qualitative research is often contrasted with quantitative analysis, where sampling of a population provides 'valid' statistical evidence, considered 'facts' (Fischer, 1998). This view however, should be tempered by an understanding that the validity of all data, both quantitative and qualitative is influenced by the skill of the researcher (Mays & Pope, 1995). Qualitative research cannot, and does not try to establish 'facts', but rather it attempts to illuminate the multifaceted human experience that results in behaviour (Fischer, 1998). In the case of drug use, it has been recognised that qualitative studies provide a valuable contribution to understanding the behaviour of 'hidden' populations, and understanding the meaning and experiences of drug use and the social context within which drug use occurs (E.M.C.D.D.A., 2000).

Quantitative (also called positivist) research assumes an unchanging world where variables can be controlled and manipulated, and studies replicated (Punch, 1998). Qualitative research acknowledges the fluidity of society and the constant changing relationship between variables (Punch, 1998). Each has its role to play in research.

Qualitative and quantitative methodologies are often posited as opposite, mutually exclusive paradigms (Baum, 1995). However, there is growing recognition that both qualitative and quantitative research has a valuable role to play. The research question should dictate the appropriate research methodology. Researching human behaviour is a complex task that benefits from the use of a diverse range of research methodologies (Baum, 1995).
The research question in this study dictated the need for a qualitative approach. Insufficient knowledge exists about the differences between varying levels of marijuana use and the impact this has on source and message credibility (if any). Qualitative methodology allowed the research to delve deeply into the rich data of human experience and seek an understanding of young people's experiences, decision-making behaviour, and attitudes toward illicit-drug use.

5.1 Limitations

While qualitative research offers an opportunity to look deeply into a research question, this depth comes at the price of generalisability. The data from this study do not provide information that can be assumed to represent the experiences of the population in general, or even any particular group within society, other than the respondents themselves.

Though this factor reduces the predictability of applying these results, the depth of the study provides insights that are valuable to those seeking to improve communication strategies for young people about illicit drugs. Some criticisms of qualitative research methodology are addressed in the analysis section.

5.2 Data Collection Methods

This main phase of the study employed two qualitative methodologies, focus groups and in-depth interviews.

5.2.1 Focus Groups

Focus groups are small group discussions, where the participants have homogeneous characteristics in relation to the topic (Morgan, 1996). The
optimal size of groups is a matter of debate, with some practitioners claiming 8-12 participants being the norm, and others claiming 12 is too large for successful interaction of all participants, placing 10 as the upper limit (Quible, 1998; Sweeney, Soutar, Hausknecht, Dallin, & Johnson, 1997). Groups are conducted by a moderator, whose role is to promote interaction between the group participants. probe for details when further examination of a topic is required, and ensure that the conversation stays on the desired topic (Baum, 1995; Quible, 1998). The moderator plays a vital role, as he/she must ensure that the group focuses on the topic, but allow conversation to meander to the extent that potentially unforeseen information of relevance may arise. Szybillo & Berger (1979) cite four key characteristics of the moderator:

- Ability to cover required topics;
- Familiarity with the focus-group process;
- Understanding of study objectives; and
- Ability to probe the key points made by the respondents.

These issues were all addressed in the current study. The moderator for all of the groups was the researcher, who had intimate knowledge of the topics and study objectives. The researcher also had previous experience in running focus groups, and observed several groups prior to conducting the study. Extensive experience in in-depth interviewing assisted the researcher to gain the skills to effectively probe respondents on key points.

Focus groups have been utilised to study a wide range of academic disciplines, including sociology, communication studies, political science, and public health (Morgan, 1996). Commercial marketing research companies also use focus groups for a wide range of purposes, including gaining target market perceptions of products, political parties and social programs as well as post-program evaluations (Morgan, 1996).
Focus groups can be used as a stand-alone methodology, as a combined method with individual interviews, or as a preliminary research method to inform quantitative survey design (Morgan, 1996; Sampson, 1996).

Methodological research conducted to compare the results of focus groups with the results of quantitative surveys (conducted on the same subject), found convergence in the results with the following exceptions:

1. Survey interviews limited what is said about sensitive topics in comparison to the detail found in focus groups;
2. Survey data forced yes/no answers from respondents, providing concise results, but less general attitudinal information; and
3. Surveys typically provided a greater breadth of information; focus groups a greater depth (Morgan, 1996).

In this study focus groups were chosen because of the exploratory nature of the topic and research objectives.

5.2.2 Interviews

Sampson (1996) noted that interviews are commonly conducted after group discussions, so that material from the groups can be explored with individuals (Sampson, 1996). An in-depth interview is defined by Sampson (1996) as an interview that is conducted:

- When the participants have known characteristics, in this case, the respondents were chosen according to their drug-use profile and gender;
Interviews allow exploration of the topic in areas that the group environment might have caused inhibitions, allowing deeper discussion on an individual basis than the focus groups could provide (Davis, 1998). In-depth interviews also provide the interviewer with the freedom to take unexpected directions and explore reasons and motivations that underlie behaviour. The respondent is free to express opinions, thoughts and feelings, but the control of the interview is with the interviewer (Sampson, 1996).

In this study, the use of in-depth interviews provided the opportunity to review the focus group data and explore issues raised in the groups with individuals who were within the target population.

5.2.3 Target Population and Sampling Frame

The target population for this study were males and females aged 18-24 years. The sample was screened to ensure that all participants had lived in Western Australia for the past five years so as to ensure that all participants had an equal opportunity to be exposed to the anti-drug campaigns conducted in this time.

The lower age limit was set at 18 years of age. It was decided not to include people under 18 years of age, as this would require parental permission. Parental permission had the potential to influence the validity of the data, because:
1. It might place some young people in a position where they feel compelled to be dishonest with their parents or the researcher, about their experiences;

2. The study might only attract young marijuana users who have open communication with their parents, and the literature review suggests this would be unusual; or,

3. The study might only attract non-users.

The upper age limit (24) was set to ensure that the data focused on young adults who were targeted by recent Western Australian Health Department campaigns. The anti-marijuana campaign was launched in 1998, and re-run in 2000. At 23 years of age or less the participants would have been 19-20 years old or less when the campaign first ran. Its objective was: To prevent or delay the onset of use of marijuana among young people aged 16 to 20 years of age.

This study did not seek to measure the impacts of the anti-marijuana campaign specifically, but it did use the press and radio advertisements from this campaign to assess source and message credibility. The groups were divided by gender.

Table 5.1 Group Participants

| Male, 18-24, no personal marijuana use | Female, 18-24, no personal marijuana use |
| Male, 18-24, light/occasional marijuana use | Female, 18-24, light/occasional marijuana use |
| Male, 18-24, heavy/regual marijuana use | Female, 18-24, heavy/regular marijuana use |
| Male, 18-24, ex-marijuana use (min. of 6 months use)* | Female, 18-24, ex-marijuana use (min. of 6 months use)* |

* Ex-users were screened to ensure that they had at least six (6) months use before ceasing marijuana use.
This study looked deeply into the experiences of 57 young West Australians.

### 5.3.1 Focus Groups

This study used 'non-probabilistic sampling' where the objective is to draw a sample from the population based on their membership of a specific group relevant to the phenomenon under examination (Mays & Pope, 1995). This form of sampling does not attempt to be representative of the population (Sampson, 1996).

A commercial market research company, Market Equity, recruited the groups using their extensive database and experienced recruiters. Telephone screening of potential participants asked about age, gender and time of residence in W.A. Those who fitted the criteria were asked about their willingness to answer questions regarding their personal level of marijuana use, (for the screening survey see appendix 2). Willing participants were asked which of the following four categories best described their personal experience:

- Not at all, never used (non-users).
- I use marijuana occasionally, and have for the last six months or more (light/occasional users).
- I use marijuana regularly, at least once a week (heavy/regular users).
- I no longer use marijuana but when I was using I did so for a period of six months or longer.

Through this process, eight individuals were recruited for each group. Two groups proved extremely difficult to recruit. The non-using male and heavy/regular-using females were very hard to find, or when found, reluctant to participate in the research. Though eight people were finally recruited to each of
these groups, only four people in each of these two categories attended on the night.

5.3.2 In-Depth Interviews

Interviews were conducted with ten members of the target population to provide additional insight into themes developing from the focus groups and to minimise the effect of small numbers in the non-using male and heavy/regular-using female focus groups. Group members were recruited through notice board bulletins on the Internet sites of Edith Cowan University, which has an undergraduate population of 20,000 students. Flyers requesting interviews were also placed on Edith Cowan University campus notice boards, and notice boards at the University of Western Australia.

Despite extensive efforts, heavy/regular-using females were extremely difficult to find, and ultimately a young girl known to the researcher assisted by recruiting through her extensive network of drug-using friends. The females recruited through this source were not known to the interviewer, or to each other, and each had quite different experiences and attitudes.

In-depth interviews were conducted with:

2 non-using males
2 light/occasional-using females
3 heavy/regular using females
2 ex-using females
1 ex-using male
5.4 Procedure

5.4.1 Focus Group Procedures

The focus groups were conducted in the purpose-built group research rooms at the offices of Market Equity, 28 Ventnor Avenue, West Perth. The focus groups each lasted approximately one-and-half hours, and light refreshments were served during the sessions. All groups were audio taped. Due to the illegal nature of marijuana use, the groups were not videotaped. A fellow masters student sat in on all of the groups, behind a one-way glass partition and took hand-written notes to assist the researcher. Participants were informed that a student was observing the groups. Participants were paid $20 for their attendance expenses.

5.4.1.1 Questioning Techniques and Topic Guide

The focus groups began with a general welcome and explanation of the focus group process. Participants were informed that there was no 'right' or 'wrong' answer or attitude to hold within the group. The researcher was also the moderator in these groups.

Participants discussed a range of topics, introduced by the moderator, regarding their exposure to anti-drug social marketing, experiences of searching for drug-related information, and their personal experiences with marijuana use. The groups were encouraged to discuss these issues openly. To ensure the group members were comfortable with the other participants, the group members were all informed of the criteria for each group. In other words, at the beginning of the non-user groups, the groups were told by the moderator: "you are all here to discuss marijuana use, and this group is a group of females who have never tried
marijuana." This assisted in the process of making participants comfortable and was done to prevent members feeling inhibited in their responses. It may have contributed to the sense of homogeneity that the groups displayed. This was evident from the findings, which found high levels of consistency within each level.

Focus groups are designed to be homogeneous to facilitate free-flowing discussion, but it is not expected that the discussion itself will produce homogeneous results. Debate is often the catalyst to deep-seated feelings being exposed. Nonetheless, the camaraderie that was evident within the groups may have had a similar effect, as group members were surrounded by people they knew had the same level of drug use. The group environment appeared to prompt recall, as they listened to the experiences of others.

A topic guide was used to direct the discussion, ensuring that questions relevant to the main aims of the study were covered (A copy of the topic guide is attached in Appendix 3). Participants were asked to discuss their experiences with marijuana, and within this discussion the following information was sought:

- The sources of drug related information they had used;
- The sources of drug related information they were aware of; and
- Their perceptions of these sources in terms of trustworthiness and expertise.
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- The sources of drug related information they had used;
- The sources of drug related information they were aware of; and
- Their perceptions of these sources in terms of trustworthiness and expertise.
The groups were asked to discuss any messages they could remember hearing or seeing regarding marijuana use. The groups were then shown press advertisements and played radio advertisements that were used in the 1999 Marijuana Campaign in Western Australia. The following information was sought:

- how they felt about the messages in these advertisements;
- what they thought about these advertisements; and,
- what their behaviour was in response to these messages.

Once the data were collected, the audio tapes were transcribed by the researcher, and entered into Nud*ist (N5) computer program for coding. The following section explains the process undertaken for the in-depth interviews, followed by a discussion of how all of the data was analysed.

5.4.2 Interview Procedures

Participants in the in-depth interviews were asked to provide an hour of their time to discuss issues relating to drug-use. The interviews were conducted at a convenient venue for the participants, usually their home. All of the interviews were audio taped for transcription. Respondents did not receive any payment for their participation.

The topic guide from the focus groups was used for the interviews, though some specific questions were added to reflect the general themes arising from the initial analysis of the focus group data. These questions included, for instance, asking interviewees about their experiences when and if, they were offered
marijuana, investigating gender issues, and probing the decision-making process that interviewees experienced when confronted with drug issues.

This process expanded the understanding of the researcher, and raised some issues that had not been explored in the groups. One issue that arose only in the interviews was the role male partners play in supplying marijuana. This finding is discussed under the section titled "The Boyfriend Factor".

5.5 Analysis

This section explains the process of analysis used in this study, and answers some of the criticisms made about the qualitative analysis process. The data from the focus groups and in-depth interviews were combined during the analysis stage. The Nud*ist program allowed this combining of data, whilst maintaining the ability to view data from interviews separately from the group data.

The following section will address: firstly, the question of subjectivity; secondly, the use of computer software to help in the analysis process; and thirdly, the question of process in qualitative research which is considered in light of criticisms that researchers do not provide sufficient detail about this function.

One criticism levelled at qualitative research is that the researcher must interpret a mass of unstructured data, and that this process is highly subjective (Barbour, 2001). Undoubtedly the skill of the researcher and the process by which the qualitative data is gathered and interpreted is a significant issue, though it should be noted that all forms of research are in fact subjective (Mays & Pope, 1995). Thus, all forms of research require rigorous academic standards to minimise the
influence of subjectivity, though in reality subjectivity is an unavoidable characteristic of the research process.

This study has employed Nud*ist (N5) software to assist in the storage, sorting and categorising of the data. Use of computer programs in qualitative data has been criticised for its potential to reduce the quality of results by introducing scientific methodology that will strip the data of its depth of meaning (Catterall & Maclaran, 1998). At the same time, using computer programs to aid qualitative data has been accredited with increased productivity and greater depth of analysis (Catterall & Maclaran, 1998). Nud*ist (N5) was used in this study to assist with data management. The use of Nud*ist allowed quick and easy access to data, removing the obstacle of handling masses of physical documents. At all times the data were retrieved and "spread" over several paragraphs and read within context to ensure that selection of data was not distorting the meaning.

Qualitative researchers have been accused of failing to explain their research analysis methodology sufficiently (Malterud, 2001; Mays & Pope, 1995; Robson & Hedges, 1993). The following explanation of the stages of analysis highlights the value of each stage from the initial collection of data to the final writing of this thesis.

The stages of analysis were:

1. Transcribing
2. Coding
3. Focused analysis
4. Review
5.5.1 Transcribing

The process of data sorting and analysis began with the transcription of the audiotapes. The value of undertaking this task was that it allowed the researcher to revisit the groups and interviews without the distractions of being involved in the personal communication. To maximise the value of this process, transcription of the groups and interviews were completed within a week of the data collection. The process of transcribing requires detailed listening. Combined with the experience of being at the groups or interviews where the data originated, this intense process provided the first stage of the analysis: data immersion. Thus, the process of transcribing provided initial insights into this study.

5.5.2 Coding

The transcripts were then imported into Nud*ist for coding. Firstly, all of the focus group transcripts were imported, coded and reviewed to provide an initial analysis that informed the in-depth interviews. Following the initial analysis the in-depth interviews were imported and the same transcribing process undertaken for the interview transcripts.

The coding process involved developing and changing codes as the meanings within the data became apparent. In this process, the codes grew and changed, requiring continual re-reading of the transcripts to search for relevant data.

5.5.3 Focused Analysis

Once coding was concluded, the researcher returned to the research questions. The analysis now focused on the research questions, a process enlightened by
the transcription and coding processes. The process of transcription and coding had provided a useful grounding in the data, which provided insights into the broader issues, and thus a more meaningful understanding of the specific research questions. Malterud (2001) suggested a deliberate process of broad analysis leading to focused analysis. In accordance with this suggestion, the analysis process began with the broad investigation of the transcripts before focusing on the research questions.

5.5.4 Review

Following the focused analysis stage, the writing up of the results provided a final stage of the analysis process. It was in this stage that the value of the Nud*ist program became most evident. Whilst writing up the research there were many occasions when the original data were accessed, and new thoughts prompted a review of the data on a particular code or group of codes. The ease of accessing the data in the computer database ensured that floating thoughts were pursued and new insights in the data realised.

5.6 Conclusion

This chapter has presented information about the methods used to derive the data for this study. It has considered the issues and limitations of using a qualitative methodology and provided an explanation of the process undertaken to derive the data for this study. The following section presents a comprehensive analysis of the data obtained, followed in Chapter 7 by a discussion of how these results relate to other studies.
Chapter 6: Data Analysis

This chapter reviews the qualitative data collected from the focus groups and in-depth interviews. The chapter starts with an analysis of the data relating to source credibility, followed by message credibility and cognitive dissonance. Finally, a discussion of other issues arising from the data highlights a number of important influences on the communication process. Chapter 7 provides a discussion of the implications of this research and its relationship to existing research.

Preliminary analysis of the data identified the need to separate non-users' and users' interpretations of the illicit-drug messages to provide useful insight into the research questions. Thus, the following analysis separates each research question into non-user and user categories. The data was also analysed to ascertain differences between the user levels (non-use, light/occasional use, heavy/regular use and ex-use) and between genders. In cases where the analysis found differences relevant to the research questions, this separation of the data is explained.

6.1 Summary of Main Results

There are several key findings from this study. Firstly, this study determined that once a young person 'crosses the line' to become a user of marijuana, there was a loss of source credibility and message credibility in anti-drug campaigns. This credibility loss limits the ability of social marketing to provide valuable
health promotion information, in relation to illicit drug use, to a large sector of
the youth population.

Secondly, loss of source credibility was consistent across all user groups
(light/occasional, heavy/regular and ex-users). Studying the response of drug­
users to the source credibility of parents raised the issue of the Government’s
strategy to use parents as a distribution strategy for prohibitive drug messages.
This study suggests that this strategy could be causing damage to family
connectedness, leading to potentially damaging risks for young drug users.

Thirdly, message credibility differed according to level of use and gender, while
source credibility did not. That is, once a young person becomes a marijuana
user, the source credibility of anti-drug messages is damaged. Messages about
the risks associated with illicit-drug use also lack credibility, but there was a
variance between genders and levels of use which influenced the way messages
were interpreted.

‘Crossing the line’ refers to a non-user taking up marijuana use on a
light/occasional or heavy/regular basis. Non-users who try marijuana and then
reject it are termed trier/rejectors, and were not included in the main study.

The following section highlights the main results arising from the data in
relation to the research questions on source credibility, message credibility and
cognitive dissonance. This is followed by a detailed analysis of the data.

6.1.1 Source Credibility

The differences between non-users’ perceptions of source credibility and
users’ perceptions of source credibility provided a clear indication that
these two groups represent two distinct segments within the youth audience.

The key results in relation to non-users and source credibility were:

- Non-users perceived traditional information sources such as parents, school and the Government to be highly credible; and
- Non-users believed it was unlikely that traditional information sources would be effective for marijuana users.

The key results in relation to users and source credibility were:

- Users perceived that Government sources, parents and school programs lacked credibility. These traditional sources were perceived to lack expertise (ignorant and/or biased), and trustworthiness (presenting an unbalanced view of drug use);
- The relationship between parents and children may be damaged as a result of the Government's strategy to use parents as an information distribution channel advocating prohibition; and
- Sources that had credibility included peers who use marijuana, some older people with drug-using experience, and the medical profession.

Consistently, both non-users and users expressed their desire to make their own decisions based on balanced information.

6.1.2 Message Credibility

The differences between non-users' perceptions of message credibility and users' perceptions of message credibility on drug issues also indicated that the youth audience falls into two distinct segments, non-users and users. Gender also appeared to play a role in the interpretation of messages for
both user and non-user groups. In addition, there were some differences in
the perceptions of message credibility by levels of use.

Firstly, the differences between non-users and users (light/occasional,
heavy/regular and ex) related to their beliefs about the accuracy and believability
of anti-marijuana messages.

Non-users believed the messages to be factually accurate, whilst users were
sceptical about the validity of the messages. Some non-users (females) thought
fear-based messages would be more effective with users, though users rejected
the use of fear campaigns and prohibitive messages claiming they were
ineffective.

Secondly, gender differences in the non-user groups related to the types of
messages non-users felt could be effective with users:

- Female non-users felt that the messages were too ‘tolerant’ and that social
  marketing on drug issues needed to have a stronger, fear-based approach;
  and
- Male non-users wanted an approach that advocated greater self-esteem and
  peer resistance for young people.

In the user groups, there was evidence of gender differences and differences
between user levels in relation to perceptions of risks associated with marijuana
use.

- Heavy/regular-using males discredited most of the messages as factually
  incorrect. The only message considered credible for the heavy/regular-using
  males was the link between marijuana smoking and cancer related illnesses;
- Heavy/regular-using females were less inclined to negate the risks of their use level. They demonstrated a self-defeated attitude toward their behaviour; and

- Light/occasional users of both genders tended to view marijuana use as 'harmless' in the quantities that they used it; thus they felt the messages lacked personal salience, as they were perceived to be directed at users who had higher use levels than themselves.

Thirdly, non-users did not believe that the social marketing messages they had received about marijuana had been influential in their decision-making. In addition, non-users indicated that they were sceptical about the ability of social marketing to influence users.

Finally, users believed that only harm minimisation messages (as opposed to prohibition messages) that were balanced would be credible with other users. The key messages that were considered to be valuable related to the need to 'use moderately' and strategies to ensure 'safe use'.

6.1.3 Cognitive Dissonance

This study investigated the role of cognitive dissonance in the decision-making process of young people when dealing with drug-use issues. Predictably, non-users did not experience cognitive dissonance about their decision to reject marijuana use. The messages that non-users have received throughout their lives about drug use have been consistent, and they were confident that rejecting marijuana use was the right decision.

The results from the user groups indicated a surprising lack of cognitive processing when they first decided to use marijuana. Users had limited recall of
any major decision-making process, suggesting it was a low-involvement decision for some users. Post-decision there was evidence that users were involved in justifying their decision and rejecting messages that contradicted their personal experience.

Each of these results will be discussed further in the following sections.

6.2 Source Credibility

One of the research questions asked if varying levels of marijuana use had influenced perceptions of source credibility. This section examined this question by investigating the many sources that young people have for information about illicit drugs; social marketing campaigns, school-based education, parents, peers, siblings, medical sources, the Internet, police, and the media.

Hovland and Weiss (1951) identified two dimensions to source credibility; expertness and trustworthiness. These dimensions were defined as:

1. Expertness: the degree to which the audience perceives the source to be competent in the field. Competence comes from the source’s training, ability, and experience with the message subject; and

2. Trustworthiness: the extent to which the audience believes the source will be truthful (Hovland & Weiss, 1951).

The following discussion examines the various sources of information available regarding illicit drugs, and considers the respondents’ impressions of expertness and trustworthiness in relation to these sources.
6.2.1 Social Marketing Campaigns

Social marketing campaigns dealing with illicit-drug issues were discussed in the groups to determine the attitudes respondents held toward the perceived sources of these messages. Source credibility was discussed in conjunction with perceptions of the Government, as the Government was the perceived source of these campaigns.

Three key issues were evident from this analysis.

1. All of the participants, regardless of their user status (including non-users), were sceptical about the value of social marketing generally. As the generation that has been targeted by many social campaigns, from Slip, Slop, Sip (anti-skin cancer), Quit (anti-smoking), 100% Control (responsible alcohol) through to how many fruits and vegetables to eat a day, this scepticism may indicate that there is message burnout amongst youth target markets;

2. The government has source credibility problems in relation to addressing illicit-drug issues with young people who use marijuana. Essentially, there was a perception that the Government has no concept of the realities of drug use, and thus they lack expertise. Furthermore, the Government lacks trustworthiness in the eyes of users, who believed the Government cannot be trusted to provide balanced information; and

3. The government's strategy of using parents as a distribution channel for anti-drug messages is dependent on parents maintaining credibility with marijuana users, which this study suggested is difficult to achieve. This strategy may in fact be damaging the relationship between young drug-users and their parents, putting young people at risk of other dangerous behaviours.
6.2.1.1 Non-users' Impressions of the Source Credibility of Social Marketing

The source credibility of social marketing messages was not a significant issue for the non-users. There was no evidence that the Government was perceived to be doing anything more or less than attempting to portray the 'objective truths' of drug use to an audience that non-users felt were unlikely to listen. If anything, the non-users demonstrated some concern that the Government is not taking the issue seriously enough: 'It's pretty ironic since the Government takes a sort of... no tolerance approach and then the ads are sort of really ... tolerance'.

6.2.1.2 Users' Impressions of the Source Credibility of Social Marketing

For some users, the fact that the source of these messages was the Government was sufficient evidence that anti-marijuana messages could not be trusted: '...you can tell they are misleading, they are written by the West Australian Government.' The conclusion appeared to be that government sources could not be trusted because they were biased toward a political agenda of prohibition: 'It is all very biased, very government; it is always the same rehashed information. If you want to go looking on the Internet you will find more balanced information.'

The extent of distrust shown toward the Government was evident from the following verbatim, which illustrated that some users believed the Government will misuse statistics to achieve their agenda: 'I view with a degree of apprehension any official government statistics and numbers that are released. I always look at the Government with a lot of suspicion anyway, because I think they adjust the numbers to suit their agenda.' In a similar vein, the Government
was an untrustworthy source of research information: ‘... when they use statistics, they need to tell you where they did the research, did they do it properly, or did they just do it all shonky. If it has been done right, or is it just government propaganda.’

The government’s approach was also perceived to be reinforcing a generational divide: ‘I don’t think they are doing a very good job at the moment. Because of the no tolerance approach and Mr. Howard. It is like the children and the adults. Kids don’t think that adults know what they are talking about... you don’t believe the adults when you are younger.’

The expertise of government sources, that is, the extent to which the Government was viewed as a source that had experience and understanding of the subject, was also questioned. Personal marijuana use triggered scepticism about anti-drug sources: ‘They are not believable once you have tried it.’ Some users believed that the Government source lacked expertise because they were out of touch with the realities of marijuana use: ‘I think there is a definite case of naivety in some of their ideas, and their perceptions of drugs. ... I would picture in my mind a lot of the people responsible for those ads would be pen pushers ... generally speaking, people in charge of that [are] people who have never experienced taking drugs or being addicted to something. Someone like that just doesn’t have the same depth of understanding.’

Users were inclined to reject sources that were perceived to exaggerate the risks: ‘It [social marketing messages] had no effect on me whatsoever... you know when you are doing it that it is bad but they are just reinforcing it, making it into an issue. They just exaggerate it to the point you just think it is stupid.’ The messages were perceived by users to come from a source which had no knowledge of the realities of youthful drug-use: ‘If they asked real people what
would happen, these ads would change drastically ... because they would get a different perspective of what marijuana use is... '

Some users responded defiantly toward sources which they perceived to be biased: 'They only portrayed marijuana in the negative side, and when you have everyone telling you it is bad, you kind of tend to go the other way.' The perception that the Government deliberately portrays marijuana use from a biased perspective led to a lack of credibility that undermined the whole message: 'They just exaggerate it to the point you just think it is stupid what they are saying, like what the effects are.'

The groups were asked: “Who should be involved in providing information to young people about drug use?” The users’ response was ‘not the Government’.

6.2.2 School-based Drug Education and Source Credibility

For many of the young people involved in this study, school assignments about illicit drugs had been the only time they had actively sought information on the risks of drug use.

6.2.2.1 Non-users’ Perceptions of School-based Drug Education

Non-users remembered their school-based education as a reinforcement of their decision to reject marijuana use. Though the school provided another source that confirmed their decision, some non-users felt that the school education they had received occurred well after their decision had been made, as this non-using male points out: ‘... in Year 10-11 ... it is too late ... if you hadn’t done it by Year 10, then that is extremely rare.’
Some non-users did not see the messages associated with school-based education as influential: ‘I think the health aspects, or school information wasn't really a major kind of influence, like, I tended to disregard that largely. Just the effects I saw it have on friends of mine and changes to their lifestyle, were definitely a large influence.’

Though some non-users did not believe that the school-based education program had a significant influence on their decision to reject marijuana use, there was some evidence that they felt school involvement was part of a supportive network: ‘I sort of had expectations of me in my school life. I was head girl so I sort of had to be a role model; it just sort of made sense, being a health issue that I didn't want to do it.’

One non-using male gave credit to his education for his resistance to tobacco smoking, which led to his decision not to smoke marijuana: ‘It was probably from High School health education; I think that had a big influence.’ It is notable in this case, however, that it was the non-smoking message, rather than non-drug message that had been influential. This non-marijuana smoker was a regular user of party drugs, such as ecstasy and speed.

6.2.2.2 Users’ Perceptions of School-based Drug Education

Users held the school-based drug programs in low esteem, primarily because of the prohibitive messages projected through these courses: ‘...high school - I wouldn’t trust... them, it is like - no don’t touch it, they were just brainwashed. Their whole message was just - Don’t do it.’ This prohibitive approach provided a one-dimensional message that users felt had little value: ‘It wasn't “you can and this may happen”, it was just “don't - stay away”.'
Nonetheless, it is notable that when the risks of marijuana use were discussed in the groups, most of the knowledge users had, other than their own personal experience, came from the research they were required to do for school assignments: ‘at school, high school. Had to do a project on teenagers and drug use. Got stuff from the school library, that would be the only time I have looked up drug information.’

School assignments had ‘forced’ some users to research the impacts of drug use; however, the take-away message was a bit confusing for some. One male heavy/regular-user related his knowledge of the risks associated with marijuana use: ‘Just what I came across when I was doing an assignment what do they call it... Emphysema? you read another book and you read that it is good for emphysema.’

Thus, the prohibitive approach of school-based drug education resulted in low credibility with some users. The opportunity some users had to do their own research into the risks associated with drug use could have been useful in providing a knowledge base about the risks of marijuana use, though the emphasis on prohibition may have counteracted the willingness of users to receive and accept these messages.

6.2.3 Parents as a Source of Drug Information

The Western Australian Government’s ‘Drug Aware’ program (Health Department of Western Australia, 1999) views parents as a credible and significant influence that has a major role to play in preventing drug use in young people. Non-users appeared to agree that their parents had been a primary influence in their decision to reject drug use. Users, however, did not see parents as credible sources on illicit drug issues.
6.2.3.1 Non-users’ Perceptions of Source Credibility and Parents

The influence and credibility of parents was evident among non-users: ‘from school and parents you knew it was bad and what it can do and that it wasn’t for me.’ Parents, and particularly mothers, appeared to have high credibility: ‘my mum comes out with all of the information about how it affects your health.’ These non-users did not appear to question the expertise of their parents, and clearly trusted their parents to provide accurate information.

Many of the non-users provided glowing images of their relationship with their parents: ‘I didn’t really feel the need to rebel too much. I think, as I went through teenage things I always tended to think of the consequences while I was thinking of doing something whatever I did my parents were there to support me, even if I did something wrong.’

Some parents had the added experience of seeing the negative consequences of drug use first hand, raising their credibility: ‘they put me on the right track, showed me what are the actual consequences and what not. My mum would bring the stories home, she is a nurse, she would tell us about the mess they got into.’

While parents were a strong influence, most of the non-users felt that the decision not to use marijuana had been their own decision: ‘I just had something in my head that said it was wrong so I didn’t do it, because I didn’t do bad things.’

Whilst many of the non-users felt that their family upbringing had a big influence on their decision not to use, some said that their siblings had not come
to the same decisions they had: ‘... it really makes you feel sheltered. ... you really don’t know much about the rest of the world. I find it difficult to relate. Whereas my sister went to the same school, and things like that... but different crowd, different sorts of parties - different pathway.’

6.2.3.2 Users’ Perceptions of Source Credibility and Parents

From the perspective of users, most parents were assumed to lack the expertise to achieve credibility as a source: ‘I wouldn't really trust my family, I know they wouldn't know that much. I just don't think anything they could tell me would be really all that factual’; ‘I wouldn't ask my family because ... they have never even done it’

Some users perceived that their parents were not only lacking in expertise, but also trustworthiness: ‘mum and dad would be .. this is really bad... just to scare me, I definitely wouldn't go there’; ‘... they over-exaggerate everything that they talk about.’

For some users, parents who had personal experience (thus expertise) of using marijuana had credibility as a source: ‘I think it matters a lot who your parents are, because, I definitely listen to my parents, but that is ... because they have done a lot of weed.’

Achieving credibility through expertise is a difficult task in a society where marijuana use is an illegal behaviour. Some users criticised parents who had open discussions with their children: ‘The thing about talking to your parents, I look at it and think - I am sorry but... unless you have got totally open, liberally minded parents, who I sort of think that you wouldn't talk to anyway because you wouldn't have enough respect for them... ’ This discussion continues: ‘I
would never have gone to my parents - well not my father. My mother and my step dad know that I smoked pot anyway - it has come out since then that they knew, but they thought that as long as it wasn't getting out of hand, then they were happy for me to get away with my little fantasy that they had no idea.' On the surface, this suggests that these parents were aware of their daughter's behaviour, whereas in fact: 'I used to smoke it a lot. A lot more than they actually knew, otherwise they would have stepped in.' This young girl also used ecstasy at parties, but: 'what would my parents know about drugs? They are not hip enough, they are not cool enough.'

This discussion highlights the double standards of our society's approach to drug use. Firstly, the role of parents as prohibitive and authoritarian was considered by some to be appropriate. Parents who were able to communicate openly with their children about drug issues were considered by these respondents to be parents: 'who I sort of think that you wouldn't talk to anyway because you wouldn't have enough respect for them.' Secondly, this user acknowledged that her behaviour exceeded the level her parents would accept, but considered it appropriate that parents be excluded from this knowledge. Her experience was not unique. The following young woman used marijuana and party drugs regularly: 'Even now, my parents are really anti-drugs so that aspect of my social life can't come into conversation... But it is better that way...'

One extreme case of this parental divide was the case of a female heavy/regular-user who appeared to suffer a number of health and social problems because of her high-level use of marijuana: 'My dad used to be a drug cop for like about 10 years and stuff like that... but my mum is like a bit more cool about it. If she finds it, she won't tell my dad about it, because she knows what he is going to
say and she knows that I am not really going to change it. But I told her that I stopped, which didn't really happen, just to make her feel better.'

Thus, in this study, parents who oppose drug use only had the opportunity for an open relationship with their children if their children were non-users. Parents of children who use illicit-drugs may be largely denied this opportunity, through either ignorance or deceit.

6.2.4 Peers as a Source of Information

Peers represented a significant influence during adolescence to non-users as well as users. Gender differences were evident in this area, where male and female social behaviour, and experiences of peer pressure, differed. The following section includes a discussion of gender differences in each group. Within the discussion of peers, some discussion arose about the perception and realities of peer influence and peer pressure. There was evidence of a number of forms of peer influence occurring. Interestingly, only the male groups discussed "peer pressure" as an issue.

6.2.4.1 Non-users' Perceptions of Peers as a Source of Information

For female non-users, peers provided a social network outside the drug-using culture: 'If you get around the right circle of friends. You know it is there, and you see its effects, but you don't actually think: Should I? You know, you don't really see it as an addition to your life ... you don't think it is going to make it better.' Having friends who were not actively involved in the drug-using culture provided an environment where lack of access ensured experimentation did not occur. '... it is probably your friends as well. If your friends are sort of into it and experimenting, you are probably likely to be pressured into trying it as well.'
But we were too busy having sleepovers and video nights. The worst thing we did was eat chocolate and have too much Coca Cola...

For some females, the decision not to use marijuana had come at the cost of losing friends: ‘...most of my girlfriends ... I have drifted away from them, and they are all off with their partners who smoke mull in their own little group.’ Some female non-users said that they would refer to peers who have drug experience for information about the realities of using. These peers offered an opportunity to ‘hear the other side of the story’; ‘I think the reason why I said I would ask friends with personal experience [is that] you have heard one side of the story, which is that it’s harmful to your health. Which it is. That is an objective truth, but I would go to someone with subjective experience to find out something different about it... get a different perspective about it.’ This implied that friends who used marijuana were viewed as a source of information, but that information was filtered through the receiver’s belief that she holds knowledge of the ‘objective truth’. Whilst drug-using peers offered a perspective that some non-users found interesting, they were not necessarily considered trustworthy sources to non-users: ‘I would talk to one of my girlfriends, who is a current user, I can’t guarantee it would be any positive information as in "it’s bad for you". She would probably have good things to say about it.’

Non-using males were generally less interested in the experiences of peers who used drugs. Male non-users appeared to identify themselves as lone crusaders: ‘I like to stand out and say, I have never ever touched it, I mean in my high school I know that I was one of only two who never touched it. I just like that label, I like to be able to say that I have never touched it.’ Males experience a different social environment when dealing with drug issues (Moon et al., 1999). Males use more marijuana, more often than females (Grella & Joshi, 1999) and
the social setting in which this occurs (i.e. public places, in groups) appears to lead to greater normative peer pressure (Cox & Cox, 1998) on the males. Thus, a male who has rejected marijuana use has to be willing to stand out from the crowd. Though these male non-users said they did not feel ostracised by peers who used, this comment about other males that use marijuana demonstrates a sense of alienation: 'It is almost like they stick together and be strong in their own unity and all that kind of thing'.

For some, the experience of normative peer pressure led to a defiant response toward peers: 'Just felt like, pressured ... people that i didn't care about were trying to influence me and i ... reacted, my mate made me react. Yeah i became quite firm about it. Tricks they try to get up to...' For some male non-users, the experience of observing peers using marijuana was enough to dissuade them from trying it: 'most of my personal opinions are formed from seeing other people using it, i thought they were dickheads, and i thought i don't want to use it.'

Male non-users believed that people who used marijuana had succumbed to peer pressure: '[i would] probably say, the reason people take it is ... the peer pressure. Most of them only do it because of peer pressure.' In line with this belief, male non-users felt that they were stronger-willed than their peers who used marijuana. They also believed that the strength to resist peer pressure should be encouraged in others: '... it would be great if kids could be more independent thinking and strong willed ... i think it is always better if people can develop their own thoughts and beliefs, and come to the right conclusion, or the best one for them.'
6.2.4.2 Users' Perceptions of Peers as a Source of Information

Peers were a primary source of information about marijuana for users. Female users saw peers that used marijuana as a credible source of information. Females were inclined to seek information about the effects of marijuana use. Peers who have extensive drug-use experience provided a credible and valuable source of this information: 'Friends who have been long-term users, or are currently, because they seem to know the pros and cons of it.' Sometimes the experiences of peers who were heavy/regular users provided a first-hand understanding of the down-sides of heavy/regular marijuana use: 'If you know long term users you can see for yourself the bad effects. I have got a couple of people who... are pretty into it, and you can definitely tell the problems that they have.'

For males, peers were a vital source of information. The form of information males generally sought commonly related to supply (i.e. 'where can I get it?') and 'what's good at the moment') or instruction on the effects of marijuana use ('what happens?' and 'what do I do?'). For some users the influence of peers over-rode all other sources: 'I really don't think ads...[have] that much effect on it...they are trying to do with this new drug campaign...get families to talk...but I think that when I started it, my influences...they were all like peer group, it wasn't...family. There wasn't anything anyone old could have said to me that would have really changed anything.'

Male users and ex-users typically did not want to believe that they had been influenced by peer pressure. This perception was, in part, a result of their narrow concept of what constitutes peer pressure, as this verbatim illustrates: 'I remember the first time I tried it, it wasn't really peer pressure. ... no one
forced you to do it, they would offer. if you said no it was more for them, so they
don't really care. ... It was just trying to fit in with a group of people that you
sort of hung around with, or wanted to hang around with.'

Another form of peer influence, vicarious learning (Cox & Cox, 1998), provided
reassurance to potential users that the fears that they have formed through anti-
drug messages were unfounded: '... if everyone else is doing it I may as well
give it a shot. They are not dead.'

6.2.5  Siblings as a Source of Information

Siblings emerged as a strong source of influence and information to both users
and non-users. Siblings provided role models of use, and in some cases access
to marijuana and other drugs. For some non-users, observing the experiences of
siblings had provided motivation to reject drug use.

6.2.5.1 Non Users and the Influence of Siblings

Just as some of the female non-users felt peers offered an insight into the
subjective reality of drug use, siblings were also a source that could satisfy
curiosity for some non-users: 'I would probably ask my sister, as first port of
call, because she uses. Just from a human perspective, I guess. ... how it effects
her daily life ... what does it feel like?'.

For some of the female non-users, the experience of seeing their older siblings
experience problems through drug use had contributed to their decision not to
use it themselves: 'I guess there is also the question of seeing how it affects
people, that kind of information. I've got my sister, and also my husband's
brother, it has actually set off some psychotic episodes etc. that um, you just see
how it hurts his life, that sort of thing...'; 'That is similar to ... my situation, I had a cousin who used very heavily, and, same situation, it triggered a kind of like a schizophrenia type thing.' These siblings/relatives provided vicarious learning about the risks of marijuana use.

By chance, the male non-users recruited were all the oldest children in their family. They related concern for their younger siblings: 'I have some sisters, and I don't know if they are taking it but they were fairly impressionable, I am pretty sure the younger sister wouldn't have had the self-esteem to turn around and say no. It would have to be a dare; she would have tried it, even if she didn't want to and then possibly go down the track a few of her friends who kept using it.' This non-user male illustrated a parental-type approach to his siblings: 'I don't live at home, ... home is down at Albany.... I speak to mum quite regularly. If anyone is going to muck up it will be my little brother.' Possibly as a result of being the eldest siblings, there was no evidence of siblings being seen as a source by the non-using males.

6.2.5.2 Users and the Influence of Siblings

Gender differences were not as apparent in the user groups. Males and females talked of being introduced to marijuana by older siblings, both sisters and brothers.

The authority of older siblings was a strong influence on users: '... if you have got an older mate, or an older brother or something ... you start to listen to what they have to say.' Authority appeared to equate to expertise in terms of credibility. Sibling relationships were considered more trustworthiness than standard peer relationships: 'Brothers and sisters, they are always going to look after you, and they are going to tell you the good stuff'.
Many of the users spoke glowingly of their siblings: ‘My brother was 2-3 years older than me, and I used to hang around with him and his friends. They didn’t coax me into it, I look up to my brother a lot, and he did it so it was o.k. for me to do it.’ For some, this ‘respect’ applied to the peer group of an older sibling as well: ‘My older sister always had her friends over on the weekends and they sort of just told me, and so that’s why I thought it wasn’t such a bad thing to do, because they seemed all right.’ The credibility of other family members, including cousins, was a major influence on some users, who clearly saw these relatives as role models: ‘I knew that my older cousins did it too, I am the youngest...and everything they did was like, wow, they are older and they do it and they are cool, so it must be a good thing.’ Users expressed confidence that their siblings would provide trustworthy information in their best interest.

Some users had also seen the negative impacts of drug use in older siblings, though this did not necessarily translate to non-use: ‘I initially thought it was like a cool thing, risk taking, rebellious and all that, because like, my elder brother did it heaps, and he eventually got kicked out of school because of it. So then, it was bad, like the ramifications and so that put me off it for a while. ... but after that I felt as though it was my choice, ... [so] when I was ready to do it, [it was] my choice.’

6.2.6 Doctors as a Source of Information

6.2.6.1 Non-users’ Perceptions of Doctors and Source Credibility

Generally, non-users were unlikely to actively seek information about marijuana. They felt that they knew enough, and had made a final decision. When asked to think who they would go to if they needed information, doctors
were one of these sources: ‘for clinical information or whatever, my family
doctor would be the person that I would talk to.’

6.2.6.2 Users’ Perceptions of Doctors and Source Credibility

Users also felt that it was unlikely that they would actively seek out information
about the effects of marijuana use. Nonetheless, if they needed information one
of the only sources that held credibility with users was medical information via
doctors and medical web sites.

The credibility of doctors was based on their medical objectivity (expertise) and
high, ethical standards that require honesty (trustworthiness). Users
demonstrated a strong belief in the credibility of doctors: ‘Basically the moment
I hear the word marijuana and the effects from a medical person, that is when I
sit up and take notice.’

From the users’ perspective, doctors also provided a confidential source of
information, an essential ingredient given the illegal nature of illicit-drug use:
‘Doctors are cool. Whatever you are on, you have to tell the doctor... he doesn’t
tell anyone... they have to have a professional opinion... that is why they are
doctors. Doctors aren’t allowed to say anything that you tell them ... it is like
the priest isn’t it.’ Some users also saw a practical basis for talking to doctors
about their drug-use history: ‘He can check out if you’re healthy or not and tell
you how it affects you.’ Even respondents who felt that doctors were
authoritarian sources that they would not use, still believed that doctors were
trustworthy: ‘I never tell the doctor, it is like getting a cop’s point of view... not
that they are going to dob you in, but their attitude toward what you’re doing.’
Though none of the participants had actually gone to the doctor to request information about illicit drugs, the appeal of doctors was evident from their high credibility and easy access. Seeing a doctor for another purpose raised the opportunity to have casual discussions about drug use: 'the doctor. Maybe I wouldn't go specifically to a doctor to ask, but next time I was there I might ask.'

The credibility of doctors as a source of information was evident from these groups. The vital role that medical practitioners could play was illustrated by the cases of several young males who had conditions that could potentially be aggravated by marijuana use. A couple of the participants in the light/occasional-user groups had specific health related issues that their marijuana use could provoke. One was an asthmatic, and two were diagnosed (and medicated) for Attention Deficit Hyperactivity Disorder (ADHD). The patients who took Dexamphetamine medication for ADHD had not discussed their marijuana use with their doctors.

The asthmatic discovered the risks involved with his marijuana use by default, when an astute specialist provided some advice: 'I reckon Doctors would be good. Because I have asthma, I went for a check up once, and I blew into the computer and she looked at my reading and she looked at me and said, do you smoke? I said no, because I don't smoke cigarettes. She said, "good, because if you are an asthmatic you should never smoke at all, don't even contemplate smoking" and then she looked at me and said "that is everything by the way". And I just thought, wow, the doctor is saying it is not good, maybe I shouldn't be smoking marijuana.' This advice had not led this participant to cease marijuana use totally, but he claimed he had reduced his use, and is aware that he needs to stop to reduce the risk of complications from his asthma.
6.2.7 The Internet

The Internet offers another channel to access information that users and some non-users considered a good source for drug-related information.

6.2.7.1 Non-users' View of the Internet as a Source of Information

Some female non-users were inquisitive about the information that may be available on the Internet. 'Internet, I think you would get both sides. If you went to ADIS (Alcohol and Drug Information Service) you would get all of the negative things that it does, whereas the Internet would also have all of the herbal benefits.'

6.2.7.2 Users' View of the Internet as a Source of Information

The Internet is convenient, anonymous and has a broad range of information. '... the Internet is good, because you don't have to leave the house and you don't have to ask people.' Users believed that they could assess the credibility of an Internet site, and medical credentials provided one method of establishing credibility: 'a special doctors' web site - obviously - you are not going to go to any old web site'; 'I have never actually actively sought out information, but I would probably look to the Internet, I would be looking for sites that look quite legitimate.'

Some users had looked for information relating to their personal experiences. One female looked for information regarding her father's use of marijuana for medical reasons: 'on the Internet, I have found things about health, how it works and stuff... to see the side-effects, and also for medicinal reasons.'

The broad-based nature of the Internet offers users more than health related information. The Internet is also a source of practical 'how to' information:
'Depends on what sort of information, like if you want to know what it does, you ask your friends, if you want to know about growing it you go to the Internet.'

6.2.8 Source Credibility of the Police

Non-users did not raise the police as a source of information. Users' opinions related to the assumption that the police would take a prohibitive stance on drug-related issues: 'I wouldn't go to the police - very biased.' Another perspective was: 'Too judgemental.' The police were assumed to provide a negative point of view: 'You know, I just think they would be very negative towards it, like oh you know, why are you asking these questions, are you planning to use the stuff or what. It is bad because of this, this and this.'

Nonetheless, some users had received information from the police in the form of pamphlets which were distributed at nightclubs: 'Well it is not that I have gone and looked for it myself, but if I have seen something, like one of those police handouts, I have taken it and read it.'

6.2.9 Source Credibility of the Media

There was limited discussion about the role of the media (as this is a mode of communication more than a source), though some users commented that the mainstream media tended to be sensationalist and biased in its portrayal of drug-use by young people: 'The newspapers. They only portrayed marijuana in the negative side, and when you have everyone telling you it is bad, you kind of tend to go the other way.' Specialist youth-based media, however, played a part in providing information that was perceived to be credible: 'I find on Triple J, they present everything in a balanced way.'
6.2.10 **Recommended sources**

Following discussions about the sources that group members had used for drug information and their feelings about the options generally available, group members discussed the sources they thought were credible to communicate to young people about marijuana use.

6.2.10.1 **Sources Recommended by Non-users**

Medical professionals have credibility with non-users: 'I definitely look toward professionals, doctors, people who see the consequences on a day-to-day basis.' Similarly, non-users believed parents, schools and government sources were accurate and honest sources of information. Non-users did not think that these sources worked for people who use marijuana. They believed that users would only listen to other young people.

Female non-users believed that credibility with anti-drug messages could be achieved by getting ex-users to tell their tales of regret. Non-users wanted to see an approach that validated their decision not to use marijuana, and highlighted for users the mistake they have made. This conversation in the non-user female group highlights the way these participants believed drug users should be used as a source. P1: 'Just the whole showing them what their life is like is enough, even if they say I would never give it up, you can have it mate.' P2. 'As they are strapping them into the electric chair.' P1: 'Yep you signed your death warrant.'
6.2.10.2 Sources Recommended by Users

Users also suggested that young people who have used marijuana were credible sources: 'You can't have people that have never tried it before going ... it's bad, like they don't know ... (You need) someone who has kind of overcome it, and stopped smoking after smoking for ages.'

Within the user groups, debate over the value of different potential sources was considerable; however, it was generally accepted that you could not really understand it unless you have done it: 'You never never know if you never never go ...'; 'There is no point using someone who has never used, they can't form an opinion on it if they don't know.'

While users believed that young people who had used drugs were credible, the scenario suggested by the non-user females was not what they had in mind. The key to credibility comes from a balanced approach: 'If they have... good information and you can see that it is not just one sided... it is really comprehensive.'

The age of spokespeople was an issue for some users: 'Young people, I wouldn't put an old person on there like, talking...you would just laugh and go, whatever.' However, some users felt that an older person with experience could provide a valid perspective: 'I think if you talk to older people who have like done it, and they tell you their perspective. I mean they are telling you the truth; it is not the scare factor. It is not like “don't do it”.' Some of the heavy/regular female users, interviewed independently, stated a preference to use older, experienced users to talk to young people: 'they have been there and seen it all.'
For some users, there were no truly credible sources; everyone was perceived to have an agenda. A common reason for rejecting source credibility was adoption of an extreme stance: 'I wouldn't trust anyone who got emotional about it either way... I only trust people who talk about it in balanced terms and give you an objective point of view.'

The user groups rejected parents and Government sources: 'not the Government and not the parents. Because you don't listen to either of them.'

6.2.11 Summary on Source Credibility

For non-users, traditional sources such as parents, school and the Government were believed to hold the 'objective truth' about illicit-drug use. Non-users did not view the social marketing messages they had received to be influential in their decision-making. Non-users valued the traditional sources that had assisted them to make the choice not to use marijuana, but felt it was unlikely these sources would be effective for marijuana users.

For users, sources that were perceived to have an agenda, at either end of the continuum were not trustworthy. The inherent association between government sources and prohibition messages reduced credibility. Likewise, most parents and school programs were assumed to advocate prohibition, so they were not credible sources. The same cynicism applied to users who were perceived to be dealers, or overly enthusiastic.

Sources that have credibility with users were peers, some older people with drug-using experience, and the medical profession.
Consistently non-users and users expressed their desire to make their own decisions based on balanced information: '...personally I like to take a little bit of both sides and weigh it up for myself and make my own decision.'

6.3 Message Credibility

The credibility of anti-marijuana messages raised issues relating to the way participants assessed the risk associated with marijuana use. Non-users believed that the risks portrayed in anti-marijuana messages were accurate; however, there was evidence that non-users felt these messages were likely to be ineffective with users. Users either discredited the messages as false/exaggerated, or deflected the risks to others with heavier use patterns than themselves.

Male and female responses differed in some categories. These differences are raised in the areas that they occurred. The clearest example of difference between males and females was the tendency of males to argue the 'facts' were incorrect. Females were less inclined to argue that the stated risks were false; rather they felt the messages were not salient to their level of use. Heavy/regular using females were the exception to this; they accepted the facts and saw the messages as salient to them; they just did not want to hear them. Different perceptions were also evident between the different levels of use, and these differences are discussed in the following section. This section will firstly consider general impressions of social marketing messages, followed by the results of examining specific messages used in the 1998 Marijuana Campaign in Western Australia.
6.3.1 General Impressions of Social Marketing Messages

6.3.1.1 Non-users' Impressions of Social Marketing Messages

Non-users were sceptical about the value of social messages because they did not perceive that they were effective: 'People still take up smoking; they still haven't hit the nail on the head. Advertising doesn't seem to be the answer.' Some non-users believed that the messages were ineffective because the Government was targeting people who were already using: 'I think for people that are already using it, ... too late and they will say "oh yeah they will try anything to get us to stop using it" ... I think you have to get people before they become users, as opposed to afterwards.' Another similar view was that the messages were targeted at teenagers who are already using, and that this was unlikely to be an effective strategy: 'the thing is by the time they get to that stage [using], no advertising is going to work, I don't think...'

Some non-users felt that people who use marijuana were likely to see the world differently to the way non-users see it: 'the problem is, we might see them [social marketing campaigns] as realistic, but the people that actually do it might think totally differently. Or maybe they just don't care.'

Non-users' perceptions of the risks associated with marijuana use indicated stereotypical views that, at times, were extreme. Some believed that people who used marijuana were on the road to ruin: 'I have always seen it associated with, I suppose not crime, but going down that sort of avenue'.

Some non-users related concerns that was consistent with the theory that marijuana is a gateway drug, inevitably leading into harder drugs. It is this perception that led some non-users to reject the idea of experimentation: 'you try it once and it is quite likely that you will try it a second and third time, so as
far as I can see there is no point in trying it the first time’. Some non-users believed that it is the soft drug image of marijuana that tempts people into trying marijuana, and that trial will inevitably lead to further drug use: ‘... marijuana is seen as a soft drug. It is seen as "I can take it and it won’t ruin my life" ... we all know that that is not true. We know that it can cause psychotic episodes; it can lead to harder drugs all the way down the line.’

Attitudes toward the types of social marketing messages that non-users believed would be effective were divided by gender. Female non-users were critical of the present strategies used in social marketing messages: ‘I guess they are not really confrontational. I don’t find that they are. They are more a bit of a nudge.” Some non-user females demonstrated a strong desire for more powerful fear-based advertising. Suggestions included using the image of a marijuana smoker who is now ‘a vegetable after a schizophrenic episode’; images of drug-users on death row ‘as they are strapping them into the electric chair,’ pointing to the ‘fact’ that marijuana was the start of this decline. This desire for strong messages with catastrophic consequences existed despite the participants’ awareness that these were unrealistic images. The following discussion in the non-using female group illustrates the attitude of some of the participants: ‘my brother ... will constantly say - it doesn’t lead to other drugs, there is no proof of it’ to which came the response ‘well let’s make up some statistics shall we.’ Instead of the present approaches to reduce marijuana use, non-using females wanted more extreme threats, to put marijuana advertising in line with road safety and anti-smoking advertising: ‘... the drink driving ads just have so much more impact’.

While some non-using males also perceived that the messages were a bit soft: ‘less harsh, same as cigarettes at the moment’, others considered scare tactics were ineffective when dealing with a normative behaviour: ‘... they are using
shock techniques to get them to steer away from it, but it is so available, I think people just try it to see if they are right.'

The male non-users tended to focus on peer group pressure issues, rather than the risks of marijuana use per se.

One male non-user expressed strong feelings against marijuana use, and an aggressive stance toward marijuana users. He wanted advertising to employ strong scare tactics: 'I think they should cut the top of someone's head off and show their brain when they have used marijuana ... that would be better.'

Overall, while some non-users enjoyed receiving negative messages about marijuana because it reinforced their personal values, the non-users did not believe that they were at risk of using marijuana under any circumstances. They believed this position would not change if anti-marijuana advertising ceased to exist. This position, though strongly expressed in the non-user groups may also have been influenced by the dynamics of being in a group setting with other non-users.

6.3.1.2 Users' Impressions of Social Marketing Messages

Users viewed the messages with an array of strategies that disassociated the message from their personal situation. One strategy was to reject the message on the basis that it was false information: ' ... "drug campaigns just say "you will die" if you do this ... people just brush it off and say they are sensationalising it all... that's the worse case scenario.'

Another rationalisation was to reject the messages on the basis that they were not personally salient: ' ... they don't even aim it really at us. They just aim it at the extremes, and kids. So you don't really make any connection with it,'
because that is not you. ' This was particularly evident in the light/occasional-user groups: '... for heavier users that do sit on the couch and have lost all their friends ... maybe, it's good for them.' The light/occasional users did not discount the accuracy of the information, but felt it only related to heavy/regular users. Light/occasional use was not perceived to hold any real risks. The gateway theory risk, that being a light/occasional user will lead to heavier use and/or use of other illicit drugs, provoked some strong opposition: 'Those ads imply that if you smoke it that is what you end up like, and we are all sitting here as evidence that that is not what happens.'

The perception that the messages were exaggerating the facts led to message and source rejection: '... when they get really excited like that, they lose all credibility with anything else they say. You won't believe anything else they say if they say something that strong, which is obviously lies.'

There was also some evidence that the use of social marketing messages created a level of curiosity in drug-use: 'the more they publicise it the more you want to do it'. In a similar vein, there was recognition that the prohibitive approach can create more curiosity than cure: 'The "don't do it" message... you tell people 'don't touch it, it is hot', they are still going to touch it to see how hot it is ... I think you have to let people make their own mistakes that is the only way they are going to learn. If you make too big a deal about anything they will always want to see what the big deal is.'

6.3.2 Review of Press Advertisements
Press advertisements used in the 1998 Marijuana Campaign by the Western Australian Health Department were shown to group members and respondents to gauge their response to the messages and sources. These advertisements were presented in a large poster format.
Three of the press advertisements contained the same written messages, with different headings and graphics. These advertisements are presented throughout this section. These three advertisements ran with the same messages printed in small print in the bottom left hand corner. The messages were:

- Marijuana is not a social drug. Friends and partners tend to lose interest in you if you’re just veging out all the time. (Anti-social message/Social threat)
- Marijuana can impair your short-term memory, concentration, coordination, logical thinking and motivation. (Cognitive message/Physical threat)
- Marijuana smoke contains more tar and higher levels of cancer-causing chemicals than tobacco. (Link to Cancer and Tobacco/Physical threat)

The order of these messages changed to match the theme of the advertisement. All three advertisements contained the following call to action:

Pick up a brochure detailing the facts about marijuana. Call in at a Drug Aware community pharmacy or phone (ADIS) on (08) 9442 5000 or 1800 198 024.

There were two images used to portray the anti-social message, one relating to the cognitive message and finally, an advertisement that appealed to regular marijuana users.
After a while mull smokers only find time for mull smoking.

- Marijuana is not a social drug. Friends and partners tend to lose interest in you if you're just vegging out all the time.
- Marijuana smoke contains more tar and higher levels of cancer-causing chemicals than tobacco.
- Marijuana can impair your short-term memory, concentration, coordination, logical thinking and motivation.

Pick up a brochure detailing the facts about marijuana.

Call in at a Drug Aware community pharmacy or phone (ADIS) on (08) 9422 5000 or 1800 198 024.
Marijuana does amazing things for your social life.

- Marijuana is not a social drug. Friends and partners tend to lose interest in you if you're just vaping all the time.
- Marijuana smoke contains more tar and higher levels of cancer-causing chemicals than tobacco.
- Marijuana can impair your short-term memory, concentration, coordination, logical thinking, and motivation.

Pick up a brochure detailing the facts about marijuana. Call in at a Drug Aware community pharmacy or phone (ADIS) on (08) 9442 5000 or 1800 198 024.
6.3.2.1 Anti-Social Message: Marijuana is not a social drug. Friends and partners tend to lose interest in you if you're just veging out all the time.

6.3.2.1.1 Non-users' Perception of the Anti-Social Message

The message that smoking marijuana results in anti-social behaviour was popular among some non-users, particularly the females. The anti-social nature of marijuana smoking appeared to be more evident to non-users who were 'left behind' when groups go to smoke: *'A lot of people see it as a social drug, 'oh yeah, I will just go around the corner with my friends and have a quick one mull', and when you listen to that, it's well, 'hang on a second, where have all my friends gone?'"* For some non-users, the thought of going with the group was more fearful that being left behind: *'things like smoking marijuana, they take you out the back, it's almost like going into the haunted castle, and you think ... maybe not.'*

Some non-using males were able to stay in the group and simply not partake: *'I told them no and that's it. But most of the time it was just friends that were doing it and offering out of being friends. They didn't know whether you use marijuana or not, and it was just easy, well for me, it was just easy to say no thanks, don't use it.'* This ability to remain within the group but abstain from marijuana use was discussed by the males, but not female non-users. Some male non-users showed scepticism toward the imagery in the 'anti-social' advertisement because it was inconsistent with their personal experience: *'... he is singled out. I am sure there would be other people, because every time my friends smoke marijuana they are together.'*
6.3.2.1.2 Users’ Perception of the Anti-Social Message

There was a serious loss of credibility associated with this message among users. The concept that smoking marijuana was anti-social provoked strong opposition from the user groups of both gender: "Friends and partners will lose interest in you" - that is only if those friends or partners don't smoke. They are trying to alienate people, 'if you do this everyone is going to think this of you' and 'you're not going to have any friends' - everyone is going to abandon you. It is just not right!" Similarly, "if you have just got a group of friends ... say 4, 5 people, ... come over and just put some tunes on, and then you pull out a bong, that is sociable." The credibility loss of this proposition eroded confidence in the source: "... but looking at this "marijuana is not a social drug" - I ... think - what would you know?"

Users in this study saw marijuana smoking as a very social behaviour, something they do with their friends at parties, on weekends or when they have nothing else to do: 'I wonder when it says marijuana is NOT a social drug. Well for me, that is just entirely wrong, because it is only a social drug for me.' This message was unbelievable to ex-users as well: 'messages like you don't have a social life when you use drugs ... I had a social life.'

Light/occasional-users were generally keen to deflect any risk factors on to heavy/regular users: 'I kind of think they smoke pot ALL the time and that is just how they are. But not everyone who smokes pot is like that.' However, some light/occasional users questioned whether heavy/regular users really do have anti-social problems. One cogent argument was put: 'I think everyone here has turned around and said, "my friend who is a heavy user", so if it's your friend who is a heavy user, obviously it is social. These people haven't lost their friends, because everyone here has a friend who is a heavy smoker.'
A few believed this message was slightly credible, but not important. The heavy/regular using females were most aware of the anti-social potential of marijuana: 'it happens, of course, like after a session if you have been out with your friends and stuff you want to go home and just sit on the couch and be boring. When I have a session, 90% of the time it's with people, I am seeing my friends, it is all what we all like to do ... we see each other that way.'

Another perspective from the female heavy/regular-users was that it was a person's right to be anti-social if they wanted to be: 'Yeah, but I don't think that really matters, if people do that. I don't see why it should be an issue. If people do it and that is what they want to do, just let them do it. It is not like hurting anyone, they are just hurting themselves, if they have no social life, who cares?'

The male heavy/regular-users saw no credibility in this message: 'Every afternoon after work, if I work that day, I ring up the boys and I go for a smoke with them. So it is very social.'
HOW MUCH DO YOU WANT TO DULL YOUR BRAIN?

- Marijuana can impair your short-term memory, concentration, coordination, logical thinking and motivation.
- Marijuana is not a social drug. Friends and partners tend to lose interest in you if you’re just vaping out all the time.
- Marijuana smoke contains more tar and higher levels of cancer-causing chemicals than tobacco.

Pick up a brochure detailing the facts about marijuana. Call in at a Drug Aware Community Pharmacy or phone (ADIS) on (08) 9442 5000 or 1800 180 024.
6.3.2.2. Cognitive Loss Messages: Marijuana can impair your short-term memory, concentration, coordination, logical thinking and motivation.

There was a wide variety of beliefs displayed in relation to the cognitive impacts of marijuana use. This variety appeared indicative of individual personal experience.

6.3.2.2.1 Non-Users' Perceptions of Cognitive Loss Messages

Some non-users were very concerned about the potential cognitive impacts of marijuana use: 'Doing damage to your mental health. ... I think ... that has been my major deterrent. I never want to risk my mental health by taking something like that just as an experimentation.' The extent to which this message was credible to non-users appeared dependant on their personal knowledge of people who use: 'I wouldn't say it is an accurate message that all marijuana smokers are... I mean I know a lot of people that smoke marijuana and I wouldn't have thought they were particularly challenged.'

6.3.2.2.2 Users' Perceptions of Cognitive Loss Messages

Some users accepted the idea that marijuana use affects motivation: 'I think the motivation definitely goes down'; 'Makes you totally listless and unmotivated', though it was considered an individual issue, not something that affects everyone: 'I reckon that's bullshit [that] ... it makes you unmotivated... I can play a game of footy, have a bong, and play the same game of footy... It doesn't affect my motivation.' In a similar vein, some felt affronted by the message: 'It irritates me, because it is not true, again. If you want to sit around doing it all day you will, but if you don't, you don't have to.'
On the issue of cognitive ability, there was some acceptance of the message by the heavy/regular-using females: '... I am pretty dumb, I didn't used to be as dumb as I am ... it pisses me off. I was doing my TEE ... but I was still smoking mull all the time, and I failed my TEE: ' I think it is has made me a bit dummer as well. And it is a bit frustrating at times ... I used to be smarter .. '

Similar concerns were raised in the heavy/regular-use male groups: 'I assume I would be a much quicker wit, be able to pick things up quicker if I hadn't used it.' Another responded with the proposition: 'I sometimes think that I am not the same person as I would be if I had never smoked dope or taken other drugs, don't you reckon?' These comments caused dissent from the other members: 'Have you had some acid lately or what?' Some felt that the cognitive loss messages were an attempt to insult heavy/regular users: 'they are trying to pay out on us. It is trying to say like, you are all dumb bastards, but like it is not.... Like I just want to go and have another cone.'

Memory loss was one cognitive impact acknowledged as inevitable by most users. 'Your memory goes down. Even after I stopped I was mixing up words and stuff ... you mix words and join them together, and things like that'; 'Short-term memory is a big one. My partner uses relatively often, and his memory is shocking. I know that my memory is impaired, and my mid term memory is impaired from the time I was using, because I was a heavy user for years.'

Others argued that marijuana had enhanced their coordination: 'I find that I actually drive just the same, if not better.'
6.3.2.3  **Link to Cancer and Tobacco:** *Marijuana smoke contains more tar and higher levels of cancer-causing chemicals than tobacco.*

The impact of 'Quit' and other anti-tobacco smoking campaigns was evident in all groups. The knowledge of tobacco risks and the linkage between marijuana smoking and cigarette smoking were seen as a valid basis for comparison, and an area of concern to most of those involved in the groups.

6.3.2.3.1  **Non-users' Perception of the Link to Cancer and Tobacco**

There was evidence that the anti-tobacco message had made an impact on non-users: 'I mean I can't stand cigarettes ... you know all the chemicals and marijuana is so similar. Even though it doesn't have some of the nasty chemicals ... but the tar that comes out of marijuana is just colossal, and they are smoking it through a bong with no filter whatsoever ... I mean, you remember the ads where they cut the lungs.' Recall of specific anti-tobacco advertisements implied that there had been a significant influence on the non-user group: 'I always related tobacco and marijuana when all of those commercials came out, with the lungs squeezing out all that tar and things like that pretty much confirmed it.'

Anti-tobacco sentiment gave rise to an unpredicted phenomenon. One in-depth interview was conducted with a non-using male who regularly took party drugs such as amphetamines (speed) and MDMA (ecstasy) His reasons for this unusual approach were deeply probed. He had no interest in the illegality, morality or any other traditional barriers to use; he simply rejected the idea of smoking: 'The first [reason for not trying marijuana] is that it affects your lungs. The chemical effect is secondary ... It is like tobacco smoking, all the chemicals in smoke that you inhale, if anything, I don't think it is the chemicals,
it is the risk of lung cancer.' This non-user also provided a perspective on how he viewed the risks of drug taking: 'I have a perception that there are different risks with different drugs. I wouldn't say ecstasy is a hard drug, or speed. The way I see it, if you smoke you have the nicotine problem with addiction. With marijuana I wouldn't know, but I associate the lung cancer with smoke so I would rate marijuana as bad as ecstasy, maybe higher.'

6.3.2.3.2 Users' Perception of the Link to Cancer and Tobacco

A message that was highly salient with users was the link between the tar in cigarettes and the tar and cancer-causing chemicals inhaled through smoking marijuana. Some users rationalised the risks on the basis of their use levels: 'it says that marijuana has 3 times the tar of cigarettes ... it makes me think ... I am glad I am not using all the time.'

One approach was to differentiate between cigarettes and marijuana on the basis that marijuana is 'natural': 'I am totally against smoking as well. it is a bit of hypocrisy on my part I guess, because it is carcinogenic, but you don't think about that. People say it is natural'. To which another light/occasional-using female added: 'Yeah, it is herbal.'

Despite these attempts to justify their decisions, many admitted concerns about the health impacts of smoking marijuana: 'I think more about lung cancer, because of the smoke and that kind of thing.' Some users attempted to separate out the issue of tobacco used in joints and the marijuana itself. This heavy/regular user was experiencing some health effects, but denied it related to her marijuana usage: 'Oh, it makes you a bit short of breath, that is pretty annoying, that is pretty much it. Oh, there is cancer, but that is from the cigarette part, not the marijuana part.' Another user stated his view that the
risks associated with marijuana user were: 'insignificant risks. No worse than smoking cigarettes. I smoke cigarettes. If I could choose to quit one it would be cigarettes.'

The difference with this message was that users did not try to discount it altogether, as they had with cognitive and social threats. One heavy/regular user considered his intake of a packet of cigarettes and five bongs a day. Unable to discount the risks involved in his behaviour he resorted to fatalistic rationalisation: 'You could be the fittest person in the world, never drink, never smoke never do anything bad, never eat fatty foods, work out every single day, and then one day you walk out in front of a bus and get killed at 25. That is my philosophy on life. If you enjoy doing something, do it.'

Despite evidence that the males had a tendency to deny any concerns about the risk factors, there was some interest from the heavy/regular male group regarding the true extent of the risk that smoking marijuana added to their existing consumption of cigarettes. As one calculated, when he took his regular consumption of marijuana into account: 'I am smoking about 5 packets a day.'
These questions touch on some of the common experiences shared by long-term regular marijuana users. How many yes boxes did you tick?

If you would like some facts on the long-term effects, call the Alcohol and Drug Information Service (ADIS) for a brochure.

We also have a quit booklet, if you are thinking about stopping. We post information in plain unmarked envelopes and you can even make up a name for yourself if you prefer. Call 08 9442 5000 or 1800 198 024.
The bland format of this advertisement led some participants, particularly the non-users, to assume that it was of little value. However, some heavy/regular users (the target audience) regarded this advertisement quite positively.

6.3.2.4.1 Non-users' Perceptions of the 'Regular User Survey'

This advertisement involved quite a lot of text that was not well received by the non-users: 'Too much to read'; 'I am not going to read that'. This was likely to be a result of the low salience this advertisement had for non-users: 'It looks like it is being directed toward a user, so I would answer no to all of them.'

6.3.2.4.2 Users' perceptions of the 'Regular User Survey'

This advertisement received mixed reviews from users. Most of the light/occasional users agreed with the non-users, they thought it was ineffective: 'Too many words - Wouldn't catch your attention - Very bland.'

Some heavy/regular users were more enthusiastic: 'whilst it is all scare factor, whoever wrote it - they know...they have been there.' The messages in this advertisement appeared to spark interest in many of the heavy/regular users: 'Interesting, it is fairly applicable to me. Yes I would read it if I saw it.'

At the same time, it had the undesired effect of being reassuring for some heavy/regular users whose personal use had not resulted in all of the symptoms listed. The potential for unintentional messages being received from this advertisement was illustrated by this comment from a heavy/regular-using male: 'That ad actually made me feel better about my dope smoking because they
repeat one of the questions, it is about memory, and I spotted it, so I thought, I must be fine, I deserve a few more cones.'

6.3.3 Radio Advertisements

Following discussion about the press advertisements, two radio advertisements were played in the focus group discussions. Due to the very consistent interpretation of these advertisements, the radio advertisements were not used in the in-depth interviews.

6.3.3.1 Anti-Social Radio Advertisement

"Regular marijuana users lose interest in doing anything other than smoking null"

A male voice answering the telephone and being asked to go out with friends. There were several phone calls, and several scenarios offered to the male, but he refuses on several grounds – no money, can’t be bothered and so on. In between telephone calls there is a sound that users would identify as a bong being smoked.

6.3.3.1.1 Non-users’ Perceptions of the Anti-social Radio Ad

Some non-users thought this advertisement might raise awareness of anti-social behaviour: ‘... for users... it is targeting the reality. And the social aspect of it as well. A lot of people see it as a social drug.’ However it was generally viewed by non-users as ineffective: ‘it is not like people are going to go out and find the phone book’: ‘If they are doped out they are never going to remember a number either.’ This comment also illustrated the extent to which some non-users believed that users were permanently ‘doped’.
6.3.3.1.2 Users’ Perceptions of the Anti-social Radio Ad

Some users felt this advertisement had limited relevance: ‘I don't think it would have a great impact. I mean there would be some people ... [that would think] that's me, this is what everyone else must be thinking that I do all day long. But I don't think the majority would.’

Some users argued that it was ridiculous to suggest that a ‘stoned’ person would not want to do the things suggested. ‘Marijuana enhances those three things that he didn't want to do.’ Thus, for some users, credibility of the message was lost through perceived lack of expertise: ‘it just looks at the side effects of marijuana, instead of looking at everything that it does, ... just because you are smoking marijuana doesn't mean you are just going to be doped out, you know, that is not all it does’. To illustrate the lack of credibility this message conveyed, one heavy/regular-user pointed out ‘No-one ... has three cones between three phone calls.’ Considering the message that the advertisement was trying to send, a male heavy/regular user suggested... ‘if they had said, “do you want to go and try to score some chicks”, like then, if the guy said “no because I am smoking mul”, then that would be realistic because you don't feel like going out and trying to score chicks when you are stoned.’

6.3.3.2 ‘Cognitive Loss’ Radio Advertisement

“Ever noticed that all the words for marijuana only have one syllable?”

This advertisement attempted to use humour to give the message that regular marijuana smoking dulls your brain. A female voice is heard saying single syllable words for marijuana, the advertisement then closed with the statement: “Ever noticed that all the words for marijuana only have one syllable? Could it be that regular marijuana use isn’t good for your brain? DOPE!”
6.3.3.2.1 Non-users' Perceptions of the Cognitive Loss Radio Ads

Non-users thought this radio advertisement was amusing but some of the female non-users were concerned that it would not work because it was patronising; 'It is actually slightly patronising, for somebody who is using.' Another female from the non-user group concluded that this advertisement was targeting non-users: 'I think it is more for people like us. Reinforcing.'

The male non-users were unimpressed by this advertisement, though they did not offer any specific ideas about its credibility.

6.3.3.2.2 Users' Perceptions of the Cognitive Loss Radio Ads

Concerns that this advertisement may offend were verified by the heavy/regular-user male group, which erupted into an argument over the content of the message: 'Marijuana - that is not one syllable! Sounds pretty dodgy to me'; 'The two main words are cannabis and marijuana, and both of them are more than one syllable.' Another chose to defend the appropriateness of using one-syllable words: 'We don't use single syllables because we can't remember long words, but 'pass me the bong' is better than 'pass me that marijuana smoking implement'.' The loss of credibility through this message flowed into a loss of source credibility: 'Just makes you think they are ignorant really.'

The heavy/regular-using females perceived the message as an insult to users, but did not seem too concerned about this insult: 'it is a bit of a pay out, but it is not like anything you are going to take offence to really, like it doesn't have that much of an effect on me.'
Light/occasional users appeared amused by the ad, but the message was not considered useful: 'Good laugh: they are just saying all of the one-syllable words for marijuana. It doesn't really have much point to it as an ad. '

The ex-user males were limited in their response to this ad, whilst the female ex-users echoed the concerns of the non-user females: 'I thought it was a good concept, but I thought it was a bit patronising.'

6.3.3.3 Conclusion on the Radio Advertisements

Whilst reactions varied between non-users and users, and among the different levels of use, the conclusion was essentially the same. None of the participants in the groups felt they had learnt anything, or would be influenced by the radio advertisements. Given this reaction, and that the radio advertisements were based on two issues (cognitive loss and anti-social) that were also raised in the press advertisements, it was decided to limit the advertising under consideration to print advertisements for the individual interviews.

6.3.4 The National Drug Campaign

During March 2001, whilst the focus groups for this study were being held, the Federal Government released an illicit-drug campaign focusing on families.

The campaign involved a television and radio advertising campaign that used scenario-building over a series of advertisements to 'tell the story'. In addition an information booklet was also sent to homes during the running of the media campaign.

Some users thought that the initial advertising campaign was good: 'there is a recent one - with the boy being put in the body bag and a kid's voice in the
background. That was very effective from the point of a user, definitely.' The
details of the advertisements that were recalled related to the initial ad in the
series: 'I like the one with the kids talking - when I grow up I want to be a
football star.'

The subsequent advertisements in the series had a 'talk to your kids' message
for parents. This message was viewed critically by users: 'I don't think there are
a lot of teenagers out there who would willingly sit down and talk about it ...
because if they are doing drugs they are not going to want to talk about it
because they are scared they are going to get busted. If they are not doing
drugs, well unless they are the small percentage of the population that will never
do it, they are going to think, what would my parents know about drugs?'

The information booklet posted out to households was criticised: 'Well the drug
information booklet that came out for parents this year was pretty pathetic,
because, having tried most of those drugs at some point, either myself or
through a friend, it was pretty negative, you know the "don't do it" approach,
which I don't believe works.'

6.3.5 Recommended Messages

All groups were asked to consider the types of messages they felt would be
useful to send to young people about marijuana use. The following section
considers these recommendations, and notes the similarities and difference in
approaches between non-users and users.

A similarity of both user and non-user participants was their desire to receive
factually-based information, rather than scare tactics. The main difference
between the groups was their concepts of 'the facts'.
6.3.5.1 Non-users: Recommended Messages

Non-users felt that users need to have the consequences of marijuana use spelled out: *"I think pure fact would work better than scare tactics. You know, pointing out that prolonged use leads to ... faster lung cancer, how it imprints in your fat cells, if you apply for certain jobs, because you have taken it you can't get certain jobs."* Some non-users offered some risk factors that were either exaggerated or factually wrong: *"So, if you say, if you try this here, here and here in the future you haven't got a chance. Job opportunities just shrink rapidly. Now they are bringing in employer tests for drug tests, you are risking your job."*

Other 'realities' of marijuana use that some non-users thought would dissuade users were: *'even people who have had psychotic episodes, maybe having people in the back of the frame kind of thing, having the family talk about them, what they have done. It's awful to say but, people who have that sort of disability I guess you could say after they have had something like that, people tend to talk about them as if they are not there. And that kind of effect, having someone sort of rolling in the background, just rocking or just sitting there just not doing anything would be far more hard hitting.'*

6.3.5.2 Users: Recommended Messages

Two themes dominated the messages that users felt would be useful to send to young people: *'everything in moderation' and 'be a safe user'.* Users felt there is no point in sending prohibitive messages: *'not to try and abolish it, because it is never going to happen.'* Instead, they thought well-balanced harm minimization messages were likely to be the most effective method of communicating: *'If they have ... good information and you can see that it is not*
just one-sided. And it is really comprehensive, not just this is the short term, this is the long-term effect, a bit more in-depth - broader range.'

6.3.5.2.1 Moderation

Both light/occasional and heavy/regular marijuana users felt that moderation was an important message to send: 'Well... I don't think you can stop them using marijuana anyway. I think you need to understand that they are going to smoke it, and it is not going to kill them if they smoke at a party every once and a while, but... it is going to disrupt their lives enormously if they start smoking all the time'; 'If you are going to do it, do it recreationally, instead of as a life style.'

Some light/occasional using males explained that they had used heavily during the initial stage of their marijuana use, but had since cut back. This verbatim illustrates one case of this use pattern: 'I smoked quite a lot when I was in Year 11 & 12, and I think it had a huge effect on my schooling. ... I found it harder to score null than it was to pass year 12. I spent more time worried about getting null... I graduated, but I could have done much better, so if you got the message across to people who actually care about their education... I didn't even think about it, I just thought 'stuff it'. But now, I just wish I didn't smoke it at all in that time, or a lot less than I did anyway.'

Some users explained that the pattern of heavy/regular-use in the initial stages of use could coincide with an important stage of schooling: 'Yeah, when you are young, everyone gets into like really heavy, and then comes out of it and settles down a bit. But if you get into it in like year 11/12, that is bad news.' In a similar vein, this light/occasional user related his pattern of early use: '... yeah, year 10 and 11 and then I just went - I am doing really badly here, I am getting
D's and stuff. So ok, I'll stop that for next year, so I did it like once a month in year 12 and did much better, I got into uni and that sort of stuff. So now I actually have a future, because if I had done it year 12 there is no way I could have passed, with the amount I was doing.'

The message that these users wanted young people to receive was: 'they don't have to be a big stoner at school. Wait until you are a bit older and be sensible about it.'

6.3.5.2.2 Harm Risk Minimisation Issues

Interestingly, the female users were inclined to recommend health messages, that included: 'It is carcinogenic'; and 'they need to tell us what exactly it does to your brain'.

The male users were more concerned about issues of personal safety: 'Stay close to your friends - not just when you're having it, but when you are buying it, try and find out from your mates, don't just go to anyone. Make sure you know who you are dealing with, because your friends will generally look after you if they are good friends.' Only males mentioned the dangers of purchasing marijuana, which may be indicative of the way marijuana is primarily purchased, by males from dealers: 'I think the most risk from dope smoking is that you can get caught up with the wrong people; you can have your money stolen from you. My mate, the first time we ever had it, we were smoking some sort of clove...he had been sold crud.'

Other issues included facts about potency: 'let them know that you can get like leaf, and hydro's which are ... a really different potency.' Explaining potency was seen as an opportunity to create credibility, and remove the barriers caused by prohibition: '... so that they know you are trying to help them, by telling them
that there are different types of potency, rather than just "oh my god you will all end up on heroin and die."

6.3.5.3 Ex-users: Recommended Messages

Ex-users provided a slightly different perspective to non-users and current users. They spoke about the need to remove the ‘it isn’t really a drug’ attitude that surrounds marijuana: ‘I think you need cigarette comparison to other drugs. ... I was talking to my sister before coming here tonight and she was saying ... with marijuana you don’t think of it as a real drug, it is just like cigarettes and alcohol.’

Some ex-users also saw value in building on messages about the risks of tobacco smoking: ‘I think comparing it to cigarettes is a good one, because so many people think that cigarettes...yeah it has this whole natural thing and because that is so common as well. Every second person just about, if not everyone has tried it, so ... you have to get away from that guy off his head on the phone that sort of thing. People just expect that, everyone knows someone like that’; ‘Exactly, it is not shocking at all.’

There was some confusion about the drug status of marijuana. Is marijuana a ‘real drug’ that is worse than alcohol and tobacco, or is it similar? ‘Well it is a real drug. A lot of people think "I can grow this in my back yard" but I can’t brew my own alcohol, can’t make my own vodka at home, and things like that and I think people see it as a little bit more harmless because it seems innocent, but it is an illicit substance.’

Part of the confusion appeared to related to the fact you can grow it yourself, which to some implies that it is ‘natural’ and therefore not a ‘real drug’. This
led to some unexpected logic: "I think that they should play on the natural part, you know how everyone says that it is natural, so it's ok, it's better than alcohol, better than everything. If it was that natural, then it wouldn't have an effect to your body. It would be like eating celery or something. If it was that natural, obviously it is natural because it grows you know, but it wasn't made for us to consume. Even if you go back to the bible, it wasn't made for us to consume, because it says things like that happen it is like demonic and that is why it affects you. So obviously I think that it wasn't made for human consumption."

An alternative approach was to try to down play the 'cool' image surrounding marijuana smoking: "it is not cool, I suppose. You don't have to have it to fit in. It is the way that you go about saying it." Some of the suggestions for creating an 'uncool' image for marijuana were unconventional: "I was just thinking that, why don't you just try and make it really uncool. Ok, if you want to try it come down here, and then you have people trying to get out of it, teachers smoking it, or something, oh they do that, erhhh."

Another approach was to appeal to the financial cost of marijuana: "I guess, I would want to say 'don't waste your life', but it sounds so clichéd that I am not sure it would make an impact. I don't know, even financially, like at 16 you want to get your licence and a car, I guess you want to appeal to financial side, because it is pretty expensive."

Boredom was a reason some of the ex-users tried marijuana in the first place: "When I was that age... it was something to do, it wasn't like I really thought about it and thought, oh I really love the feeling, or anything like that, it was like what should we do today. And someone would say I've got a foil or something and that is what you do." This led to the suggestion that young people need
'something to replace it': 'Instead of like focusing on don't do it, what about, do this instead.'

Commitment to sporting competition was one alternative activity that some ex-users had seen influence friends: 'I know people that have got out of it because they have gone and done competitive sporting things. A couple of my friends are in league football, and from then on they hardly ever drink, or like they drink after games and things like that, but they don't drink Friday nights because of the game on Saturday, all that kind of stuff. So, if you could really push stuff like sporting and sporting heroes and people who young people really do look up to. Not just people that they have never heard of, or the cold calm politician/parent thing, which kids really don't respond to.'

Some ex-users, like current users, were in favour of the message 'do not let it rule your life': 'The method I think you should tell them is not, 'don't do it'. It should say, if you do do it, be safe, make sure you keep it under control. Make sure it doesn't overtake your life. Make sure if you are going to do it you have got someone around that isn't doing it. . .if you must do it, set yourself limits, like if I am going to do it, I am not going to do it any more than once a fortnight, or once a week at the most. The people that don't do it and then get out of control and it gets to every day, that is when marijuana becomes a problem. I don't think casual use is that much of a problem. It is about as much of a problem as casual drinking in that case.'

6.3.6 Conclusion on Message Credibility

Participants in this study believed that messages in anti-drug campaigns had not had any influence on them. Non-users believed the content of these messages was factual, though female non-users felt the messages were too tolerant. The
male non-users were concerned that young people participated in marijuana use because of peer pressure. They wanted to see campaigns that focus on building self-esteem and strategies to reject peer pressure.

Light/occasional-users did not see the messages as salient to them, as they viewed light/occasional use as risk free. Heavy/regular-using males rejected the messages and discounted the credibility of the risks of marijuana use, with the exception of smoking-related illnesses. Heavy/regular-using females accepted most of the risks as true, but felt that they knew the risks and did not see any value in hearing them through social marketing messages.

6.4 Other Drugs

Reactions to social marketing messages that related to other illicit drugs were also explored to determine if there was a difference between non-users and users in terms of their acceptance of the messages.

6.4.1 Non-Users' Perceptions of Other Drugs

For non-users, social marketing campaigns about other illicit drugs provided more evidence that drug use was dangerous and potentially fatal: 'I pretty much seem to group them all together. The ecstasy one - it is supposed to heighten your horizons, and make you dance all night, and then it turns around and makes you paranoid, people hate you, totally turns into a bad trip. Don't particularly have a mind set to single it out, like this is what this drug does to you and this is this, pretty well they all have some pretty bad side-effects, and can be pretty lethal.'

Messages about drug quality have also been received by non-users: 'Just about the risk involved, you know, made in backyard labs and dodgy guys on the street corner, makes you think.'
One of the interviewees was recruited based on his non-user status with marijuana but was a party drug-user. His status was unusual amongst those involved in this study, but the potential appeal of party drugs did arise with some non-users of marijuana. One non-using male explained: '... like your party drugs that make you dance all night... and everything is happy is more of a temptation for me than like any social kind of stigma that I have with marijuana. But that is probably like where the health issues come into it a lot more for me.' Therefore, while marijuana had been rejected, the appeal of party drugs had evoked curiosity for some: 'I do want to know what it is like, but it isn't worth the risk.'

6.4.2 Users' Perceptions of Other Drugs

For marijuana users the extent to which they accepted messages about the risks of using other illicit drugs differed according to their own experience. Predominantly there was a belief that the only reliable sources were peers and your own experience: 'You just don't think of the consequences when you are younger. All of the ads tell you negative things, but all the people you know and trust are telling you that it is good. So you are not going to listen to an ad in the newspapers that is written by some stupid old person, that's what you are thinking, but your friends are telling you, oh it is great, and everyone is doing it so you go and do it.'

It was clearly accepted that drugs were on a spectrum of 'heaviness'. Marijuana was on the light end with alcohol and cigarettes, and heroin at the heavy end: 'I've tried illicit drugs, but I have never done heroin, and I never would ... now. I've thought about it, I have come close to it. But I have had friends who have and do similar things ... like you see everywhere that people die from it, and are
addicted to it... but I have never ever seen anything like that with marijuana. I
have never seen someone die of it or any really bad side effects with it. Yeah I
find those drugs are just to enjoy.'

Many participants had stories of friends or relatives whose lives had been badly
affected by the use of other illicit drugs. It was this personal insight that most
influenced decisions about drug use: 'My sister in law was actually addicted to
heroin. For a year and a half... he doesn't touch the stuff any more. But you
know you get all these bad messages and then you see it for real and it's like... it
really knocks it into you, when you know people who are addicted to it, it
changes the story totally.'

Confronted with messages that contradicted personal experience, users
concluded that the source had lied: 'Ecstasy, they tell you that people die from it
and that sort of thing, but they don't tell you that the chances of dying are like
one in 10 trillion... the amount of people that have it at raves! I have been to so
many raves, and people are on it, and nothing bad has happened to them, so it
makes you think that it is pretty unlikely to happen. And speed... they say it
catches up with you, I know people who have it a lot or have had it a lot before,
or a lot in one quantity, and it hasn't done anything to them, they are fine, so it
just makes me think, well you must be lying.'

Source credibility with regard to illicit drugs other than marijuana was called
into question on the basis of expertise: 'they don't really know enough of what
they are talking about, they only know the bad things.' The messages were also
viewed by some as unbelievable: 'the advertising, like the messages, all of them
show you the bad things... I don't know if it is just me, but like I just kind of
think, there has got to be more to that. It's my curiosity, it is like you would
have to be stupid to believe that is all it does.'
addicted to it...but I have never ever seen anything like that with marijuana. I have never seen someone die of it or any really bad side effects with it. Yeah I find those drugs are just to enjoy.'

Many participants had stories of friends or relatives whose lives had been badly affected by the use of other illicit drugs. It was this personal insight that most influenced decisions about drug use: 'My sister in law was actually addicted to heroin. For a year and a half... he doesn't touch the stuff any more. But you know you get all these bad messages and then you see it for real and it's like... it really knocks it into you, when you know people who are addicted to it, it changes the story totally.'

Confronted with messages that contradicted personal experience, users concluded that the source had lied: 'Ecstasy, they tell you that people die from it and that sort of thing, but they don't tell you that the chances of dying are like one in 10 trillion... the amount of people that have it at raves! I have been to so many raves, and people are on it, and nothing bad has happened to them, so it makes you think that it is pretty unlikely to happen. And speed... they say it catches up with you, I know people who have it a lot or have had it a lot before, or a lot in one quantity, and it hasn't done anything to them, they are fine, so it just makes me think, well you must be lying.'

Source credibility with regard to illicit drugs other than marijuana was called into question on the basis of expertise: 'they don't really know enough of what they are talking about, they only know the bad things.' The messages were also viewed by some as unbelievable: 'the advertising, like the messages, all of them show you the bad things... I don't know if it is just me, but like I just kind of think, there has got to be more to that. It's my curiosity; it is like you would have to be stupid to believe that is all it does.'
The lack of source credibility and message credibility of social marketing messages led to the conclusion that only personal experience could be trusted: ‘No, I don’t believe what they say, I believe what I know and what I have seen [happen to] other people I know.’

Though most marijuana users indicated that there was a level of drug use they considered personally taboo, they rejected the proposal that social marketing messages that advocate prohibition were part of this decision. ‘You don’t do heroin because people have died from it; not because an ad said that.’

One ex-users’ perspective illustrated the potential for government sources to lose credibility: ‘The thing that I think is stupid about the speed ads, you have the Government talking about the impurities of speed, whereas if they were to make it legal, you wouldn’t have any impurity problems, no criminal problems, and there would be nothing wrong with it.’

Messages that provided harm minimisation information were highly valued by some users: ‘I remember that one where the kid is on speed and he collapses and every one is going: ‘What did he have? What did he have?’… there is always someone, or more than one person, heaps of people, who knows what I have had and when I have had it and who I got it from. I always want someone around… I think it is really good advertising … to make sure that someone watches you and you let someone know what you are doing.’ Providing information that reduces the risks of illicit-drug use was also considered important for novice users. ‘It could be helpful for some people too, it says, like, if you are on speed for ecstasy and you get really hot, have some water; it gives you little basic guideline things: for people that don’t know shit in the first place. So it could be helpful.’
One salient threat message was the proposition that a drug charge would restrict freedom to travel: ‘They said with speed, heroin, all the main illegal drugs, if you get caught with these drugs, or using these drugs you won’t be able to travel overseas to places like France, Italy and America... it kind of makes you stop and think for a second.’

6.5 Cognitive Dissonance Theory

Festinger (1957) introduced the theory of Cognitive Dissonance, that when making a choice between two conflicting options the subject will experience discomfort until a decision is made. When a choice is made, the subject will then overvalue the option chosen and devalue the rejected option. This allows the subject to feel reassured that the decision made was the best option (Shultz & Leveille, 1999).

6.5.1 Cognitive Dissonance and Non-users

In line with this theory, non-users displayed contentment with their decision to not use marijuana, and lacked any dissonant emotions over this decision: ‘I just had something in my head that said it was wrong so I didn’t do it, because I didn’t do bad things. It probably came from school and parents that you knew it was bad and what it can do and that it wasn’t for me.’ Thus, non-users had maintained consistent beliefs that matched the messages they had received from the sources they trusted.

6.5.2 Cognitive Dissonance and Users

Recall of ‘making the decision to use marijuana’ was surprisingly absent for many of the users. This may be a function of poor recall, as well as a result of
successfully convincing themselves that ‘it isn’t a big deal’. Nonetheless, the data implied that for some of the users the decision involved very limited cognitive decision-making.

A number of the participants could not remember having any particular views on marijuana before they first tried it: ‘I can’t remember even like having an opinion about it... I think it was because everyone around me was doing it, like all my close friends were doing it... and I had seen them on it, and they seemed fine. ...I could see that it wasn’t doing any major harm to them, and I wasn’t really worried about health effects because like I could see they were all really long term... I didn’t think trying it was really a big issue.’

The idea that seeing others use marijuana had persuaded them that it was safe was a recurring theme: ‘I knew that my older cousins did it too, I am the youngest... and everything they did was like, wow, they are older and they do it and they are cool, so it must be a good thing. So basically I didn’t have any apprehension about it. My brother, and my sister, and I think my dad has done it too. So it is good.’ The influence of seeing respected family or friends use marijuana was very persuasive to some users: ‘I knew it was bad, because it is a drug but it didn’t seem as bad because my brother and sister were doing it. I was thinking, ... if they’re doing it, they are not stupid people, if they do it it can’t be that bad.’

Another recurring theme was that using marijuana was seen as a cool or mature behaviour that matched the way they wanted to be perceived: ‘I didn’t know that much about it, I thought it was pretty taboo, like oh wow, you must be really cool to do that. It was a massive issue, but I think I settled into it quite well.’
Some participants remembered having negative feelings about marijuana prior to use: ‘I was a bit nervous at first, because you hear drugs are bad and all that. That’s all I had heard - drugs are bad. All my mates were smoking it and that, but they were having a ball, so...I was still a bit nervous, but it wasn’t ... major.’

Some of the strongest expressions of negative attitudes toward marijuana use prior to using it personally came from participants who were now heavy/regular users: ‘Won’t do it, will never touch it, no way. Can’t really remember when it changed but...I was kind of scared about what it would do to me...Oh I was wrong’; ‘I remember like when I was in primary school I was thinking, ohh that’s really bad, I am never going to take drugs. In fact, like when I was in Year 7, I found out that the guy I was dating ... had tried it and I was like, so shocked. I was, “oh my God and I am going out with him.” When I tried it, it was just like, oh ok, something to do’. Having made the decision to use marijuana, some were left wondering what the problem was: ‘... then once you try it you think, they are not so bad, I am still alive or whatever. And you don't know why you are not supposed to take them.’

The process of reducing cognitive dissonance involves a complex process of discrediting negative messages and building justifications that exempt the user from the negative consequences that cannot be discredited. For light/occasional users, the logical conclusion was that it did not apply to them: ‘I think you see the other side, I mean when you are little you used to think “oh my god; it is bad, really bad.” Then you see that there is another side to it and that that doesn’t apply to you if you are not using it all of the time.’

Resolution of cognitive dissonance took many forms. For one female user, who felt she had to deceive her parents, a sense of guilt prevailed: ‘I knew it wasn’t good for me ... because of the way I was bought up. My parents were very anti
and I always feel guilty, or when I was living with them I would always feel guilty because I was stoned ... 'This guilt was resolved by moving out of home, not by giving up marijuana use.

All user categories indicated that they perceived they had been lied to about the realities of marijuana use. A light/occasional-using male illustrated this attitude: 'they (non-users) have just heard some false information basically... if they heard the truth they would know that you have it, it is fun, that is the end of the story.'

Some users were influenced by the change from primary to secondary school: 'Before I tried it I had always been taught by parents and teachers that it was wrong: it is only when you get to high school that you really get exposed to it I guess and different groups of people.'

For some users, the messages were too extreme, resulting in a total disregard for health information: 'The way it was all written, it was just like with some of those ads how they went totally over the top. Johnny in some high school in America went crazy over some.... it was just really stupid, so I thought, it was just propaganda so I forgot about it.'

A light/occasional-using female explained the process of rejecting sources which attempt to tell young people not to use marijuana: 'No one ever listens to anyone, you know, no one has an open mind to someone who has a closed mind in the first place. That is how they come across, quite clearly, is that they are very close-minded and the person you think is trying to get their message across without considering anything else, so why should we consider your message?'
A light/occasional-using female who had attended a convent school described her strong anti-drug upbringing. Her experience demonstrated what can occur when messages were so strong as to be unbelievable. 'I went to a religious school for about 2 years. It was run by a group of Poles who thought they were on a mission from god to educate the pagan Australian masses. Basically, drugs were Satan's way of altering your mind state so that you are more receptive to him, and you know, the dark side. I have... this thing happening at school where you are doing the rosary every day and you are being told that if you wear a skirt above your knee it is un-lady like. You are thinking, I don't think this is quite right, because people out there, and they seem to be pretty nice people, they wear skirts that come above their knee, and it just made you a bit sceptical of it. But at the same time it was like, if I don't believe it then I will go to hell. I did other things that were wrong. And seeing I was doing these other things that were wrong I thought, well if I do that in this religion's eyes I go to hell if I die, so I might as well just discredit the whole religion, and that way I can make myself a good person.'

This section has considered the data in relation to the research questions. The following sections discuss other data that arose from the research that provided insight into issues surrounding illicit-drug use and social marketing.

6.6 Influence of Self-Image

The literature review indicated that self-perception and the development of self-image led adolescents to explore different roles. The following section describes the non-users' and users' perceptions of themselves that appeared to be related to their decision not to use/to use marijuana.
6.6.1 Self-Image and Non-Users

The males perceived themselves to be stronger, more independent than those who had "succumbed to peer pressure": 'the reason people take it is probably the peer pressure.'

Some male, and some female non-users, expressed the belief that they had been born with superior abilities: 'I think it is true. Some people are naturally leaders and some people are naturally followers. I just think I more lead my friends than follow what they do.'

Some non-users described their long-term plans, which had influenced their decision not to use marijuana. One non-using male explained that his desire to enter the military and his determination to achieve this goal had meant that he would not risk being involved in any illegal activity.

6.7.1.1 Good Person: Self-Image in Action

Non-users were probed to determine the influences that had led them to decide not to use marijuana. Social marketing had provided additional information, and confirmed beliefs that were already held, but most reported that their decision had been made in advance of any information from school drug education, or receiving social marketing messages.

For the female non-users particularly, the decision to reject marijuana use was an issue of self-image; drug use did not fit with their perceptions of themselves as 'good girls': 'I think the reason I didn't was that there was something in my head that said it was wrong and there are people who choose to avoid those things, and there are people that choose to go with those things. I just had
something in my head that said it was wrong so I didn't do it, because I didn't do bad things": 'you know how you said you were too good . I was like that. I sort of had expectations of me in my school life. I was head girl and stuff, so I sort of had to be a role model; and I don't know, it just sort of made sense, being a health issue, that I didn't want to do it.'

The influences of parenting and a sense of being 'too good' to participate seemed to empower some non-users: 'I wasn't really offered like "do you want this". It was just kind of like "we are going behind the bushes, who is coming" kind of to a group kind situation... by then I already thought I don't need that. I thought I was like too good for it, you know... I am not the sort of person who would succumb to pressure anyway. I think that's your upbringing or what you are yourself.'

The influence of family and Christian values also provided direction to some non-users: 'I have just been thinking about it... I think I have always been taught or had the role models telling me be the best you can. You have a lot of potential, that kind of thing. That has come from my mum and dad and school and even like religious Christian influences, so I think that is a large part. Be the best person that you can or your potential. And like, yeah, smoking drugs has never been a part of that. So that would be the basis of that.'

6.7.2 Self-Image and Users

Being cool, or a part of the 'cool' group, was an issue some participants felt played a part in their decision to use marijuana: 'I was more interested, wanted to see what it did. I think doing it to make myself cool or something probably did have something to do with it, but not as much as the doing it
because I wanted to know like, what happened'; 'I just wanted to be cool.' Both users and non-users mentioned the perception that smoking marijuana is 'cool' when you are young. For more mature users, this image did not fit comfortably with their present use: 'It is not about being cool any more, you smoke dope or you don't now, it isn't about being cool.'

Users displayed a desire to make their own decisions, to be seen as independent and capable of deciding for themselves: 'I feel that I am smart enough to make my own decisions, and I feel that the people that are my friends use drugs wisely. I think there are some people that can use them wisely and still get on with their lives. And I feel that applies to me.'

6.7.3 Non-Users' Perceptions of Users

Related to non-users' self image was the image that non-users had of users. Their perceptions of users influenced their decision to reject marijuana use.

Non-users perceived that users were a group that society looked down on: 'I mean, you get ostracised by a certain group of people I think, as soon as people find out that you have used marijuana, or some other kind of drug you get kind of judged by that. Especially by employers.' Some non-users believed that using marijuana would limit your job prospects: 'There is always that sort of connotation that, oh yeah, well if you use that what else are you using, are you really committed to the job?'

Some non-users seemed to be remarkably distant from the realities of their peers: 'I think it was more along the lines that I was always told that people that did use, never really knew them personally, they were always shunned, put in a different light, it is bad because of this and that. I have always seen it
associated with, I suppose not crime, but going down that sort of avenue, that is how it was when a few people at school were going into it.

6.8 Lack of Access

The literature review and findings from this research suggest that peer groups and siblings provided access to marijuana. If the peer group of a non-user does not have a member who has access to marijuana, or siblings who provided the opportunity, it may be that some non-use of marijuana results from lack of access: 'It is probably your friends as well. If your friends are sort of into it and experimenting, you are probably likely to be pressured into trying it as well.'

Some non-users believed their 'well supervised' adolescence had prevented them from coming into contact with marijuana: 'I was never actually asked to go and have marijuana. In all honesty I don't even know how to. But I really think that in the small circle of friends that I did have, it was more...we didn't really go to big parties, because that's where it was. We were all confined to the three or four girls that we were. We would always kind of be at someone's house, or we would be somewhere where we were very well supervised.' Whilst this example supports the proposition that parental supervision can prevent marijuana use, this participant had a younger sister who was heavily involved in drug use: 'Whereas my sister went to the same school, and things like that... but different crowd, different sorts of parties, different pathway.'

6.9 Gender Issues

There were some differences between the experiences of males and the experiences of females when dealing with marijuana use issues that have not been covered in the previous section.
6.9.1 Risk Acknowledgement

There was evidence that males and females perceived the risks of their use differently, particularly in the heavy/regular-use category. Females worried about the risks they felt were relevant: '... lung cancer'; '... psychological problems'; '... short term memory loss'; '... it definitely affects you psychologically'; '... It changes your outlook on things'.

Males offered far more defensive/defiant responses when they were asked what the risks of marijuana use were: 'No worse than smoking'; 'Running out'; 'You can burn your thumb with the lighter'; '... Might lose your best mate if he comes home from the pub first and smokes your last cone...'; 'Being broke... ' 'Getting caught by the cops. That is probably the main risk that I would think about.'

6.9.2 The Boyfriend Factor

The 'boyfriend factor' relates to the influence boyfriends have over access to, and amount of, marijuana used. The 'boyfriend factor' was more evident in the individual in-depth interviews than in the groups.

Among heavy/regular-using females, there was evidence of a strong influence from male partners. The following discussion in an interview illustrated how these influences can occur: 'when I was 16, I went out with a guy who smoked a lot. And for about 9 months I smoked every day with him, and it was good that I broke up with him. It affected my social life; my friends said they never saw me. I can't even remember it, but apparently I would just go to the library by myself and hide, which was strange because I had always been really social.'

Why were you hiding? 'Because of this boyfriend I just stopped seeing all my friends, so I felt like I didn't have friends any more. So it was just like a vicious
circle. I thought they didn't want to see me, and they thought I didn't want to see them. So after I stopped going out with him, I stopped smoking, everything got much better. So I went through this nice little phase and I can say I did it, but now I have been going out with this boyfriend for about 2 years and he has always smoked a lot. And I have tried so hard to stop him using so much, and he did. He smokes all the time, but compared to what he used to smoke it is not much. And then last break from uni I just got really bored. I was house sitting two houses, and I just started smoking every day. I went back to uni and I am still smoking every day. ... and yeah, it is a bummer, like this morning when I went to get up to go to uni and I just didn't get up. I know that smoking marijuana is not helping at all.'

For some heavy/regular-using females, constant access to marijuana when they have a heavy/regular-using boyfriend had increased their usage: 'well it has escalated a fair bit, a lot of the other girls I know do because their boyfriends are like mine and do it all the time. It is probably because, like I said, boys were into it; it is sort of a boy's drug. Girls probably find it harder to get a hold of, except through their boyfriends. Most of the boys you meet do use it.'

6.10 Normalisation

All of the participants in this study believed that the majority of young people use, or at least try, marijuana.

6.10.1 Non-users' Beliefs about Normalisation

Non-users appeared to accept, and in some cases enjoy, that they were the exception to the norm: 'Because, you know, everyone everywhere uses mull'. Some saw this decision as a reflection of their individuality: 'I think it was pretty
much the norm to take it... I like to stand out and say, I have never ever touched it... in my high school I know that I was one of only two who never touched it. I just like that label. I like to be able to say that I have never touched it.'

6.10.2 Users' Beliefs about Normalisation

The idea that marijuana use was a normal behaviour was prevalent in the user groups: 'The amount of people that come to uni stoned, and come to school stoned. It is just so prevalent, ... it's kind of like, if you are having a cigarette, that is more taboo than having a joint, like in my circle of friends. What are you doing smoking cigarettes, get out ... you sometimes forget that you are smoking (dope) and it is like, "oh god, what should I do with this."' The belief that smoking marijuana was normal behaviour made it difficult for some users to perceive a feasible message to send about marijuana: 'Like in the ads, I don't know how... you would advertise against something that is so popular, without them going, that's stupid.'

6.11 Ex-Users

The results discussion to this point has segmented non-users from users. The user category has included ex-users because, for most part, their comments were similar. This section will address the data that was exclusively relevant to ex-users: the decision to stop using marijuana.

6.11.1 Ex-Users and Control

The fear of losing control, or an experience where ex-users have felt out of control, led some to choose not to use marijuana again: 'Need to be in control. That was one of my major things, there is no way I am ever going to do this again because I can't; I am a control freak. For other people it is fine, they can just sit back and go, cool, and just let everything roll by. For me it is like, I can't
talk, I can't do anything'; 'It was more a conscious decision. I just, I hate not being in control of myself. ... I found when I was smoking it, I just had no idea; it affected me quite a lot. I just thought this is ridiculous.'

In some cases, a bad experience was the final straw: 'I could barely move my arm, I couldn't really talk, I couldn't complain that they were hurting me when they were dragging me along the footpath, and they were too stoned to care. After ... that night I had already said, ... I don't want to do it tonight, and I just got drunk and said bugger it, I just lost control, and that was really the worst thing to do, mix it. Especially me, I do not react well ... I had already said no more, so that was it, the last time.'

6.11.2 Ex-Users and Paranoia

Some ex-users described situations where they became paranoid, fearing that people were talking about them, or staring at them. For some ex-users, seeing their friends behave in a paranoid manner caused concern: 'I had a turning point for me was, one night I was talking to a mate and he just turned around, and he was a good friend. (and he said) "why are you talking to me". Just snapped... ok. I didn't even know that he was high at the time, it just...the paranoid thing got a bit weird, no thanks.'

6.11.3 Ex-Users and Addiction

For some ex-users, the addictive usage of marijuana by friends led to a decision to quit: 'I thought, no - if I get as badly addicted as they are my life is just going to go down the tubes. So just looking at them was like a reality shock sort of thing. That is what made me stop.'
6.11.4 Ex-Users and Life-style Changes

A large proportion of the youth population have tried marijuana, yet only a small percentage go on to use it long term. This would suggest that marijuana use is a stage that most people will out grow. In this study, there was evidence that marijuana use was a stage that some ex-users had progressed beyond: 'I think as you grow up your attitudes change anyway. When you are young it is like, ohhh, this is illegal, you know. Underage drinking, it is like ohhh this is so cool. I don't really drink alcohol much any more ... I don't need that any more. I am a bit sort of past that stage of my life. I guess I would rather try something else, or do other things, not necessarily involving drugs.'

6.11.5 Substitution of Marijuana for Alcohol

An unexpected explanation for ceasing marijuana use related to the use of marijuana as a substitute for alcohol, whilst under-age. Once they were over 18 years of age, some ex-users felt that marijuana was not needed any more: '... it always was a replacement for alcohol, the reason why I started was because it was cheaper and more available than alcohol.' The irony of marijuana being easier to get than alcohol for under-age adolescents was not lost on some ex-users: 'And the fact is it is still easier to get hold of than legal drugs. Like marijuana is so much easier to get hold of than say, alcohol; it is ridiculous.'

The effort of getting alcohol or marijuana was seen as equally challenging for this ex-user before she turned 18: 'I used to do it before i was 18, and before I was 18 it was like it is just as much hassle to get mull as it is to get alcohol. Because you can't go get it yourself. ... so if you are putting the effort in, it is whichever one you are going to do. Now, once you are 18, everyone goes to the pub, and ... because I don't really hang around the people...like I have friends that do it and stuff, but they are not my close friends. So, if I was wanting to do
it I would have to go through them and all that sort of stuff, so it is a hassle. I would really have to want to. I might be still doing it if I was that close to the people that did it. But because I kind of separated from that group now... it is so much more of a hassle to get it, and I didn't really find... mull heaps better or anything... so I just get drunk!" Just as some non-users appeared to have limited opportunities to try marijuana, some ex-users appeared to have stopped use because they lacked easy access, rather than due to a conscious decision to reject use.

6.2 Conclusion

This chapter has reviewed the results of the focus group and in-depth interviews conducted for this study. The following chapter will discuss these results in the context of the literature.
Chapter 7: Discussion, Limitations and Recommendations

This study has looked at the motivations, experiences and decision making processes of young people regarding illicit-drug use, and particularly marijuana. As stated in Chapter One, this study was designed to examine the following questions:

- Does use of marijuana alter the source credibility of anti-marijuana messages? If so, how do perceptions of source differ according to use levels?
- Does use of marijuana alter the message credibility of anti-marijuana messages? If so, how do perceptions of message credibility differ according to use levels?

Other secondary research questions were:

- Does marijuana use influence the credibility of other illicit-drug messages? If so, how do perceptions of credibility differ according to use levels?
- Do perceptions of the physical and social risks of using marijuana and other illicit drugs vary according to levels of use?
- Is there evidence of cognitive dissonance affecting young people who are making decisions about using illicit drugs?

This chapter will analyse the results discussed in Chapter 6, in relation to the existing research discussed in Chapter 2. This chapter also expands into new areas of research to explain unexpected findings. Following this discussion is a section on the limitations of this study. This chapter
concludes with recommendations for social marketers to consider in light of this research and a discussion of opportunities for further research.

### 7.1 Influence of Source Credibility by Marijuana-Use Levels

- Does use of marijuana alter the source credibility of anti-marijuana messages? If so, how do perceptions of source differ according to use levels?

This study supported the suggestion that differing levels of marijuana use influence the source credibility of anti-marijuana messages.

#### 7.1.1 Non-users' Perceptions of Source Credibility

Consistent with Glassner and Loughlin (1987), non-users provided conservative views about drug use. Non-users believed the messages they have received from traditional anti-drug sources. Non-users believed that they had received the 'objective truth' from traditional anti-drug sources. Non-users saw parents as the most influential source in their decision to reject marijuana use.

An unexpected finding was the level of cynicism non-users held toward social marketing generally. Mangleburg & Bristol's (1998) research into youth and media suggested that there were growing levels of scepticism in the youth population toward marketing messages generally. The cynicism shown by the non-users in this study may be an illustration of this phenomenon. The cynicism of non-users toward the efficacy of social marketing messages may also be a consequence of their personal experiences; seeing many of their peers ignoring social marketing messages relating to alcohol, tobacco and marijuana use.
7.1.2 Users’ Perceptions of Source Credibility

Anti-drug social marketing lacked source credibility in the eyes of marijuana users. Firstly, users perceived government sources were untrustworthy because they had an agenda based on prohibition. Thus, credibility was lost because social marketing messages from the Government were assumed to be driven by this agenda.

Secondly, government sources lacked credibility because they lacked expertise in the eyes of the user audience. Users perceived that government sources lacked the personal experience to understand marijuana use.

Some of the users’ responses to social marketing messages were consistent with Brehm’s (1966) theory of reactance. Brehm’s (1966) theory of reactance suggests that prohibiting behaviour makes it more appealing, and that removing a freedom creates a stronger desire to reinstate that freedom. Evidence of reactance behaviour did not only apply to users. Even though non-users have chosen to not use marijuana, there was a strong sense that some non-users also believed they had the right to make their own decisions. This may be a result of the age group studied in this research (18-24), and the desire of young people to be independent (Arnett & Taber, 1994).

Another consequence of reactance behaviour can be feelings of hostility toward the person threatening or removing the freedom (Wickland, 1974). This study found considerable negativity by users toward the Government in its role as ‘prohibitor’. In some cases, this negativity also applied to parents and schools in their roles as authoritative figures.
Users viewed school-based drug education as an extension of the Government’s prohibition message. Research in the United Kingdom found similar attitudes among young drug users, who were critical of the prohibition message embedded in drug education (Measham, Parker, & Aldridge, 1998).

The government’s policy of using parents as a distribution channel for anti-drug messages raises concern about the impact this role has on family connectedness (Resnick et al., 1997). Parents who advocate prohibition may provoke a reactance-type response in some users, who reject their parents advise on the basis of poor credibility, and actively avoid communicating with their parents about drug issues. Evidence of the damage this can cause to family connectedness was illustrated by the responses of some female users who felt they needed to protect their parents from the realities of their drug use: ‘for their own sake’.

Essentially, this research found evidence of a “them and us” mentality that sees ‘anyone older’ and ‘non-users’ as being from a different mindset, and lacking credibility on drug issues. Users perceived that anyone who had not used drugs could not understand their perspective, and was not valid as a source of information.

The only exception to this was medical professionals. As a source, medical professionals met both criteria for credibility; they were assumed to have expert knowledge (expertise) and they were perceived to be bound to use this knowledge without prejudice (trustworthy).
7.2 Influence of Message Credibility by Marijuana-Use Levels

- Does use of marijuana alter the message credibility of anti-marijuana messages? If so, how do perceptions of message credibility differ according to use levels?

Consistent with the results of source credibility, this study supported the suggestion that perceptions of message credibility in anti-marijuana messages were influenced by the level of marijuana use. Message credibility is linked to source credibility, and at times, it was difficult to separate these two variables. Nonetheless, this study was able to look specifically at the types of messages that participants felt had salience and credibility.

7.2.1 Non-users' Perceptions of Message Credibility

Consistent with Glassner and Loughlin (1987) non-users believed the messages were factual, and conveyed accurate information about the consequences of marijuana use. Generally, however, non-users did not perceive that the campaigns shown to them were likely to be effective. There were several reasons for this. One reason for this belief was the perception that once a person uses illicit drugs it is "too late" to communicate information to them about the risks of drug use. This perception was consistent in both the male and female groups.

The second reason that some non-users were cynical about the efficacy of anti-drug social marketing was the perception that the messages were too soft. The non-using females held this belief quite strongly, arguing that the Government campaigns were too tolerant, and that the campaigns were not sufficiently
graphic or threatening to be effective. This belief contrasted with the perceptions of users, who thought that the campaigns lacked credibility, in part, because they were too extreme, and did not offer realistic images of marijuana use. Research has suggested that fear-based approaches to illicit-drug use are unlikely to be effective with the user audience (Hamilton, 1998; Schoenbachler & Whittler, 1996). It appears that the sorts of messages non-using females wanted were messages confirming their own elevated concepts of the risks associated with marijuana use.

The third reason that some non-users did not believe that the campaigns would be effective was that they believed that the campaigns did not project the realities of peer pressure. Non-using males, in particular, appeared to have experienced overt peer pressure to participate in marijuana use. This is likely to be a result of the expectations surrounding male behaviour and drug use (Moon et. al., 1999; Van Etten et. al., 1999; Warner, 1999; Zickler, 2000). Further discussion of peer pressure research is provided in 7.6.3.

7.2.2 Users’ Perceptions of Message Credibility

Users tended to feel that the messages sent regarding marijuana use were exaggerated and sensationalising the risks of use. These findings were consistent with Kouns & Danielson (1998), who found that young users accepted that using drugs was not good for them, but felt social marketing messages 'demonised' marijuana.

While all of the user groups viewed source credibility consistently, message credibility showed greater variance between genders, and between levels of use. Firstly, the differences noted related to beliefs about the risks associated with marijuana use. Heavy/regular users perceived less risk in heavy/regular use than
light/occasional users, and all users perceived virtually no risk in light/occasional use. This finding is consistent with that of Resnicow et. al. (1999) who found the same perceptions in relation to cigarette smoking. Also consistent with Resnicow et. al.’s study was the apparent ‘harm minimisation’ behaviour of some light/occasional users, who viewed the risks associated with heavy/regular use as sufficient grounds to limit their use to the ‘risk free’ level of light/occasional use.

Secondly, in the heavy/regular user groups, gender differences were evident in their reactions to message credibility. Heavy/regular-using males were dismissive of the risks of heavy marijuana use. This finding is consistent with that of Brown (1997) who found that young people felt that their positive personal experiences were evidence that they were being ‘lied’ to by society about the dangers of drugs. The heavy/regular-using males presented themselves as upbeat, active people, who have a lot of fun, and are not concerned about the Government’s opinion of their behaviour.

In contrast, the heavy/regular-using females were inclined to accept that their use behaviour was bad for them, and acknowledged the negative side effects they felt marijuana was having on their lives. Some of these heavy/regular users presented a more self-defeated, depressed attitude toward their use.

Though these gender differences may be a result of the sampling, it is possible that they relate to Warner’s (1999) finding that male intoxication from drug use was considered ‘normal’, while female intoxication was still considered ‘deviant’. The male attitude may be a response to society’s ‘acceptance’ of their youthful drug adventures, while the females could be sub-consciously absorbing society’s disapproval of their deviance.
It is known that males are at greater risk of coming into legal difficulties as a result of their drug use, as they tend to be more likely to use drugs in a public place, and more likely to be involved in dealing or purchasing drugs from dealers (Hammer & Pape, 1997; Warner, 1999). This study is consistent with this finding as only male users raising issues associated with the risks of obtaining marijuana.

Similar to a reactance response toward sources is the 'message backlash' reaction noted by Jaynes (1988) and Peele (1985), who expressed concerns that promoting drug prevention increased adolescent awareness of illicit drugs that could lead to experimentation. The current study found some evidence that social marketing messages had resulted in an increased curiosity about drug use. Some users claimed that hearing messages that told them not to use particular drugs simply raised their interest in that drug.

### 7.3 Influence of Social Marketing on Use of Other Illicit Drugs

- Does marijuana use influence the credibility of *other illicit-drug* messages? If so, how do perceptions of credibility differ according to use levels?

This study supports the proposition that marijuana use influences users' perceptions about the credibility of anti-drug campaigns for all illicit drugs.

#### 7.3.1 Non-users' Perceptions of Credibility in Other Illicit-Drug Messages

Predominantly, non-users believed that messages relating to other illicit drugs were accurate and credible. Non-users relayed information about the risks associated with backyard drug makers and the potentially fatal consequences of illicit-drug use.
Social marketing messages may have been quite effective with this group. Some male non-users expressed interest in 'party' drugs that indicated they had contemplated using these drugs. They indicated that the messages they had received about the risks associated with these drugs had convinced them that they should not use them. One exception was a male non-user of marijuana who was a regular user of 'party' drugs.

This non-user was unusual in the sample of non-users, but his situation does raise concerns about the potential of anti-tobacco messages influencing young people to avoid smoking, thus avoid marijuana use. If this was to lead young people to use 'party' drugs instead, as was the case of this non-marijuana user, the net impact of this strategy may be undesirable.

7.3.2 Users’ Perceptions of Credibility in Other Illicit-Drug Messages

Users had a variety of beliefs in relation to other illicit drugs; however the role of social marketing had low credibility with this group. Of the potential sources of information, social marketing was viewed as one of the least credible sources to people who had personal marijuana use, unless the information correlated with other sources, such as personal experience or observation. Even when the messages were consistent with the beliefs they held, marijuana users showed a resistance to social marketing messages: 'You don’t do heroin because people have died from it, not because an ad said that.'

In this area, the findings of the current study are consistent with Jones and Rossiter (2001) who stated that compared to non-users and ex-users, marijuana users were least likely to believe messages about other illicit-drugs.
7.4 Perceptions of Risk

- Do perceptions of the physical and social risks of using marijuana and other illicit drugs vary according to levels of use?

Research has indicated that risk perceptions lower according to the extent of an individual's drug use (San, 1999). Resnicow et. al. (1999) found that regular users perceived less risk in regular use than occasional users did. Resnicow et. al. (1999) also found that both regular and occasional users perceived the risk of occasional use to be low. This is consistent with the findings from the current study, where each level of use (except possibly high/regular-using females) perceived their own use to be relatively safe, and only considered those who used more than themselves to be taking risks.

Similarly, those with experience using other illicit drugs were more sceptical about the risks of those drugs than those who had not used other illicit drugs.

7.5 Cognitive Dissonance

- Is there evidence of cognitive dissonance affecting young people who are making decisions about using illicit drugs?

Many of the participants in this study claimed that the decision to use marijuana was a spontaneous one; thus it involved a low-involvement decision-making process. This result was surprising, given that the decision to use an illegal substance has potentially high-involvement consequences.

The extent to which cognitive dissonance was occurring in the transition from non-user to user was difficult to assess, given the lack of involvement the decision appeared to hold for most users. This lack of involvement in the
decision to use illicit drugs may be explained by another transition point that was not directly investigated in this study. Legal drugs, alcohol and tobacco, are generally drugs that are used before initiation into illicit drugs (E.M.C.D.D.A., 2000). Given that this use is often an underage behaviour (Department of Health U.K., 1999), it is likely that using tobacco and/or alcohol represents many young people’s first experience of ‘illegal behaviour’. Similarly, it is also likely that these behaviours defy the authority of some parents. It is possible that using alcohol and/or tobacco is the act that raises the most dissonance for young people. Using alcohol to the extent of being ‘drunk’ is also likely to be the first experience a young person has of intoxication. Given that many of the participants in this study viewed marijuana as a drug similar to tobacco and alcohol, this study may have underestimated the role of cognitive dissonance by not considering the role of tobacco use and under-age drinking. Further research into this relationship would provide a better understanding of the role of cognitive dissonance in young people and useful information about the behaviour and decision making of this group.

Nonetheless, what is evident from this study is that cognitive dissonance behaviour appears to come in to play after use commences. Users demonstrated rejection of anti-drug sources based on their lack of credibility, on both the trustworthiness and expertise criteria. Users looked to other users who confirmed their decision, because they believed that non-users were incapable of understanding their perspective. This cognitive response is consistent with cognitive dissonance theory, where a person seeks confirming evidence that their decision was the correct one, and finds grounds to devalue sources that contradict their decision (Jonas et. al., 2001).
7.6 Other Influences on the Decision to Use/Not Use Marijuana

This section considers the sources that non-users and users believed were influential on their decisions about marijuana use.

7.6.1 Influences of Non-Users' Decision

Parents appeared to have had a large influence on the non-users' groups. This could be interpreted to suggest that parents are a credible, significant influence. Resnick et. al. (1997) refers to the role of family connectedness as a protective factor against youth risk-taking behaviour. Non-users generally reported a high level of connectedness to their families.

It is, however, worth considering the possibility that parental influence may be only part of the answer. Though most non-users reported being in situations where other people were using marijuana (at a party for instance), when probed, very few of them had actually been offered marijuana directly. This is consistent with Van Etten and Anthony (1999) who found it was the opportunity to use that influenced use, rather than willingness to use. Some non-users felt the offer to use marijuana was there if they wanted it, but few had actually had to say 'no'. Thus, the idea that teaching young people the skills to say 'no' to peer pressure will 'immunise' them from drug use may have limited relevance to young people's life experiences. In fact, lack of access to marijuana at stages when other young people were experimenting with marijuana may have been an influence on some non-users' decisions. There was evidence from users that peers play a role in providing access and information about how to use marijuana. A number of users commented that they feared the social embarrassment of being a 'novice' when first using marijuana. Friends who
were experienced users played an important facilitative role, by providing 'how to' information. If non-users do not have friends with this knowledge to ask, they could lack the confidence to use marijuana in a social setting, such as a party. Thus being at a party where the marijuana is being smoked does not necessarily imply easy access.

There is another explanation that could explain this scenario. Schoenbachler and Whittler (1996) looked at the role of sensation-seeking orientation to determine if there are differences between levels of sensation seeking and response to threat messages used in anti-drug advertising. Schoenbachler and Whittler's (1996) study suggested that low level sensation-seekers were unlikely to use drugs, as they were not drawn to seeking novel sensations, and actively avoid being in positions where they will be challenged to participate in risk-taking behaviour (Schoenbachler & Whittler, 1996). Cox and Cox (1998) concluded that 'like attracts like' in peer relationships, raising the possibility that non-users were inherently unlikely to use and were prone to find peers of similar persuasion (or sensation-seeking orientation). Thus, non-users may be low sensation-seekers who are more comfortable associating with peers of similar sensation-seeking orientation, and actively avoid being in the position to be offered marijuana. Further support for this proposition comes from Donohew et. al.'s (1999) study, which found that sensation-seeking behaviour is a strong predictor of peer relationships, and that peers of similar sensation-seeking orientation cluster together. This would represent the antithesis of facilitative peer influence (Cox & Cox, 1998), where the lack of peer access to drugs assists in preventing experimentation.

Non-users believed that their decision to reject marijuana was based on the knowledge they had acquired from parents and society that told them that it was 'wrong' to use marijuana. Among the female non-users particularly, there was a
common belief that they were not the sort of girls that do 'the wrong thing'; they were 'too good' for that. This was consistent with Warner's (1998) study that found marijuana use was considered a deviant behaviour for females, but not males. The non-using females in this study repeatedly projected the belief that 'good girls do not use drugs.'

The non-using males held similar views. Some of these males believed that they had 'potential' that could be compromised by marijuana use. Non-using males also believed that they were stronger individuals than those who used marijuana, and they could not be 'pressed' into drug taking. Warner's (1998) study suggested that male marijuana use was normative behaviour. For males to reject marijuana use, they must stand up to the normative pressures of peers. The male non-users in the current study displayed pride in their non-user status and their ability to stand up to peer pressure.

All non-users in this study rejected the idea that social marketing had influenced their decision to not use marijuana. They believed that they had made their decision based on their knowledge of the risks, and the primary source of this knowledge appeared to be their parents. If social marketing had influenced non-users, the influence had been sub-conscious.

It would be easy to assume that non-use is evidence of successful parenting, and that encouraging parents to be 'good' parents would reduce marijuana use. It should be noted, however, that approximately 73% of young people (20-29 years) try marijuana (Australian Institute of Health and Welfare, 2000). It is highly unlikely that the parents of all these children were poor communicators. Many of the non-users in this study reported that siblings had been, or were, users of marijuana and other drugs. It is likely that parenting skills or a parent's connectedness to their children will not be sufficient to prevent
marijuana use for some young people. This study suggests that a young person’s decision to use or not use marijuana may be most influenced by the peers they choose, and that the peers are chosen for their similar desires.

7.6.2 Crossing the Line: The Decision to Use Marijuana

Experimentation with marijuana appears to have two potential outcomes. One outcome is that the experience of trying marijuana is either not sufficiently satisfying to justify continued use, or is a negative experience that leads to rejection of marijuana use. In this thesis, these young people were categorised as trier/rejectors. The other outcome is that the experimentation with marijuana use is a pleasant experience, leading to either light/occasional or heavy/regular use. Evidence from the preliminary research suggested that people who try marijuana and reject it (trier/rejectors) were likely to hold different views from those who have used marijuana for a period of time and then chosen to stop (termed ex-users in this study).

Jones and Rossiter (2001) found that ex-users were likely to hold views that were more negative toward drug use than either users or non-users. The data from this thesis did not support this proposition. The current study found ex-users were not particularly negative to marijuana use per se; rather they felt that marijuana use was no longer desirable for them. The difference between Jones and Rossiter’s study and the current study may to be grounded in the definition of ex-users, which Jones and Rossiter did not provide. This thesis proposes that those who have used for a period of time, and ceased to use are likely to have different views to those who have tried marijuana and rejected it (trier/rejectors). This proposition is supported by the findings of the European Monitoring Centre for Drugs and Drug Addiction (2000) report that found ex-users had a plethora of reasons for ceasing use, but ex-users were not negative to the use of
marijuana by their peers. Jones and Rossiter's study is considered in full in the later section on Ex-Users.

7.6.3 Influences on Users' Decision

Peers and siblings/cousins appeared to play a pivotal role in the transition from non-user to user status in this study. Essentially, they could offer the facilitative roles of providing access to the drugs, and information on how to use them. Importantly, siblings/cousins also provided a contagion influence by generally modelling marijuana use without significant consequences. Users frequently raised the influence of these role models as evidence that there was nothing to 'fear' about marijuana use.

Consistent with Cox and Cox (1998), the influence of peers tends to be one of contagion: when an individual wants to try a behaviour, but "is restrained by perceived social norms against it, feels a reduction of these restraints when seeing someone else engage in the behaviour, and then does so himself" (Cox & Cox, 1998, p. 2). Contagion influence appeared to be the most common form of peer influence in this study.

Conformity (peer pressure) occurs when a young person participates in behaviour for positive social rewards (acceptance) or to avoid negative social consequences (exclusion/ridicule). There was also evidence of conformity peer pressure (Cox & Cox, 1998) occurring, primarily among the male users. This could relate to Warner's (1999) findings that male use of drugs is normative and female use perceived as more deviant. It could be that females do not experience as much conformity pressure because it is not 'expected' that females will use marijuana, while males may experience more pressure to conform to male normative behaviour. This also correlates with the experiences of non-
users, where the males felt that social marketing should be providing assistance to young people to help them resist the 'peer pressure', while non-using females did not raise this as an issue.

Moon, Hecht, Jackson and Speller's (1999) study investigated the issue of behavioural differences between males and females, stating that females tend to be offered drugs in a private setting, whilst males were more likely to be offered marijuana in a public place. This is also likely to be a factor in the type of peer influence that was reported within this study. Moon et. al., (1999) also stated that the style of drug offers differed in male vs. female settings. Females had a greater opportunity to reject marijuana use without argument, whilst males were likely to feel a need to explain their decision, opening themselves to persuasion from others present (Moon et. al., 1999). The current study found some evidence that male non-users felt that they had to stand up to peer pressure to avoid use. This raised resentment and anger in some non-using males who were determined to hold their ground. Female users and non-users did not describe any cases of overt pressure from peers.

The peer influence of family members was an unexpected finding, as this was not discussed in the preliminary literature search. On investigation of this issue, however, evidence does exist that siblings influence drug use. Sandwijk, Cohen, Musterd, & Langemeijer (1995) looked at the use levels of family members in Amsterdam and found that 50% of cannabis users who a sibling that also used cannabis. Sandwijk et. al. point out that this may be a generational influence. Given the broader use of marijuana in this generation than in the past it was considered likely that more than one sibling in a family would have marijuana-use experience (Sandwijk et. al., 1995). Nonetheless, it was an indication that siblings are a potential influence. A study by the Department of Health in the U.K. (1999) reported that children whose brothers and sisters did not use drugs
were less likely to take them. The statistics in this case stated that 39% of children with drug-using siblings living at home took drugs themselves. This compared to 5% who have drug-using siblings living at home, but do not take drugs themselves; and 9%, who were either an only child, or whose siblings have left home (Department of Health U.K., 1999). Though these statistics do not provide evidence of siblings encouraging or supplying drugs to brothers or sisters, it does provide weight to the possibility that siblings are an important influence.

This study did not measure the sensation-seeking orientation of users, thus it is difficult to discuss the influence this may have on users' decision to use marijuana. Future studies may benefit from including Schoenbachler and Whittler's (1996) measure, as their study concluded that high sensation-seeking individuals were more likely to use drugs. Schoenbachler and Whittler (1996) determined that social threats would be more persuasive to adolescents than physical threats. Though this is useful direction for developing appropriate messages for drug-users, their findings also highlighted the difficulty of finding a social threat that would be credible to a drug-using adolescent. Using social threats that contradict the beliefs of marijuana users can lead to increased scepticism and source rejection. This was evident in the current study when considering the messages “your friends will lose interest in you” and “mull smokers only have time for mull smoking”. Referring to anti-drug messages as PSAs (Public Service Announcements) Schoenbachler and Whittler (1996) stated that “a high sensation seeker is not only more likely to use drugs, but responds differently to anti-drug PSAs, feels he/she is immortal, and tends to view drugs favourably. PSA producers must recognize that reaching these at risk individuals is a necessary but difficult task” (Schoenbachler & Whittler, 1996, p. 54). Some suggestions for appropriate messages to target drug users are listed in the recommendations section.
7.6.4 Influences on Ex-users

Ex-users differed from present users in some ways, but mostly these differences were small. This appeared to contradict Jones and Rossiter’s (2001) suggestion that cognitive dissonance will lead to ex-users having strong anti-drug beliefs. Certainly, ex-users in this study were more inclined to recognise the risks in marijuana use than present users. There was, however, no support for the prohibitive approach, with ex-users expressing no regrets about their decision to use at the time that they did.

Jones and Rossiter’s (2001) paper titled “Believability of anti-drug advertising as a function of marijuana usage experience” used a quantitative approach and measured the believability of messages relating to cocaine and heroin based on the subject’s usage of marijuana. Jones and Rossiter found that ex-users of marijuana were more likely to believe negative messages about the risks of drug-use than either non-users or current users. There are several differences between Jones and Rossiter’s study and the current study, which may account differences in findings.

Firstly, Jones and Rossiter (2001) looked at the attitudes of marijuana users/non-users toward cocaine and heroin to investigate the influence of marijuana use on the perception of other illicit drugs. Cocaine was not raised in the current study, and it appeared likely that this sample had no personal experience with this drug. Heroin was raised only in a negative way. Party drugs (ecstasy and speed), and hallucinogens (LSD) were discussed, and some participants had used them. Statistical studies of drug use patterns in Australia suggest that this scenario of use is consistent with the general population, with the 20-29 year age group’s drug preferences being:
Ever used:
- Amphetamines - 25.4%
- Hallucinogens - 23.1%, and
- Ecstasy (and designer drugs) - 18.4%

In contrast, in the same age group the 'ever used' levels were Cocaine was 9.0% and Heroin 3.7% (Australian Institute of Health and Welfare, 2000).

Within the current study, participants had only second-hand knowledge of heroin, and held very negative attitudes toward its use. As a heavy/regular marijuana user said, 'something like heroin is just so, it gets me angry because you know how stupid it is. You can have a good time, let's be honest, a bit of whipper (speed) have an E (ecstasy), go out and party on. Heroin is just stupid. Not that speed is good, but it is better than heroin.' There was no support in this study for heroin use, at any level of drug experience.

Secondly, another explanation for the difference between this current study's findings and Jones and Rossiter's (2001) research could lie in the definition of an ex-user. Jones and Rossiter (2001) refer to ex-users, but do not define the extent of use needed for this categorization. It is possible that people who had very limited experience of marijuana use dominated this category. If so, this is fundamentally different to the ex-user group as defined in the current study. Ex-users were specifically screened to ensure that they had used marijuana either frequently or at least socially for a period of at least six months. This criterion was the result of the projective exploratory work described in Chapter 4, which indicated that members of the rejector/trier group were similar to the non-users. Due to limited resources, it was decided that this group be excluded from this study, as they appeared the group least likely to offer a perspective that was different from the other groups. The differences in perceptions between those who try and reject marijuana, and those who have been users and for a variety of reasons and have ceased use is worthy of further consideration. Thus, it is
recommended that future studies consider including the trier/rejectors as a separate group from ex-users or non-users. The differences in results between those of Jones and Rossiter and this current study emphasise the need to clearly identify the stages of use and the attitudes and behaviours associated with those stages.

The following is a model that represents the process of drug use as identified in this study.

In this model, non-users are static, and remain in that box. Those who try marijuana move from non-users' status to experimental use. From this point, there are two possibilities. Some will decide that they do not want to continue use, and will fall into the trier/rejector category. Those who continue use may shift between light/occasional and heavy/regular use, depending on personal circumstances and personal preference. At some point, most marijuana users cease use, thus becoming ex-users. Of fundamental importance in the current study is the recognition of the difference between rejectors and ex-users.
7.6.5 **Social Norms Theory**

A number of social norms theory studies have found that young people perceive their peers to be using cigarettes, alcohol and marijuana to a greater extent than is, in fact, the case (Hansen & Graham, 1991; Moore et al., 1996; Perkins, Meilman, Leichiter, Cashin, & Presley, 1999). Some social marketing campaigns in the United States have tried to overturn normative beliefs about marijuana use by providing contradictory evidence about the prevalence of use (Hansen & Graham, 1991). This current study has found some evidence of social norm perceptions. A shift in the perception of ‘social norms’ can occur when moving out of one social environment into another. This was the case for one ex-user who found that her university colleagues had more diverse backgrounds than she had previously experienced: ‘I was so shocked when I went to uni [to] find out that many of them had never even tried it... I thought that I was the norm.’

Drug use statistics provide some evidence that could be appropriate for a social norms approach. Despite the perception of participants in this study that marijuana use starts in Years 9 or 10, statistical evidence in Western Australia placed the average age of initiation for 20 – 29 year olds at 16.5 years (Year 12); (Australian Institute of Health and Welfare, 2000). Though the public perception may be that drug use is occurring at earlier and earlier ages, the age of initiation remained stable between the 1995 and 1998 surveys, although prevalence of use increased (Australian Institute of Health and Welfare, 2000).

Whilst these statistics could be used to combat the perception that ‘if you hadn't done it by Year 10, then that is extremely rare’, extreme care is required when using statistical data. In this study, all of the participants expressed the belief
that the use of marijuana was extremely widespread among young people. The age of initiation within this sample ranged from Year 7 (11 years of age) and on. Using a social norms approach could alienate young people who already show a reluctance to trust government-based statistics. If the personal experience of a young person is that everyone they know uses marijuana, social norms theory is unlikely to produce anything other than reduced credibility. Furthermore, telling young people that starting marijuana use in Year 12 is 'normal' may have undesirable results.

7.7 Consumption Behaviour

There was some evidence that an economic phenomenon noted by Chaloupka et. al. (1997) was occurring in this study. Chaloupka et. al. (1997) determined that young people substitute marijuana for alcohol when the price and/or availability varied. Some ex-users raised this issue, stating that the motivation to use marijuana came from its accessibility for those under 18 years, and lower cost than alcohol: ‘...it always was a replacement for alcohol. The reason why I started was because it was cheaper and more available than alcohol.’ This was also consistent with the findings of Measham, Parker & Aldridge (1998) who found that use of marijuana commonly decreased when young people gained access to pubs, though Measham et. al. also noted that access to clubs (i.e. night clubs) led to increased use of other drugs such as ecstasy and amphetamines.

Some ex-users indicated that they had used marijuana until they were able to access alcohol legally. Once they could easily access alcohol as a method of intoxication, the difficulty of obtaining marijuana seemed unnecessary.

Another issue raised by this research is the potential of social marketing to shift demand away from one drug to another. The study found one case of a non-
marijuana user who was a regular user of ecstasy (MDMA) and speed (amphetamines). He claimed his decision was a direct result of his desire to avoid tobacco use. This raises the question of whether reducing the appeal of marijuana through its association to tobacco could result in young people shifting their product preferences to other drugs that are not smoked.

Referring to research into the impact of a reduction in the supply of cannabis in India, a United Nations report stated: “Of those finding a cannabis shortage 76 per cent of students and 84 per cent of patients reported substituting other drugs” (Smart, 1976 p. 62). Therefore, marijuana may be a substitute for alcohol when price and availability is altered, and vice versa, and this shift may also lead toward other illicit drugs is likely. Social marketing practitioners must consider the implication that reducing the appeal of marijuana could increase the appeal of other illicit drugs.

1.8 Summary

This study suggests that once a person crosses the line and becomes a marijuana user, the credibility of anti-marijuana sources and anti-marijuana messages declines. This loss of credibility can flow through to all sources of anti-drug messages, leaving marijuana users with peers as their most trusted source of information.

Of particular concern is the potentially damaging government strategy of using parents as a distribution channel for prohibitive messages. Studies have repeatedly stated the importance of connectedness between parents and children to protect children from potentially dangerous behaviours (Dekovic, 1999; Resnick et. al., 1997; Schoenrock, Bell, Sun, & Avery, 1999). Present social marketing strategies designed to encourage parents to talk to their children about
drugs are premised on the belief that parents can prevent drug use. The implicit message that ‘good’ parents can prevent young people from using drugs sets most parents up for failure, and potentially damages their relationship with their children. This failure of communication may be more damaging to young people, and their parents, than the risks associated with using marijuana. A shift in emphasis toward informing parents about harm minimisation, and asking parents to talk to their children about avoiding harm in drug use situations, as well as avoiding drug-use, could be a more effective approach.

At the very least, present anti-marijuana strategies may be a waste of resources. This study suggests that the non-users sampled were not influenced by these messages, and users rejected them. There was some evidence that social marketing messages about other illicit drugs had been effective in discouraging use of other illicit drugs among non-marijuana users. This influence had not flowed through to the marijuana users in this study, who felt that government sources lacked credibility, in part, because they perceived that the Government would mislead them to achieve their agenda of drug prohibition.

This study has raised many questions about the role social marketing plays in influencing young people’s use of marijuana. It highlights the possible lack of credibility that anti-drug sources may have for marijuana users, and the risks associated with this loss of credibility. Unintended harm caused by the loss of source credibility and message credibility include damaging the connectedness of families, potentially shifting young people from marijuana use to use of other illicit drugs, and damaging the opportunity for social marketing to communicate other important health messages to this high-risk group.
7.9 Limitations

Qualitative research seeks to gain insight into a population, not to provide generalisable statistical information. Given that fundamental difference, this study must be read with due consideration to the limitations of such a research methodology.

It is always possible that the sample used in this research was atypical. Most of the participants were students with middle-class backgrounds. The sample was drawn from the suburbs of Perth, Western Australia. Thus, this study may not reflect the variations that could be evident in different socio-economic environments or geographical locations.

Furthermore, the numbers of participants in the non-using male groups and heavy/regular-using female groups were low (4), and this may have skewed the data. In-depth interviews were undertaken to reduce this impact.

The data used in this study is cross-sectional in nature. A longitudinal study research design would provide more reliable information on casual links. All of these limitations influence the generalisability of the data, which is the major limiting factor of this study.

The personal biases of the researcher can influence the interpretation of all forms of research. In this study, one researcher conducted all of the research data collection, transcribing and analysis. This improved the consistency of data collection, but it also increases the likelihood that personal biases might have influenced the process.
7.10 Implications for Social Marketing Practitioners

This research has provided a number of issues for social marketers to consider. Foremost, it has highlighted the need for all formative research related to anti-marijuana social marketing messages to involve measurement of use levels. The targeting of messages to users requires careful consideration of a number of issues that impact on users' perspectives of marijuana use.

Social marketers also require an understanding of the differences between the user levels, and particularly the likely variation in perspective between trier/rejectors and ex-users. Message credibility may be improved by the use of harm minimisation messages that are realistic and contain balanced practical advice for young people in drug-using situations. Source credibility requires extensive research to ensure that the chosen source is considered trustworthy and expert in the eyes of the relevant user groups.

To achieve Andreasen's (n.d) definition of social marketing, voluntary change for perceived improvement of personal wellbeing and society, social marketers must also consider the unintended harm that their messages may be causing. Potential damage to family connectedness, shifting drug use from marijuana to other illicit drugs, and reduction in the credibility of all illicit-drug messages are all possible consequences of the present strategy to prevent marijuana use.

7.11 Implications for Further Research

The significance section of this study suggests there appears to be good reasons to conduct that future studies into social marketing and drug use should contain a user status measure. It is difficult to validate the significance of any findings relating to the effectiveness of a campaign without determining the user status of the respondents.
• Further research is needed to test the effect on non-users of shifting from prohibitive/fear based messages toward harm minimisation messages.

• Further research is needed to determine whether trier/rejectors and ex-users are substantially different groups.

• Investigation is needed to determine the impact of substitution behaviour in relation to price and product availability, to assess the potential impact of reducing demand for marijuana and potentially raising demand for other forms of drugs.

• Further research is required to examine the likelihood that linking the dangers of smoking to marijuana use will cause a shift from marijuana to other illicit drugs.

• Research with parents is required to determine whether using parents as a social marketing distribution channel has damaged family connectedness. This research needs to segment parents according to the use patterns of their children, although this may have major methodological difficulties.

• Future research into cognitive dissonance in young people should consider the influence of alcohol and tobacco as the potential transition points for young people away from traditional sources and toward peer influence.

• Further research is required to ascertain whether the credibility of medical practitioners can be harnessed to provide harm-minimisation messages to young drug users.
7.12 Recommendations

This study has provided many valuable insights into the way young people negotiate illicit drug use, particularly the use of marijuana. All of the participants were asked what they would want to communicate to young people about marijuana use, and how they would communicate this information. The following recommendations are based on these discussions, as well as the literature.

7.12.1 Recommended Sources

In all social marketing messages relating to marijuana use, it is very important to consider the source, and research into source credibility should be conducted with user groups. This research suggests that the sources likely to have credibility were peer based - 'someone who has been there and knows what it is like', or a medical person.

- Research suggests that medical practitioners are in a position to communicate with drug-using adolescents. In a study of multiple risk-taking adolescents (i.e., they participated in at least two health risk behaviours), two thirds of the multiple risk takers had been to their doctor in the past 12 months (Porter & Lindberg, 2000). This research suggests that doctors have an opportunity to discuss illicit-drug use and pass on important harm minimization information to adolescents. At the very least, doctors could be encouraged to discuss marijuana use with young people who have specific medical conditions that can be provoked by drug use, such as asthma and ADHD.
There is a need for further research into how this opportunity could be maximised. Research conducted into doctors’ efficacy in counselling on youth health issues has suggested that medical education ill prepares doctors to deal with specific issues facing young people (Sanci, 2000). The reluctance of doctors to deal with drug associated issues has also been noted in research in the U.K., which found GPs perceived these patients to be: “time-consuming, unrewarding and presenting management problems to treat” (Deehan, Taylor, & Strang, 1997, p. 1).

- Research into peer-to-peer communication has indicated reluctance on the part of peers to advise their friends not to use drugs, and have concluded that any attempt to use peer communications as a method of primary prevention is likely to fail (Kelly et. al., 1996). Peer communication does, however, offer potential for passing on harm minimisation messages. The facilitative roles that peers play as advisors on how to use marijuana and other drugs could be utilised to pass on useful harm minimisation information.

- Similarly, the potential to encourage siblings to ‘take care’ of younger siblings may be an opportunity to reduce harm. Siblings have a stake in providing information that will minimise risk, and the results of this research suggested that siblings were highly credible.

- Web sites can offer an easily accessible platform for highly credible information about illicit-drug use. This study suggested that the source of this information is critical, and further suggests that a medical source would be credible, whilst sites that are government branded or clearly prohibitive in their approach would not be credible.
Based on this study, the use of Government branding in social marketing campaigns can only be viewed as self-serving. There was no evidence that the Government was considered a credible source among drug users. Without a significant and genuine shift in government policy, the Government is viewed as untrustworthy and willing to misrepresent information to achieve their prohibition agenda.

Both non-user and user groups considered school-based programs to be of minimal influence. Despite this lack of perceived value, school projects about drug effects had been the only time most users had actively sought information, and thus may be the only time that users were 'forced' to consider the health impacts of drug use. The general feeling was that drug programs at school were presented 'too late'. This finding is consistent with research in the United Kingdom which found that young people wanted drug education to begin at age 11 years, and continue into young adulthood (Measham et al., 1998).

However, as stated earlier, statistical evidence in Western Australia places the average age of initiation for the largest user group, 20 – 29 years, to be 16.5 years (Australian Institute of Health and Welfare, 2000). This indicates that young people may have exaggerated concepts of the behaviour of their peers, which would be consistent with social norms theory (Hansen & Graham, 1991; Moore et al., 1996; Perkins et al., 1999).

School-based programs can also provide an opportunity to build the knowledge base of young people. A shift toward messages that encourage informed decision-making through credible harm minimisation messages could present an opportunity to improve the efficacy of school-based drug education.
7.12.2 Recommended Messages

From this research, there were several messages that could be effective in reducing the risks associated with marijuana use in young people who presently use:

- The threat of lung cancer builds on existing fears in relation to cigarette campaigns. Highlighting that marijuana is not a 'natural' product for smoking, and that the health implications of smoking marijuana are greater than that of smoking tobacco could be a deterrent to some users, and reduce/limit use in others. Such a campaign should, however, consider the potential unintended result that such a strategy may move users from marijuana to other illicit drugs that do not require smoke inhalation.

- Some users recognised that their use of marijuana during the last years of school had reduced their motivation and focus on their studies. Case studies of young people who have faced these problems could be an effective method of relaying this message to students. The male light/occasional use group offered an example that illustrates the type of case study that may be appropriate for this use:

  'I smoked quite a lot when I was in Year 11 & 12, and I think it had a huge effect on my schooling...like I graduated, but I could have done much better. Like, I didn't even think about it, I just thought “stuff it”. But now, I just wish I didn't smoke it at all in that time, or a lot less than I did anyway.'

Other suggested harm-minimisation messages include:

- Ensuring that others know what you have taken, and are prepared to care for you if you experience negative side effects.
- Encouraging peers to take responsible action if they are with a person who experiences negative drug side effects, and,
- Providing information about appropriate forms of care in the event of negative side effects, for instance lying a vomiting person on their side. In addition, preventative measures, such as drinking sufficient water and avoiding mixing drugs, licit and illicit.

Based on the results of this study, social marketing messages based on social threats require careful research to ensure that they do not alienate the target audience, or do harm.

7.13 Conclusion

This study has provided valuable insights into the role of anti-drug social marketing. Firstly, the findings indicate that 'crossing the line' from being a non-user of marijuana to a user of marijuana results in a loss of credibility for most anti-drug sources and most messages. Secondly, the study offers a segmentation strategy for future research to differentiate between user levels, and identifies the potentially significant difference between trier/rejectors and ex-users. This is an important distinction which has not already been made in the literature, and which has implications for future research on user levels. Thirdly, the study identifies the risks associated with using parents as a distribution channel for anti-drug messages. This study suggests that social marketing practitioners should consider avoiding prohibitive anti-marijuana messages, as it appears they could possibly create harm. This study, and the literature, supports the use of social marketing to implement harm minimisation strategies that seek to reduce the potential harms of using illicit drugs.
References


Copeland, J. (2001) *Young cannabis users' attitudes and beliefs about cannabis and school drug education*. NSW Department of Education.


Health Department of Western Australia. (1999). Drug aware education campaign phase II (Internal document). Perth: Health Department of Western Australia.


Independent Drug Monitoring Unit. How cannabis was criminalised [Internet Site] (http://www.idmu.co.uk/historical.htm), [accessed: 17 January, 2002].


cannabis offences under a civil penalties system and strict prohibition in two Australian states. Canberra: Department of Health and Aged Care.


The Health Department of WA. (1999). Drug aware program campaign summaries.

drug opportunities and transitions to first use: Marijuana, cocaine,
hallucinogens and heroin. *Drug and Alcohol Dependence, 54*(2), 117-
125.

differences in the earliest stages of drug involvement. *Addiction, 94*(9),
1413-1419.

Vartanian, L. R. (2000). Revisiting the imaginary audience and personal fable
constructs of adolescent egocentrism: A conceptual review. *Adolescence,
35*, 100+.

Warner, J. (1999). *Girls are retarded when they're stoned*. Marijuana and the
construction of gender roles among adolescent females. *Sex Roles, 40*(1-
2), 25-43.

teachers as enforcers in the war on drugs: What their students see and

and the police: What high-school students believe about detection and

Government leadership. *International Journal of Drug Policy, 9*(5), 297-
303.

Adolescent substance abuse: A review of the past 10 years. *Journal of
the American Academy of Child and Adolescent Psychiatry, 37*(3), 252-
262.


Lawrence Erlbaum Associates.

taking, and related constructs as predictors of adolescent substance use:
An application of Cloninger's theory. *Journal of Substance Abuse, 6*(1),
1-20.

Wright, J. E., & Pearl, L. (2000). Experience and knowledge of young people

Wright, K. (1998, 1-20-98). Dare we admit it? Drug war is a bust with our

Zickler, P. (2000). Gender differences in prevalence of drug abuse traced to
opportunities to use. *NIDA Notes, 15*(4).

APPENDIX ONE:
Drug Use Survey used for Projective Study
Drug Use Survey

Thank you for completing this exercise. Please complete the following short survey on your personal experience of illicit drugs. To protect your privacy, please use whichever name you wish.

Have you ever taken/used illicit drugs: [ ] Yes, No [ ]

Which drugs? [ ]

How often? [ ]

Have you been with other people who are using illicit drugs? [ ] Yes, [ ] No

If yes:

Has this experience affected your opinion of drugs, and if so, how? [ ]

Age [ ]

Sex [ ]
APPENDIX TWO:
Group Recruitment Screening Form
GROUP RECRUITMENT SCREENING FORM

Hi, My name is .................. and I am conducting research on behalf of Edith Cowan University and Healthway. Could I speak to you for a moment.

If Yes
Are you aged between 18-24 years of age? YES NO (end)
Note sex MALE FEMALE
Have you been resident in W.A. for the past 5 yrs? YES NO (end)

The research we are conducting is totally confidential and no identifying information will be used or kept. We will reimburse you $20.00 for your travel expenses. The discussion groups are about marijuana use and will be held on Wednesday nights in March at Market Equity in West Perth, would you be interested in attending?
IF YES – continue IF NO – Thank and discontinue

Which of the following statements best describes your personal use of marijuana?

- Not at all, never used (non-users).
- I use marijuana occasionally, and have for the last six months or more (light/occasional users).
- I use marijuana regularly, at least once a week (heavy/regular users).
- I no longer use marijuana but when I was using I did so for a period of six months or longer.

(NOTE: If none of these categories is applicable, thank and discontinue)

Could we have your first name and a contact number or email address so that the research team can inform you of further details about the groups

NAME: __________________________
CONTACT PH: ______________________
E-MAIL: __________________________

THANK-YOU VERY MUCH FOR YOUR TIME
APPENDIX THREE:
Topic Guide for the Focus Groups
APPENDIX SEVEN

OBJECTIVES FOR FOCUS GROUPS

1. To ascertain what influence, if any, anti-marijuana campaigns have had on participants;

2. to ascertain sources that are considered credible to each of the groups;

3. to ascertain messages that are seen as credible to each groups;

4. to establish whether participants have experienced conflict between social messages and personal experience;

5. to ascertain the consequences of marijuana use that groups see as valid/concerning;

6. to establish if a difference exists between levels of marijuana use and message and source credibility;

7. to determine if marijuana use influences willingness to receive messages about other illicit drugs.

TOPIC GUIDE FOR FOCUS GROUPS

I. Introduction
   introduction of moderator
   explain how focus groups work
   more in depth than questionnaires
   no right or wrong answers
   OK to feel/think differently from others
   we want as many different points of view as possible
   moderator is neutral
   explain that this group is looking at health/social issues
   Confidentiality assured
   explain ground rules: want you to interact but as this is taped, please
   don't all talk at once
   Please don't start side conversations

II. Warm-up
Ask each group member to introduce himself/herself and say a little about themselves, e.g. whether married, working, children etc.

III. Top-of-mind awareness sources for marijuana information

Ask each group member to complete questionnaire 1

Discussion
Have they ever sought information?
Who has valid information?
Are some sources likely to be incorrect?

IV. Awareness of marijuana campaigns

Ask each group member to complete questionnaire 2

Discussion
Can you remember what you thought of the campaigns you have heard?
Did they influence your feelings about using marijuana?
Did they influence your decision whether or not to use marijuana?

V. Risk

Are there any risks of using marijuana?
Are there circumstances that reduce the risks?
Is there a safe level of use?

VI. Advertisement

Hand around advertisements

Discussion
Have you seen any of these ads?
Did they influence you in any way?
What do you think of them
How do you feel about them
Is this useful information?
Do these ads portray realistic images to you?
Is there any thing you didn’t know before tonight that is in these ads?
Would you change your behaviour as a result of this information?

VII. Cognitive Dissonance
Discussion
Can you think of the first time you were offered marijuana?
If yes
How did you feel?
What did you think?
What did you do?

VIII. Awareness of other drug campaigns
Return to recall of previous campaigns
Discussion
What do you think about drug messages generally?
Do you believe the messages?
Have they influenced your behaviour?

IX. Alternatives
Are there any messages you think should be used to tell young people about marijuana use?
What do you think are the best ways to communicate messages to other young people about marijuana use?
What types of messages should be avoided?
Is there anyone who shouldn’t be involved in giving messages about marijuana to young people?
If you were designing advertisements about the risks of using marijuana, whom would you use as a spokesperson?

X. Closure
Ask them if they have questions or would like clarification

Thank them and ask them to collect their envelopes from reception.
APPENDIX FOUR: Research Consent Form
Thank you for agreeing to participate in this research. By signing this form, you are accepting the invitation to participate in a focus group, where you will join with a group of people to discuss the use of marijuana by young people. The discussion will take approximately one hour. You will be paid $20.00 to cover your travel and time expenses.

You are free to withdraw your consent at any time during the research if you wish.

This research is being undertaken as part of a Masters thesis at Edith Cowan University. The research aims to explore how young people make decisions regarding the use of marijuana.

Your identity will remain totally and strictly confidential. Your identity will not be associated with anything you say or do during the research. This form will be kept separate from any research data, and will not be used for any purpose. It is used simply to ensure that you are aware of what we are doing, and what your rights are.

If you agree with the terms of this form, please sign below. If you wish to discuss any issues arising from this consent, or the research please contact the researcher, Fiona Perman on 9389 9416, or her supervisor, Dr. Nadine Henley on 9266 4835.

Please print name: __________________________

Signature: __________________________

Date: _______
APPENDIX FIVE:
Focus Group Demographic Data Form
FOCUS GROUP DISCUSSIONS

Good evening. Thank you for agreeing to participate in this group discussion. Before the start of the group, would you please complete this short questionnaire and return it to reception.

Q1 Firstly, do you, or anyone else in your household work for an advertising or market research company?
   YES ☐
   NO ☐

Q2 Have you attended a focus group discussion, on any topic, in the last six months?
   YES ☐
   NO ☐

Q3 Please tick the box that indicates your age.
   18-20 ☐
   20-22 ☐
   22-24 ☐

Q4 Please tick the box that indicates your gender.
   Female ☐
   Male ☐

Q5 What is your occupation or primary source of income?
Q6 Please tick the box that indicates your marital status

Single □
De-Facto □
Married □
Divorced □
Widowed □

Other, if so, please state:

Q7 Please indicate which of these options best describes your living arrangements

Living alone □
Living at home with parents □
Living in shared accommodation □
Living in student accommodation □
Living in a hostel □
Living with partner □
Other, please state

Q8 Please indicate the level of education you have completed or are presently undertaking

Completed Presently undertaking
Year 10 □ □
Year 12 □ □
Tafe Course □ □
Diploma □ □
Degree □ □
Post-Graduate Diploma □ □
Masters □ □
Doctorate □ □

Q9 What is your postal code
□ □ □ □

Please fill in your first name: ________________________________

PLEASE HAND THIS SHEET TO THE PERSON AT RECEPTION
THANKYOU
APPENDIX SIX:
Focus Group Questionnaire One
QUESTIONNAIRE ONE

First Name__________________________

Date and Time of Group ______________________

Please answer the following questions

Who would you ask if you wanted information about marijuana?

________________________________________

Where would you go to look for written information about marijuana?

________________________________________

Is there anyone or any place you wouldn’t trust to give you honest information about marijuana use?
APPENDIX SEVEN:
Focus Group Questionnaire Two
QUESTIONNAIRE TWO

First Name

Date and Time of Group

Please answer the following questions:
1. Can you recall seeing or hearing any advertising messages about marijuana use?
   Yes ☐
   No ☐
   Not sure ☐

If yes
2. What type of advertisement was it? (tick as many as are applicable)
   Radio ☐
   Television ☐
   Press/Newspapers ☐
   Magazine ☐
   Other, please state: ________________________________

3. What messages, if any, do you remember from the advertisement/s?

4. Can you recall seeing or hearing any advertising messages about other illegal drugs?
   Yes ☐
   No ☐
   Not sure ☐

If yes: Which drugs did the ads refer to?
5. What type of advertisement was it? (tick as many as are applicable)
   - Radio □
   - Television □
   - Press/Newspapers □
   - Magazine □
   - Poster □
   - Other, please state: ________________________________

6. What messages, if any, do you remember from the advertisement/s?
____________________________________________________
____________________________________________________
____________________________________________________
____________________________________________________