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The Role of Self-Presentation in Adolescent Health Risk Behaviours

by

Kelly Roth

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Supervisor: Dr. Kimberley Gammage

Faculty of Applied Health Science

Brock University

St. Catharines, Ontario

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Abstract

Self-presentation has been identified as playing a key role in the performance of various potentially hazardous health behaviours such as substance abuse, eating disorders and reckless behaviours (Leary, Tchividjian, & Kraxberger, 1994; Martin & Leary, 2001; Martin, Leary, & O'Brien, 2001). The present study investigated the role of self-presentation on adolescent health-risk behaviours. Specifically, this study examined the prevalence of adolescent identified health-risk behaviours rooted in self-presentational motives in youths aged 13-18 years. The current study also identified the specific images associated with these behaviours desired by youth, and the targets of these behaviours. Also, the relationship between these behaviours, and several trait measures (social physique anxiety, public-self consciousness, fear of negative evaluations, self-presentational efficacy) of self-presentation were examined. Finally, the gender differences in health risk behaviours and self-presentational concerns were examined.

Participants in the present study were 96 adolescent students, 34 male and 62 female, recruited from various private schools across Southern Ontario. Students ranged in age from 13 to 18 years for both males (M age = 15.81 years, SD = 1.49) and females (M age = 14.89 years, SD = 1.17) and ranged from grades 8 through 13. Results of the current study suggested that Canadian adolescents between the ages of 13 and 18 years participated in health risk behaviours for self-presentational purposes. Drinking alcohol, skipping school, and performing stunts and dares were identified as the most common health risk behaviours performed for self-presentational purposes by both males and females. Appearing fun and cool were the most commonly reported desired images while appearing brave and mature were the least reported. The most desired target group cited



was same sex friends, followed by other sex friends. Trait measures of self-presentational concerns identified females as being higher in public self-consciousness, and social physique anxiety than males. Males were found to be higher in self-presentational efficacy than females. The total number of health risk behaviours was predicted by self-presentational efficacy and social physique anxiety for males, and social physique anxiety for females.

Findings of the current study suggest that Canadian adolescents' health risk behaviours are rooted, in part, in self-presentational motives. Thus far, an educational approach to health interventions has been favoured and/or adopted by teachers, health promoters, and educators (Jessor, 1992). Implications of the current study suggest that although educational interventions are beneficial in presenting the associated risks with certain activities and/or behaviours, one reason this type of approach may be ineffective in changing adolescent behaviour over the long run is that it does not address the strong and prominent influences of interpersonal motives on health damaging behaviour. It is evident that social acceptance and public image are of importance to adolescents, and the desire to make the "right" impression and to achieve peer approval and acceptance often override health and safety concerns (Jessor, 1992). Thus, a self-presentational approach focusing on changing the images associated with the behaviours may be more successful at deterring adolescent health risk behaviours.



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Chapter I. Detailed Problem Statement

1.0 Introduction

Health risk behaviours are behaviours participated in by individuals willingly, despite the possible known health consequences (Irwin, 1990). Unsafe sex, smoking, substance abuse and reckless driving are just a few potential health risk behaviours.

Negative consequences of such behaviours may include sexually transmitted diseases, chronic diseases such as cancer, addictions or accidental injury or death. The current study examined the following health risk behaviours in adolescents: substance use/abuse, criminal behaviour, violent/aggressive behaviour, self harm behaviours, eating behaviours, sexual intercourse, and reckless behaviours.

1.1 Incidence and Severity

The incidence rates of health risk behaviours in Canadian adolescents are high, and as adolescents get older, participation rates increase dramatically. Even at relatively young ages, adolescents engage in health risk behaviours. For instance, in 1998-99, 3% of 12-14 year olds were regular or occasional drinkers, and in 2000-2001, 3% of 12-14 year olds smoked daily (Canada Year Book, 2001). In 18-19 year olds, those numbers jumped to 83% and 18%, respectively (Canada Year Book). Of even greater concern is the fact that engaging in one of these behaviours is associated with engaging in others (termed clustering), a trend that increases with age (Igra & Irwin, 1996).

As the incidence rates of many of these health risk behaviours in Canadian adolescents continue to grow (Statistics Canada, 2004a), the rates of the associated negative consequences have also increased. For example, 26% of young male drivers involved in fatal crashes in 2000 had been drinking at the time of the crash, compared

with 13 percent of the young female drivers involved in fatal crashes (Mothers Against Drunk Driving, 2003). Also, over 20% of persons aged 12 to 21 years participated in binge drinking at least once in the 30 days prior to completing an alcohol use survey in 2000 (Mothers Against Drunk Driving).

1.2 Influences on Health Risk Behaviours

Statistics Canada (2004a) has identified one of the major factors in adolescent alcohol and drug use as the behaviour of friends. The report is based on data from 4,296 Canadian adolescents aged 12 to 15 years. Two-thirds of adolescents who reported that all or most of their friends had used alcohol, and 82% of adolescents who reported having friends that smoked marijuana had, themselves, used alcohol and marijuana at least once. By contrast, only 8% of those who reported having few or no friends who used alcohol had ever been drunk, and 7% who reported having few or no friends who had used marijuana had ever used marijuana themselves. In addition, peer influence far exceeded that of parental influence in predicting substance use among adolescents.

A behaviour's social context also plays an important role in risk behaviour prevalence (Maxwell, 2002). Some activities, such as drinking alcohol (often done at parties) and chewing tobacco (associated with team sports) are more social, group based activities whose prevalence may be affected by larger group norms which encourage such activities. If friends do not engage in these activities, teens may be less likely to engage as well.

It appears that peer norms represent a form of social influence that helps determine whether a behaviour is desirable. Social influence occurs when people continually compare themselves with others to ascertain whether their own behaviour is

appropriate (Maxwell, 2002). Despite the previous findings, it is still unclear why others have such influence over adolescent health risk behaviour.

1.3 Self Presentation

One explanation that may lead to an enhanced understanding of health behaviours in adolescents is self-presentation. Self-presentation, or impression management, is the process by which individuals attempt to monitor and control the impressions other people (e.g., family and friends) hold of them (Leary, 1992). Leary and Kowalski (1990) developed a two-component model, which identifies the particular processes involved in self-presentation (see Appendix A). This two-component model of impression management conceptualizes self-presentation as being composed of two discrete processes. The first process involves impression motivation, which is defined as the degree to which people are motivated to control how others see them. Three factors have been identified by Leary and Kowalski (1990) as determining the degree to which one is motivated to self-present, including the goal-relevance of impressions, the value of desired goals, and the discrepancy between desired and current images. The second process is impression construction, which involves how people decide, implicitly or explicitly, which image(s) they want to foster as well deciding precisely how they will go about doing so (e.g., deciding whether to create the desired impression via selfdescription, nonverbal behaviour, or the use of props). Five factors have been identified as determining the kinds of impressions people try to construct: self concept, desired and undesired identity images, role constraints, target's values, and current social image (Leary & Kowalski).



1.4 Self-Presentation and Health Risk Behaviours

Self-presentation has been associated with health risk behaviours in a variety of populations, including children and adolescents (Aloise-Young, 1993; Petridou et al., 1997), college-age students (e.g., Martin & Leary, 1999; Martin & Leary, 2001), adults (Culos-Reed, Brawley, Martin, & Leary, 2002; Jones & Leary, 1994; Leary & Jones, 1993) and older adults (Camp, Klesges, & Relyea, 1993; Martin, Leary, & Rejeski, 2000). Within the adolescent population, self-presentation has been linked to a variety of health risk behaviours, including cigarette smoking (O'Callaghan & Doyle, 2001), eating behaviours (Wilson et al., 2002), reckless behaviours (Leary et al., 1994), academic underachievement (Juvonen & Murdock, 1995), and physical inactivity (Martin et. al., 2001) among others. In fact, adolescents may be very likely to engage in selfpresentationally based health risk behaviours Chassin (1984) identified early and middle adolescence (11-15 years of age) as the timeframe in which adolescents may be particularly likely to adopt a behaviour because of its associated image. For example, if the image associated with alcohol use is one that their friends admire, adolescents may drink to project that socially desirable image to a peer audience.

Currently, few studies have specifically examined the images adolescents attempt to portray by engaging in health risk behaviours (i.e., impression construction). Martin and Leary (2001) examined the images associated with particular health risk behaviours in college-aged participants. They found that college-aged students reported the image of appearing cool/laid-back followed by appearing brave/risk-taker most often. In an adolescent population, Roth and Gammage (2006) asked students to identify the images they thought other adolescents wanted to portray by engaging in health risk behaviours.

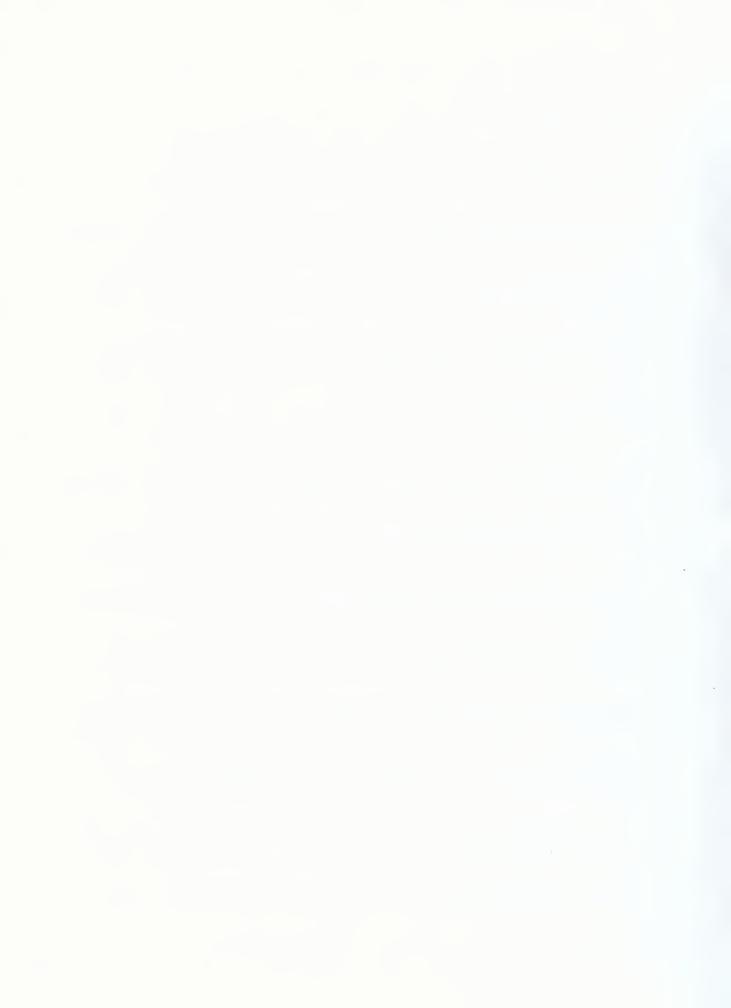


They found that cool and mature were most often cited, followed by brave, physically attractive, and fun.

With respect to targets of self-presentationally based behaviours, a considerable amount of research has identified strong friend and peer involvement and social motivation in health risk behaviours (Barton, Chassin, Presson, & Sherman, 1982; Martin et al., 2001; Maxwell, 2002). However, Shucksmith, Hendry, Love, and Glendinning (1993) identified friends and peers as being different in nature. This contention was further supported by Roth and Gammage (2006) who found that adolescents most frequently identified friends, followed by peers as the targets of self-presentationally based health risk behaviours.

Finally, limited research has previously examined the relationship between trait self-presentational concerns and participation in health risk behaviours. Martin and Leary (2001) examined the prevalence of health risk behaviours in college-aged students. They found a positive relationship between the occurrence of health risk behaviours and fear of negative evaluation for females and public self-consciousness for males. Martin et al. (2001) also examined the relationship between trait self-presentational concerns and health risk behaviour participation. Results of this study showed that several trait measures of self-presentational concerns, including social physique anxiety, public self-consciousness, and fear of negative evaluation were positively correlated with males' and females' endorsements of self-presentational motives for certain health practices.

Self-presentational efficacy, the confidence people have in their ability to present desired images to others (Maddux, Norton, & Leary, 1988) has yet to be examined in relation to health risk behaviours. However, Leary and Kowalski's (1990) self-



presentational framework suggests that people's behaviours may be constrained by the probability they can successfully portray particular impressions to others. People hesitate to try to create images that others are unlikely to believe, because of the possibility that they cannot pull the impression off. Therefore, it may be that only when people are confident that others will see them as they desire, that they will engage in health risk behaviours designed to portray those images.

1.5 Limitations to the Extant Research

While self-presentation has been linked to many health risk behaviours in adolescents, several limitations to this research exist. First, with the exception of one study (Martin & Leary, 2001), each of the behaviours selected for investigation was determined by researchers and not by participants themselves. A wider variety of health risk behaviours may exist than has previously been examined. Also, adolescents may not consider researcher identified behaviours as health risk behaviours or as being selfpresentationally motivated. Second, these behaviours are often examined in isolation of one another, yet it is likely that adolescents engage in multiple behaviours (e.g., Martin et al., 2001). In addition, while these studies have examined self-presentation in general, the specific images desired and targets of these images have not been investigated. While research indicates the existence of self-presentational motives for health-risk behaviours for both American college students (Martin & Leary, 2001) and Irish adolescents (Martin et al., 2001), none of these studies has examined Canadian adolescents. Due to geographical distances, as well as ensuring the accuracy of research examining Canadian adolescents' health risk behaviours, it is important to examine the desired images and targets in this population to avoid drawing inaccurate conclusions.



1.6 Purpose of the Present Study

Given these limitations, the general purpose of the current study was to investigate the role of self-presentation in adolescent health-risk behaviours. Specifically, this study examined the prevalence of adolescent identified health-risk behaviours rooted in self-presentational motives in Canadian adolescents aged 13-18 years. Second, using the two-component model, it also identified the specific desired images (i.e., one of the antecedents identified by Leary and Kowalski (1990) as a contributing factor in impression construction) desired by adolescents associated with these behaviours. Third, the targets (also considered to be a contributing factor in impression construction) of these behaviours were also identified. Fourth, the relationship between these behaviours, and several trait measures of self-presentation (i.e., social physique anxiety, public self-consciousness, self-presentational efficacy, and fear of negative evaluation) were examined. Finally, the gender differences in health risk behaviours and self-presentational concerns were examined.

1.7 Hypotheses

Hypothesis 1: Canadian adolescents would report participating in health risk behaviours for self-presentational purposes.

Hypothesis 2: Canadian adolescents would report appearing cool and mature most frequently as the desired images, followed by brave, physically attractive, and fun.

Hypothesis 3: The most frequently identified target groups would be friends, followed by peers.

Hypothesis 4: There would be a positive relationship between the number of health risk behaviours participated in at least once for self-presentational purposes and



several trait measures of self-presentational concerns (i.e., social physique anxiety, fear of negative evaluation, and public self-consciousness, and self-presentational efficacy).

Hypothesis 5: There will be gender differences found with respect to selfpresentational concerns and the number of health risk behaviours participated in for selfpresentational purposes. More specifically:

- a) Females will score higher on measures of social physique anxiety,
 public self-consciousness and fear of negative evaluation.
- b) Males will score higher on the measure of self-presentational efficacy.
- c) Males will participate more frequently in health risk behaviours for selfpresentational purposes.

1.8 Delimitations

Several restrictions were placed on the study by the researcher. Only a limited number of schools participated in the present study from only a specific region in Southern Ontario. Additionally, the age of the participants was limited from 13 years to 18 years. Only the health risk behaviours identified by adolescents in a previous pilot study were examined. Therefore, other health-risk behaviours may not have been accounted for in this particular sample. Similarly, a limited number of desired impressions and targets of behaviour were examined though other possible impressions and targets may exist. In addition, self-presentational concerns were assessed through the Social Physique Anxiety Scale (Hart, Leary, & Rejeski, 1989), the Public Self-Consciousness Scale (Fenigstein, Sheier, & Buss, 1975), the Self-Presentational Efficacy Scale, and the Fear of Negative Evaluation for Adolescents Scale (La Greca & Stone, 1993).



1.9 Limitations

Based on these delimitations, several limitations to the study exist. First, because the participants were recruited from Catholic, or private school sectors in Southern Ontario, the generalizability of this study is limited. The rates of occurrence of health risk behaviours due to beliefs, discipline, and religion among this particular sample may be different than public schools adolescents, or adolescents in different geographic regions. A second limitation of the present study is the design. A cross-sectional, correlational design was used, so the data collected represent a single point in time. Further, causality cannot be determined. The questionnaire used also required participants to recall past behaviour and report potentially sensitive behaviours honestly.

1.10 Definitions

Self-Presentation. The process by which individuals attempt to monitor and control the impressions other people (i.e., friends, family) hold of them (Leary & Kowalski, 1990).

Health Risk Behaviours. Behaviours participated in that pose a threat or harm the health of the participant that participants know pose a threat (e.g., doing illicit drugs) (Irwin, 1990).

Adolescents. Male or female participants aged 13 to 18 years.

Images. Specific impressions or appearances purposely portrayed to target group(s) by participant (e.g., smoking to portray an image of being cool).

Target Groups. A group or individual the participant is attempting to impress or make a specific impression toward (i.e., opposite gender peers, same gender peers, opposite gender friends, same gender friends, parents)



Social Physique Anxiety. Involves the degree to which individuals become concerned when others observe or evaluate their bodies, as assessed by The Social Physique Anxiety Scale (Hart et al., 1989).

Fear of Negative Evaluation. Involves the fears, concerns, or worries participants may experience regarding peers' negative evaluations of the self. The Fear of Negative Evaluation subscale of the Social Anxiety Scale for Adolescents was used to assess this construct (La Greca & Stone, 1993).

Public Self-Consciousness. Refers to the consciousness that arises when a person becomes aware of another's perspective and, as a result, views him/herself as a social object. The emphasis is on the reactions of others on the self. The Public Self-Consciousness Scale (Fenigstein et al., 1975) was used in the present study to assess this contact.

Self-Presentational Efficacy. The confidence a participant has in his/her ability to portray specific images that will lead to desired outcomes (Maddux et al., 1988). The Self-Presentational Efficacy Scale was used to assess this measure in the current study.

1.11 Significance of Study

The rates of occurrence of adolescent health risk behaviour participation are troubling. The risks of participating in these health risk behaviours are potentially very serious and in some instances life threatening. Thus, there is a need for a better understanding of factors related to health risk behaviours to reduce their occurrence. Self-presentation is one framework that may be potentially beneficial in helping us to understand why these behaviours occur in adolescents. A greater understanding could lead to the development of interventions targeted to this group. Ultimately, the

development of self-presentational interventions may have the potential to evoke positive behaviour change in adolescents, which would have significant implications for the safety and well-being of individuals and society as a whole.



Chapter II: Literature Review

The Role of Self-Presentation on Adolescent Health Risk Behaviours

2.0 Introduction

Everyday, people show-off in dangerous ways, exceeding the speed limit while driving, drinking alcohol in excess, failing to take reasonable safety precautions, and engaging in a variety of other dangerous and ill-advised behaviours that pose risks to their health, well-being, and even their lives (Martin & Leary, 2004). These behaviours occur despite the fact that people know the risks they are taking. Health risk behaviours are those that may result in known harmful health consequences, but that are still undertaken willingly (Irwin, 1990). For example, unsafe sex, smoking, substance abuse and reckless driving are all health risk behaviours. Negative consequences of such behaviours may include sexually transmitted diseases, chronic diseases such as cancer, addictions or accidental injury or death. Health risk behaviours are not limited to just one stage in life. They occur at any or all stages of life, from childhood to adulthood, and even can occur in the elderly (Leary et al., 1994; Martin et al., 2000). However, of particular interest to the current study is the occurrence of health-risk behaviours in adolescence.

This age cohort is important for several reasons. In this age group, health risk-behaviours often occur in clusters rather than in isolation, an occurrence that increases with age (Igra & Irwin, 1996). That is, adolescents will often participate in more than one health risk behaviour at a time. Consequently, they can be at even greater risk for injury or illness. Also, participation in many health-risk behaviours during adolescence increases the likelihood of participation in health risk behaviours during adulthood (Statistics Canada, 2004b). Conversely, adolescents who do not participate in these



behaviours are less likely to engage in them as adults (Statistics Canada, 2004b).

Therefore, efforts to prevent these behaviours in adolescents are important. Finally, the incidence rates of many of these behaviours are increasing in this age group (Statistics Canada, 2004a).

2.1 Incidence and Severity of Health-Risk Behaviours

The incidence rates of many of these health-risk behaviours in Canadian adolescents are at all time highs, and for many behaviours, growing (Statistics Canada, 2004a). Substance use is one of the most commonly occurring health risk behaviours in this age group. In 1998-1999, Statistics Canada estimated that 3% of those aged 12-14 years, 64% of those aged 15-17 years, and 83% of those aged 18-19 years were either regular or occasional drinkers. In 2000-2001, 3% of adolescents aged 12-14 years and over 18% of those aged 15-19 years smoked tobacco daily. Illegal drug use has shown the most significant increases, including the use of cannabis (marijuana) and hallucinogens such as "magic mushrooms" (Canada Year Book, 2001). In 2000, approximately seven million adolescents aged 12 to 20 years were considered binge drinkers (five or more alcoholic beverages on the same occasion) in a governmental study by the World Health Organization (U.S. Department of Health and Human Services, 2003). Over 30,000 adolescents each year need emergency health care for alcohol overdose (U.S. Department of Health and Human Services) and alcohol kills more adolescents than all other drugs, with eight adolescents a day dying in alcohol-related car accidents (U.S. Department of Health and Human Services).

Sexual behaviour is also a health risk behaviour prevalent in adolescents. In one British Columbia study in 1996, it was found that more than half of all seventeen year-old



adolescents were sexually active, but less than six out of ten had used a condom during their last sexual episode (Canada Year Book, 2001).

Nutrition behaviours can also be associated with health risks. Obesity has been called an epidemic by the World Health Organization (2003), who considers it to be almost as great a threat as smoking. In North America, one-third of the population is medically overweight (Taggart, 2001). The escalating problem of overweight and obesity is a priority health issue among young females (Health Canada, 2004). The prevalence of overweight among girls aged 7-13 years increased from 15% to 23.6% between 1981 and 1996, while the prevalence of obesity more than doubled, from 5% to 11.8%. In the same time frame, the prevalence of overweight boys increased from 15% in 1981 to 35.4% in 1996. During the same period, the prevalence of obesity in children tripled, from 5% to 16.6% for boys and from 5% to 14.6% for girls (Health Canada, 2004).

Numerous other nutrition related health risk behaviours have also been noted. An estimated 200,000 to 300,000 Canadian females aged 13 to 40 have anorexia nervosa and twice as many are estimated to have bulimia (Branswell, 2001). A recent study on teenage females in Ontario has found unhealthy attitudes toward food and unhealthy dieting practices that could potentially lead to the development of eating disorders such as anorexia or bulimia (Branswell, 2001). More disturbing is the fact that the problems appear to be starting at an earlier age than previously seen, with signs of females aged 12 to 14 years displaying disordered, unhealthy dieting behaviours (Branswell, 2001).

Finally, aggressive and violent behaviours also occur relatively frequently in this age group. Every year, approximately 1 in 10 youth comes into contact with the police for violations of the Criminal Code or other federal statutes. Data collected in 1995



indicate that, of these adolescents, 19% were charged with a violent offence. Of the small number charged with a violent crime, a minority were related to homicide, attempted murder or aggravated assault (Health Canada, 2004). The World Resource Center (1998) conducted a survey concerning weapon possession in a sample of adolescents aged 14 to 19 years. The study found 8.5% of high school students had carried a weapon (e.g., gun, knife, or club) during the 30 days preceding the survey, 8.3% of high school students had carried a weapon on school property during the 30 days preceding the survey, and 7.4% of high school students were threatened or injured with a weapon on school property during the 12 months preceding the survey.

While these statistics indicate the growing problem of health risk behaviours in adolescents, an even more troubling fact is that engaging in one of these behaviours often leads to engaging in others (i.e., clustering). Petridou et al. (1997) examined the clustering of health-risk behaviours in adolescents 12 to 17 years of age. They attempted to determine if participating in one pre-determined health-risk behaviour correlated with participation in another pre-determined health risk behaviour. Results of the study indicated that smoking tobacco was highly correlated with the failure to wear a seat belt, binge drinking, and riding with a drunk driver, while non-use of oral contraceptives was correlated with riding with a drunk driver. They concluded that risk-taking behaviours do not occur in isolation; rather they tend to cluster. In addition, it was also concluded that over time, involvement in one type of risk behaviour increased the likelihood of becoming involved in other risk behaviours.



2.2 Consequences of Health Risk Behaviours

Many people accept adolescence as a time during which adolescents experiment with a wide variety of behaviours, including potentially unhealthy ones. In fact, Statistics Canada (1999) has stated that adolescents will test limits and take risks during this time. Consequently, some individuals believe that these health risk behaviours are just a normal part of growing up. However, while these types of behaviours may be perceived as normal, their consequences can be quite severe. Consequences can occur both in the short and long term.

2.2.1 Short Term Consequences. For many of these health risk behaviours, short-term consequences can occur with only a single act, and can lead to extreme outcomes. For alcohol and drug use, one of the most immediate risks is accidental overdose. Further, research continues to show that young drivers are more often involved in alcohol-related crashes than any other comparable age group (Mothers Against Drunk Driving, 2003). Alcohol-crash involvement rates, the proportion of the alcohol related crashes and the risk of alcohol-related crashes all reach their peaks with young drivers, with fatal crashes peeking at age 21 (Mothers Against Drunk Driving).

Dangerous and reckless behaviours also have the potential for severe consequences. Accidental injury leading to death is the number one cause of adolescent death, followed by suicide, and can occur with one acute incident. Approximately one-half of all deaths among children aged 10 to 14 are due to external causes, most commonly car accidents (Statistics Canada, 2004a).

2.2.2 Long Term Consequences. Not all the consequences of health risk behaviours are seen immediately. Some may take months, or even years, to evidence



themselves. Long-term tobacco use is the leading preventable cause of death worldwide (World Health Organization, 2003). Currently, tobacco use is the probable cause of at least 25 different diseases (World Health Organization). By the year 2020, deaths related to tobacco use are estimated to become the leading cause of life-years lost across the globe (World Health Organization). The use of tobacco causes approximately 30% of cancers in Canadians (Canadian Cancer Society, 2002). Long-term health consequences of adolescent smoking are reinforced by the fact that most young people who smoke regularly continue to smoke throughout adulthood. Smoking harms young people's physical fitness in terms of both performance and endurance. The younger people start smoking cigarettes, the more likely they are to become strongly addicted to nicotine (National Center For Chronic Disease Prevention and Health Promotion, 2003). Among young people, regular smoking is responsible for an increased frequency and severity of respiratory illnesses. Lastly, the possibility of addiction to tobacco or other substances is likely.

Adolescents who consume alcohol before age 15 are four times more likely to develop alcohol dependence than those who begin drinking at age 21. In addition, more than 40 percent of individuals who start drinking before the age of 13 will develop alcohol abuse or alcohol dependence at some point in their lives (Mother's Against Drunk Driving Canada, 2003).

Disordered eating behaviours also hold long-term consequences. Starvation diets and excessive exercise can lead to exhaustion, excessive, unhealthy weight loss and ultimately even death (Health Canada, 2004). On the contrary, physical inactivity can



lead to obesity. Obesity threatens health and is linked to high blood pressure, increased risk of diabetes, heart attacks, strokes and several cancers (Health Canada).

2.3 Factors Associated with Health Risk Behaviours

Demographic factors such as age, and gender, have been identified as being associated with the increased likelihood of adolescents engaging in health risk behaviours. First, risk-taking behaviours have been identified as generally increasingly occurring with age. Igra and Irwin (1996) found rates of sexual activity, substance use, reckless vehicle use, and delinquency increased with age during adolescence. Gender may also influence the occurrence of health risk behaviours. For example, Hayes and Ross (1987) identified physical inactivity and eating disorders to be more prevalent in females than in males, whereas lifting excess weight at the gym and performing risky stunts has been identified more frequently in males than in females (Martin & Leary, 2001).

Research has also indicated that family is a significant influence on adolescent's behaviour (Resnick et al., 1997), as teens acquire information regarding risk behaviours from parents and teachers (Maxwell, 2002). For example, Igra and Irwin (1996) identified a link between substance use by adolescence and parental substance use. Parental modeling of, and permissive attitudes toward, substance use have also been implicated in the initiation of substance use in early adolescence (Statistics Canada, 2004a).

In addition to family impacting these behaviours, during adolescence peers become a more important influence on behaviour (e.g., Jessor, Chase, & Donovan, 1980), and peer influence is more closely linked to problem behaviour than parental influence (Jessor & Jessor, 1977). Adolescents are particularly vulnerable to peer influence because



they share a stressful biological event over a relatively short period of time. These physical changes are coupled with shifting personal expectations and new social demands (Maxwell, 2002). As children move away from childhood and into adolescence, identification with a peer group becomes more important (Igra & Irwin, 1996). Igra and Irwin suggested that normal development during adolescence involves individuation from the family and identification toward a peer group. As a result, parental impact on risk-taking behaviour may wane as peer influences increase throughout adolescence.

2.4 Peer Influence on Behaviour

Acknowledging that adolescents are particularly vulnerable to peer influence, it is important to understand how this process occurs. As a foundation for better understanding peer influence mechanisms, Maxwell (2002) suggested using three criteria to study adolescent friend selection: physical proximity, age, and similarity of lifestyles. The most salient of these three characteristics for adolescents when choosing friends is whether potential friends have social traits that are congruent with the teen's own identity (Maxwell, 2002). This is important information, because as youths form new friendships, ties among adolescents with shared activities are strengthened, while bonds with other individuals diminish. Thus, new friends are likely to have a large effect on a teen by anchoring pre-existing behaviours, similarities or changing the adolescent's discrepant behaviour (Maxwell, 2002). That is, common behaviours are reinforced, while differing behaviours are altered either by stopping old ones, or beginning new ones.

Statistics Canada (2004a) has identified one major factor in adolescent alcohol and drug use as the behaviour of friends. This report is based on data from 4,296 Canadian adolescents aged 12 to 15 years. Two-thirds of adolescents who reported that

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all or most of their friends were using alcohol, and 82% of adolescents who reported having friends that smoked marijuana had, themselves, used alcohol and marijuana at least once. Only 8% of those who reported having few or no friends who used alcohol had ever been drunk, and 7% who reported having few or no friends who had used marijuana had ever used marijuana themselves. Further, peer influence far exceeded that of parental influence in predicting substance use among adolescents (Statistics Canada).

A behaviour's social context also plays an important role in risk prevalence (Maxwell, 2002). Some activities, such as drinking alcohol (often done at parties) and chewing tobacco (associated with team sports) are more social, group based activities whose prevalence may be affected by larger group norms. If friends do not engage in these activities, teens may be less likely to engage in them.

In essence, peer norms represent a form of social influence that helps determine whether a behaviour is desirable. Social influence occurs when people continually compare themselves with others to ascertain whether their own behaviour is appropriate (Maxwell, 2002). Despite the previous findings, we still do not have a full understanding of the ways in which peer influence adolescent health risk behaviour.

2.5 Theories of Adolescent Health Risk Behaviours

Researchers have attempted to explain the occurrences of these health behaviours as being due to normal exploration during adolescent development, biological factors, psychological factors, or some combination of the above. Explanations that suggest health risk behaviours are just a normal part of growing up consider many of these behaviours as occurring due to curiosity (Jessor, 1992). Biological theories suggest that risk-taking behaviours result from some hormonal effects, puberty, or genetic



predispositions (Igra & Irwin, 1996). Psychological/cognitive based theories implicate deficits in self-esteem, cognitive immaturity, or high sensation seeking in the occurrence of health risk behaviours (Igra & Irwin, 1996). Social/environmental theories rely on family and peer interactions, or community and societal norms to explain adolescent participation in risk-taking behaviours (Igra & Irwin, 1996). Often, features from more than one theory are used when attempting to account for the occurrence of health-risk behaviours (Irwin & Millstein, 1986). Also, it has been theorized that adolescent health risk behaviours can be explained by a general tendency toward deviance, but these explanations are unique only to individual behaviours such as drinking alcohol and smoking. However, they do not apply to other behaviours such as having an eating disorder (Igra & Irwin, 1996). Taking the above into consideration, it is apparent that these explanations have been insufficient in fully understanding and changing these behaviours.

2.6 Self-Presentation Defined

One explanation that may lead to enhanced understanding of health behaviours in adolescents is self-presentation, which uses aspects from both psychological and social theories. A self-presentational approach is not necessarily a better approach than any of the others. Rather, focuses more on aspects of the individual and situation as opposed to factors (i.e., socioeconomic status) that may increase or decrease the likelihood of one participating in health risk behaviours.

Self-presentation, or impression management, is the process by which individuals attempt to monitor and control the impressions other people (e.g., family and friends) hold of them (Leary, 1992). People often behave in ways consistent with the social



images they wish to project. Self-presentation has been linked to the occurrence of health risk behaviours such as tobacco use, drinking alcohol and reckless behaviours in a variety of populations (adolescents, Martin et al., 2001; college-aged, Martin & Leary, 2001; adults, older adults; Martin et al., 2000).

Leary and Kowalski (1990) proposed a model of self-presentational processes that provides a useful framework for considering the factors that affect health-relevant impression management (see Appendix A). Their two-component model proposes that people's efforts to present particular impressions of themselves are comprised of two distinct processes. The first, impression motivation, involves the extent to which people are concerned about how they are perceived by others in a particular context, and how motivated they are to regulate other people's impressions of them. For example, individuals who believe it is very important for others to see them as attractive are likely high in impression motivation. The second process, impression construction, involves how people decide, implicitly or explicitly, which image(s) they want to foster, as well as how they choose to portray these images. For instance, an individual may wish to be seen as intelligent by studying hard and getting good grades.

In describing the factors that affect impression motivation and impression-construction, the two-component model identifies both features of the immediate situation (e.g., the number and identity of other people who are present, and incentives) and characteristics of the individual him or herself (e.g., traits, goals, self-concept) that affect each process. For example, the more powerful a target (i.e., the person upon whom an impression is being made) or the greater the number of people present, the more motivated an individual may be to self-present. Similarly, when incentives are high (e.g.,



becoming part of a popular crowd), impression motivation will also likely be high and the individual is more likely to adopt behaviours he/she believes to be favoured by the group. In addition, some individuals are simply more predisposed to be concerned with how they are perceived by others (e.g., high self-monitoring; Martin & Leary, 2004).

Several important points about self-presentation should be noted. First, a person can intentionally convey only a small number of public images at any particular time (Leary & Kowalski, 1990). For instance, an adolescent wanting to be accepted and considered to be part of the 'popular crowd' has many images from which to choose (mature, cool, brave, care-free, etc.). The adolescent will likely select the image perceived to be most desired by the target. So, if adolescents value being seen as carefree over being responsible, they will likely choose to engage in behaviours consistent with that image (e.g., not study). Second, the images portrayed are not necessarily positive. Rather, they are desired (Leary et al., 1994). For instance, an individual may wish to be seen as unintelligent (e.g., playing dumb) in order to avoid intimidating others. Third, most self-presentations are generally truthful (Leary & Kowalski, 1990). That is, rather than trying to portray false images, people tend to selectively omit less desirable characteristics, while emphasizing more desirable ones.

Whatever the desired image, people self-present for many reasons. The most common reason is to increase the benefits they receive (either tangible or social rewards) or decrease the costs of their behaviours. For instance, people who are perceived as more attractive tend to have more friends, better jobs, and make more money (Martin & Leary, 2004). Second, people self-present to increase positive emotions and decrease negative ones (Leary & Kowalski, 1990). When people feel liked by others, they generally feel



better about themselves. Third, people self-present in order to enhance their perceptions of themselves (Leary & Kowalski, 1990). If others perceive them as smart and funny, they are more likely to see themselves that way. Finally, self-presentation generally ensures that people behave appropriately (e.g., people usually do not yell at waitresses when their orders take too long, because they do not want to be seen as rude) in social contexts. Thus, self-presentation serves several important functions, to individuals and society as a whole.

2.7 Onset of Self-Presentational Awareness and Concern

While it may seem that self-presentation is a concern only for adults, children's capacities to understand the self-presentational behaviour of other people should not be underestimated. Banerjee and Yuill (1999) examined the ability to identify selfpresentational behaviours by asking children aged 6-11 years of age to explain the motivations displayed in certain emotion-masking cartoons. Participants were read six stories describing either a self-presentational or pro-social situation. In the selfpresentational stories, characters made statements contrary to their behaviours in order to make themselves look better (e.g., saying they were not hurt, despite clearly being hurt.) In the pro-social stories, characters made statements contrary to their behaviours in order to make others feel better (e.g., saying they liked a present, when they obviously disliked it). Following each story, the participant was asked why the protagonist acted or said what he/she did. Responses were coded as either psychological (i.e., explanations that did not involve manipulating others' evaluation of them), interpersonal (i.e., explanations that attempted to manipulate how one was evaluated by others), or residual (i.e., all other responses not providing a reasonable explanation of the protagonist's motivation). Results



of the study indicated that children aged 8-11 years were capable of providing interpersonal explanations for self-presentational acts. In contrast, while 6-7 year olds performed almost as well as the older age groups on self-presentational stories, their performance was significantly poorer on the pro-social stories.

Aloise-Young (1993) examined the development of self-presentation in children from 6 to 10 years of age. The study investigated children's ability and awareness of verbal self-presentational strategies. Participants were videotaped and asked to tell children at another school about themselves at three separate times: 1) a base-line self-description; 2) a self-description intended to convince the children to pick them as a partner for a game (goal-directed condition); and 3) a self description intended to convince children who really want to win prizes to pick them as a partner (enhanced goal-directed position). In the baseline self-description, participants described themselves.

Then, the children were told that they were going to play a game and that they would have a partner from another school who was also going to play the game, but at his/her own school. It was explained to the participants that both partners' scores would be added together to determine their total score, and the higher the score, the more prizes they would win. Partners were then asked to rate, how much they wanted a partner who was a) nice; and b) good at the game.

During the second phase, goal-directed self-presentation, an interpersonal goal was introduced. Once again, the participants were asked to describe themselves while being videotaped. The participants were told that the first recordings they had done (baseline) were for practice only. Participants were informed that this new videotape



would be seen by the children at another school, and they would choose the descriptions they liked the most as their partner for the game.

During the final phase, an enhanced goal-directed self-presentational condition participants were again told that they were going to describe themselves while being videotaped. However, they were told that this description was just for pretend, and that the kids at the other school would not see this video. Participants were instructed to imagine that the kids at the other school really wanted to win, so winning was extremely important.

Results of the study found that the self-descriptions in each phase differed, suggesting that children's self-statements were sensitive to self-presentational concerns. That is, in the selective self-presentation condition, kindergarten students did not engage in self-promotion (i.e., defined as an increase in the percentage of positive self-statements that were social from the baseline to the experimental conditions), whereas second and fourth graders significantly self-promoted. The tendency to adopt the most appropriate self-presentational strategies was found to increase developmentally. Futhermore, the second and fourth graders showed significant levels of self-promotion in both experimental conditions, whereas kindergarten children did not. More specifically, fourth grade students increased the number of positive game-related self-statements and decreased their social self-statements from the goal directed condition to the enhanced goal-directed condition. Taken together, these studies suggest that self-presentation is not only recognizable by younger adolescents but also may occur in children from a very young age.

2.8 The Target of Self-Presentational Behaviour

A considerable amount of research on peer involvement and social motivation in health risk behaviours has been conducted (e.g., Barton, et al., 1982; Maxwell, 2002; Sharp & Getz, 1996). Urberg, Shyer and Lang (1990) asserted that peer involvement is multi-dimensional in that it can take the form of direct pressure to engage in substance use (e.g., peers saying they will not be friends anymore if they didn't drink), normative pressure (e.g., friends saying "just have a drink, everyone else is"), or modeling (e.g., watching peers drink themselves), and that much research fails to specify the difference, leading to inconsistency in their generalizability across adolescent populations.

In an attempt to identify the role of peer influence across adolescent health risk behaviours, Maxwell (2002) conducted a study of 1,969 adolescents, ranging in age from 12 to 18 years. The study used a longitudinal network analysis of the National Longitudinal Study of Adolescent Health (AddHealth) data set to examine the role of peer influence on five risk behaviours: smoking, drinking alcohol, using marijuana, chewing tobacco, and sexual activity. Data was obtained by conducting in-home interviews with the students at base line (T1), during which time each adolescent nominated up to five female and five male friends. A second interview was conducted 30 days following the first interview (T2) to assess experience or no experience with a risk-behaviour. The authors found that the prevalence of the specific behaviours differed. At the time of the first interview (T1), 26% of the respondents had smoked cigarettes during the previous 30 days, 48% had consumed alcohol during the last 12 months, 16% had used marijuana in the previous 30 days, 7% had chewed tobacco during the previous 30 days and 33% had engaged in sexual intercourse in the past 30 days. Risk behaviour prevalence was found



to be associated with demographic factors such as age and gender. It was found that older teens were more likely to smoke cigarettes, drink alcohol, use marijuana, and be sexually active than were younger teens. Boys were more likely to smoke cigarettes, use marijuana, and chew tobacco compared to girls regardless of age. Cigarette smoking, alcohol consumption and sexual intercourse showed the largest increases in behaviour initiation between the first and second interview, while marijuana use and chewing tobacco show less behaviour uptake. Specifically, 18% of T1 non-smokers reported smoking regularly at T2, 22% of T1 non-drinkers used alcohol by T2, and 21% of T1 virgins were sexually active at T2. By contrast, only 9% of T1 marijuana nonusers reporting use at T2 and 5% of T1 non chewers chewing tobacco at T2. Most significantly, it was found that teens were twice as likely to engage in risk behaviours if they had a friend who also engaged in the behaviour.

2.9 Social Images and Health Behaviours

As previously noted, self-presentational behaviours occur so people can portray specific images to others. Chassin (1984) identified early and middle adolescence (11-15 years of age) as the timeframe in which adolescents may be particularly likely to adopt a behaviour because of its associated image. He suggested an adolescent may drink to attain a positive image in the eyes of peers. If the image associated with alcohol use is one that their friends admire, adolescents may drink to project a socially desirable image to a peer audience.

Chassin, Tetzloff, and Hershey (1985) investigated the social image of adolescent drinking to determine if social image factors influenced teens' decisions to drink. The sample consisted of high school males and females, with an average age of 15.6 years.



Students were asked to rate slides of peer models drinking either beer or soft drinks, as well as non-drinking peer models. All images were ambivalent, and could portray both social liabilities and social benefits (including toughness and precocity). This image was then related adolescent drinking behaviour. In other words, youth could interpret models as being either positive or negative.

The adolescent alcohol drinker was seen by subjects as projecting an appearance of toughness and precocity, images which have been identified as possible social assets conveyed by adolescent cigarette smoking (Norman & Tedeschi, 1989). In addition, drinking alcohol conveyed an image of rebellion and acting against authority, which may be attractive to some adolescents as they attempt to assert their independence from family. However, drinking was also associated with less happiness, less honesty and some social rejection. These social images were consistent across the sex of model and subject, suggesting that similar attributes are conveyed by both male and female drinking in the eyes of both boys and girls. Further, perceptions of the drinker did not differ across drinking and non-drinking adolescents.

2.10 Self-Presentation and Health Risk Behaviours

Self-presentation has been associated with health risk behaviours in a variety of populations, including children and adolescents (Aloise-Young, 1993; Petridou et al., 1997), college-age students (e.g., Martin & Leary, 1999; 2001), adults (Culos-Reed et al., 2002; Jones & Leary, 1994; Leary & Jones, 1993) and older adults (Camp et al., 1993; Martin et al., 2000). Further, across each of these populations, a wide range of potential health-risk behaviours has been associated with self-presentational motives.



2.10.1 Self-Presentation and Smoking. O'Callaghan and Doyle (2001) examined the role of impression management in cigarette smoking among high school students in grades 8-12. Non-smokers, occasional smokers (i.e., those who selected "I smoke less than one cigarette a week; I smoke at least one cigarette a week but not everyday") and frequent smokers (i.e., those who selected "I smoke at least one cigarette everyday") were asked to complete a questionnaire assessing self-monitoring, perceived success in impression management, self-esteem and social anxiety among nonsmokers, occasional smokers, and frequent smokers.

Results of this study supported the argument that smoking served a selfpresentational function during adolescence and subsequently influenced an individual's
level of cigarette smoking. In comparison to occasional smokers, both nonsmokers and
frequent smokers had significantly lower levels of self-monitoring, perceived success in
impression management, and self-esteem, while experiencing significantly higher levels
of social anxiety. Occasional smokers were also more sensitive to situational cues
regarding self-presentation and were more influenced by the situation at hand in
determining their level of smoking. The authors attributed these findings to adolescents
passing through an experimental or occasional substance using stage prior to becoming a
frequent user of tobacco or other substances. It is possible that occasional smokers used
smoking to create desired impressions in others (by contrast, frequent smokers may have
been addicted). Clayton (1992) suggested that the longer individuals continue to
experiment with various substances, the greater the chance that they will become
dependent.



Norman and Tedeschi (1989) also examined self-presentation and smoking by investigating the effectiveness of a one-time intervention on the social, medical or medical/social consequences of smoking in deterring 425, sixth, seventh and eighth grade students' smoking behaviour. The prevention program consisted of a single presentation, followed by completion of a questionnaire assessing attitudes towards smoking, subjective norms, and intentions to smoke two weeks following the initial presentation (T1). Six months later (T2), the students were once again asked to fill out the questionnaire. The medical presentation consisted of a lecture accompanied by slides on the short and long term health risks of smoking cigarettes. The social intervention focused on the stereotyped image of smokers as perceived by the individual viewers (such as appearing "cool" or a nerd). The influences of parents, friends, and the mass media were separately assessed. Slides accompanied each segment of the social presentation, emphasizing the belief that many people perceive smokers as being 'cool' (i.e., sexy, attractive, mature). Counter arguments were presented and included lost independence by giving into peer pressure, physical unattractiveness due to smoke-stained teeth and smoke-tainted breathe, and a lack self control and immaturity. The non-smoking role models who were considered 'cool' were presented as being opposed to smoking. Lastly, advertising by mass media was discussed. The emphasis was on the fact that models and actors are paid to serve as representatives for tobacco companies. Students were encouraged to analyze different cigarette advertisements in terms of their target audiences. The third intervention was a combination of the previous two. Repetitive slides from the previous two presentations were eliminated.



Results of the study indicated no significant effect for the overall effectiveness of the interventions in terms of impact on stated intentions to smoke and smoking behaviour. Both attitudes toward smoking and the subjective norm were found to significantly predict intentions to smoke, and intentions to smoke predicted a significant amount of the variance in smoking status among students six months later. Students who had a stereotype of smokers as 'cool' and wanted to have an image of 'cool' themselves expressed a more positive attitude toward smoking, believed that significant others would react more positively to them if they smoked, and expressed a stronger intention to smoke than did students in the other categories. The authors suggested that a more systematic and sustained contact with students about smoking was necessary for prevention.

2.10.2 Self-Presentation and Alcohol. Sieving, Perry, and Williams (2000) conducted a study investigating peer selection and young adolescent drinkers whose friends used alcohol. These adolescents sought out friends whose drinking behaviour was similar to their own. The study consisted of 1804 male and female participants in grades 7-9. Researchers assessed the adolescents' expectancies associated with drinking alcohol, alcohol use norms, alcohol refusal self-efficacy, future intentions to use alcohol, perceived parental expectations related to teenage drinking, general family management practices, friend's drug use and offers, and levels of alcohol and other drug use.

The authors suggested their findings demonstrated that friends' alcohol use is an antecedent of adolescent alcohol use. Results of this study indicated that similarity in alcohol use behaviours was related more to processes of peer influence (i.e., peers' drinking behaviour was an antecedent to their own drinking) than of peer selection (i.e., adolescents choose and keep friends whose behaviours and beliefs are similar to their



own use; Sieving et al., 2000). Friends' drug use behaviours were found to impact on adolescents' alcohol use behaviours. Together, these studies suggest that self-presentation can be an important motive in alcohol use by adolescents.

2.10.3 Self-Presentation and Other Drugs. Odgers, Houghton and Douglas (1996) examined substance use in Australian adolescents using the Student Activity

Questionnaire to determine possible interactions among variables such as coping strategies, levels of self-concept, and reputation enhancement across gender. One thousand two hundred and seventy male and female adolescent participants, in grades 8
12 were classified as either current substance users, ex-substance users, or non-substance users, based on responses to a self-report substance use questionnaire.

Results of the study found substance users to be less confident in themselves and believed that they were less liked by their families when compared to ex-substance and non-users. Further, current substance users were found to have higher levels of admiration of drug-related activities (e.g., making money selling drugs) and lower levels of admiration for pro-social activities (e.g., being viewed as a good athlete), as well as a greater desire to portray themselves as non-conforming and as a result portrayed this image more often than ex-users and non-users. Also, current users were found to strive to portray themselves as mean and nasty, as causing trouble and breaking rules compared to their counterparts. Lastly, current users communicated with their peers about drug related activities significantly more than non-users. The authors suggested the differences between current substance users, ex-substance users, and non-substance users were due more to factors involved in reputation enhancement than by factors of self-concept or coping strategies. They also suggested that the types of reputations desired by males and



females differed, with male participants seeking a more non-conforming reputation and females preferring a more conforming reputation.

Sharp and Getz (1996) examined the role of substance use in impression management by linking constructs of self-modeling, perceived success in managing others' impressions of themselves, and self-esteem. The study included 377 male and female first year university students. Participants completed a questionnaire assessing self-presentational behaviour initiated for the attainment of social rewards rather than for the avoidance of social rejection, social physique anxiety, and perceived success in impression-management. Generally, the results of the study supported the argument that substance use served self-presentational purposes in adolescents. Substance users scored higher in self-monitoring, and perceived success in self-presentation, while scoring lower in interaction anxiety when compared to their non-user counterparts.

2.10.4 Self-Presentation and Nutritional Behaviours. Self-presentation has been identified as influencing nutritional intake in several ways. Herman, Polivy, and Roth (2003) examined the literature regarding social influences on food intake to examine the effect of the presence of others on various male and female participants, in early adulthood, using a self-presentational framework. They identified two main types of self-presentational studies prevalent in the research: 1) the effect of being observed by a non-eating observer on food intake; and 2) the effect of being observed by a coactor (i.e., someone also eating) on food intake.

These authors found that the presence of a non-eating observer substantially suppressed the amount eaten by the participant. Also, the presence of a coactor, as opposed to a non-eating observer, influenced food intake based on the specific

characteristic of the eating companion and not as a result of how much the coactor themselves ate. In general, participants ate less than the confederate, and both male and female participants ate less in the presence of an opposite gender individual. Food intake was much lower when the participant was accompanied by an attractive opposite gendered person compared to a less attractive one. Herman et al. (2003) suggested self-presentational motives could have a powerful influence on food intake. Participant behaviours indicated that making a good impression on others was more important than either excessive or normal uninhibited food intake. Further, they suggested that decreasing food intake was considered more attractive or desirable. Thus, self-presentational concerns may override the effect of substantial hunger and satiety. People may be willing to change their eating patterns, even if hungry, in order to make a desired impression on others.

In addition to influencing how much individuals may eat, self-presentation can also impact the types of food eaten. Wilson et al. (2002) examined the possible benefits of using a self-presentational method versus a social cognitive or education only method, to increase fruit and vegetable intake in African American adolescents. Participants were randomized into one of the following interventions: education only, social cognitive only, strategic self-presentation/social cognitive.

Participants in the education only group received educational materials involving general health related issues. Participants were advised to maintain their usual diets. The social-cognitive only program was based on three principles (a) education regarding serving sizes; (b) behavioural skills (strategies to increase fruit and vegetable intake); and (c) feedback and reinforcement. The strategic self-presentational/social cognitive

participants to answer several questions on coping strategies (methods to increase fruit and vegetable intake) they themselves had used as an effective solution for common problems (e.g., how to stick with the dietary program while out with friends or in a social setting). To induce self-presentational processes, participants were specifically instructed to portray their successful coping strategies so beginning students could learn how to successfully cope with their own diet behaviours. In all three conditions, a three-day dietary food intake journal was used to assess each participant's intake of fruit and vegetables at baseline and again at post treatment.

Results of the study indicated the benefits of applying a self-presentational strategy to nutrition behaviours. Participants involved with the self-presentational video demonstrated positive correlations between post treatment self-concept, self-efficacy and an increase in their fruit and vegetable intake compared to the remaining other conditions. Further, a greater proportion of self-presentational participants stayed with the program at the end of the treatment when compared to that of the education-only and the social-cognitive conditions. Specifically, participants in the self-presentational condition continued to increase their fruit and vegetable consumption at the end of the treatment compared to the other conditions. Together, these studies suggest self-presentation can impact eating behaviours. Further, while self-presentation can impact eating behaviours in normal populations, it has also been associated with eating disordered populations.

2.10.5 Self-Presentation and Eating Disorders. Hewitt, Flett, and Ediger (1995) conducted a study to determine the association between eating disorders, body image,



appearance self-esteem and personal (i.e., self-imposed) and interpersonal (i.e., self-presentational) dimensions of perfectionism in 81 female university students.

The authors found that self-imposed trait perfectionism was related only to anorexic tendencies and attitudes, whereas self-presentational aspects of perfectionism were related to both anorexic and bulimic tendencies, as well concerns about social reactions or evaluations of one's appearance. These findings suggests that strong needs to present to others an image of perfection or to avoid revealing imperfections in the self are related to both anorexic and bulimic tendencies and to concerns about social reactions to or evaluations of one's appearance. Also, it was social facets of perfectionism that were found to be most strongly related to appearance and global self-esteem. The authors suggested that self-presentational measures provide further information in the prediction of eating disorders when compared to trait measures alone.

2.10.6 Self-Presentation and Sexual Behaviour. Leary et al. (1994) reviewed the evidence that self-presentational motives play a role in condom use and in the risk of sexually transmitted diseases. Condom use not only helps to protect against unwanted pregnancy but also, helps to reduce the risk of contracting of sexually transmitted diseases (STD). Leary et al. (1994) suggested that regardless of the risks involved in being sexually active, many people continue to take inadequate precautions against pregnancy and sexually transmitted diseases. Younger teens may not fully understand the implications of unprotected sexual behaviour for both pregnancy and health. However, failure to use a condom was not found to be a result of lack of information. Zabin, Stark, and Emerson (1991) identified the primary reason adolescents fail to use a condom to be self-presentational in nature; people were found to be concerned about how they would be



perceived by others if they obtained condoms or discussed condom-use with their potential partner.

Hanna (1989) and Herold (1981) both identified self-presentational concerns about obtaining condoms to be the primary barrier to their use. These studied revealed that between 30% and 63% of sexually active respondents reported being embarrassed when buying condoms. More importantly, adolescents in particular were found to be deterred from obtaining condoms and other forms of contraception by self-presentational concerns. Herold (1981) indicated that young females were more embarrassed about getting condoms than other forms of contraception (i.e., contraceptive pill or foam) which do not protect against sexually transmitted diseases. Leary et al. (1994) suggested that this may be due to the perception that it is more acceptable for females to purchase oral contraceptives or foam than condoms.

The use of condoms has also been found to be self-presentational in nature (Schlenker & Leary, 1982). Even if a person acquires condoms, self-presentational concerns may deter him/her from using them. Schlenker and Leary identified the concerns associated with particular situations preventing the use of condoms.

Specifically, it was found that socially anxious women, who are more concerned about others' impressions of them, were less likely to discuss contraception with their partners before having intercourse. In contrast, high self-esteem, which is associated with self-presentational confidence and low need for social approval, is associated with more effective contraceptive use (Schlenker & Leary, 1982).

If an individual has a condom when engaging in sex with a new partner, it may imply they had anticipated having sex, or had actively worked to seduce the other person.



Making plans to use a contraceptive could be perceived as calculating unless an individual is involved in a stable, ongoing relationship. The researchers also identified females as being particularly reluctant to carry condoms for fear that they would be perceived as promiscuous and as too bold. Also, people were found to believe that insisting on using a condom will lead sexual partners to conclude that they have an STD. Each of the previously mentioned female concerns is self-presentational in nature and possibly contributes to an increase in the contraction of an STD.

Not only is unsafe sex identified as a health risk behaviour performed for self-presentational reasons but also, sexual intercourse alone can be considered a health risk behaviour with self-presentational motives. Even with the use of a condom, there are no absolute guarantees that using a condom will protect 100% against the contraction of an STD (U.S. Food and Drug Administration, 2005). Most experts only believe that the risk of getting AIDS and other sexually transmitted diseases can be greatly reduced if a condom is used properly (U.S. Food and Drug Administration).

2.10.7 Self-Presentation and Violent/Aggressive Behaviour. Adolescents not only avoid certain behaviours for self-presentational reasons (such as failure to use a condom), but also participate in behaviours to gain self-presentational benefits. Self-presentational motives have been identified in the analysis of displaced aggression. Melburg and Tedeschi (1989) conducted a study to examine a self-presentational interpretation of previous research demonstrating displaced aggression. Fifty-seven female undergraduate students were asked to complete two phases of a task: solving anagrams and creative words association. Participants were distributed into one of four conditions; annoy

condition, superior performance/annoy condition, equal-performance condition and superior performance/no annoy condition.

In all conditions, participants were placed in a small room with a confederate and given seven minutes to solve a set of seven very difficult anagrams. In the annoy condition, the confederate spoke pleasantly to the participant during the task. In the superior performance/annoy condition the confederate announced that she had completed the anagrams in under three minutes and continued to talk until the completion of the anagrams. In the superior performance/no annoy condition the confederate conspicuously put down her pencil when she finished the anagrams (in less than three minutes) and sat quietly. Lastly, in the equal performance condition, the control person made sure as to complete the anagrams at about the same time as the participant.

The second phase of the experiment required participants in the equal performance condition to continue into phase two with the same partner. All remaining participants received a new partner. The task involved the participant reading words over an intercom to the confederate who was then expected to respond with a creative word association. The participant, at her own discretion, responded with either 'good' if the response was creative, or an electric shock if she perceived the response uncreative. Finally, the participants were asked to fill out a questionnaire rating their own and the control person's performance of the anagram task and their perception of the control person.

Results of the study indicated that participants in the control-superior condition were more frustrated than those in the equal-performance condition. In general, the superior performance of a peer rather than annoyance induced frustration in participants.

In addition, participants delivered more shocks to the confederate when she had outperformed them on the anagram task than when performance was equal, regardless of whether the partner was the same or different. The authors interpreted this result as a displacement effect. Negative social comparison induced subjects to 'displace their aggression' and deliver more shocks to the confederate who outperformed them on the anagrams task, or to another comparison individual. The authors believed these results were due to the negative identity and embarrassment created by the superior performance of another. In order to make themselves look better, participants increased the number of shocks given to the confederate to make the confederate look less competent (i.e., less creative). Thus, the aggressive behaviour resulted from a desire to create an impression of superior creativity and intelligence.

2.10.8 Self-Presentation and Stealing. Moncher and Miller (1999) examined adolescent correlates of stealing in a sample of 167 nondelinquent 10- to 15- year-old male and female participants. Results of the study indicated that external or situational reinforcement influenced adolescent stealing behaviour. Specifically, a high level of stealing was related to the belief that an adolescent would steal because of peer influence. In addition, peers and situational factors (i.e., group pressure) were found to be more influential than perceived punishment from family in contributing to stealing behavior. Greater peer acceptance of stealing has also been found to increase the likelihood that such behavior will be reinforced over time (Moncher, & Miller. Thus, adolescents' may be more likely to steal if this behavior is seen as a means of obtaining peer approval and acceptance, consistent with the theory that peers are potential instigators and reinforcers of delinquent behavior.



- 2.10.9 Self-Presentation and Bullying. Bullying has not been a behaviour previously examined directly as a self-presentational health risk behaviour. Craig and Pepler (2003) identified factors contributing to the performance of bullying. Participants identified bullying as a way of becoming popular by making themselves appear tough, fearless and in charge. Also, individuals who bully may use it as a way of getting attention or possessions and make others afraid of them (Craig & Pepler). Whatever the chosen reason for bullying, each of the above cited reasons for bullying are all rooted in self-presentational concerns.
- 2.10.10 Self Presentation and Carrying a Weapon. Although it has not yet been investigated as a self-presentationally motivated behaviour, carrying a weapon is a health risk behaviour as there is known potential for severe injury to both the individual that has possession of the weapon, as well as other innocent bystanders. Even if an adolescent has no intent of harming another and is carrying the weapon purely for self-presentational reasons (i.e., appear tough, brave or cool to others and make others fear them) the rate of accidental death caused by firearms takes the life of about 1,600 people per year and injures tens of thousands more (Guest, 1995). Therefore, carrying a weapon as a means of self-presenting may benefit from further investigated due to the severe and life threatening consequences.
- 2.10.11 Self-Presentation and Piercing and Tattoos. Nathanson, Paulhus, and Williams (2005) identified adolescent piercing and tattooing (otherwise known as body modification) as being participated in mainly for self-presentational purposes.
 Individuals often alter their appearance to satisfy a need to belong. Alterations may sometimes be strategic attempts to curry favour with an admired group (Nathanson et al.),

and group affiliation has been reported as the most common reason for teenage piercing and tattooing (Nathanson et al.). Further, such body modifications are marks of disaffiliation. Such groups seek to differentiate themselves from society at large and from other groups that are more conventional with appearance (Nathanson et al.). Among groups likely to encourage body modification are those that identify themselves as thrill-seekers, cool, and dangerous (Nathanson et al.). Such groups expressly promote dangerous and unhealthy behaviours.

Tattooing and ear/body piercing are increasingly popular among Canadians. These procedures, however, may increase the risk of contracting a number of serious bloodborne diseases (Health Canada's Centre for Infectious Disease Prevention and Control, 2006). Unless the needles are new, sterilized for each treatment and properly handled by the practitioner, instruments can be contaminated with the infected blood or bodily fluids of another person. Bacteria or viruses may be present on the skin that can enter your body and cause infection when your skin is pierced. Practitioners who do the tattooing and piercing are also at risk of becoming infected through accidental cuts and punctures. It is possible to transmit viral infections such as hepatitis B, hepatitis C, Human Immunodeficiency Virus (HIV)/Acquired Immunodeficiency Syndrome (AIDS) and herpes through tattooing and piercing, as well as bacterial skin infections such as Streptococcus and Staphylococcus (Health Canada's Centre for Infectious Disease Prevention and Control).

2.10.12 Self-Presentation and Academic Under Achievement. The impressions desired by adolescents when participating in health risk behaviours may not always be positive in nature. Both skipping school and failing to reach one's potential achievement



in school can also be considered a health risk behaviour, as students may fall behind, or even fail in their studies.

Skipping school may not show immediate effects on one's health or may not even be considered a health risk behaviour are at all. However, for the purpose of the present study a broader definition of health including cognitive, social, and psychological aspects. As well, both the short and long term consequences to one's health as a result of participating in certain behaviours are important. Therefore, skipping school was determined to be a health risk behaviour, based on the long term consequences to one's health as a result of participating, as well as perceptions of adolescents themselves (Roth & Gammage, 2006).

Skipping school can lead to academic under-achievement, and may lead to immediate potential risks. For example, it is possible that if students are not attending school, they may be participating in unhealthy or risky behaviours outside school. For instance, a study identified skipping school as providing opportunities for friends to meet in settings that facilitate cigarette, drug, and alcohol use (Bahr, 1999). The Los Angeles County Office of Education (2000) identified truancy as the most powerful predictor of delinquency. Police departments across the nation report that many students not in school during regular hours are committing crimes, including vandalism, shoplifting, and graffiti.

In the longer term, other negative consequences may also become evident. Lack of achievement and/or failure in school can come as a result of skipping classes.

Absenteeism has been identified as being detrimental to students' achievement, promotion, graduation, self-esteem, and employment potential (Los Angeles County



Office of Education, 2000). Students who miss school may fall behind their peers in the classroom in turn, leading to low self-esteem and an increased likelihood that at-risk students will drop out of school (Los Angeles County Office of Education).

Juvonen and Murdock (1995) reported poor grades due to falling behind or even failing in their studies as ultimately having a direct negative consequence on students' futures. Decreased confidence and self-esteem and inability to obtain or keep employment were identified. It has also been documented that adolescents who do poorly in school are more than twice as likely to report drinking to intoxication than those who reported doing well in school (Statistics Canada, 2004a). During early years in education, children come to understand that good performance due to high effort is valued by adults, and that teachers are most likely to reward hard working students and disapprove of students performing poorly due to laziness and lack of effort (Juvonen & Murdock). To examine these assertions, a two-part study was conducted using three grade levels (fourth, sixth, and eighth grade) representing middle childhood, pre-adolescence, and early adolescence. Juvonen and Murdoch examined changes in students' willingness to be seen as diligent to their teachers and their peers' as well as their understanding of teachers' and peers' approval of others who vary in their level of effort expenditure.

In part one of the study, students wrote an exam, and were then told they had done either very poorly, or very well, regardless of actual performance on the test. Students were then asked to explain why they had done either poorly or well to their teachers, and then to a group of popular kids. In part two of the study, students were given success and failure scenarios of a hypothetical student (in the same grade as the participant) and were



required to predict how much teachers would like this student and how popular these students would be among their classmates.

Results of the study indicated clear grade-level related differences in student preferences to portray themselves as putting forth effort to their peers versus their teachers across the success and failure conditions. As the grade level changed, so did the perceived effects of high effort on peer popularity, and how adolescents portrayed themselves. Participants at each grade level believed that teachers preferred diligent, smart students over others. However, the participant perceptions of the popularity of smart and diligent students changed as a function of the participants grade-level.

Specifically, peer status of smart students decreased from being the most popular at fourth grade to the least popular at eighth grade. Conversely, the perceived popularity of low ability, lazy students increased from being the least popular at the fourth grade to being among the most popular at the eighth grade.

Similar results were identified in the success/failure condition in part two of the study. High levels of effort resulted in the hypothetical students being more likable by teachers than those expending no effort. However, the lazy students were perceived as increasingly popular with advancing grade level. The findings of this study demonstrate not only how self-presentation influences how youngsters are regarded and treated by others but more importantly, how they come to view themselves.

Academic achievement perceptions, using a self-presentational framework has also been used to examine college-aged students. Brown, Uebelacker, and Heatherington (1998) conducted a study of 142 male and female first-year undergraduate students to determine the possible existence of gender differences in the self-presentation of



academic performance. The students were first introduced to their partner (a confederate), and were then asked to watch a five-minute videotape of their partner answering questions about life at college. The video portrayed one of three conditions. The partner was either self-promoting, moderate, or self-deprecating in response to questions about his/her academic performance. After watching the video, participants were asked to complete an open-ended questionnaire concerning their own academic performance at college, and were advised that they would be meeting with their partners to discuss their answers. In addition, prior to meeting with their potential partners, participants were asked to complete an additional 'Impressions and Concerns' questionnaire, which they were told would not to be discussed.

Results of the study indicated that the context played a larger role in men's self-presentation of achievement than in women's. Men predicted the highest grade point average (even over predicted their GPA) when expecting to interact with a partner who was self-promoting, and predicted the lowest grade point average when confronted with a partner who was self-deprecating. Women were found to be more comfortable than men when watching the presentation of a self-deprecating confederate and were therefore less affected by the condition. Participants tended to base their self-presentation on the status of the responses of the confederate, so as to not appear different, or to appear 'normal' when compared to the confederate. The authors suggested this finding was a result of not wanting to appear as though one was 'gloating'.

2.10.13 Self-Presentation and Reckless Behaviour. Leary et al. (1994) suggested that reckless behaviours were performed primarily, if not solely, for self-presentational reasons. Presently, no concrete research exists regarding self-presentation and reckless



behaviours. However, these authors believed the images (i.e., fearless, risk-taking, brave) associated with these behaviours are highly valued, and outweigh the consequences of participating in such behaviours. In particular, adolescents are believed to participate in risky activities (e.g., white water rafting), even if they have no experience or ability in the activity because they do not want to be viewed as cowardly or a poor sport.

Leary et al. (1994) also suggested that injuries may occur when adequate precautions have not been taken, because the performer did not want to be perceived as too careful. For example, may people fail to wear seatbelts in automobiles, helmets on bicycles and motorcycles, and life preservers in boats because it does not look 'cool' or to avoid conveying an image of excessive cautiousness. These behaviours can emerge at extremely young ages, as children as young as 6 and 7 have been found to be reluctant to wear safety equipment due to fear of what other children will think of them (Jonah, 1990). No research presently exists investigating the role of self-presentational motives in accidental injury or death. However, if these beliefs are correct, such motives may be the leading cause of injuries in adolescents.

In considering the powerful influence of self-presentation on health risk behaviours, such motives should be taken into consideration in the development of preventative and educational programs. Self-presentation appears to be a legitimate framework for the explanation of adolescent health-risk behaviours. While each of the studies described above linked self-presentation to specific health risk behaviours, two limitations exist. First, most have looked at health risk behaviours in isolation of one another. However, as previously noted, health risk behaviours often occur in clusters.



Second, the health risk behaviours have been identified by researchers, rather than by adolescents themselves.

2.11 Self-Presentation and Multiple Health Risk Behaviours

In order to overcome the first problem (that these behaviours are often examined in isolation of one another), Martin et al. (2001) conducted a study of 183 Irish adolescents in their 4th and 5th years of secondary school to examine the relationship between trait self-presentational concerns (i.e., social physique anxiety, public selfconsciousness, and fear of negative evaluation) and health risk behaviours (e.g., smoking, drinking alcohol, exercising and dieting). Trait self-presentational concerns were positively related to the performance of some health risk practices (dieting and exercising) and were significantly correlated with the value that students placed on selfpresentational motives for various health practices (e.g. drinking alcohol, exercising, not exercising). Among girls, dieters and non-exercisers scored higher on measures of trait self-presentational concerns compared to non-dieters and exercisers. Lastly, selfpresentational concerns were positively correlated with boys' and girls' endorsement of self-presentational motives for certain health practices (i.e., diet and exercise). These results suggested that Irish adolescents' health practices were often motivated, at least in part, by self-presentational factors.

Martin and Leary (2001) attempted to overcome both limitations (i.e., multiple behaviours and researcher determined behaviours) in examining health risk behaviours in college students. They examined the prevalence of health risk behaviours in college freshman. However, these health risk behaviours had previously been identified by college students as health risk behaviours with self-presentational motives underlying

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them. Fifty-one male and 59 female undergraduate students completed three scales at the beginning of their freshman year that measured personality attributes that might be expected to relate to health risk behaviours performed for self-presentational reasons.

The Public Self-Consciousness Scale (PSC; Fenigstein et al., 1975) measured the degree to which participants' thought about the public aspects of themselves and others' reactions to them. The Brief Fear of Negative Evaluation Scale (FNE; Leary, 1983) was used to measure participants' fearfulness associated with receiving disapproval and criticism from others. Lastly, The Social Physique Anxiety Scale (SPA; Hart et al., 1989) was used to assess participants' trait anxiety experienced in response to others' evaluations of their bodies. At the end of their freshman year, participants were given a list of ten health-risk behaviours and asked to indicate how often they had engaged in each behaviour during their freshman year. For each of the listed behaviours, participants were also asked to identify the impressions they were trying to achieve (cool/laid back, fun/social, brave/a risk-taker, physically attractive, mature).

Results of the study indicated that participants high in public self-consciousness, were concerned about impressing others at college. In addition, trait self-presentational concerns were found to account for the number of health-risk behaviours performed by participants. Specifically, the study indicated that of the participants surveyed, 75% had engaged in at least one health-risk behaviour for self-presentational purposes. Of the health-risk behaviours listed, the most commonly cited behaviour was the use of alcohol. Fifty-five percent of male participants and 52% of female participants indicated that they had drunk alcohol for self-presentational reasons at least once during the previous semester. Both young men and women also reported smoking, reckless driving, and

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performing potentially dangerous stunts as self-presentational strategies. Approximately one-third of men reported performing a risky stunt or had driven dangerously in order to make an impression upon others. One-quarter of women also reported driving dangerously for self-presentational reasons. Lastly, smoking for self-presentational purposes was reported by similar proportions of men (26%) and women (22%). Results also indicated that the most frequently desired impressions cited were cool/laid back, brave/ a risk-taker, and fun-social. Notably, it was rarely cited that health risk-behaviours were performed to be perceived as mature. While both Martin et al. (2001) and Martin and Leary (2001) have overcome significant limitations to previous research (i.e., examining multiple behaviours, and participant identified behaviours), neither has specifically examined Canadian adolescents.

2.12 Self-Presentation and Canadian Adolescents

Recently, Roth and Gammage (2006) attempted to investigate the role of selfpresentation in adolescent health risk behaviour. Specifically, these authors conducted a
study of 96 Canadian adolescents (48 females and 48 males) between the ages of 13 and
18 years. Participants were asked to complete an open-ended questionnaire identifying
up to 10 health risk behaviours they had seen or heard of other adolescents participate in
for self-presentational purposes. They were also asked to indicate the desired impressions
that the adolescent was trying to make with these behaviours, and the specific target
group upon whom they believed the risk behaviour performer wished to make the
impression. Results of the study identified seven health risk behaviour categories:
substance use/abuse, criminal behaviour, violent/aggressive behaviour, self harm
behaviours, sexual behaviours, eating and physical activity behaviours, and reckless



behaviours. Substance use/abuse behaviours, included smoking, drinking alcohol, and illicit drug use, and were the most frequently identified behaviours by both male and female respondents. A summary of the above results including frequencies of each behaviour for males and females can be found in Appendix B and C. Three health risk behaviours identified by the adolescent participants had not been identified as health-risk behaviours in prior research. Specifically, committing murder (or talking about murder), attempting suicide, and carrying a weapon were identified by both male and female participants as being based on self-presentational motives. In addition, some health-risk behaviours that have been identified by previous research, were not identified by the participants or identified by very few (i.e., sun tanning and physical inactivity).

Impressions of being cool, brave, and mature were the most frequently cited images that adolescent participators wished to portray. Also noteworthy, friends and peers were by far the most frequently cited target group in the performance of all health-risk behaviours.

In summary, it appears that a self-presentational framework may be useful for examining health risk behaviours in adolescents, although there have been many limitations that exist with regards to the extant research, as noted above. First, each of the behaviours selected for investigation was determined by almost exclusively by researchers and not by adolescents themselves. As suggested by Roth and Gammage (2006), a wider variety of health risk behaviours likely exists than has previously been examined. Also, adolescents may not consider researcher identified behaviours as health risk behaviours or as being self-presentationally motivated. Third, these behaviours are often looked at in isolation of one another, yet it is likely that these behaviours often



Canadian youth. Research indicates the existence of self-presentational motives in adolescent health-risk behaviours for both American college students and Irish adolescents (i.e., Martin & Leary, 2001; Martin et al., 2001). Taking geographical distance, cultural differences, the possibility of unidentified health risk behaviours, desired targets and images present in Canadians and not in Americans or Irish adolescents, and the chance of drawing incorrect conclusions about Canadian adolescents health risk behaviours, self-presentational concerns, desired images, and the desired targets, the generalizability of these results is limited.

The general purpose of the current study was to investigate the role of self-presentation on adolescent health-risk behaviours. Specifically, this study examined the prevalence of adolescent identified health-risk behaviours rooted in self-presentational motives in adolescents aged 13-18 years. It also identified the specific images desired by adolescents associated with these behaviours. Third, the targets (also considered to be a contributing factor in impression construction) of these behaviours were also identified. Fourth, the relationship between these behaviours, and several trait measures of self-presentation (i.e., social physique anxiety, public self-consciousness, self-presentational efficacy, and fear of negative evaluation) were examined. Finally, the gender differences in health risk behaviours and self-presentational concerns were examined.

2.14 Hypotheses

Hypothesis 1: Canadian adolescents would report participating in health risk behaviours for self-presentational purposes.

Hypothesis 2: Canadian adolescents would report appearing cool and mature most frequently as the desired images, followed by brave, physically attractive and fun.

Hypothesis 3: The most frequently identified target groups would be friends, followed by peers.

Hypothesis 4: There would be a positive relationship between the number of health risk behaviours participated in at least once for self-presentational purposes and several trait measures of self-presentational concerns (i.e., social physique anxiety, fear of negative evaluation, and public self-consciousness, and self-presentational efficacy).

Hypothesis 5: There will be gender differences found with respect to selfpresentational concerns and the number of health risk behaviours participated in for selfpresentational purposes. More specifically:

- a) Females will score higher on measures of social physique anxiety,
 public self-consciousness and fear of negative evaluation.
- b) Males will score higher on the measure of self-presentational efficacy.
- c) Males will participate more frequently in health risk behaviours for selfpresentational purposes.



Chapter III: Methodology

3.1 Participants

Participants in the present study were 110 adolescent students, 36 male and 74 female, recruited from various private schools across Southern Ontario. These schools varied in class sizes (i.e., ranged anywhere from 5 to 35 students in the entire class), class structure (i.e., students in entire classroom possibly ranged in grades 1 through 12), location (i.e., churches, personal homes, and schools) and grade distribution Students ranged in age from 13 to 18 years for both males (M age = 15.81 years, SD = 1.49) and females (M age = 14.89 years, SD = 1.17) and ranged from grades 8 through 13 (see Table 1). Notably, the response rate was 100%.

3.2 Instrumentation

The survey used in the present study was designed to obtain a general understanding of patterns of self-presentational motives in health risk behaviours in adolescents. Data collection took place over a two-week period.

3.2.1 Demographic Information. The first section of the survey assessed demographic information, including age, gender, and grade (see Appendix D). The second section consisted of a questionnaire developed for the present study, based on Martin and Leary's (2001) research on health risk behaviours in college students (see Appendix D). It assessed the frequency of self-presentationally motivated health risk behaviour occurrence, the desired images associated with these behaviours, and the desired targets. Participants were given a survey listing various health risk behaviours, and associated images and targets, that had been previously identified by adolescents in private schools, ranging in age from 13 to 18 years, and described by Roth and Gammage



(2006) (see Appendix D). The categories identified included substance use/abuse, criminal behaviours, fighting and bullying, sexual behaviours, eating and physical activity behaviours, self-harm behaviours, and reckless behaviours. The images included a desire to appear cool, brave, mature, attractive, and fun, and the targets were, same sex friends, opposite sex friends, same sex peers, opposite sex peers, and parents.

3.2.2 Behaviours, Images, Targets. To assess the occurrences of health risk behaviours, participants were asked to indicate how often they had engaged in each of the behaviours during the current school year on a 5-point scale (0 times, 1 time, 2 to 3 times, 4 or 5 times, 6 or more times) for the purpose of making an impression on others. The timeframe used in this study (i.e., since the beginning of the current school year) was indicated for the purposes of giving all participants a common timeframe that was felt to be long enough to have participated in their usual behaviours and short enough that participants were able to accurately recall their behaviours.

For each health risk behaviour participants reported engaging in at least once for self presentational purposes, participants were asked to identify the desired impression(s) they were trying to make (cool, fun/social, brave, physically attractive, mature). These images were identified in previous research (Roth & Gammage, 2006) by adolescents as being the desired images of the targeted health risk behaviours. Participants were able to choose more than one image for each of the behaviours selected. Finally, participants were asked to indicate the target of each of these behaviours (same sex friends, opposite sex friends, same sex peers, opposite sex peers, and parents). These target groups were also identified in previous research (Roth & Gammage, 2006) by adolescents as being the desired target groups. Again, participants were able to select as many targets as they



wished. The final section of the questionnaire included several measures of specific selfpresentational concerns. The measures in the final section were systematically rotated to counterbalance the order of the questionnaires.

- 3.2.3 Social Physique Anxiety Scale. The Social Physique Anxiety Scale (SPAS; Hart et al., 1989) was developed to assess the degree to which individuals become concerned when others observe or evaluate their bodies (see Appendix D). The SPAS was originally developed as a 12-item measure. However, subsequent analyses of the scale's psychometric properties have indicated that a 9-item version is more psychometrically sound (Martin, Rejeski, Leary, McAuley, & Bane, 1997), and consequently was used in the present study. Each item was rated on a 5-point scale (1 = "not at all characteristic of me" to 5 = "extremely characteristic of me"). Cronbach's alpha was used to estimate reliability in the present sample for the total sample, (α = .86), the male sample (α = .89), and the female sample (α = .84).
- 3.2.4 Fear of Negative Evaluation. The Social Anxiety Scale for Adolescents (SAS-A) was developed by La Greca and Stone (1993) and designed to assess social anxiety in adolescents. For the present study only the fear of Negative Evaluation subscale was used. The Fear of Negative Evaluation subscale consists of six items assessing adolescents' fears, concerns, or worries regarding peers' negative evaluations (e.g., "I feel that others are making fun of me") (see Appendix D).

Each item is assessed on a 5-point scale (1 = not at all characteristic of me to 5 = extremely characteristic of me), with higher scores reflecting greater social anxiety.

Inderbitzen-Nolan and Walters (2000) replicated and extended previous work with the Social Anxiety Scale for Adolescents by providing psychometric data and further



evidence of construct validity. Futhermore, the findings were relatively consistent across sex and grade level subsamples. Cronbach's alpha was used to estimate reliability in the present sample for the total sample, ($\alpha = .92$), the male sample ($\alpha = .93$), and the female sample ($\alpha = .92$).

3.2.5 Public Self-Consciousness Scale. Fenigstein et al., (1975) developed the Public Self Consciousness Scale as part of an assessment of individual differences in self-consciousness (see Appendix D). Public self-consciousness refers to the consciousness that arises when a person becomes aware of another's perspective, and (s)he views her/himself as a social object (Fenigstein et al.). The emphasis is on the reactions of others to the self. This scale consists of 7-items, each rated on a 5-point scale ranging from 0 (extremely uncharacteristic of me) to 4 (extremely characteristic of me). Items from this scale focus on assessing the reactions of others on the participants (e.g., the self as a social object; e.g., "I'm concerned about my style of doing things").

Rankin, Lane, Gibbons, and Gerrard (2004) conducted a longitudinal study of ages and gender differences in adolescent self-consciousness in two cohorts, providing support for the validity of this scale in adolescent populations. Cronbach's alpha was used to estimate reliability in the present sample and was found to be adequate for the total sample, ($\alpha = .82$), the male sample ($\alpha = .83$), and the female sample ($\alpha = .81$).

3.2.6 Self-Presentational Efficacy. The self-presentational efficacy scale was developed specifically for this study to assess the level of confidence in the ability to portray desired images to others. This scale consists of 5-items, each rated on a scale of 0 to 100% assessing how confident the participant is that others will see him/her as cool, brave, mature, fun, and physically attractive, as previously described (Roth & Gammage,



2006) (see Appendix D). Cronbach's alpha was used to estimate reliability in the present sample for the total sample, ($\alpha = .87$), the male sample ($\alpha = .64$), and the female sample ($\alpha = .90$).

3.3 Procedures

Ethics approval from Brock University was attained prior to proceeding with the research (see Appendix E). Prior to administration of the questionnaires, the researcher contacted each of the school administrators to inform him/her of the purpose of this research project. School administrators also received a letter of information and consent forms (see Appendix F), the methodology and, a copy of the questionnaires (see Appendix D). Following approval from the school administrator, the primary researcher then entered the individual classrooms to ask for volunteers to participate in this study. Students were informed of the purpose of this research study, that their participation was voluntary, and that all responses were anonymous and confidential. Students under the age of 18 years were given letters of information and informed consent forms describing the purpose of the study and the requirements of their involvement, to be completed by themselves and their parent(s)/guardian (see Appendix G). Students 18 years of age or older received only the letter of information and informed consent form (see Appendix H). Following parental/guardian permission, (or, for those over age 18, informed consent) a convenient time was set for both the primary researcher and the school administrator for completion of the questionnaire by the participants.

During this second visit, the researcher presented instructions on the completion of the questionnaire to each of the classes involved. Prior to receiving the survey, students were reminded that they were to report only the health risk behaviours they had,

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themselves participated in for self-presentational purposes. The students were informed that no names or identifying marks were to be placed on the questionnaires. Once instructions were clearly outlined and students were confident in their understanding of the requirements, the survey was then completed. Students were asked to keep all responses to themselves and to complete the questionnaire forms individually. They were also told to raise their hands at any time if they had questions. Students then took approximately 15-20 minutes to complete the questionnaires after which they returned them directly to the researcher. The completed questionnaires were separated from consent forms, placed into envelopes, and stored in a secure location on campus. This procedure was the same for each of the schools involved (n = 5).

3.4 Data Analysis.

The collected data was entered into SPSS. After the data was inputted, the researcher checked for data entry errors and assessed statistical assumptions, including univariate and multivariate normality. For the analysis of each continuous variable, means, standard deviations, skewness, and kurtosis were calculated to assess assumptions of normality. Mahalanobis's distance was calculated to determine multivariate outliers. In addition, internal consistencies were calculated for each subscale of the self-presentational measures. Descriptive statistics were then calculated for each of the study variables. The occurrence of each of the health risk behaviours were calculated for males and females. In addition, frequencies for each of the images and targets were also calculated. To determine the number of health risk behaviours performed at least once by each participant, a variable 'total' was created. The variable 'total' was calculated by assigning a one to each health risk behaviour reported by the participant as having been



participated in at least once or more for self-presentational purposes and then adding the number of health risk behaviours participated in at least once or more for each participant.

Thus, no matter how many times a participant reported engaging in a particular behaviour, (s)he received a value of one for that behaviour.

Bivariate correlations were computed to determine the relationship between health risk behaviours performed and the measures of trait self-presentational concerns (SPA, PSC, FNE, and SPE). A General Linear Model was run to identify significant gender differences on SPA, FNE, PSC, SPE and number of health risk behaviours tried at least once. Chi square analysis was used to determine if significant differences existed between desired images and targets for males and females. Multiple regression was used to determine if trait measures of self-presentational concerns could predict the occurrence of health risk behaviours in adolescents.



Chapter IV: Results

4.1 Data Screening

Prior to running any analytical procedures, the data were first screened for key-punch errors, normality, and missing data. Inspection of skewness and kurtosis values (all less than 2) suggested the data were normally distributed (see Table 2.) All missing data (less than 1%) were deemed to be random, as a visual inspection revealed no consistent pattern. Consequently, missing data were replaced by using the mean score by group classification (Tabachnick & Fidell, 2001).

In addition, the data were screened for multivariate outliers. Mahalanobis's distance was calculated for the total number of HRB performed at least once for SP purposes and each of the trait measures of self-presentation for males and females. Results revealed one multivariate outlier in the females' data. This participant was found to score the maximum score on both public self-consciousness and fear of negative evaluation, the minimum score on self-presentational efficacy, and a very low score (more than 2 standard deviations below the mean) on social physique anxiety. This case was removed for subsequent analyses.

4.2 Occurrence of Health Risk Behaviours

In order to examine the occurrence of health risk behaviours, frequencies of each response category were calculated for each gender. Eighty-eight point two percent of respondents, 95% of males and 85.17% of females, indicated that they had performed one or more of the 14 health risk behaviours at least one time for self-presentational reasons. Table 3 shows the number of males and females who reported engaging in each of the health risk behaviours for self-presentational purposes. In order to examine the



occurrence of self-presentationally motivated health risk behaviours in male and female adolescents, frequencies of each behaviour were calculated for each gender. Tables 4 and 5 show the number of males and females, respectively, who reported participating in each of the health risk behaviours at least once for self-presentational purposes.

4.3 Desired Impressions

The types of impressions that participants tried to make through participation in health risk behaviours (HRB) were analyzed. For each behaviour, Tables 6 and 7 show the specific impression(s) males and females respectively were trying to make by performing each behaviour (note that participants could have listed more than one type of impression for each behaviour). By far, appearing fun (n = 85) and cool (n = 38) were the most frequently cited desired images overall, by both males and females when participating in health risk behaviours for self-presentational purposes.

In order to examine if differences existed in the number of times the images reported for total number of health-risk behaviours engaged, a χ^2 analysis was conducted. The total number of times each image was reported by participants across all behaviours was calculated. Results of the χ^2 analysis indicated a significant difference between images reported by both males (χ^2 (4) = 15.83, p<.05) and females (χ^2 (4) = 49.70, p<.05).

4.4 Desired Target

The target groups that participants identified as being the most desired when participating in health risk behaviour were also analyzed. For each HRB, participants reported in engaging in at least once for SP purposes, frequencies for each desired target were calculated. For each behaviour, Table 8 shows the number of male participants and



Table 9 shows the number of female participants who indicated each of the desired target groups they were trying to make an impression on for each behaviour (note that numbers may not add up to 100 because participants could have listed more than one target for each behaviour). Examination of the frequencies indicated that the most commonly cited targets were same sex friends (n = 71), followed by opposite sex friends (n = 66) for both males and females.

The total number of times each target was reported by each participant across all behaviours was calculated. In order to determine if differences in the frequency of reporting of the desired target groups reported by both males and females for each of the reported behaviours existed, a χ^2 analysis was used. Results of the χ^2 analysis indicated a significant difference between the desired target groups for females (χ^2 (4) = 17.79, p< .05) and for males (χ^2 (4) = 9.49, p = .05).

4.5 Trait Self-Presentation Variables and Health Risk Behaviours

The relationship between the number of health risk behaviours performed and trait measures of self-presentational concerns were analyzed. Only participants who reported engaging in at least one health-risk behaviour at least once for self-presentational purposes were used in subsequent analysis. Eleven females and two males reported engaging in no health risk behaviours, and therefore were removed for subsequent analysis.

Descriptive statistics were calculated for males and females, and for the total sample for each of the trait (SPA, FNE, PSC, SPE) self-presentational measures and are shown in Table 10. Correlations were run separately for males and females and are shown in Table 11. Results show that the total number of health risk behaviours



participated in by boys was significantly correlated with self-presentational efficacy (r = .54) social physique anxiety (r = .51), and fear of negative evaluation (r = .29), and for girls, total number of health risk behaviours was correlated with self-presentational efficacy (r = .21). In order to determine if the magnitude of these correlations was significantly different for boys and girls, Kendall's tau_b was calculated. No significant differences were detected for any of the relationships (all p's > .05).

In order to examine if gender differences occurred in the self-presentational variables and the total number of self-presentational health risk behaviours, an MANOVA was conducted. The omnibus test was significant (Pillai's trace (F (5, 90) = 2.52, p = .035, η^2 =.123, power = .763). Follow-up univariate ANOVAs showed significant differences on SPE, SPA, and PSC. Examination of means showed males scored higher on self-presentational efficacy F (1, 94) = 6.57, p = .012, η^2 = .065, power = .718) than females. Females scored higher in social physique anxiety F (1, 94) = 6.12, p = .015, η^2 = .061, power = .687) and public self-consciousness F (1, 94) = 5.221, p = .025, η^2 = .053, power = .619) than males. Given these significant gender differences, subsequent analyses were conducted separately for boys and girls.

4.6 Predictions of Health Risk Behaviours from Self-Presentational Variables.

In order to examine whether the total number of health risk behaviours tried at least once for self-presentational purposes could be predicted from trait self-presentational concerns, a simultaneous regression analysis was conducted. For boys, the overall regression was significant (F(4, 29) = 5.62, p = .002), accounting for approximately 36% (adjusted $R^2 = .359$) of the variance in the number of health risk behaviours performed at least once for self-presentational purposes. Self-presentational



efficacy and social physique anxiety both contributed significantly to the prediction (see Table 12). The overall regression for girls was also found to be significant (F(4, 57) = 3.12, p = .022), accounting for approximately 12 % (adjusted $R^2 = .122$) of the variance in the number of health risk behaviours performed at least once for self-presentational purposes. Social physique anxiety significantly contributed to the prediction (see Table 13).

In other words, self-presentational efficacy and social physique anxiety for males, and social physique anxiety for females were each found to predict the number of health risk behaviours participated in at least once for self-presentational purposes. More specifically, males scoring higher in self-presentational efficacy, and lower in social physique anxiety participated in more health risk behaviours at least once for self-presentational reasons than males scoring lower on self-presentational efficacy and higher on social physique anxiety. For females, those scoring low in social physique anxiety were found to participate in more health risk behaviours for self-presentational purposes than those scoring high in SPA.



Chapter V: Discussion

The purpose of the current study was to investigate the role of self-presentation on adolescent health-risk behaviours. Specifically, this study examined the prevalence of adolescent identified health-risk behaviours rooted in self-presentational motives in adolescents aged 13-18 years. Second, it also identified the specific images desired by adolescents engaging in these behaviours. Third, the targets of these behaviours were also recognized. Finally, the relationship between these behaviours and trait measures of self-presentation (i.e., social physique anxiety, public self-consciousness, fear of negative evaluation, and self-presentational efficacy) were examined. In general, the results of the current study supported the relationship between self-presentation and health risk behaviours, consistent with that of previous research (e.g., Martin et al., 2000; Martin & Leary, 2001; Norman & Tedeschi, 1989).

5.1 Self-Presentation and Health Risk Behaviours

It was hypothesized that adolescents would participate in health risk behaviours for self-presentational purposes. Support for this hypothesis was found. Of the students surveyed, the majority of adolescents had engaged in at least one health risk behaviour for self-presentational reasons since the beginning of the school year. This finding is consistent with previous research indicating that adolescents and college students use health risk behaviours as a self-presentational strategy (Leary et al., 1994; Martin et al., 1999; Martin et al., 2001; Martin & Leary, 2001).

Of the 14 health risk behaviours examined, drinking alcohol was the most commonly reported self-presentationally motivated health risk by both males and females. Past research has also found alcohol use to be the most commonly reported



health risk behaviour performed for self-presentational purposes in college students (Martin & Leary, 2001) and youth aged 11-18 years (Maxwell, 2000).

Many of the commonly cited health risk behaviours in the present study have also been reported in previous literature, including alcohol and drug use (Sieving et al., 2000), performing stunts and dares (Leary et al., 1994), smoking (Norman & Tedeschi, 1989), illegal drug use (Sharp & Getz, 1996; Odgers et al, 1996), sexual behaviours such as unsafe sex (Leary et al., 1994), dieting/disordered eating (Hewitt et al., 1995), and drinking and driving (Martin & Leary, 2001). In addition, some behaviours not previously identified as being self-presentationally based were also identified in the current research. Specifically, adolescents in the present study indicated getting piercings/tattoos, stealing/shoplifting, fighting/bullying, overeating, skipping school, and carrying weapons as self-presentationally motivated health risk behaviours. These findings suggest that adolescents engage in a much wider variety of health risk behaviours than previously investigated. As such, there is a great need to investigate not just researcher-identified behaviours, but also adolescent-identified behaviours.

5.2 Desired Images.

Secondly, it was hypothesized that there would be a significant difference between the reported frequencies of the desired images adolescents were attempting to portray through these health risk behaviours. Specifically, it was hypothesized that adolescents would engage in HRB most often for the purpose of appearing cool and mature, and to a lesser frequency, brave, physically attractive and fun. This hypothesis was only partially supported. In examining the images adolescents desired to portray through their health risk behaviours (i.e., impression construction), the results supported the hypothesis that



there would be differences in the frequencies with which the images were reported.

However, being perceived as fun was by far the most commonly listed image, followed by being cool. Less frequently cited were physically attractive and brave, with mature being the least often mentioned.

Overall, these images were found to be similar to those cited in previous research. Martin and Leary's (2001) research examining college-aged students identified the most frequently cited images as being appearing cool/laid-back, followed by brave/risk-taker, and fun/social. However, contrary to previous research which suggested that being perceived as mature was a desirable image (Martin & Leary, 2001), appearing mature was not found to be frequently cited in this population. In fact, there was little or no indication of participating in health risk behaviours to appear mature in adolescents in the present study. This discrepancy may be due to the differences in the age groups examined in previous research. Martin and Leary (2001) investigated college-aged participants, while the present study examined adolescents. One possible explanation for this difference may be that appearing mature may not be a desirable image until later in adolescence or early adulthood. Barker and Galambos (2005) identified adolescent conceptions of maturity as individual characteristics such as accepting responsibility for one's actions and independently deciding on personal beliefs and values (each of which adolescents associated with the transition in adulthood). It may be that adolescents are not ready, nor want the responsibility of becoming an adult and therefore, avoid presenting images that may suggest otherwise.

However, an alternative explanation may also exist. Barker and Galambos (2005) identified adolescents as recognizing a 'mature' peer as someone who exhibits autonomy,



responsibility, and control of emotions while a pseudo-mature peer engaged in problem behaviours, preferred to hang out with older peers, and looked and acted older. In addition, adolescents identified accepting responsibility for one's actions and not engaging in problem behaviours as characteristics of the transition into adulthood.

Together, these findings suggest adolescents may not have reported maturity as a desired image not because they do not want to be seen as mature, but rather because they understand that engaging in health risk behaviours may not be a successful self-presentational strategy to portray the image of being mature.

One reason fun may have been such a desired image in the present study is a result of effective advertising. Adolescents view nearly 2000 beer and wine commercials per year on television (Committee on Communications, 1995). Alcohol advertising specifically targets young people by showing the supposed advantages of drinking, such as having more friends, gaining prestige, and having more fun (Committee on Communications). In the promotion of alcoholic products, these companies exemplify the link between having fun and being popular, and suggest that without alcoholic beverages teens cannot have fun or be popular (Committee on Communications). It is likely that many adolescents would be affected by these commercials and adopt the behaviours presented to fulfill his/her self-presentational desires, in particular if they are high in self-presentational concerns.

These results suggest that adolescents have learned what images are desirable, and how to achieve these desired images through engaging in health risk behaviours at an early age. These findings may be indicative that preventative programs need to target

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young age groups in hopes of deterring participation in, and deconstructing the images associated with health risk behaviours.

5.3 Desired Target Groups.

In addition to the behaviours and images, another key factor in the engagement in health risk behaviours is the desired target group as it directly influences the desired image (i.e., impression construction). However, this question has not been directly investigated previously. It was hypothesized that there would be a significant difference between the frequencies with which the target groups were reported when participating in health risk behaviours for self-presentational purposes. Specifically, it was hypothesized the most frequently identified desired target groups would be friends followed peers. This hypothesis was supported. Same sex friends followed by other sex friends were identified as being the most frequently desired target group, by both males and females. It should be noted that these groups were differentiated from peers.

A considerable amount of research has identified strong friend and peer involvement in self-presentationally motivated health risk behaviours (Barton et al., 1982; Martin et al., 2001; Maxwell, 2002; Sharp et al., 1996). Shucksmith, et al. (1993) identified friends and peers as being distinguishable from one another. Peer-groups appear to have a dynamic role, the function and influence of which shifts across adolescence. Adolescents use the peer group to evaluate the perspectives of others, while developing his or her own values and attitudes. It is in individual friendships where adolescents find support and security, negotiate their emotional independence, and develop perspectives of themselves (Shucksmith et al.). Friends likely hold much more power than peer relationships (Maxwell, 2000) because adolescents spend a great deal of



their time with friends. Friends determine what behaviours and images are most desirable and effective through friendships, as they organize, experience and define themselves as persons (Shucksmith et al.). According to Leary and Kowalski's (1990) 2-Component Model of Self-Presentation the more power a target holds, the more motivated an individual may be to participate in health risk behaviours. Thus, if friends hold the most power, it is not surprising that they are listed most frequently as the desired target group.

Considering that self-presentational motives are at least in part involved in the decision to participate in health risk behaviours, and few adolescents sneak off alone for their first experiences with most health risk behaviours, the influence of friends is profound in adolescents' decisions to participate (Leary et al., 1994). Maxwell (2000) identified friend norms as helping to determine whether a behaviour is desirable. Also, studies show correlations between adolescents' perceptions of their friends' activities and their own risk taking behaviours (Maxwell, 2000). As well, other studies have also found that a single friend may initiate another into cigarette and alcohol use (Eiser & Stroebe, 1972; Urberg et al., 1990). Lastly, data show that adolescents are twice as likely to engage in a risk activity if their friends have previously participated (Maxwell, 2000). Collectively considered, the influence of friends on adolescents' decisions to participate in a health risk behaviour is significant and may be helpful in the development of preventative programs.

Not surprisingly, parents were found to be the least desired target group.

However, it is important to note that different targets may hold different motives for selfpresentation. The desired impressions presented to parents may not always be positive in
nature. Adolescents may participate in health risk behaviours to present a negative image



toward parents. For example, an adolescent may participate in drug use or drinking alcohol to get attention from parents especially, if parents fail to give adequate attention to their child. The National Institute on Drug Abuse (2006) research on marijuana use among young people below college age indicates those who used marijuana demonstrated rebelliousness and poorer relationships with parents. This may suggest one of two possibilities. First, adolescents that have poor relationships with their parents may participate in health risk behaviours to gain the attention currently lacking in their relationship. Alternatively, due to the lack of a positive influence, these adolescents may be more influenced by their friends and therefore participate more frequently in these behaviours.

Social comparison theory indicates that social influence occurs when people continually compare themselves with others to ascertain whether or not their own behaviour is appropriate (Maxwell, 2002). Friend and peer groups provide adolescents with their most significant social comparisons to aid with this identity formation, supplying opportunities and experiences that cannot be duplicated by other socializing agents. As children move away from childhood and into adolescence, identification with a peer group becomes more important (Igra & Irwin, 1996). Not only does identification with a peer group become more important, but also becomes a more important influence on behaviour (Jessor et al., 1980).

The cause for concern regarding this finding is that peer influence is more closely linked to problem behaviour than parental influence (Jessor & Jessor, 1977). Also, adolescents spend twice as much time with peers as with parents or other adults, and adolescent peer groups function with much less adult supervision compared to pre-



adolescent youth (Brown, 1990). Specifically, adolescents are particularly susceptible to friend and peer influence rather than adult or parental influence. Taking into consideration that peer influence is more closely linked to problem behaviour, adolescents may be more prone to participate in risk behaviours themselves, especially if they perceive their friends or peer group participate in health risk behaviours.

5.4 Trait Self-Presentation and Health Risk Behaviours.

Although not specifically one of the purposes of the present study, a new measure of self-presentationally motivated health risk behaviours was developed for the current study. Some preliminary support for the validity of this measure was found. Specifically, as expected, boys reported engaging in more health risk behaviours overall than girls, providing evidence of predictive validity. Second, evidence of convergent validity was also found. For example, correlations revealed that adolescents higher in SPE engaged in more health risk behaviours. Also, those higher in anxiety about evaluations of their bodies were less likely to participate in these behaviours.

The final purpose of the study investigated the relationship between trait self-presentational concerns and the occurrence of health risk behaviours. It was hypothesized that there would be a positive relationship between SPA, FNE, PSC, and SPE and the number of health risk behaviours performed at least once for self-presentational purposes. This hypothesis was only partially supported. For boys, the total number of health risk behaviours engaged in at least once for self-presentational purposes was positively related to SPE, but negatively related to SPA. For girls, the total number of health risk behaviours engaged in at least once for self-presentational purposes was negatively related to SPA.



These results suggest that, like their American and Irish counterparts, Canadian adolescents' health risk behaviours are related to their trait self-presentational concerns.

Martin et al. (2001) reported trait self-presentational concerns existed in Irish adolescents and they were found to be modestly correlated with the value that they placed on self-presentational motives for various health practices (e.g., drinking alcohol, exercising and not exercising).

Males and females scoring lower in SPA were found to participate more frequently in health risk behaviours at least once for self-presentational purposes. A possible explanation for this finding is that for males, some of the behaviours that may be interpreted as having a positive impact on the body's appearance were reported by only a small number of participants (e.g., piercings/tattoos, and dieting/disordered eating). It may be that participation in many of these behaviours can actually have a negative impact on the body's appearance (e.g., alcohol consumption, overeating, and fighting). For example, excessive alcohol consumption and overeating may be associated with weight gain. Therefore, it may be that these behaviours are avoided by those high in social physique anxiety because they do not wish to further diminish the appearance of their bodies. It should also be noted, however, that these results are based on relatively small numbers of participants. Considering the findings of the current study are inconsistent with those of previous research (e.g., Martin & Leary, 2001; Martin et al., 2001) further investigation is needed with a larger, more diverse sample size for more conclusive results.

Further, males who were high in self-presentational efficacy were more likely to have performed health risk behaviours for self-presentational purposes. Two possible



explanations may exist for this finding. First, males may be higher in SPE because they engage in these health risk behaviours. That is, engaging in health risk behaviours increases self-presentational efficacy as they successfully perform behaviours designed to portray these images. Alternatively, males may believe that participation in these behaviours will help them maintain their desired images. Specifically, when males are confident that others see them as fun, cool etc., they may be more willing to engage in risky behaviours, to be consistent with those images. This finding supports Leary and Kowalski's (1990) two-component model which suggests that people's behaviours may be constrained by the probability they can successfully portray particular impressions to others. Individuals who do not believe that they are seen by others as presenting the desired images (i.e., low in self-presentational efficacy) may avoid these types of behaviours because they are inconsistent with their current images. That is, higher levels of self-presentational efficacy may lead to adolescents engaging in health risk behaviours. Because the present study is correlational, neither of these explanations can be discounted.

Trait self-presentational measures accounted for significant variance in the total number of health risk behaviours performed at least once for self-presentational purposes for males (36%) and females (12%). Although a significant amount of variance was accounted for in males and females, it was much greater in males. An explanation for the difference in variance found between males and females may be that females feel participating in health risk behaviours is not a successful way to achieve desired images. That is, images associated with these health risk behaviours may be less desired by girls. Chassin et al. (1985) found similar results, as they found girls aspired away from the



drinker image. They also found girls who misused alcohol were dissatisfied with this behaviour and did not perceive it as self-enhancing or as socially desirable (Chassin et al.). Chassin et al. suggested that girls participate in these behaviours not for social acceptance but to reduce stress and mood regulation (i.e., non-self-presentational motives). The findings of the current study may also indicate that girls participate in health risk behaviours for reasons other than to self-present.

It should also be noted that although the variance accounted for in the total number of health risk behaviours engaged in at least once for self-presentational purposes was significant, there is also a great deal of variance not accounted for by trait self-presentational concerns. Martin and Leary (2004) have encouraged researchers to shift from a trait approach to a situational approach or an interactionist (trait by state approach). With the exception of disordered eating behaviours, it seems that most health damaging behaviours are only weakly correlated with trait self-presentational concerns. Thus, it makes sense to shift paradigms and identify situational factors that elicit health-damaging behaviours and whether these factors interact with dispositional self-presentational concerns. For example, examining the images adolescents believe that others (i.e., friends and peers) hold of them, or those that they value, as well as the effects of these beliefs on self-presentational concerns could be investigated.

Although a self-presentational framework is useful in explaining adolescent participation in health risk behaviours other factors and theories should not be discounted. Psychological and cognitive theories suggest that personality traits such as deficits in self-esteem, cognitive immaturity and high sensation seeking increase the probability of adolescents participating in health risk behaviours. Social and environmental theories



suggest that it is family and peer interactions, and community and societal norms that are the main contributors to adolescent health risk behaviour participation. Advocates of this theory believe that it is the norms that are modeled by these groups that provide models, opportunities and reinforcements for adolescent participation in risk taking behaviours. However, it is most likely that a combination of these explanations including self-presentation that can fully help us understand health risk behaviours in adolescents.

5.5 Implications.

The results of this study have several implications. It is obvious that adolescents participate in health risk behaviours for self-presentational motives. Self-presentational motives have been strongly linked to the decision to use alcohol, tobacco, and illicit drugs (Leary et al., 1994). Few people sneak off alone for their first experiences with any of these substances (Leary et al., 1994). For instance, Friedman, Lichtenstein, and Riglan (1985) found that only 11% of adolescents reported that they first smoked cigarettes alone. Rather, most people first try alcohol, tobacco, and other drugs in an interpersonal context in which they want others to perceive them in a certain way or want to avoid making a bad impression.

Thus far, an educational approach to health interventions has been favoured and/or adopted by teachers, health promoters, educators (Jessor, 1992). Although educational interventions are beneficial in presenting the associated risks with certain activities, and/or behaviours, this type of approach is generally ineffective in changing behaviour (Jessor, 1992), and does not address the strong and prominent influences of interpersonal motives on health damaging behaviour. Maybe adolescents are truly not aware how influenced they are by social pressures and desired images. However, it is evident that



social acceptance and public image are of importance to adolescents, and the desire to make the "right" impression and to achieve peer approval and acceptance may often override health and safety concerns (Jessor).

Martin and Leary (2001) suggested that interventions that simply educate teens regarding health risk behaviours or that try to compel them to walk away from risky situations (e.g., "just say no") will not be as effective in promoting health behaviours as those that acknowledge and address interpersonal motives. Although educational interventions are necessary when people do not fully understand the risks associated with certain activities, a purely educational approach ignores the potent effects of interpersonal motives on health-related behaviour (Martin et al., 2001). Particularly among adolescents, for whom public image and social acceptance are often paramount, the desire to make the right impression and to achieve peer approval and acceptance may often override health concerns (Martin et al., 1999).

Considering that thus far educational approaches targeting the consequences of health risk behaviours have not been entirely successful (Martin et al., 2001), and that changing the current images desired by adolescents (i.e. appearing intelligent vs. appearing cool) is unlikely, a self-presentational approach focusing on changing the images associated with the behaviours may be more successful at deterring adolescent health risk behaviours altogether. For example, Jones and Leary (1994) found a self-presentational approach to be more successful in a study of college students whereby participants were more persuaded not to suntan when they read about the negative self-presentational effects of excessive tanning on appearance (e.g., aged wrinkled skin) than when they read about the health risks associated with sun tanning (e.g., skin cancer).



Thus, highlighting the negative self-presentational images associated with these health risk behaviours may be more effective at reducing performance of these behaviours.

5.6 Limitations.

Despite the contribution of this study, there are several limitations that must be acknowledged. First, the number of males was small compared to the number of females. Thus, gender differences in self-presentational concerns in particular must be interpreted with some caution. This limitation was due in part to the ratio of boys and girls that attend private schools in Southern Ontario. It may have also been beneficial to have an equal number of males and females represented in each age group because there was only a relatively small number represented as each age, in particularly in older ages. Results may not be a true indication of health risk behaviours performed across age group (i.e., drinking and driving).

Another limitation of the current study to be considered is that the participants were recruited from private schools in Ontario. This may result in certain health risk behaviours, desired images, and targets not being identified and therefore the results are not entirely generalizable across all Canadian adolescents. For example, these schools varied in class sizes, class structure, location (i.e., churches, personal homes, and schools) and grade distribution (e.g., one grade 4, ten grade 7's, 3 grade 11's). Due to the varied structure of these schools compared to public schools different relationships may exist between students of any age. Also, these relationships may lead to different types of influences existing between these students. For example, it may be more likely that a grade 6 is influenced by the behaviours of a grade 12, or vice versa. Therefore, there is potential for students to start participating in health risk behaviours at a younger age.



However, the contrary may also exist. Due to the low numbers of students represented in each grade, it may be less likely that older adolescents participate in health risk behaviours if they are friends with students younger in age. Also, due to some of these schools being located in a church setting, there may be a strong religious component to their schooling, which may deter them from participating in health risk behaviours at all. There also is the possibility of these students rebelling against their parents/teachers due to the fact that they attend private schools and participating more frequently in health risk behaviours for self-presentational purposes.

The variable 'total' may also be considered a limitation to the current study. Total was calculated by assigning a one to each health risk behaviour reported by the participant as having been participated in at least once or more for self-presentational purposes and then adding the number of health risk behaviours participated in at least once or more for each participant. Therefore, a participant having indicated participating in a health risk behaviour for self-presentational purposes one time was considered equal to a participant that had participated in a health risk behaviour six or more times. In addition, both the severity and/or risk of participating in the behaviour was not taken into consideration. For example, participating in drinking and driving was considered equal to participating in skipping school.

Lastly, considering the present study is cross-sectional and did not take place over a longer period of time, results may not entirely represent adolescent health risk behaviours compared to a more longitudinal approach.



5.7 Future Directions.

Implementing health promotion interventions that adopt a self-presentational perspective may be beneficial for future examination. In implementing and examining the effectiveness of this type of a program, comparisons could be drawn to determine whether this type of approach exceeds the effectiveness of a purely educational approach possibly leading to the desired result of decreased adolescent health risk behaviour participation.

Of the fourteen health risk behaviours reported, alcohol was by far the most commonly reported behaviour followed by skipping school and performing stunts and dares. Drug use also was reported relatively frequently for males and dieting/disordered eating behaviour were reported by females. Given the reported frequency, the previously mentioned behaviours may be ideal behaviours to target in subsequent investigations of the effects of self-presentational motives on adolescent health risk behaviour. In addition, it may be worthwhile for researchers to examine why some health risk behaviours may be more often used to self-present than others. It has been noted that adolescents favour those health risk behaviours that are most likely to convey a particular impression (i.e., smoking to appear 'cool') (Martin et al., 2000).

Researchers may benefit from possibly taking a more qualitative approach in examining adolescent health risk behaviours and self-presentation. By doing so, further insight into the construction and importance of desired images, the importance of desired target groups, the reasoning for health risk behaviour participation, and possible further insight into the occurrences of health risk behaviour participation. Consequently,



researchers may gain an increased understanding of adolescents participation in health risk behaviours and the possible development of more effective preventative programs.

Also, it may be beneficial to explore different behaviours, images and target groups other than the ones examined in the current study and existing research. Further, the possible interaction between behaviours, targets and images could contribute additional insight in adolescent health risk behaviours. Although this study represents a good first step in examining the role of self-presentation adolescent health risk behaviours, future research must continue to investigate this topic to gain a better understanding of how to reduce the incidence of such behaviours.

5.8 Summary.

The findings of the current study suggest that Canadian adolescents are participating in health risk behaviours in hopes of attaining self-presentational benefits (i.e., performing certain behaviours to portray desired images to desired target groups). It is also evident that trait self-presentational concerns were related to the participation in health risk behaviours to reap self-presentational benefits. Weak and modest relationships were observed between trait self-presentational concerns and the number of health risk behaviours reported for each gender. Specifically, males and females who were confident in their ability to portray certain desired images (i.e., high in self-presentational efficacy), as well as males who were lower in concern that others would evaluate their bodies (i.e., low social physique anxiety) were more likely to participate in health risk behaviors for self-presentational purposes. Considered together, the findings of the current study suggest that self-presentational motives do play a role in health risk behaviours in adolescents, and warrant further investigation.



Summary and Conclusion

Canadian adolescents aged 13-18 years from various Ontario private schools were found to participate in health risk behaviours for self-presentational purposes. Drinking alcohol, skipping school and performing stunts and dares were found to be the most frequently participated in, self-presentationally motivated, health risk behaviours identified by both boys and girls. Appearing fun was by far the most commonly desired image, followed by appearing cool for both male and female participants. Both same and opposite sex friends were found to be the most desired target group by both males and females. Females were found to score higher on measures of social physique anxiety and fear of negative evaluation compared to boys. Males scored higher on self-presentational efficacy. Finally, trait self-presentational concerns significantly predicted the total number of health risk behaviours engaged in at least once for self-presentational purposes. For males, SPE and SPA were significant predictors and for females, SPA was a significant predictor.

The findings of the current study are beneficial and contribute to existing research in that they identify Canadian adolescents as participating in health risk behaviours for self-presentational reasons. They also suggest that different health risk behaviours are used to portray different desired images. Lastly, but maybe most importantly is that adolescents are participating in these health risk behaviours most often to make impressions toward their friends. This finding also supports previous suggestions that friends and peers are considered to be different and hold different levels of importance in the eyes of adolescents. This finding suggests that it may be helpful in directing future studies to determine the differences between friends and peers as identified by



adolescents. As well, it may also be beneficial for programs to target groups of friends rather than just individual friends.

The findings of the current research study may also be useful in the development of intervention and preventative programs. Having gained a further understanding of the importance of self-presentational motives in adolescent's health risk behaviour participation, using a self-presentational approach in preventing, deterring and ultimately diminishing adolescents participation may be beneficial.



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Table 1.

Distribution of Grade level for Male and Female Students

Grade Level	Males	Females
8	5	5
9	3	34
10	9	21
11	15	12
12	3	2
13	1	0

Table 2.

Values of Continuous Variables for Assessment of Normality

Continuous Variable	Skewness	Kurtosis	Standard Deviation	Mean
SPE	82	.86	20.03	62.41
SPA	1.04	-5.56	.922	2.84
FNE	.41	86	1.11	2.38
PSC	23	80	.93	2.91
Total	.62	48	3.73	4.85



Table 3.

Total Number of Different Health Risk Behaviours Tried by Males (n = 36) and Females (n = 74).

Number of HRB	Ma	ales	Fen	nales
Tried	n	%	n	%
0	2	5.6	11	14.9
1	3	8.3	4	5.4
2	3	8.3	15	20.3
3	6	16.7	9	12.2
4	2	5.6	3	4.1
5	2	5.6	5	6.8
6	2	5.6	10	13.5
7	3	8.3	2	2.7
8	3	8.3	4	5.4
9	5	13.9	4	5.4
10	1	2.8	2	2.7
11	0	0	0	0
12	1	2.8	4	5.4
13	1	2.8	1	1.4
14	2	5.6	0	0

Note. HRB = Health Risk Behaviours. Number of behaviours could range from 0-14.



Table 4. Frequency of Males Having Reported Engaging in Each Health Risk Behaviour (n = 36).

Behaviours	0 T	imes	One	e time	2 or 3	times	4 or 5	times		r more mes
	n	%	n	%	n	%	n	%	n	%
Smoking	22	61.1	3	8.3	0	0	5	13.9	6	16.7
Drinking Alc.	9	25.0	3	8.3	3	8.3	3	8.3	20	55.6
Drug Use	17	47.2	3	8.3	0	0	1	2.8	15	41.7
Stealing	25	69.4	1	2.8	3	8.3	0	0	7	19.4
Bully/Fighting	22	61.1	2	5.6	2	5.6	0	0	10	27.8
Unsafe Sex	27	75.0	3	8.3	0	0	3	8.3	3	8.3
Sexual Int.	22	61.1	1	2.8	1	2.8	2	5.6	10	27.8
Dieting/Dis.Eat	29	80.6	3	8.3	2	5.6	0	0	2	5.6
Overeating	17	47.2	3	8.3	6	16.7	0	0	10	27.8
Skipping	9	25.0	3	8.3	6	16.7	7	19.4	11	30.6
Stunts/Dares	12	33.3	2	5.6	3	8.3	4	11.1	15	41.7
Drink/Driv	32	88.9	0	0	0	0	2	5.6	2	5.6
Pierc/Tattoos	25	69.4	3	8.3	5	13.9	1	2.8	2	5.6
Carry Weapons	26	72.2	1	2.8	3	8.3	2	5.6	4	11.1

Table 5.

Frequency of Females Having Reported Engaging in Each Health Risk Behaviour (n = 74).

Behaviours	0 7	Times	On	e time	2 or time		4 or			r more mes
	n	%	n	%	n	%	n	%	n	%
Smoking	54	73.0	4	5.4	5	6.8	1	1.4	10	13.5
Drinking Alc.	27	36.5	11	14.9	9	12.2	6	8.1	21	28.4
Drug Use	55	74.3	4	5.4	0	4.1	3	5.4	11	14.9
Stealing	58	78.4	9	12.2	4	5.4	2	2.7	1	1.4
Bully/Fighting	49	66.2	10	13.5	11	14.9	1	1.4	3	4.1
Unsafe Sex	66	89.2	1	1.4	1	1.4	1	1.4	5	6.8
Sexual Int.	57	77.0	4	5.4	2	2.7	0	0	11	14.9
Dieting/Dis.Eat	45	60.8	14	18.9	8	10.8	0	0	7	9.5
Overeating	41	55.4	8	10.8	11	14.9	1	1.4	13	17.6
Skipping	36	48.6	17	23.0	11	14.9	2	2.7	8	10.8
Stunts/Dares	40	54.1	11	14.9	6	8.1	7	9.5	10	13.5
Drink/Driv	72	97.3	1	1.4	1	1.4	0	0	0	0
Pierc/Tattoos	45	60.8	12	16.2	10	13.5	3	4.1	4	5.4
Carry Weapons	70	94.6	2	2.7	2	2.7	0	0	0	0



Table 6.

Number of Males Indicating the Image They Were Trying to Portray when Engaging in Each Behaviour (n = 36)

		C	Cool	M	ature	Br	ave	Attr	active	Fun		
	n	n	%	n	%	n	%	n	%	n	%	
Smoking	14	8	57.1	3	21.4	2	14.2	0	0	6	42.9	
Drinking Alc.	25	9	36.0	4	16.0	2	8.0	0	0	23	92	
Drug Use	19	8	42.1	0	0	3	15.8	2	10.5	16	84.2	
Stealing	11	3	27.3	1	9.1	4	36.4	2	18.1	7	63.6	
Bully/Fighting	14	5	35.7	0	0	3	21.4	3	21.4	9	64.3	
Unsafe Sex	9	2	22.2	3	33.3	0	0	0	0	5	55.6	
Sexual Int.	14	3	21.4	4	28.6	0	0	0	0	9	64.3	
Dieting/Dis.Eat	7	1	14.3	0	0	0	0	6	85.7	0	0	
Overeating	19	3	15.8	0	0	1	5.3	0	0	9	4.7	
Skipping	27	11	40.7	1	3.7	6	22.2	3	11.1	13	48.1	
Stunts/Dare	24	7	29.2	3	12.5	14	58.3	2	8.3	15	62.5	
Drink/Driv	4	2	50.0	1	25.0	0	0	0	0	3	75	
Pierc/Tattoo	11	5	45.5	0	0	1	9.1	7	63.6	5	45.5	
Weapon	10	3	30.0	2	20.0	4	40.0	1	10.0	3	30.0	

Table 7.

Number of Females Indicating the Image They Were Trying to Portray when Engaging in Each Behaviour (n = 74).

		Cool		Matu	re	В	rave	Attra	active	F	un
	n	n	%	n	%	n	%	n	%	n	%
Smoking	20	11	55.0	3	15.0	1	5.0	0	0	8	4.0
Drinking Alc.	47	7	14.9	5	10.6	1	2.1	0	0	43	91.5
Drug Use	19	2	10.5	1	5.3	2	10.5	0	0	15	78.9
Stealing	16	3	18.8	0	0	2	12.5	0	0	10	62.5
Bully/Fighting	25	1	4.0	6	24.0	2	8.0	1	4.0	8	32.0
Unsafe Sex	8	0	0	1	12.5	0	0	0	0	4	50.0
Sexual Int.	17	1	58.8	4	23.5	0	0	1	5.9	9	52.9
Dieting/Dis.Eat	29	0	0	0	0	1	3.4	20	69.0	1	3.4
Overeating	33	0	0	0	0	2	6.1	0	0	21	63.6
Skipping	38	4	10.5	0	0	2	5.3	0	0	0	0
Stunts/Dare	34	3	8.8	1	29.4	6	17.6	0	0	21	61.8
Drink/Driv	2	1	50.0	0	0	0	0	0	0	0	0
Pierc/Tattoos	29	6	20.7	0	0	2	6.9	18	62.1	10	34.5
Carry Weapons	4	1	25.0	0	0	0	0	0	0	2	50.0



Table 8.

Number of Males Indicating the Target Group They Were Trying to Impress when Engaging in Each Behaviour.

Behaviour			ne Sex iends		e Sex eer		er Sex iend		er Sex eer	Pa	rents
	n		%	N	%	n	%	n	%	n	%
Smoking	14	11	78.6	3	21.4	5	35.7	3	21.4	1	7.1
Drinking Alc.	25	16	64.0	11	44.0	13	52.0	8	32.0	1	4.0
Drugs	19	13	68.4	8	42.1	6	31.6	3	15.8	1	5.3
Stealing	11	7	63.6	4	36.4	4	36.4	6	54.4	2	18.2
Bully/Fighting	14	9	64.3	5	35.7	4	28.6	3	21.4	2	14.3
Unsafe Sex	9	3	33.3	3	33.3	4	44.4	3	33.3	2	22.2
Sex Int.	14	4	28.6	3	21.4	5	35.7	4	28.6	2	14.3
Dieting/Dis.Eat	7	2	28.6	3	42.9	3	42.9	3	42.9	2	28.6
Overeating	19	5	26.3	2	10.5	3	15.8	1	5.3	3	15.8
Skipping	27	16	64.0	11	44.0	12	48.0	8	32.0	1	4.0
Stunts/Dare	24	15	62.5	10	41.7	14	58.3	12	50.0	1	4.2
Drink/Driv	4	3	75.0	1	25.0	2	50.0	1	25.0	1	25.0
Pierc/Tattoo	11	5	45.5	2	18.2	4	36.4	3	27.3	3	27.3
Carry Weapon	10	5	50.0	3	30.0	1	10.0	0	0	1	10.0



Table 9. Number of Females Indicating the Target Group They Were Trying to Impress when Engaging in Each Behaviour.

Behaviour			ne Sex iends	S	ame Sex Seer	5	ther Sex iend		er Sex eer	Pa	rents
	n	n	%	n	%	n	%	n	%	n	%
Smoking	20	14	70.0	3	15.0	8	40.0	4	20.0	0	0
Drinking Alc.	47	30	63.8	9	19.1	27	57.4	10	21.3	6	12.8
Drugs	19	11	57.9	4	57.9	9	47.4	6	31.6	0	0
Stealing	16	7	43.8	0	0	2	12.5	1	6.3	1	6.3
Bully/Fighting	25	9	36.0	6	24.0	8	32.0	4	16.0	1	4.0
Unsafe Sex	8	0	0	0	0	3	37.5	3	37.5	1	12.5
Sexual Int.	17	1	5.9	0	0	7	41.2	3	17.6	1	5.9
Dieting/Dis.Eat	29	7	24.1	5	17.2	14	48.3	14	48.3	5	17.2
Overeating	33	9	27.3	3	9.1	5	15.2	5	15.2	7	21.2
Skipping	38	22	57.9	12	31.6	16	42.1	10	26.3	1	2.6
Stunts/Dare	34	23	67.6	14	41.2	18	52.9	13	38.2	0	0
Drinking/Driv	2	2	100.0	0	0	0	0	0	0	0	0
Pierc/Tattoo	29	12	41.4	7	24.1	14	48.3	13	44.8	5	17.2
Carry Weapon	4	2	50.0	0	0	0	0	1	25.0	1	25.0

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		-	

Table 10.

Means and Standard Deviations for Self-Presentational Measures and Total Health Risk

Behaviours Tried at Least Once.

	Ma	ales	Females			
	Mean	Standard	Mean	Standard		
		Deviation		Deviation		
SPE	68.86	14.82	57.86	22.46		
SPA	2.56	1.02	3.04	.87		
FNE	2.14	1.06	2.58	1.10		
PSC	2.69	.95	3.12	.84		
Total	6.18	3.79	5.15	3.28		

Note. SPE = Self-Presentational Efficacy Scale (1-100); SPA = Social Physique Anxiety (1-5); FNE = Fear of Negative Evaluation (1-5); Public Self-Consciousness (1-5); Total = Total Number of Health Risk Behaviours Participated in at Least Once (1-14)

Table 11.

Correlations between Total Number of Health Risk Behaviours Participated in and SelfPresentational Concerns.

Variable	Total	SPE	SPA	FNE	PSC
Total	_	.544**	511**	287*	197
SPE	.207*	_	297	156	131
SPA	174	213*	_	.603**	.539**
FNE	.072	181	.663**	_	.707**
PSC	.199	101	.554**	.630**	

Note. SPE = Self-presentational Efficacy; SPA = Social Physique Anxiety; FNE = Fear of Negative Evaluation; PSC = Public Self-Consciousness. Total = Total Number of Health Risk Behaviours Participated in at Least Once (1-14). Male scores above diagonal and female scores below diagonal. Correlation is significant at *p < .05; **p < .01.



Table 12.

Summary of Simultaneous Regression of Number of Health Risk Behaviours for Males.

В	SE B	β	rsp	p
.109	.037	.427	.408*	.007
-1.54	.685	416	314*	.032
203	.762	056	037	.792
.488	.800	.123	.085	.547
	.109 -1.54 203	.109 .037 -1.54 .685 203 .762	.109 .037 .427 -1.54 .685416 203 .762056	.109 .037 .427 .408* -1.54 .685416314*203 .762056037

Note. Significant *p*<.05. SPE = Self-Presentational Efficacy Scale; SPA = Social Physique Anxiety; FNE = Fear of Negative Evaluation; Public Self-Consciousness; Total = Total Number of Health Risk Behaviours Participated in at Least Once

Table 13.

Summary of Simultaneous Regression of Number of Health Risk Behaviours for Females.

Variable	В	SE B	β	rsp	p
SPE	.017	.019	.114	.105	.39
SPA	-1.718	.638	454	323	.009
FNE	.575	.535	.194	.129	.287
PSC	-1.244	.659	.317	.227	.064

Note. Significant p<.05. SPE = Self-Presentational Efficacy Scale; SPA = Social Physique Anxiety; FNE = Fear of Negative Evaluation; Public Self-Consciousness; Total = Total Number of Health Risk Behaviours Participated in at Least Once



Appendix A

Dispositional and Situational Influences on Impression Motivation and Construction



Dispositional and Situational Influences on Impression Motivation and Construction

Impression Motivation	Impression Construction
*Goal-relevance of impression	*Self Concept
** Value of desired goals	*Desired and undesired identity images
	**Role constraints on the individual
**Discrepancy between desired and current image	**Targets Values
and carrent mage	**Current or potential social image

Note. Based on Leary and Kowalski's (1990) Two-Component Model of Impression Management.

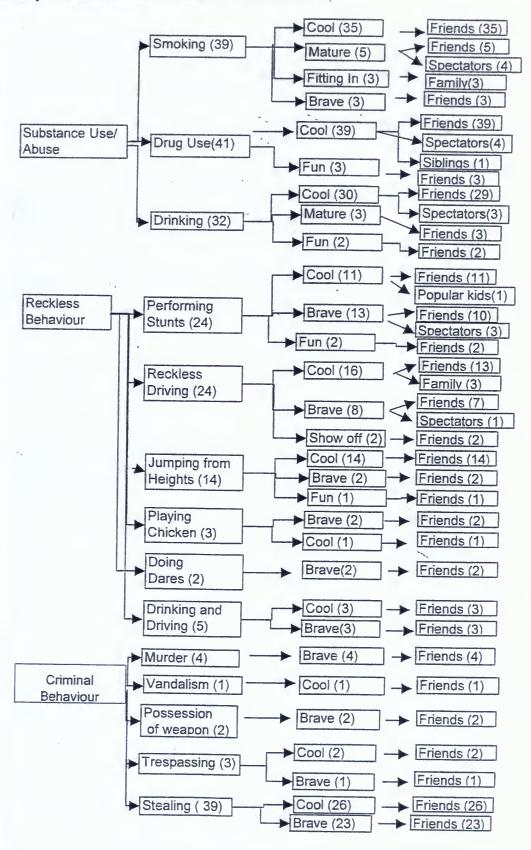
^{*} Refers to dispositional influences, ** Refers to situational influences.



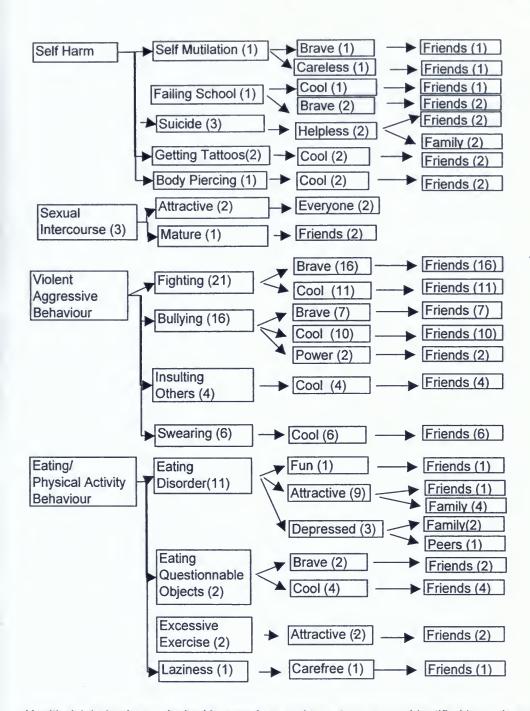
Appendix B

Summary of Male Results from Roth and Gammage (2006) Health Risk Behaviours Questionnaire







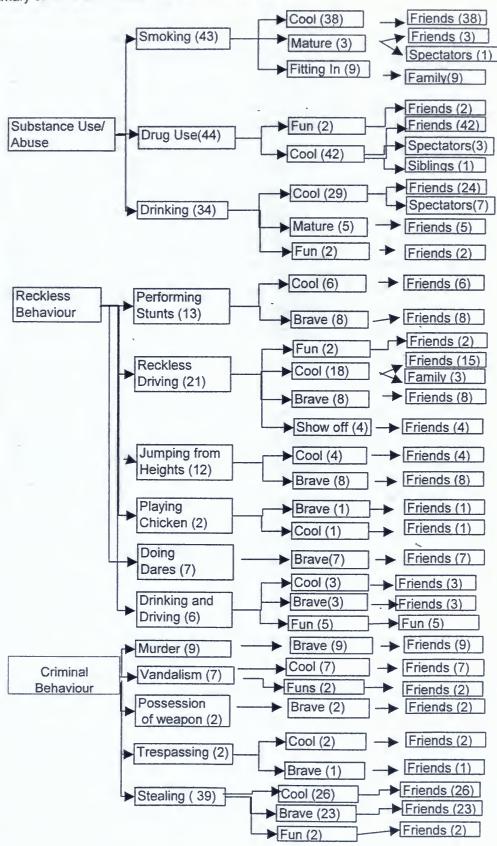


Health risk behaviours, desired impressions and target groups as identified by male respondents

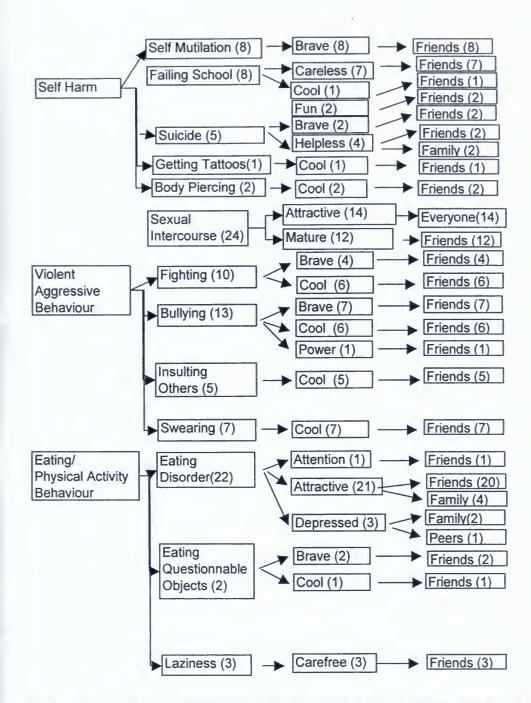


Appendix C

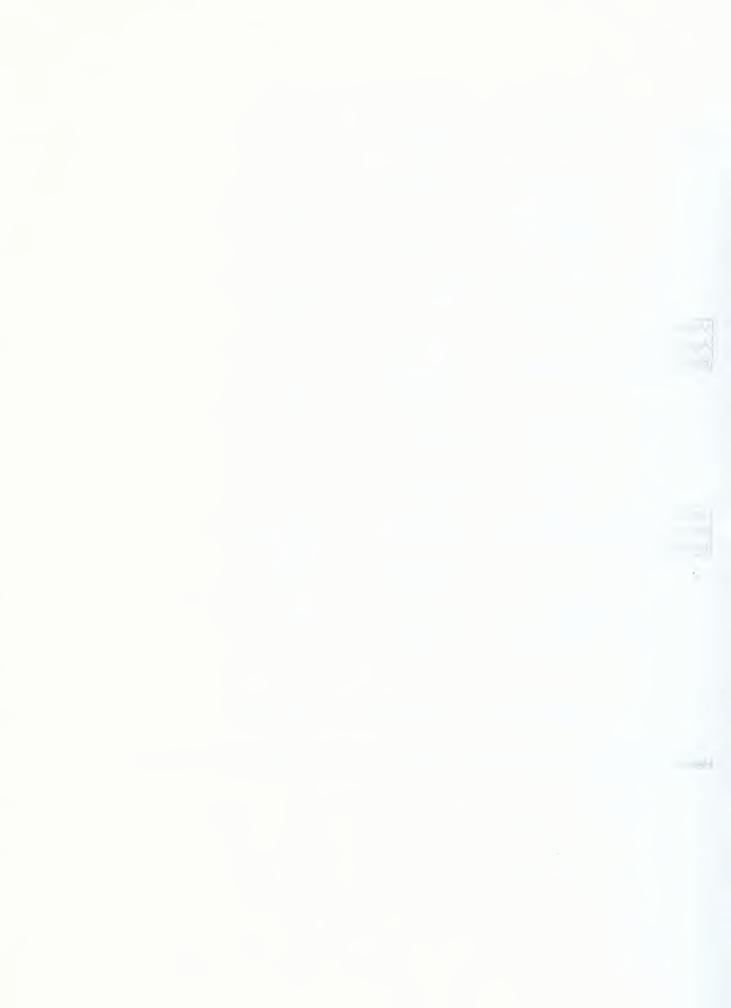
Summary of Female Results from Roth and Gammage (2006) Health Risk Behaviours Questionnaire







Health risk behaviours, desired impressions and target groups as identified by female respondents



Appendix D

Health Risk Behaviour Questionnaire

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Health Risk Behaviour Questionnaire

Age:	G	rade:		
Gender: (please circle)	Male	Female		

Sometimes, we do things so we can impress other people. We may want to make a good impression on them, or we may not want them to think badly of us. Sometimes, in order to make these impressions, people will even put their health at risk. People may do dangerous things because they want others to see them positively or negatively. People may also do dangerous things because they think if they don't go along with others and do risky behaviours, others will think badly of them. For example, some kids may start smoking because they want their friends to think they are cool. Some people may smoke because they think it will help them stay thin. Others may smoke so that they fit in with their friends. In all of these examples, people are putting their health at risk (by smoking) in order to make certain impression (appearing cool) on others (friends). We want to find out about these behaviours, in adolescents.

Please indicate how often you have engaged in each of the following behaviours for self-presentational purposes by circling the appropriate number.

An example of a health risk behaviour, performed for self presentational purposes is drinking alcohol at a party because you want to be perceived as cool and not as uptight. A health risk behaviour that is not performed for self-presentational purposes would be smoking a cigarette, alone at home after a stressful day of work.

* Remember you are to indicate the behaviours that you have engaged in for selfpresentational purposes only.

Please circle the appropriate number for each behaviour:

Behaviour	0 Times	1 Time	2 or 3	4 or 5	6 or More
			Times	Times	Times
1. Smoking					
2. Drinking Alcohol					
3. Doing Drugs					
4. Stealing/Shoplifting					
5. Bullying/Fighting					
6. Unsafe Sex					
7. Sexual Intercourse					
8. Dieting/Eating disorders					
9. Overeating					
10. Skipping School					
11. Stunts/Dares					
12. Drinking and Driving					
13. Piercing/Tattoos					
14. Carrying Weapons					



2. For each behaviour that you performed, please indicate the impression(s) that you were trying to make by checking the appropriate box(es). You may select as many impressions as you wish for each behaviour. If you have never engaged in the behaviour, please select Have Not Done.

Health Risk Behaviour	Cool	Mature	Brave	Physically Attractive	Fun	Have
				Attractive		Not
						Done
1. Smoking						
2. Drinking Alcohol						
3. Doing Drugs						
4. Stealing/Shoplifting						
5. Bullying/Fighting						
6. Unsafe Sex						
7. Sexual Intercourse						
8. Dieting/Eating disorders						
9. Overeating						
10. Skipping School						
11. Stunts/Dares						
12. Drinking and Driving						
13. Piercing/Tattoos						
14. Carrying Weapons						

3. For each of the behaviours you indicated above please indicate who you were trying to make the impression upon by checking the appropriate box. You may select as many groups as you wish. If you have never engaged in the behaviour, please select Have Not Done.

Health Risk Behaviour	Same Sex	Same Sex	Other Sex	Other Sex	Parents	Have Not
	Friends	Peers	Friends	Peers	Tarchis	Done
1. Smoking						
2. Drinking Alcohol						
3. Doing Drugs						
4. Stealing/Shoplifting						
5. Bullying/Fighting						
6. Unsafe Sex						
7. Sexual Intercourse						
8. Dieting/Eating						
disorders	,					
9. Overeating						
10. Skipping School						
11. Stunts/Dares						



12. Drinking and Driving			
13. Piercing/Tattoos			
14. Carrying Weapons			

Self-Presentational Efficacy

Using any values from the	ne following scale (0-	-100%), please	indicate how	confident y	ou
are of each of the follow	ing:				

	0	50%	100%
(n	o confidence at all)	(somewhat confident)	(complete confidence)
1.	I am confident that of	others will see me as cool.	
2.	I am confident that of	others will see me as brave	
3.	I am confident that of	others will see me as mature	
4.	I am confident that of	others will see me as fun.	
5.	I am confident that of	others will see me as physically at	tractive

SPA

Circle the number which best represents the amount to which the statement is characteristic of you. 1= not at all characteristic of me

2= slightly characteristic of me

3= moderately characteristic of me

4= very characteristic of me

5= extremely characteristic of me

Statements	1	2	3	4	5
I am comfortable with the appearance of my physique/figure.	1	2	3	4	5
I would never worry about wearing clothes that might make me look too thin or overweight.	1	2	3	4	5
I wish I wasn't so uptight about my physique/figure.	1	2	3	4	5
There are times when I am bothered by thoughts that other people are evaluating my weight or muscular development	1	2	3	4	5
negatively. When I look in the mirror I feel good about my physique.	1	2	3	4	2



	1	2	3	4	5
Unattractive features of my physique/figure make me nervous in certain social settings.	1	2	3	4	5
In the presence of others, I feel apprehensive about my physique/figure.	1	2	3	4	5
I am comfortable with how fit my body appears to others.	1	2	3	4	5
It would make me uncomfortable to know others were evaluating my physique/figure	1	2	3	4	5
When it comes to displaying my physique/figure to others, I am a shy person.	1	2	3	4	5
When in a bathing suit, I often feel nervous about the shape of my body.	1	2	3	4	5
I usually feel relaxed when it is obvious that others are looking at my physique/figure.	1	2	3	4	5

FNE

Circle the number which best represents the amount to which the statement is characteristic of you 1= not at all characteristic of me

2= slightly characteristic of me

3= moderately characteristic of me

4= very characteristic of me

5= extremely characteristic of me

I'm afraid that others will not like me.	1	2	3	4	5
I worry about what others think of me.	1	2	3	4	5
I worry what others say about me.	1	2	3	4	5
I worry that others don't like me.	1	2	3	4	5
I worry being teased.	1	2	3	4	5
I feel that others are making fun me.	1	2	3	4	5



PSC

Circle the number which best represents how characteristic the statement is of you, \

1= not at all characteristic of me

2= slightly characteristic of me

3= moderately characteristic of me

4= very characteristic of me

5= extremely characteristic of me

I'm concerned about my way of doing things.	1	2	3	4	5
I'm concerned about the way I present myself.	1	2	3	4	5
I'm self-conscious about the way I look.	1	2	3	4	5
I usually worry about making a good impression.	1	2	3	4	5
One of the last things I do before I leave my house is look in	1	2	3	4	5
the mirror.					
I'm concerned about what other people think of me.	1	2	3	4	5
I'm usually aware of my appearance.	1	2	3	4	5



Appendix E

The Brock University Research Ethics Board Approval



DATE: January 12, 2005

FROM: Linda Rose-Krasnor, Chair Research Ethics Board (REB)

TO: Kim Gammage, Physical Education and Kinesiology

Kelly ROTH

FILE: 04-134 - ROTH

TITLE: Self-Presentation and Health Risk Behaviours in Adolescents

The Brock University Research Ethics Board has reviewed the above research proposal.

DECISION: Accepted as Clarified

This project has received ethics clearance for the period of January 12, 2005 to April 30, 2005 subject to full REB ratification at the Research Ethics Board's next scheduled meeting. The clearance may be extended upon request. The study may now proceed. Please note that the Research Ethics Board (REB) requires that you adhere to the protocol as last reviewed and approved by the REB. During the course of research no deviations from, or changes to, the protocol, recruitment, or consent form may be initiated without prior written approval from the REB. The Board must approve any modifications before they can be implemented. If you wish to modify your research project, please refer to http://www.brocku.ca/researchservices/Forms/Forms.html to complete the appropriate form Revision or Modification to an Ongoing Application.

Adverse or unexpected events must be reported to the REB as soon as possible with an indication of how these events affect, in the view of the Principal Investigator, the safety of the participants and the continuation of the protocol.

If research participants are in the care of a health facility, at a school, or other institution or community organization, it is the responsibility of the Principal Investigator to ensure that the ethical guidelines and approvals of those facilities or institutions are obtained and filed with the REB prior to the initiation of any research protocols.

The Tri-Council. Policy Statement requires that ongoing research be monitored. A Final Report is required for all projects, with the exception of undergraduate projects, upon completion of the project. Researchers with projects lasting more than one year are required to submit a Continuing Review Report annually. The Office of Research Services will contact you when this form *Continuing Review/Final Report* is required. Please quote your REB file number on all future correspondence.

Heather Becker, Office of Research Ethics

Brock University

Office of Research Services

500 Glenridge Avenue

St. Catharines, Ontario, Canada L2S 3A1

phone: (905)688-5550, ext. 3035 fax: (905)688-0748

email: hbecker@brocku.ca

http://www.brocku.ca/researchservices/Certification&Polices_Hum an Ethics.html



Appendix F

Brock University, Faculty of Applied Health Sciences Letter of Information- School Administrator



Brock University, Faculty of Applied Health Sciences Letter of Information-School Administrator

Title of Study: Self-Presentational Influences on Health Risk Behaviours in Adolescents Principal Researcher: Kelly Roth, Graduate Student, Dept. of Physical Education and Kinesiology

Faculty Advisor: Dr. Kim Gammage, Assistant Professor, Dept. of Physical Education and Kinesiology

Dear School Administrator,

The research project that your school is being invited to participate in is entitled, "Self-Presentational Influences on Health Risk Behaviours in Adolescents". Kelly Roth, a graduate student at Brock University, is conducting the study as part of her Master's degree. Kelly Roth's research is focused on self-presentational concerns in adolescent health risk behaviours. The purpose of this study is to investigate the prevalence of health risk behaviours (e.g., drinking, smoking, drug-use, unsafe sexual practices etc.) in adolescents rooted in self-presentational concerns. In addition, the images that individuals attempt to portray through these behaviours (e.g., looking cool) and the groups or individuals upon whom they are attempting to make these impressions (e.g., friends, parents) will be investigated.

Your involvement and feedback are greatly appreciated and will help to further our understanding of the prevalence of health risk behaviours rooted in self-presentational concerns in adolescents. The questionnaires are expected to take approximately 15-20 minutes to complete.

This study will involve students from a number of schools like yours. Results from this study will be used to enhance our understanding of the participation in health risk behaviours in adolescent populations. Further dissemination will occur in academic journals and conference presentations; however, the specific identity of your school and the participants in the study will not be disclosed. Any information that arises from participants will be treated with confidentiality and access to information that might identify participants will be limited to Kelly Roth (Principal Investigator) and Dr. Kim Gammage (Assistant Professor), at Brock University. Only Kelly Roth and Dr. Kim Gammage will have access to the data. The names of specific participants or schools in the study will not be attached to comments or issues raised within project reports or presentations generated from this study. All original written documents will be destroyed one year following the completion of the study. Participation in this study is voluntary and individuals may decline answering any question(s) within the questionnaire that they find invasive, offensive or inappropriate. There are no known physical or psychological risks associated with participating in this study. Participants may withdraw from the study at any stage in the process. Of course, people may choose not to participate and will experience no negative consequences. Students who do not wish to participate will engage in other class work as assigned by their teacher.

This study has been reviewed and has received ethics approval through the Research Ethics Board at Brock University (File # 04-134 - ROTH). Following the completion of our study we



will send you an executive summary of our results. Form attached. Should you have any further questions concerning the interview or the study in general please fell free to contact Kelly Roth or Kim Gammage at (905) 688-5550 extension 3772 or by e-mail at rothkelly@hotmail.com or kgammage@brocku.ca. Additionally, concerns about your involvement in this study may also be directed to the Research Ethics Officer in the Office Research Services at (905) 688-5550 extension 3035.

Thank you for your interest and involvement in this study.

Sincerely,

Kelly Roth Graduate Student Faculty of Applied Health Sciences Kimberley L. Gammage, Ph. D. Assistant Professor, Faculty of Applied Health Sciences



Date:

Brock University, Faculty of Applied Health Sciences Informed Consent Form- School Administrator

Title of Study: Self-Presentational Influences on Health Risk Behaviours in Adolescents Principal Researcher: Kelly Roth, Master Student, Dept. of Physical Education and Kinesiology Faculty Advisor: Dr. Kim Gammage; Assistant Professor, Dept. of Physical Education and Kinesiology
Name of School: (please print)
Name of School Administrator: (please print)
Position of School Administrator: (please print)
I have been given and have read the Letter of Introduction provided to me by the Principal Investigator conducting the research.
I understand that participation of my school in this study will involve participation of students in my school and that they will complete a questionnaire that will last for approximately 15-20 minutes. The purpose of this investigation is to examine motives underlying and prevalence of adolescent health risk behaviours.
I understand that there are no known physical or psychological risks associated with participation in this study.
I understand that participants may ask questions of the researchers at any point during the research process.
I understand that there is no obligation for participants to answer any questions that they feel in invasive, offensive or inappropriate.
I understand that our school will receive an executive summary of the results (which will not identify individual students). I understand these results will be aggregate information (no individual school information will be made available).
I understand that there will be no payment for our participation. I understand that all personal information will be kept strictly confidential and that all information will be coded so that the name of the school and the name of individual participants will not be associated with specific responses.
I understand that only the Principal Investigator and Faculty advisor will have access to the data. Data will be kept in a locked office at Brock University and will be shredded one year following completion of the study.
I understand that the results of this study will be distributed in academic journal articles and conference presentations and a summary of the results will be made available to the school and participants in the study.
As indicated by my signature below, I acknowledge that our school is participating freely and willingly and I am providing the consent of the school.
Signature of School Administrator:Date:
Position:

Signature of Researcher:_



Appendix G

Brock University, Faculty of Applied Health Sciences

Letter of Information- Parents/Guardians and Participants



Brock University, Faculty of Applied Health Sciences Letter of Information-Parents/Guardians and Participants

Title of Study: Self-Presentational Influences on Health Risk Behaviours in Adolescents Principal Researcher: Kelly Roth, Graduate Student, Dept. of Physical Education and Kinesiology

Faculty Advisor: Dr. Kim Gammage, Assistant Professor, Dept. of Physical Education and Kinesiology

Dear Participant/Parent/Guardian,

The research project that your child is being invited to participate in is entitled, "Self-Presentational Influences on Health Risk Behaviours in Adolescents". Kelly Roth, a graduate student at Brock University, is conducting the study as part of her Master's degree. Kelly Roth's research is focused on self-presentational concerns in adolescent health risk behaviours. The purpose of this study is to investigate the prevalence of health risk behaviours (e.g., drinking, smoking, drug-use, unsafe sexual practices etc.) in adolescents motivated by self-presentational concerns. In addition, the images that individuals attempt to portray through these behaviours (e.g., looking cool) and the groups or individuals upon whom they are attempting to make these impressions (e.g., friends, parents) will be investigated.

Your involvement and feedback are greatly appreciated and will help to further our understanding of the prevalence of health risk behaviours rooted in self- presentational concerns in adolescents. The questionnaires are expected to take approximately 15-20 minutes to complete.

This study will involve students from a number of schools like yours. Results from this study will be used to enhance our understanding of the participation in health risk behaviours in adolescent populations. Further dissemination will occur in academic journals and conference presentations; however, the specific identity of your school and the participants in the study will not be disclosed. Any information that arises from participants will be treated with confidentiality and access to information that might identify participants will be limited to Kelly Roth (Principal Investigator) and Dr. Kim Gammage (Assistant Professor), at Brock University. Only Kelly Roth and Dr. Kim Gammage will have access to the data. The names of specific participants or schools in the study will not be attached to comments or issues raised within project reports or presentations generated from this study. All original written documents will be destroyed one year following the completion of the study. Participation in this study is voluntary and individuals may decline answering any question(s) within the questionnaire that they find invasive, offensive or inappropriate. There are no known physical or psychological risks associated with participating in this study. Participants may withdraw from the study at any stage in the process. Of course, people may choose not to participate and will experience no negative consequences. Students who do not wish to participate will engage in other class work as assigned by their teacher. Participation in this project is not connected to the school and/or teacher evaluation of your son/daughter.



This study has been reviewed and has received ethics approval through the Research Ethics Board at Brock University (File # 04-134-ROTH). Following the completion of our study we would be happy to send you an executive summary of our results. Should you wish a summary, please complete the Debriefing Form attached. Should you have any further questions concerning the interview or the study in general please fell free to contact Kelly Roth or Kim Gammage at (905) 688-5550 extension 3772 or by e-mail at rothkelly@hotmail.com or kgammage@brocku.ca. Additionally, concerns about your involvement in this study may also be directed to the Research Ethics Officer in the Office Research Services at (905) 688-5550 extension 3035.

Thank you for your interest and involvement in this study.

Sincerely,

Kelly Roth Graduate Student Faculty of Applied Health Sciences Kimberley L. Gammage, Ph. D. Assistant Professor, Faculty of Applied Health Sciences



Brock University, Faculty of Applied Health Sciences Informed Consent Form- Parents/Guardians and Students

Title of Study: <u>Self-Presentational Influences on Health Risk Behaviours in Adolescents</u>
Principal Researcher: Kelly Roth, Master Student, Dept. of Physical Education and Kinesiology
Faculty Advisor: Dr. Kim Gammage; Assistant Professor, Dept. of Physical Education and
Kinesiology

Name of School: (please print)	
Name of Student: (please print)	

- I have been given and have read the Letter of Introduction provided to me by the Principal Investigator conducting the research.
- I understand that the participation in this study will involve completing a questionnaire that will take approximately 15-20 minutes. The purpose of this study is to determine the prevalence of health risk behaviours in adolescents as motivated by self-presentational motives.
- I understand that there is no known physical or psychological risk associated with participation in this study.
- I understand that participation in this study is voluntary and that individuals may withdraw from the study at any time and for any reason without penalty.
- I understand that there is no obligation for participants to answer any questions that they feel is invasive, offensive or inappropriate.
- I understand that results of this study may help the researcher gain a better understanding of why adolescents engage in health risk behaviours.
- I understand that all personal information will be kept strictly confidential and that all information will be coded so that the name of the school and the name of the individual participants will not be associated with specific responses
- I understand that the Principal Investigator and the faculty Advisor will have access to the data.
 Data will be kept in a locked office at Brock University and will be shredded one year following
 completion of the research study. I understand that the results of this study will be distributed in
 academic journal articles and conference presentations and a summary of the results will be made
 available to the school and participants of the study.
- As indicated by my signature below, I acknowledge that I/my son/daughter is participating freely and willingly and I am providing the consent of myself/him/her.

Signature of parent/guardian	Date:
Signature of student	Date:
Signature of researcher	Date:



Appendix H

Brock University, Faculty of Applied Health Sciences

Letter of Information- Participants 18+ years of age

Brock University, Faculty of Applied Health Sciences Letter of Information- Participants 18+ years of age

Title of Study: Self-Presentational Influences on Health Risk Behaviours in Adolescents Principal Researcher: Kelly Roth, Graduate Student, Dept. of Physical Education and Kinesiology

Faculty Advisor: Dr. Kim Gammage, Assistant Professor, Dept. of Physical Education and Kinesiology

Dear Participant,

The research project your are being invited to participate in is entitled, "Self-Presentational Influences on Health Risk Behaviours in Adolescents". Kelly Roth, a graduate student at Brock University, is conducting the study as part of her Master's degree. Kelly Roth's research is focused on self-presentational concerns in adolescent health risk behaviours. The purpose of this study is to investigate the prevalence of health risk behaviours (e.g., drinking, smoking, drug-use, unsafe sexual practices etc.) in adolescents motivated by self-presentational concerns. In addition, the images that individuals attempt to portray through these behaviours (e.g., looking cool) and the groups or individuals upon whom they are attempting to make these impressions (e.g., friends, parents) will be investigated.

Your involvement and feedback are greatly appreciated and will help to further our understanding of the prevalence of health risk behaviours rooted in self- presentational concerns in adolescents. The questionnaires are expected to take approximately 15-20 minutes to complete.

This study will involve students from a number of schools like yours. Results from this study will be used to enhance our understanding of the participation in health risk behaviours in adolescent populations. Further dissemination will occur in academic journals and conference presentations; however, the specific identity of your school and the participants in the study will not be disclosed. Any information that arises from participants will be treated with confidentiality and access to information that might identify participants will be limited to Kelly Roth (Principal Investigator) and Dr. Kim Gammage (Assistant Professor), at Brock University. Only Kelly Roth and Dr. Kim Gammage will have access to the data. The names of specific participants or schools in the study will not be attached to comments or issues raised within project reports or presentations generated from this study. All original written documents will be destroyed one year following the completion of the study. Participation in this study is voluntary and individuals may decline answering any question(s) within the questionnaire that they find invasive, offensive or inappropriate. There are no known physical or psychological risks associated with participating in this study. Participants may withdraw from the study at any stage in the process. Of course, people may choose not to participate and will experience no negative consequences. Students who do not wish to participate will engage in other class work as assigned by their teacher. Participation in this project is not connected to the school and evaluation by your teacher.

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This study has been reviewed and has received ethics approval through the Research Ethics Board at Brock University (File # 04-134-ROTH). Following the completion of our study we would be happy to send you an executive summary of our results. Should you wish a summary, please complete the Debriefing Form attached. Should you have any further questions concerning the interview or the study in general please fell free to contact Kelly Roth or Kim Gammage at (905) 688-5550 extension 3772 or by e-mail at rothkelly@hotmail.com or kgammage@brocku.ca. Additionally, concerns about your involvement in this study may also be directed to the Research Ethics Officer in the Office Research Services at (905) 688-5550 extension 3035.

Thank you for your interest and involvement in this study.

Sincerely,

Kelly Roth Graduate Student Faculty of Applied Health Sciences Kimberley L. Gammage, Ph. D. Assistant Professor, Faculty of Applied Health Sciences



Brock University, Faculty of Applied Health Sciences Informed Consent Form- Students (age 18 years and above)

Title of Study: Self-Presentational Influences on Health Risk Behaviours in Adolescents
Principal Researcher: Kelly Roth, Master Student, Dept. of Physical Education and Kinesiology
Faculty Advisor: Dr. Kim Gammage; Assistant Professor, Dept. of Physical Education and
Kinesiology

Name of School: (please print)	
Name of Student: (please print)	

- I have been given and have read the Letter of Introduction provided to me by the Principal Investigator conducting the research.
- I understand that the participation in this study will involve completing a questionnaire that will take approximately 15-20 minutes. The purpose of this study is to determine the prevalence of health risk behaviours in adolescents as motivated by self-presentational motives.
- I understand that there is no known physical or psychological risk associated with participation in this study.
- I understand that participation in this study is voluntary and that individuals may withdraw from the study at any time and for any reason without penalty.
- I understand that there is no obligation for participants to answer any questions that they feel is invasive, offensive or inappropriate.
- I understand that results of this study may help the researcher gain a better understanding of why adolescents engage in health risk behaviours.
- I understand that all personal information will be kept strictly confidential and that all information will be coded so that the name of the school and the name of the individual participants will not be associated with specific responses
- I understand that the Principal Investigator and the research assistant will have access to the data, and that information seen by the research assistant will not identify the name of the participants. Data will be kept in a locked office at Brock University and will be shredded one year following completion of the research study. I also understand that the research assistants have been asked to sign confidentiality forms indicating that they will not discuss the study outside of research meetings with the Principal Investigator, and that they will not disclose any confidential information.
- I understand that the results of this study will be distributed in academic journal articles and conference presentations and a summary of the results will be made available to the school and participants of the study.
- As indicated by my signature below, I acknowledge that I/my son/daughter is participating freely and willingly and I am providing the consent of myself/him/her.

Signature of student	Date:
Signature of Researcher	Date:



