Framing Solutions: Adolescent Girls and their Relationships with Alcohol

by

Margaret Nancy Comeau

Submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy

at

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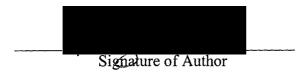
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For my parents, Ruth and John Comeau in loving memory of Jonathan

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Abstract

The purpose of the thesis is to learn more about the drinking behavior of adolescent girls at high personality risk of alcohol abuse. Feminist theory provides the conceptual and value framework for a three study empirical investigation that uses quantitative and qualitative research methods. Together, the three empirical studies were designed to add insight into our understanding of certain groups of at-risk girls' relationships with alcohol by exploring three inter-related questions.

Study 1 examined the question of how girls compare with boys in their relationships with alcohol. Anxiety sensitivity (AS) and sensation seeking (SS) are personality risk factors for alcohol use disorders, each associated with a different drinking motive (i.e., coping/conformity and enhancement, respectively). Study 1 investigated associations between these personality factors and drinking motives using Cooper's four categories of substance use motivations as applied to teens' use of alcohol and explored gender patterns. Findings support the adaptation of existing motive-specific brief interventions designed for clinical populations of adult women substance abusers for use in early intervention efforts with groups of at-risk teenage female drinkers.

The second research question, explored in Study 2, asks how girls at particular risk of alcohol abuse understand their relationships with alcohol. Two groups of female drinkers were recruited through the screening sample to participate in qualitative semi-structured interviews: 1) those with high AS; and 2) those high in the "intensity-seeking" component of SS. Interviews were conducted with AS and SS girls at particular risk of alcohol abuse by virtue of these specific personality factors associated with heavy drinking and alcohol problems. Study 2 data yield findings consistent with, but substantially extending, previous questionnaire-based research on the motives underlying alcohol use behavior in AS and SS adolescents in Study 1. A novel set of personality-matched early interventions was developed for at-risk teenage drinkers, informed in part by the qualitative interviews.

Study 3 focused on the third research question that asks how certain tailored alcohol abuse brief early interventions work for at-risk girls. These interventions were tested in a randomized controlled design in 4 high schools in Nova Scotia. Eligible teens were drinkers scoring at least one SD above the norm on the Childhood Anxiety Sensitivity Index (CASI) or Arnett's Inventory of Sensation Seeking, Intensity subscale (AISS-I) in school-wide screenings. Study 3 findings suggest promise for the personality-matched early interventions in reducing heavy and problem drinking, at least among teenage girls.

The final chapter situates the research findings in the context of feminist theory and outlines some of the implications suggested for future research.

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Chapter One: Thesis Overview

1.0 Introduction

The purpose of the thesis is to learn more about the drinking behavior of adolescent girls at high personality risk of alcohol abuse. This introductory chapter describes how the thesis is structured and presents the objectives, hypotheses, and assumptions of the investigation. It introduces feminist theory as the conceptual framework for a three study empirical investigation that uses quantitative and qualitative methods. Together, the three empirical studies are designed to add insight into our understanding of adolescent girls' relationships with alcohol. They explore three interrelated questions: 1) How does personality relate to reasons for drinking in girls and boys? 2) How do girls at particular risk of alcohol abuse understand their relationships with alcohol? 3) How do certain tailored alcohol abuse brief early interventions work for at-risk girls?

The thesis is written from a feminist perspective. There are several different versions of feminism, each with a particular approach to theory and practice. While there are important areas of disagreement regarding priorities, analyses, and approaches, it remains possible to speak of a broad, loosely defined feminism that comprises views shared by most feminists. All feminist theories recognize that women and girls are among the subordinated groups who have been devalued in many complex ways by systemic social forces.

"Feminism" is the name given to the various theories that help reveal the multiple, gender-specific patterns of harm that constitute women's oppression. It is also the term used to characterize the complex, diverse political movement to eliminate all such forms of oppression. (Sherwin 1992, p.13)

A feminist perspective views the lens of gender as a critical tool of analysis. I use the term "gender" to refer to the culturally specific set of norms, values, and expectations that structure the social behavior of women and girls, men and boys, and the ways relationships between females and males are socially constructed (Caplan & Caplan, 1994). Gender is one of the main ways by which we identify ourselves and make sense of others. The term "gender difference" refers to diversity in the culturally specific performances of gendered social relations (Romero, 1998). Like the concepts of class and race, gender provides an analytical tool for understanding social processes. A distinction can be made between inequality and oppression. "Inequality" occurs when differences we use to locate ourselves as members of groups with shared history and meaning are not treated equally (cf. O'Brien, 1998). Similarly, "gender inequality" occurs when differences between men and women, boys and girls, are not treated equally. Iris Marion Young (1990) describes oppression as a structural phenomenon that immobilizes or diminishes a social group through deeply entrenched social processes of power and domination.

Oppression refers to the vast and deep injustices some groups suffer as a consequence of often unconscious assumptions and reactions of well-meaning people in ordinary interactions, media and cultural stereotypes, and structural features of bureaucratic hierarchies and market mechanisms - in short, the normal processes of everyday life. (Young 1990, p. 41)

These everyday processes and practices in cultural settings and formal organizations reflect systemic oppression or entrenched forms of dominance and inequality. I follow Young's (1990) characterization of the faces of oppression as exploitation, powerlessness, marginalization, cultural dominance, and violence. Marked differences set some apart as targets of injustice, prejudice, and discrimination. Gendered analysis

targets the existing conditions in society that contribute to the role gender plays in inequitable patterns of difference between men and women, boys and girls.

The basic conceptual framework for the thesis draws on two theoretical tools of feminist theory: feminist ethics and feminist epistemology. Ethics is the philosophy of morality and is concerned with questions of right and wrong conduct and the nature of moral obligation. Ethics or moral theory is generally concerned with "value questions about human conduct" (Sherwin, 1992, p. 35). Drawing considerably on the work of Susan Sherwin (2001; 1998; 1996a; 1996b; 1995; 1992), I rely on feminist ethics, a scholarly area within feminism, to help explain the value framework that motivates my investigation. Ethical theorists generally "seek to understand the underlying value schemes that determine the moral evaluation of practices" (Sherwin, 1992, p. 36). Following Sherwin, the value scheme that motivates this thesis and helps with evaluation of the empirical investigation is an approach to feminist ethics that opposes oppression in all forms, including gendered oppression (Sherwin, 1992).

Feminists have concerned themselves with the details of oppression. In a world where women are systematically oppressed, an adequate ethics must address that oppression. Feminist ethics, in making explicit the moral offense of sexism and illuminating some of its many forms, is the only approach to ethics that lives up to this obligation. (Sherwin, 1992, p. 57)

The thesis opposes all forms of injustice and pays particular attention to injustice based on gender.

1.1 Feminist Ethics: The Value Framework

A primary aim of the thesis is to explore the social contexts in which the drinking of adolescent girls at particular risk of alcohol abuse occurs. Feminist ethics, in its opposition to oppression, says we have a social responsibility to challenge oppression

and, therefore, an obligation to pay explicit attention to the needs of its victims – in this case girls. The most obvious difference between feminist and non-feminist approaches to adolescent alcohol abuse intervention can be seen in the relative attention each gives to the interests and experiences of girls in its analysis. Feminists consider it self evident that the adolescent girl is a subject of principal concern in alcohol use decisions. I am concerned with how gender-specific patterns of harm connected with adolescent girls' relationships with alcohol are related to broader systems and structures of oppression. This investigation focuses on the need to develop an analysis that fits the actual world that we live in and it refuses to regard the interests, values, and rational choices of young women as irrelevant. Rather, the lives of those girls, their values and choices, are the grounding for the investigation. Relevant contextual details to be considered in the ethical deliberations of this investigation include the political or power relations of adolescent girls who are involved in this research and who are affected by the brief interventions being evaluated.

Feminist theory in the field of substance abuse challenges the more traditional structures and beliefs about behavior and differences and suggests alternatives that enhance equality, respectful recognition of diversity, and empowerment (see Abbott, 1994; 1995; Schmidt & Weisner, 1995; Van den Bergh, 1991). A feminist approach to alcohol abuse intervention recognizes that the dominant culture has had a major impact on current beliefs; hence, changes must occur not only at an individual level but also at a societal level, based on an expanded view of human diversity. Ann Abbott (1994) calls for intervention programs that recognize, respect, and incorporate the broad spectrum of critical differences such as class or status (e.g., religion, race, nationality, gender).

Feminist philosophy challenges the concept that biology is destiny; gender, race, or ethnic background should not determine value, rather all are valued equally and programs should be designed to accommodate and recognize variation and difference. This change in perspective does not negate the importance of the 'disease model' or the genetic component of addictions, rather it expands on options designed to overcome or manage the disease/addiction. (Abbott, 1994, p. 74)

A feminist approach, then, examines alcohol use in the context of girls' real lives. As I will argue, a feminist understanding also helps us see that support for girls requires social and institutional change.

Feminist philosophy recognizes that great diversity exists among women and girls as well as within minority groups (e.g., Harding, 1991; hooks, 1990). In a similar vein, men and boys do not represent a homogeneous static category, but rather a complex collection of diverse individuals. A feminist approach supports programs that incorporate a difference sensitive approach to intervention and thus enhances accessibility and relevance (cf. Abbott, 1994). A feminist theoretical framework considers girls not just on an individual level, but also in the context of communities, families, institutions (such as schools and the health care system), and broader sociopolitical factors. From a feminist account, alcohol use is examined in the context in which it occurs. Feminist ethics directs the thesis investigation to approach these young women as adolescent girls at a certain place and point in time, to look at alcohol use in the context of other issues of power, and not to limit discussion to standard issues about the legal drinking age. In order to challenge oppression, feminist discussions of alcohol use must be moved beyond the framework of each individual girl's choice to drink and connected to a broader analysis that addresses the conditions of girls' lives.

In sum, feminist ethics with its opposition to all forms of oppression, including gendered oppression (Sherwin, 1992), and its attention to using a gendered lens for analysis, motivates, and guides this investigation. Feminist ethics recognizes the important role society plays in maintaining power structures. It challenges some of the values assigned by the dominant culture and seeks to offset the impact of oppressive practices and habits such as sex-role stereotyping, racism, sexism, homophobia, and the accompanying power differentials. My feminist approach stresses advocacy for girls and recognizes and respects differences among them.

1.2 Feminist Epistemology: The Methodological Base

In general, feminist theory encourages us to think critically about how knowledge and beliefs are formed and why they are adopted. Epistemology is concerned with the nature and scope of knowledge, its presuppositions and biases, and the general reliability of claims to knowledge. Philosophical investigation of such questions as "What counts as knowledge?" and "What are the criteria for knowing?" help to define the methodology of all disciplines. For example, the philosophy of science is largely concerned with how scientific knowledge can be acquired and what status its claims should have. A central aspect of feminist epistemology is an understanding of knowledge as socially produced. Alison Jaggar and Susan Bordo (1989) list the embedded assumptions of Western science, explicitly arguing that knowledge of the world is socially constructed, knowledge is socially produced and gendered (i.e., since gender patterns who we are, it also patterns how we think). At the root of feminist epistemology is a belief in the social locatedness of personhood and perspective, particularly the role of gender. (See, for example, Farganis, 1989; Jaggar & Bordo, 1989; Longino, 1990.) Turning away from the

dominant ideal that regards the concept of personhood as abstracted from particularities of peoples' lives, those who share this belief in the significance of social location argue that individuals cannot be divorced from time and place, or treated as indistinguishable from one another. Instead, individuals, girls and boys, women and men are embodied, socially situated, concrete persons whose perspectives are – to a significant degree – a consequence of these features of their lives. Thus, in a gendered society, women will see and know differently from men. Farganis (1989) explains that the social locatedness of women's existence, their activities within the world and how they are (or are not) esteemed in a gender-stratified society shape their perspectives.

At the most general level, feminist epistemology and feminist ethics are similar in their efforts to value the experiences of women and girls. Feminist epistemology helps us to understand the importance of inquiries into girls' realities; it directs us to include research into the lives of girls. Harding (1991) cautions us against making gender the sole concern, however, insisting on the need to understand interlocking systems of oppression (cf. Collins, 1990; hooks, 1990). Important variations exist among women and girls in concrete and historicized ways that cross the boundaries of gender; there is no comprehensive, unified female identity or a single female perspective. Nonetheless, my analysis in this project is primarily through gender, independent of other differences since it constitutes an important determinant of experience. I hope to be able to explore the significance of other social differences in future research.

Combining quantitative and qualitative research methods in a complementary way, I attempt to adhere to prevailing methodological norms of scientific inquiry. I use the tool of feminist epistemology as a methodological basis for the thesis. I am interested

in exploring how at-risk girls' experiences of personality, gender, and other social factors shape their relationships with alcohol and influence their understandings of why they drink – girls' socially located knowledge about their drinking. I am also interested in exploring the political dimensions of social factors involved in girls' relationships with alcohol (i.e., girls' resistance to culturally defined roles and social expectations and various forms of oppression such as sexual exploitation, racial discrimination, and marginalization based on social class). Results of qualitative findings (Chapter 4) help inform the development of a brief intervention program for certain groups of adolescent female drinkers that can then be tested in a randomized controlled study design (Chapter 5).

1.3 Research Question 1

The first research question asks how girls compare with boys in their relationships with alcohol. The adolescent years encompass the ages between 10 and 19 in Western society and are associated with "the onset of puberty, the development of analytical and abstract thinking, greater strides toward autonomy, increased peer group involvement, and the beginnings of sexual intimacies" (Kutcher, 1994, p. 263). Cross-sectional and longitudinal surveys of adolescents from representative national, provincial, and regional samples indicate that alcohol use is common among adolescents in North America (Kaminer, 1999; Wagner, Brown, Monti, Myers, & Waldron, 1999) and the United Kingdom (Gilvarry, McCarthy, & McArdle, 1995; Newcombe, Measham, & Parker, 1994). For example, in the United States, more than half of high school seniors drink at least monthly, and more than one third get drunk at least monthly (O'Malley, Johnston, &

Bachman, 1998, pp. 87-88). Girls are only slightly less likely than boys to drink (49% versus 56%) (O'Malley et al., 1998).

In Canada, the Ontario Student Drug Use Survey (OSDUS) is conducted every two years with students in grades 7, 9, 11, and 13. The survey involved 4211 students in the 2001 cycle (OSDUS 2001, Executive Summary). Similar to gender patterns in the United States (O'Malley et al., 1998), males were more likely to report past year alcohol use; however, the margin was very small (66.3 % males vs. 65.0% females; OSDUS 2001, Executive Summary). The Nova Scotia Student Drug Use Survey 2002, conducted in 205 randomly selected classes in 87 schools (grades 7, 9, 10, and 12) with 4303 students in Nova Scotia revealed that overall about 51.7% of students used alcohol during the course of the year (Poulin & Wilbur, 2002). Frequent alcohol use (defined as once a month or more) rose from 7.7 % in grade 7 to 51.7 % in grade 12. Using a similar measure for boys and girls, Poulin and Wilbur (2002) defined being drunk, as 5 or more drinks at one sitting in the 30 days prior to the survey, rose from 6.7% in Grade 7 to 32.5% in Grade 12. There were only slight differences between males and females in patterns of alcohol use. For example, 83% males versus 79 % females in Grade 12 reported they had consumed alcohol during the course of the year; 6% males versus 6% females in Grade 7 reported they had been drunk in the year before the survey (Poulin & Wilbur, 2002, p. 4).

Alcohol is usually the first illicit substance used during adolescence and is often associated progressively with other illegal drug use (Scheier & Botvin, 1998). Research also indicates that youth who initiate drinking at an early age are more likely to increase their drinking, to experience alcohol-related problems during adolescence, and are at

greater risk for life-time alcohol abuse or alcoholism (Grant & Dawson, 1997; Hawkins, Graham, Maguin, Abbott, Hill, & Catalano, 1997). In addition to its prevalence, heavy alcohol use in teenagers carries significant risk of adverse physical health, psychological, and/or social consequences (Cooper, 1994; Kaminer, 1999; Kandel, Davies, Karus, & Yamaguchi, 1986). Higher levels of alcohol use are associated with the three most frequent forms of mortality among adolescents: accidental deaths (e.g., automobile or boat crashes), homicides, and suicides (Brookoff, Cook, Williams, & Mann, 1994; Maio, Portnoy, Blow, & Hill, 1994; Windle, Shope, & Bukstein, 1996). Research suggests that when heavy alcohol use or alcohol-related problems among teens are considered, more males than females manifest severe patterns of alcohol misuse (Windle et al., 1996). This gender difference is true across age-ranges. Hence, attention to adolescent male drinking patterns is understandable. However, drinking among teenage girls is also a serious health risk that warrants major attention.

The substance abuse literature supports a relationship between overall alcohol use and engaging in risky sexual behavior (see review in Beckman and Ackerman, 1995). Increased drinking levels are associated with an increased risk of sexually transmitted diseases and teenage pregnancy (Windle et al., 1996). Christiane Poulin and Linda Graham (2001) examined the influence of substance use (including alcohol) on unplanned sexual intercourse with multiple sexual partners, and inconsistent condom use in Canada; they also sought reasons for not always using condoms among adolescent students in the four Atlantic provinces. Poulin and Graham's (2001) findings demonstrated an association between substance use and unplanned sexual intercourse and other risky sexual behaviors. Unplanned sexual intercourse under the influence of

alcohol or other drugs was found to be an independent risk factor for multiple sexual partners and inconsistent condom use (Poulin & Graham, 2001). These results support the importance of comprehensive school-based coverage of intersecting issues addressed by the two fields of sex and drug education as well as interventions attending to unplanned sexual intercourse under the influence of alcohol and/or other drugs.

Epidemiological data support the need to pay more attention to girls' alcohol use and associated risky behaviors (Amaro, Blake, Schwartz, & Flinchbaugh, 2001; Beckman & Ackerman, 1995). There are certain negative outcomes related to alcohol and other drug use that affect girls more than boys (e.g., adolescent pregnancy and its complications, and heterosexually transmitted HIV) (Amaro et al., 2001). In addition, girls show evidence of greater intoxication and functional impairment at lower levels of consumption than boys (Amaro et al., 2001). However, few intervention studies have been published that focus on the differential effectiveness of programs by gender or that test gender-specific theoretical models (see review in Blake, Amaro, Schwartz, & Flinchbaugh, 2001).

Historically, alcohol abuse has been identified primarily as a male problem and treatment has been developed with this assumption in mind (Abbott, 1994, 1995; Nicols, 1985; Van Den Bergh, 1991; Wilke, 1994). However, as noted above, alcohol abuse is not exclusively a male problem; females are also at risk. Moreover, interventions developed with men are not necessarily transferable to women (Schmidt & Weisner, 1995). Some data do suggest that single-gender intervention programs can confer substantial benefits for women and girls with substance use disorders (see review by Hodgins, El-Guebaly, & Addington, 1997). In the substance abuse treatment literature,

most recommend that treatment groups consist of same-gender clients (Hodgins et al., 1997; Schmidt & Weisner 1995; Stewart, Ouimette, & Brown, 2002a). Given the widespread use of alcohol among adolescents and its significant relations to other health-related problems, it is critical to begin to know more about how boys and girls differ in drinking behaviors and motivations and how broader social forces impact teens' relationships with alcohol. Successful efforts to prevent adverse consequences of alcohol abuse in youth should optimally be based on empirically derived understanding of the risk factors that contribute to heavy and problem use of alcohol among youth (Comeau, Stewart, & Loba, 2001). There is a need to make school-based alcohol prevention efforts more meaningful to adolescent girls who are at particular risk of heavy drinking and increased alcohol problems.

Study 1 (Chapter 3) replicated and extended a preliminary background study (Comeau et al., 2001) to investigate associations between personality factors and drinking motives using Cooper's (1994) four categories of substance use motivations as applied to teens' use of alcohol. The preliminary background study for this investigation (Comeau et al., 2001) indicated a distinction could be made between two particular pathways of personality factors that increase the likelihood that a young person will consume alcohol for specific drinking motives or reasons for drinking. These maladaptive motives in turn put a young person at risk for alcohol problems (i.e., specific types of harm resulting from alcohol use). Coping, conformity, and enhancement motives are considered "risky" due to their established associations with heavy drinking and/or drinking related problems in youth (Comeau et al., 2001; Cooper, 1994). Study 1 replicated the background study and extended it to explore the significance of gender to outcome.

Study 1 investigated how girls' and boys' realities differ. Specifically, I examined differences in relations of the personality factors of trait anxiety (TA: general tendency to experience anxiety), anxiety sensitivity (AS: fear of anxiety), and sensation seeking (SS: desire for intense and novel experiences) as motives (or reasons) for drinking (cf. Cooper, 1994).

1.4 Research Question 2

The second research question asks, "How do girls at particular risk of alcohol abuse understand their relationships with alcohol?" There is a paucity of research on girls' subjective experiences with drinking. Rebecca Pizer (2000) examined the experiences of culturally diverse adolescent girls with substance abuse and recovery, using an exploratory study gathering information from a sample of eight adolescent girls chosen for their completion a long-term alcohol and other drug treatment program.

Among the themes arising from the in-depth interviews were childhood physical and sexual abuse (Pizer, 2000). Most participants in Pizer's (2000) qualitative study suffered sexual trauma and exploitation. Alcohol and other drug use was described as numbing the pain and shame from early and ongoing sexual trauma, though it also increased the risks of further exploitation and harm (Pizer, 2000).

In addition to sexual forms of abuse, female children will be as subject as male children to child physical abuse (and child homicide) (Duffy, 1995). Ann Duffy notes:

While both boys and girls are victimized by child abuse, it is important to note that boys are targeted when they are younger (under age 13) while girls are more likely to be physically abused when they are older (Gelles and Cornell 1990:54). In other words, boys grow out of victimization while girls grow into it. (Duffy, 1995, p. 155)

A history of abuse has been associated with increased substance use (Cole & Putnam, 1992; Miller & Downs, 1995; Sarigiani, Ryan, & Petersen, 1999).

There is a need to know more about how girls understand their relationships to drinking, and the causes and implications of that. More research is needed to explore how alcohol use is related to violence and victimization experienced by girls (i.e., the actual impact, how girls interpret the violence and victimization they experience and how this connects with their drinking). Research is needed that not only traces the incidence of various forms of girls' victimization and its association with alcohol use, but also explores how girls understand, name, and resist victimization in their own lives. "A focus on girls' assets, rather than deficits, will lead to greater understanding of girls' complex realities and will help to counter negative portrayals of girls as passive, frail, or voiceless" (Phillips, 1998, p. 94).

In an attempt to learn more about what drinking involves for girls at particular risk of alcohol abuse, Study 2 (Chapter 4) used qualitative research methods to consider how personality, reasons for drinking, gender, and other social factors influence their understandings of their relationships with alcohol. Using quantitative research methods, the participants in Study 2 were selected by virtue of their status as members of two specific subgroups of at-risk drinkers based on the personality factors of AS and SS. Qualitative semi-structured interviews were conducted with AS and SS girls at particular risk of alcohol abuse because of these specific personality factors thought to increase probability of heavy and problem drinking. Qualitative interview data added to the understanding of relations between AS and SS with girls' motives for drinking by exploring in greater depth these girls' understandings of their reasons for drinking as well

as any perceived relations of personality style to their understanding of their drinking.

Study 2 yielded findings consistent with, but substantially extending, my previous questionnaire-based research on the motives underlying alcohol use behavior in AS and SS adolescents in Study 1 (Chapter 3).

1.5 Research Question 3

The third research question investigates how two particular tailored alcohol abuse interventions work for at-risk girls. Epidemiological data support the need to pay more attention to girls in alcohol abuse intervention research (Amaro et al., 2001; Guthrie & Flinchbaugh, 2001). While trends indicate an increase in the use of alcohol by girls, and increased initiation rates among younger girls, there is a lack of attention in the literature to the causes and implications of such trends (Amaro et al., 2001).

These data bring into question the effectiveness of current national prevention approaches for girls and should urge the field to investigate the cause of these trends, risk factors that specifically might place girls at risk, and approaches for intervention that give attention to such factors. (Amaro et al., 2001, p. 259)

While increased epidemiological data are available on girls' use of substances, including alcohol (see review in Amaro et al., 2001; see also Blake et al., 2001), large gaps still exist in that knowledge base. For example, the necessary means to prevent harmful negative outcomes have not yet been identified with confidence (Blake et al., 2001). In addition, relatively few investigators have considered or addressed the gender-specific needs of young adolescent girls in the development and implementation of substance use intervention programs (see review in Blake et al., 2001). Few intervention studies have been published that focus on the differential effectiveness of programs by gender or that test gender-specific theoretical models (see review in Blake et al., 2001). Moreover,

relatively few theoretical models have been developed to explain fully the differential substance use patterns (Amaro et al., 2001). As Blake and colleagues (2001) argue, "Well-controlled intervention trials with sufficient sample sizes are needed, so that gender differences in program effects can be compared reasonably and new theoretical models can be tested" (Blake et al., 2001, p. 319).

Motivational theories of substance abuse variability generally propose that individual differences in personality reflect different susceptibility to certain reinforcing properties of drugs of abuse (Cooper, Frone, Russell, & Mudar, 1995; Conrod, Pihl, Stewart, & Dongier, 2000a; Pihl, & Peterson, 1995). Conrod, Stewart, Pihl, Côté, Fontaine, and Dongier (2000b) recently found support for the validity of this motivational hypothesis by demonstrating that substance-abusing women, classified according to specific personality profiles (e. g., AS versus SS), manifested distinct patterns of addictive and non-addictive psychopathology and coping skills deficits. These findings highlight the importance of developing intervention strategies that differentially target subtype-specific motivational, personality, and coping skills profiles (Conrod et al., 2000b). Recent research has also showed that brief interventions involving cognitive behavioral coping skills training are most effective in treating substance abuse disorders when they are applied in a "matched" fashion (Conrod et al., 2000b). For example, SS substance abusers benefit most from coping skills that specifically target their underlying enhancement drinking motives (Conrod et al., 2000b): drinking for reasons of increasing internal positive emotional states. A similar rationale might prove useful in early intervention efforts with adolescent girls.

In Study 3, I draw on motivational and personality theory in psychology (e.g., Conrod et al., 2000a; 2000b) to experiment with a brief personality-matched early intervention program intended to benefit those adolescent girls already showing signs of alcohol involvement. Results of the qualitative investigation informed the development of intervention manuals used in Study 3 (Chapter 5). Study 3 tests the effectiveness of two school-based brief interventions using a randomized control design with adolescents at high personality risk of alcohol overuse. I use the term "alcohol overuse" to refer to the harm (e.g. adverse consequences) arising from alcohol use (cf. Winters, 2001). Study 3 investigated how these particular early interventions affected risky motives for alcohol use and affected drinking levels and problems among AS and SS teenage girls. The brief intervention program is therapeutic in nature and as such can be classified as an indicated intervention or tertiary prevention program (cf. Amaro et al., 2001; Kaminer, 1999) with a goal to stem the progression of alcohol use and/or reduce alcohol involvement among at-risk individuals. (For a description of primary and secondary prevention, see Windle et al., 1996.) A primary assumption of the investigation is that by intervening at the level of personality vulnerability, one can change or help manage girls' maladaptive drinking motives (e.g., coping, conformity, and enhancement; Cooper, 1994) and ultimately reduce heavy drinking and alcohol related problems.

1.6 A Quantitative and Qualitative Approach

The feminist approach of this investigation attempts to demonstrate attention to diversity and sensitivity to gender issues that affect girls' drinking behaviors. I am concerned about the interests of adolescent girls and what kinds of methods will help illuminate those interests. Thus, I use the apparatus of quantitative and qualitative

research to pursue understanding of drinking patterns, contexts, and consequences particular to at-risk adolescent girls.

Certain personality factors have been associated with unique reasons or motives for alcohol use (Conrod, Stewart, Pihl, & Woicik, 2000c; Theakston, Stewart, Dawson, Knowlden, & Lehman, in press; Stewart, & Devine, 2000; Stewart, Loughlin, & Rhyno, 2001a). Two such personality vulnerability factors are AS and SS. Recent research suggests that these personality factors are associated with unique reasons or motives for alcohol use (Comeau et al., 2001; Conrod et al., 2000c; Theakston et al., in press; Stewart, & Devine, 2000; Stewart, & Lehman, 2000; Stewart et al., 2001a). As previously noted, specific drinking motives are considered "risky" due to their established associations with heavy drinking and/or drinking related problems in youth (Comeau et al., 2001; Cooper, 1994) and adults (Conrod, Pihl, & Vassileva, 1998; Conrod et al., 2000b; Stewart, Karp, Pihl, & Peterson, 1997a; Stewart et al., 2001a; Stewart & Zeitlin, 1995). Quantitative research provides an empirical case for targeting personality factors as a means for reducing "risky" drinking motives in adolescents (Cooper, 1994).

While large-scale surveys are helpful for determining the incidence of drinking and comparing behavior patterns between girls and boys, qualitative approaches are also needed to capture important variations across girls' diverse social interactions (cf. Phillips, 1998). This research aims to take into account the contexts in which girls live and develop (i.e., broad social contexts in which alcohol campaigns are frequently aimed at young women) as well as sociopolitical forces (i.e., gendered social inequities) as expressed in the girls' own words. I use both qualitative and quantitative research

methodologies to develop and test a novel, motive-specific, personality matched brief intervention program for certain groups of adolescent female drinkers.

The objectives (cf. Creswell, 1994) of the empirical investigation are as follows:

- 1) To compare boys and girls and describe gender patterns in associations between personality factors and drinking motives using Cooper's (1994) four categories of substance use motivations as applied to teens' use of alcohol.
- 2) To explore the heterogeneity among two subgroups of adolescent girls (AS and SS) regarding self-perceived reasons for alcohol use and relations to personality factors through qualitative interviews.
- 3) To examine whether matched early interventions based on AS and SS personality factors (moreso than no intervention) reduce risky drinking motives in each group.
- 4) To investigate whether these personality-matched early intervention sessions, informed in part by the stories of adolescent girls in Study 2, have an impact on drinking behavior and problems for this population.
- 5) To investigate whether there is a difference in effectiveness of these personality-matched early interventions for adolescent girls as opposed to adolescent boys.

The hypotheses for the three studies (Study 1, Chapter 3; Study 2, Chapter 4; and Study 3, Chapter 5) are as follows:

1) In Study 1, I hypothesized that, among my entire sample of adolescents (boys and girls combined), the personality measures would predict the three "risky" alcohol use motives (coping, conformity, enhancement), over and above demographics (Comeau et

al., 2001). Extending previous findings with both teens (Comeau et al., 2001; Cooper, 1994) and young adults (Cooper, Russell, Skinner, & Windle, 1992; Stewart, Zvolensky, & Eifert, 2001b), I expected the AS – conformity motives relation would be stronger in adolescent boys than girls. I hypothesized that TA would be a significant predictor of coping motivated drinking (cf., Comeau et al., 2001). Extending previous findings with young adults (Stewart & Zeitlin, 1995), I expected that this TA – coping motives relation would also be stronger in adolescent girls than boys. I also hypothesized that intensity seeking (a component of SS; Arnett, 1994) and low AS levels would predict enhancement motives for alcohol use (cf., Stewart & Devine, 2000; Comeau et al., 2001; Cooper et al., 1995). Since prior literature seems to indicate a greater involvement of SS in the drinking behavior of boys, I also expected that the SS – enhancement motives relation would be stronger for boys than girls (cf., Cooper, 1994).

- 2) In Study 2, I expected that open-ended, semi-structured interviews would yield results consistent with, but substantially extending, previous questionnaire-based research (Comeau et al., 2001) on the motives underlying alcohol use behavior in AS and SS adolescent girls. My earlier study (Comeau et al., 2001) showed that previously-documented relations between high SS and enhancement drinking in youth (cf. Cooper, 1994) appear limited to the intensity-seeking (as opposed to novelty-seeking) component of SS (Arnett, 1994). Thus, when I use SS to characterize the girls, I am referring specifically to the intensity seeking component of sensation seeking (Arnett, 1994).
- 3) In Study 3, I hypothesized that the drinking behavior and drinking problems would decrease most from pre to post intervention for individuals who received the matched interventions relative to those in the no treatment control conditions. Similarly,

I anticipated that the risky drinking motives (i.e., coping, conformity, and enhancement) would decrease most from pre to post intervention for individuals who received the matched interventions relative to those in the no treatment control conditions. Given results of Study 1 and that the early intervention manuals were informed in part by findings from the qualitative Study 2, I expected increased effectiveness of the interventions for girls relative to boys.

Chapter Two: Conceptual Framework

2.0 Introduction

Chapter 2 focuses on the role of feminist theory as the conceptual framework for the thesis. As pointed out in Chapter 1, many girls drink; their alcohol use has health and social consequences. In view of the paucity of research exploring girls' drinking experiences (Pizer, 2000) and the lack of existing early intervention studies specifically for girls (Amaro et al., 2001; Blake et al., 2001), there isn't enough information to understand how gender and other social factors shape girls' relationships with alcohol. A feminist interest in the lives of young women says we need to find out more; specifically, it is necessary to explore how girls' experiences of gender influence their understandings of why they drink.

There are three sections in this chapter. The first section provides an overview of four inter-related components of feminist theory and shows how a feminist approach can help us discover more about the lives of adolescent girls. The remaining sections of Chapter 2 take up two aspects of feminist scholarship: ethics and epistemology, respectively. As noted in Chapter 1, feminist ethics provides the value framework that motivates the empirical investigation. Feminist epistemology provides methodological coherence for this multi-method research approach. Feminist theory, as the conceptual framework for the thesis, links the three sections of the chapter together.

2.1 Four Components of Feminist Theory

Charlotte Bunch (1979) presents four inter-related components of feminist theory: description, analysis, vision, and strategy. I describe each in turn and discuss its relevance to adolescent girls. My focus is on two main points: 1) women are oppressed

on the basis of gender; and 2) this oppression is relevant to girls and their drinking behavior.

2.1.1 Description

Feminism begins with a recognition that women typically have "less power and authority than comparably situated men and their interests are often sacrificed in favor of the interests of others" (Sherwin 1998, p. 2). In general, the description component of feminist theory identifies and examines the social reality of gender difference (and especially gender-based oppression) in many aspects of life. In the economic sphere, for example, despite the increasing importance of the income of women for their own survival, and in many instances that of their families, women have lower incomes than men across all age and education groups. The social reality is that not only do women continue to do the majority of unpaid work in the economy, but women are also segregated into low paying occupations more than men. The earning power of women remains stubbornly low, as evidenced by the significant wage gap between women and men (McFadyen, 2000). Although more women than ever are working outside the home and make up one-third of the world's labor force: they are concentrated in the least skilled and lowest paying jobs (Neft & Levine, 1997) and in part-time jobs where they are often not eligible for benefits. In Nova Scotia, women generally earn less than men regardless of their type of employment (McFadyen, 2000). Women in Nova Scotia who worked full-year, full-time in 1997, "earned 71 percent as much as their male counterparts" (McFadyen, 2000, p. 1). The consequences of women's continuing economic inequality are evident: women are disproportionately among those living below the poverty line, particularly when they head lone-parent families (McFadyen, 2000; Phillips, 1998).

Similar patterns of gender inequity occur with teens, as evidenced in Canada by the labour force profile of youth which examines the nature and extent of youth involvement in the paid labour market (Canadian Council on Social Development [CCSD], 2002). For example, in 2000, young men earned significantly more per hour than young women (\$ 10.11 versus \$9.05) (CCSD, 2002). In 1998, boys aged 14 and 15 were almost twice as likely as girls the same age to be employed, and girls were more likely to work at odd jobs for pay. Similarly, with respect to summer employment, boys were more likely to work for pay and girls were more likely to work at odd jobs which generally have irregular hours and pay less (CCSD, 2002).

Significant gender-injustice also exists in interpersonal spheres where women are disproportionately subject to domestic violence and sexual assault (Duffy, 1995; MacKinnon, 1989; Sherwin, 1992), two leading causes of female injuries in nearly every country (Neft & Levine, 1997; Duffy, 1995). Violence against women is a reflection of women's inequality in society as well as a contributing factor to that inequality (Neft & Levine, 1997). Many female victims of domestic violence and sexual assault throughout the world are children and adolescents. Abbey, Ross, and McDuffie (1996) use the term "sexual assault" to describe any nonconsensual sexual contact, including penetration, whereas the narrower term "rape" is reserved for sexual behaviors that involve penetration. Sexual assault is common in younger women (Cooper, 2002; Koss, 1992) (late adolescence to early adulthood).

In a related dimension, there has been a great deal of media attention on crime and safety in neighborhoods and on bullying behavior and violent crime in schools. Sexual harassment in schools is a common problem, threatening the safety of all female students (Phillips, 1998). As Sherwin notes, with reference to adults, "the prevalence of sexual harassment of women by men and the fact that many people have difficulty distinguishing it from ordinary male sexual aggression are evidence of the unbalanced relations of power in our society" (Sherwin, 1996a, p. 48).

The description component of feminist theory focuses on evidence for the empirical claim that gender matters in a systemic and problematic way in girls' lives. This is equally true when we examine consequences and comorbid conditions associated with substance use and the importance of substances. Although risk factors for substance use on the individual level might be pertinent both for boys and for girls, there are gender differences. Amaro and colleagues note:

It could be that similar risk factors make boys and girls both vulnerable to alcohol, tobacco, and drug use, but that they have a differential impact on boys and girls. Risk factors also might interact differentially to affect rates of other negative outcomes known to affect girls more. For example, although many negative outcomes share common risk factors, the relation between risk factors and outcomes does differ by gender. Negative outcomes related to alcohol, tobacco and drug use that affect girls more include depression, eating disorders, suicide-related behaviors, adolescent pregnancy and its complications, and heterosexually transmitted HIV. (Amaro et al., 2001, p. 279)

Among other factors, research findings point to the central role of body image concerns and dieting in the association of symptoms of disordered eating and problem drinking among teenage girls (Striegel-Moore, Wesleyan, Middleton, Huydic & Edward, 1993; von Ranson, Iacono & McGue, 2002). In a sample of 234 female high school students (aged 14-17 years), girls diagnosed with an eating disorder were twice as likely to be

problem drinkers than girls who were not diagnosed with an eating disorder (Striegel-Moore et al., 1993). In an epidemiological sample of 672 adolescent girls (von Ranson et al., 2002), eating attitudes and disorders were associated with alcohol use. For research with young adults in this area see Stewart, Angelopoulos, Baker, and Boland (1998); see also Stewart and Samoluk (1997). See Piran (2001) for a gendered analysis of eating disorders and disordered eating. See Thompson (1994) for a multicultural analysis of eating disorders as frequent responses to injustices (i.e., racism, sexism, homophobia, classism, the stress of acculturation, and emotional, physical, and sexual abuse).

Feminist descriptions of social reality also help reveal "how expectations are derived from deeply entrenched social patterns that structure social institutions and practices" (Baylis, Downie, & Sherwin, 1998, p. 235). Consider how images of women in the popular media are often stereotypically limited, encouraging girls to fit cultural notions of the ideal shape through advocating cosmetic surgery and diet programs. (See Frost (2001) for a sociological analysis of body image concerns among teenage girls.) Increasingly high profile and troublesome issues arise in relation to the bodies and appearance of adolescent girls. Susan Bordo explains:

Through the exacting and normalizing disciplines of diet, make-up, and dress -- central organizing principles in the days of many women -- we are rendered less socially oriented and more centripically focused on self-modification. Through these disciplines, we continue to memorize on our bodies the feel and conviction of lack, insufficiency, of never being good enough. At the farthest extreme, the practices of femininity may lead us to utter demoralization, dehabilitation, and death. (Bordo, 1989, p. 14)

Many of the influences on girls' personal identities are inseparable from the social contexts in which they develop. Growing up in a male-dominated society, girls face pressures to judge their self-worth based on narrow standards of physical attractiveness,

and to conform to cultural notions of femininity that promote passivity, compliance, and self-sacrifice, while discouraging strength, resistance and entitlement to pursue one's own desires (Carney, 2000; Phillips, 1998).

It is important to note that gender has consequences for boys too; they are disadvantaged in some spheres of life. For example, complexities, injustices, and inequities exist in both the educational environment and in the social lives of boys and need to be examined (see review in Frank, Kehler, Lovell, and Davison, 2003). Within the last decade, there has been a growing concern about the condition of boys' lives (Frank et al., 2003; Head, 1999; Mills & Lingard, 1997). Rebecca Coulter (2003) uses data from individual and group interviews with adolescent boys from three secondary schools in Ontario to examine gender equity and the role of family and peer group experiences in shaping the gender consciousness of young men. The critical importance of teachers' work is highlighted in the sphere of schooling where pertinent issues of concern have included bullying, violence, literacy and numeracy, harassment and homophobia (Coulter, 2003). It is arguable that gender does not always work to the advantage of males and I hope to be able to explore ways to improve the lives of boys in future research, with particular attention to those at risk of heavy and problem drinking. Convinced that gender is an important feature in how individuals experience the world, and keenly aware of the significance of inter-related forms of systemic oppression (cf. Frye, 1983), my focus here is on girls.

2.1.2 Analysis

The analysis component of feminist theory explores the origins and reasons for the perpetuation of the oppression of women and girls (Bunch, 1979) in order to better understand how to make the necessary social changes. This category of feminist theory looks for a causal story behind the discrepancy or differential treatment between women and men, girls and boys, which the descriptive component identified. Bunch elaborates:

In seeking to understand the sources of women's oppression and why it is perpetuated, we have to examine biology, economics, psychology, sexuality, and so on. We must look at what groups and institutions benefit from oppression, and why they will, therefore, strive to maintain it. (Bunch, 1979, p. 13)

In developing an analysis, Bunch (1979) recommends initially focusing on a phenomenon in a limited context, considering a wide range of factors that may affect it, then expanding the analysis as that context is better understood.

An example of the analysis component of feminist theory is reflected in the ways feminists have explored the gendered division of labour. Wendy Kolmar and Frances Bartkowski (2000) describe the sexual division of labour as an arrangement of work into clearly gendered public and private spheres of production and reproduction, which has been theorized particularly by Marxist, materialist, and socialist feminists in the nineteenth and twentieth centuries (Kolmar & Bartkowski, 2000).

Their analysis is rooted in Frederick Engels' *The Origin of the Family, Private Property and the State* (1884) which added an understanding of the sphere of reproduction and women's work to Marx's largely genderblind division of labor analysis. . . . Nineteenth-and twentieth-century feminists extended this division of labor analysis as a primary tool for understanding the gendered division of the work of child-rearing as well as occupational segregation of the paid workforce and the division of psychological and emotional labour in the family and society. (Kolmar & Bartkowski, 2000, pp. 46-47)

Kolmar and Bartkowski (2000) also refer to the early critique by Olive Schreiner (1911) of women's exclusion from productive work because of their role as "child-bearer," and to the work of Schulmith Firestone (1970) who argues that the division of reproductive

labour is the cornerstone of the sex/gender system. Muriel Dimen (1989) explores an unspoken initial premise on which the division of labour runs: the notion that women are "trained" for domestic work and bio-psychologically suited to nurturance. While feminist ethnographers explore the specifics of a gendered division of labour from culture to culture (Kolmar & Bartkowski, 2000), others have examined the division of labour as a "taboo" against the "sameness of men and women" (Rubin, 1975, p. 234). On the latter approach, the division of labour divides the sexes into two categories exacerbating biological differences between men and women thereby creating gender and entrenching heterosexuality.

Having focused on gender and labour in a limited context, feminist theory began to incorporate an analysis of the male-centeredness of mainstream theories about human knowledge that they regarded as uni-dimensional and flawed because of the exclusion and misrepresentation of women's contributions. Contemporary feminist epistemology attributes gender bias to both scientific method and the Western epistemological tradition of which that method is a part (Jaggar, 1989; Farganis, 1989; Harding, 1986; 1991; Inhorn & Whittle, 2001; Longino, 1990; Smith 1987). For example, Sandra Harding's (1991) analysis of Western science critiques the notion of "objective" scientific inquiry as evidenced through the "conventional notion of a value-free, impartial, dispassionate objectivity" (Harding, 1991, p. 138). The common idea is that this abstract, impartial view of objectivity separates knowledge from mere opinion. The fear is that if there is no objectivity, we are left with relativism and no way to adjudicate between competing claims because individuals' judgments about truth, knowledge, and reality will be considered equal. Harding (1991) does not want to give up on the idea of increased

objectivity in science. She presents the notion of "strong" objectivity, i.e., strengthened standards of objectivity required by feminist standpoint epistemology (Harding, 1991, p. 138). Feminist standpoint theorists argue that while there is no impartial, detached position in a hierarchically organized society, it is possible to judge some positions as better than others because they can result in less partial and distorted understandings of the world than can the view from dominant positions. Dorothy Smith (1987) points to the "standpoint of women" which "directs us to an "embodied" subject located in a particular actual local historical setting" (Smith, 1987, p. 108). Harding calls for women's standpoint as a basis for adjudicating knowledge claims. The advantage of women's standpoint is attributable to the gap between their experiences of life and the dominant conceptual schemes (cf. Smith, 1987).

The role of gender in structuring acceptable forms of masculinity and femininity is an important part of the causal story of why girls are situated differently than boys. The differential treatment of girls and boys begins long before adolescence (Phillips, 1998). For example, parents play differently with and encourage different kinds of behavior in their girl and boy children (Leaper & Gleason, 1996) and send subtle messages regarding gender and what is acceptable (Jory, Rainbolt, Karns, & Freeborn, 1996). Such differential treatment can lead to gender-role stereotypes (Amaro et al., 2001) (e.g., girls are more dependent on others, boys are more independent). Central to an understanding of the social and political contexts shaping girls' lives is a feminist analysis of power and modes of oppression. Sherwin (1992) describes oppression as entailing "a pattern of hardship that is based on dominance of one group by members of another" (p. 24).

The analysis component of this investigation attempts to explain how social and political contexts, and the constraints and potentials of gendered social norms, help shape the ways in which girls' drinking occurs. Adolescent girls who participated in the qualitative Study 2 (Chapter 4) articulated experiences of gendered oppression (e.g., sexual objectification, sexual vulnerability, threat of violence). Some girls also spoke of experiences of marginalization based on class and race. The analysis component of this investigation also attempts to explain how gender and gendered oppression influence girls' relationships with alcohol, particularly in connection with their reasons for drinking. In addition, Chapter 6 includes evaluation of the empirical data resulting from the 3 studies in my dissertation, directing conscious attention to the place of oppression in the research that is being evaluated. The final chapter also focuses on the need for gender-specific intervention programs and the potential positive health impact when girls' voices shape the interventions.

2.1.3 Vision

The vision component of feminist theory advocates a social ideal: what a society ought to be like if it were just and fair. Bunch elaborates on the dimension of vision:

Determining what should exist requires establishing principles (or values) and setting goals. In taking action to bring about change, we operate consciously or unconsciously out of certain assumptions about what is right or what we value (principles), and out of our sense of what society ought to be (goals). This aspect of theory involves making a conscious choice about those principles in order to make our visions and goals concrete. (Bunch, 1979, p. 14)

This dimension of feminist theory imagines a world where the sort of suffering that constitutes oppression no longer exists. In order to get closer to this social ideal of a world where nonhierarchical relationships are the norm, feminism requires opposition to

dominance and its ties to masculinity. Feminists "want power for women as well as for men, but the power that is sought would be enabling and emancipatory; it is not power over others, as is the common understanding of power relations in the hierarchical thinking of patriarchy" (Sherwin, 1992, p. 27). This articulation of power enables us to imagine a world where dependence in relationships can exist without necessitating dominance and subservience.

The vision aspect of feminist theory involves making a conscious choice about principles of justice in order to make visions and goals concrete (Bunch, 1979). In order to promote fairness in the world, we need to know the measure of justice to apply in the short term as well as the long term. My vision for girls in this thesis is motivated by feminist ethics as interpreted by Sherwin (1992; 1996a; 1996b; 1998). Following Sherwin (1992), I adhere to a conception of justice defined in opposition to oppression. She claims that the core principle of feminist ethics is that the subordination of one group by another is morally wrong.

My broader vision is motivated by a feminist commitment to justice and concern about ways in which gender oppression can harm girls in the absence of positive forces. Hence, I believe that a world that is fair and just would empower girls to pursue non-exploitative relationships. In this research, I am driven by a social ideal in which power is recast from a view of power over others to a view of empowerment or "power as an internal source of personal control" (Abbott, 1994, p. 75). In a fairer world, girls and boys would feel safe and valued (e.g., be encouraged and supported in their social contexts so they can thrive during adolescence and develop and preserve their sense of self). A world that is fair and just would fully capitalize on girls' strength, creativity, and

power to manifest a more equitable social reality for them. While justice defined in opposition to oppression provides a social ideal both in the short term and long term, this thesis is about short-term, practical (non-utopian) improvements in the present.

2.1.4 Strategy

In general, the strategy component of feminist theory moves from the description of social reality toward the social ideal of justice and is closely connected to the political agenda of feminism that concentrates on the transformative ways of organizing our world to free it from dominance structures. The strategy dimension includes short term and long term goals. Short term goals concentrate on making improvements here and now to lessen the impact of oppression. Long term goals concentrate on the broad social ideal of a just and fair society.

There are multiple strategies appropriate to different projects in feminism.

Feminist theorists will suggest different strategies and solutions for the elimination of the many forms of oppression (Tuana & Tong, 1995). "Developing a strategy requires that we draw out the consequences of our theory and suggest general directions for change" (Bunch, 1979, p. 14).

A gender-neutral health promotion strategy to reduce the risk of negative outcomes related to substance use among girls would seek to spread preventive health information, offer coping skills strategies conducive to healthy living, and foster self-help approaches. Also involved would be assessing the support services available, identifying gaps in the services and combining collective effort to meet the varying health needs of girls. A feminist strategy to alcohol abuse prevention demands gender-specificity: it examines how broader social conditions play out and how we can help make the lives of

girls and women more equal. A feminist strategy takes up what actions are necessary to reduce oppression. Different versions of feminism might suggest very different ways to approach an alcohol abuse prevention strategy for girls. For example, in general, liberal feminists view the sex roles of males and females as the basis of women's subordination and aspire to achieve equality without radically transforming society (e.g., see review of liberal feminist perspectives in Tuana & Tong, 1995). A liberal feminist alcohol abuse prevention strategy might suggest providing more adequate childcare facilities for adolescent mothers and seek to spread preventive health information by providing non-sexist information materials. This would require a more individual based strategy that provides girls with the relevant information and skills to help empower girls and bring about changes that would contribute to their health.

In contrast, radical feminists regard the basis of women's subordinate position as centering on the notion of women as a class, a sex class that faces oppression and needs to act collectively; the radical feminist strategy is to overthrow the oppressor class.

Radical feminists (e.g., Ti-Grace Atkinson 1974; Marilyn Frye, 1983; Shulamith

Firestone, 1971) root the oppression of women in biological difference itself. Radical feminists view the systemic dominance of men in society as preceding and laying the foundation for other forms of human oppression and exploitation. Thus, the aim of radical feminism is to liberate women from the oppression of men. A radical feminist approach to alcohol abuse prevention, focusing on the notion of adolescent girls as a sex class, would be particularly concerned with girls' experiences of sexual exploitation and sexual objectification associated with drinking. In contrast with a liberal feminist approach, a radical feminist agenda might have a broader strategy that targets large social

forces and practices contributing to the victimization of women and girls. They may advocate for public policies that challenge economic barriers and social conditions that threaten girls' health and safety in their homes, schools, and communities.

Cultural feminism, an offshoot of radical feminism, emphasizes the differences rather than the similarities between men and women (e.g. see Griffin, 1978; Daly, 1979). A deeply women-identified movement, it celebrates what is distinct about women, challenging male culture rather than strategizing to become a part of it. A cultural feminist approach to alcohol abuse prevention would likely be concerned with particular individual motivating factors that make girls' drinking experiences unique from boys and may also incorporate strategies to deal with or prevent girls' unplanned sexual intercourse under the influence of alcohol.

Socialist feminists view the fight against the subordination of women as inseparable from the struggle against capitalism (e.g., see Jaggar, 1983; Hartsock, 1983). They ground understanding of gender oppression in material conditions – primarily productive and reproductive work. On a socialist feminist view "it is in regard to the means of reproduction that women have been exploited and alienated" (Pearsall, 1993, p. xiii). Furthermore, "for socialist feminists, patriarchy, as a social system, is integrally tied in with class and racial oppressions and can only be abolished through a full transformation of the social system" (Weedon, 1997, p. 4). Socialist feminists, similar to radical feminists, would likely propose that meliorative measures (e.g., providing non-sexist drug information materials) are not sufficient (cf. Pearsall, 1993). Being concerned with the role of the family in the ideological socialization of women, men, and children, a socialist feminist approach to alcohol abuse prevention may attend to how girls' drinking

is connected with social demands on girls, including girls' lack of material resources and opportunities.

Feminists of colour (e.g., Collins, 1990; hooks, 1990), anti racist feminists (Frye, 1992; Spelman, 1988), and lesbian feminists (e.g., Bunch, 1975; Hoagland, 1988) insist on an analysis of larger systems and structures of oppression. Within this broad framework, an approach to alcohol abuse prevention would promote more nuanced, layered understandings of the ways that gender interacts with race, ethnicity, sexual identity, socioeconomic status, culture, and disability in shaping girls' identities and social experiences. This more complex analysis of intersections might also expand research categories to move beyond such practices as characterizing race as only "White," "Black," and "Asian."

While tensions sometimes exist, most versions are sensitive to the fact that specific experiences of oppression among women and girls vary. In general, feminist theorists recognize that the forces of oppression are complex and systemic and will continue until they are dismantled, until men and boys, women and girls make the subordination of females unacceptable (Sherwin, 1992).

Neither helpless victim nor complicit agent is the appropriate image of women's role in patriarchal structures. Women do not have to accept their position in the hierarchy; they can and do challenge the legitimacy of the hierarchy and seek ways of organizing social structures that are not based on dominance and control. That is the political agenda of feminism, and it takes a great deal of individual and collective work to make such significant transformations in society. Feminists believe in the possibility for resistance and change. (Sherwin, 1992, p. 26)

Within a general feminist agenda, I believe a multi-level strategy that targets the individual level as well as broader social practices is necessary to challenge oppression. While I am interested in learning how gender-specific patterns of harm connected with

adolescent girls' relationships with alcohol are related to larger systems and structures of oppression, my strategy in this thesis is a narrow one. My strategy entails using quantitative and qualitative research methods to hear from AS and SS girls about their current realities and involves tailoring school-based interventions to meet girls' current needs.

I have reviewed four inter-related dimensions of feminist theory as a framework for the empirical investigation (Bunch, 1979). I now turn my attention to feminist ethics in an attempt to show that attending to the lives of women and girls is an essential aspect of moral reasoning and evaluation. Feminist ethics is one of two components of feminist theory that provide the basic conceptual structure for this thesis. (The other component is feminist epistemology to be discussed in the following section.) I highlight three general elements of feminist ethics (Purdy, 1989): 1) it focuses on the importance of women and girls and their interests; 2) it is concerned with issues affecting women and girls; and, 3) it involves rethinking fundamental assumptions of moral theory.

2.2 Feminist Ethics

Feminist ethical theory is the collective work of many women thinkers. Just as in feminist theory generally, there are many different interpretations of feminist ethics. I follow the approach to feminist ethics as interpreted by Sherwin (1992, 1996a; 1996b; 1998), which is highlighted in this section in relation to the current investigation.

Sherwin claims that the core principle of feminist ethics is that the subordination of one group by another is morally wrong. In general, moral theory as developed by feminists is seen as undoing patterns of conceptual dominance that before seemed permanent (Pearsall, 1993). In contrast with much of mainstream, traditional ethics, feminist ethics

emphasizes the importance of women and girls and their interests, drawing on the shared experiences of women's and girls' everyday lives. (See Sherwin, 1992, for a critical review of positions adopted by most philosophers working in the field of nonfeminist ethics.)

Carol Gilligan (1982) proposed that women and girls engage in a distinctive style of moral reasoning. Gilligan (1982) claims there are two different patterns of moral reasoning: an ethic of care or responsibility and an ethic of justice or rights. Gilligan noticed a gender difference in the tendency to use each form. She believes that women's and girls' morality often centers on the notions of caring and responsibility. "... in the different voice of women lies the truth of an ethic of care, the tie between relationship and responsibility" (Gilligan, 1982, p. 173). An ethic of care focuses on actual persons, the particularities of their circumstances, the feelings, relationships and interactions of those involved. The alternative approach, identified as an ethic of justice or rights, pursues universal rules in an effort to ensure fairness (Gilligan, 1982). "The ethics of rights is a manifestation of equal respect, balancing the claims of other and self" (Gilligan 1982, pp. 164-5). Mainstream ethics is primarily an ethics of rights in which individuals are regarded as abstract entities. Gilligan (1982) claims the ethic of rights or justice is associated with male moral thinking, an approach that views persons generically and abstractly. According to Gilligan, moral agents should be skilled at both forms of moral reasoning. While Gilligan's emphasis on the importance of attention to concrete narrative details in moral decision making is influential, not all feminists share her endorsement of apparently female approaches to moral reasoning.

Feminist ethics usually views individuals as concrete and contextualized rather than as abstract entities. In contrast to mainstream ethics and its usual view of relationships among strangers, feminist ethics focuses on interpersonal connections. For example Virginia Held (1987) and Sara Ruddick (1980) target intimate relationships. Held (1987) draws attention to relations between mothers and children as models for moral thought. Ruddick (1980) presents the idea of "maternal thinking" – a moral perspective and way of knowing associated with the demands of being a mother. She also sees maternal thinking as expressive of ethical modes that can transform morality in general, such as "the capacity for attentive love" – a skill in which she regards women as particularly proficient due to their upbringing to be mothers.

However, the concept of care is problematic as a core of feminist ethics. Some feminist ethical theorists (e.g., Houston, 1987; Hoagland, 1988; Sherwin, 1996a) have rejected caring as the central element of feminist ethics because "of the dangers and complications that have been associated with attempts to endorse stereotypically feminine patterns as the basis of ethics" (Sherwin 1996a, p. 51). As Joan Tronto (1989) points out

... the feminine approach to caring bears the burden of accepting traditional gender divisions in a society that devalues what women do. From this perspective, caring will always remain as a corrective to morality, as an "extra" aspect of life, neither suggesting nor requiring a fundamental rethinking of moral categories. (Tronto, 1989, p. 184)

In general, feminist ethics regards persons as relational versus independent and indistinguishable from one another (Baier, 1985; Held, 1987; Purdy, 1989; Sherwin, 1992; 1998). (See Sherwin, 1998, for a feminist ethical reinterpretation of relational autonomy.) As Sherwin observes, "Unless we recognise that a person's desires, needs, and beliefs are formed only within human society, we may mistakenly imagine our

interests to be independent from others and their interests" (Sherwin, 1992, p. 53). The consensus of feminist theorists is that there is a need for models of human interaction that convey the rich complexity of human relationships. While individual girls' identities are unique and profoundly personal, they are constructed within interpersonal relationships and meaningful social contexts (including families, peer relationships, schools, communities), never in a "social vacuum" (Phillips, 1998, p. 8). The social contexts in which girls' identities are shaped often provide contradictory messages about social expectations and girls' cultural roles, as well as present and future barriers and opportunities they can expect to encounter. Since these messages may vary across the range of girls' cultural contexts, their senses of self are drawn from a collage of experiences and understandings about race, class, culture, and sexuality, as well as gender (cf. Phillips, 1998).

Feminism teaches that moral theories are partial and defective when they speak of the interests, values, and rational choices of individuals as abstract entities, as if the personal histories and social contexts of persons are irrelevant. Feminists are very aware that persons are not all situated so as to be independent and equal; many are disadvantaged, dependent, exploited, responsible for the care of others, or otherwise limited in their ability to assert their rights in competition with the claims of other persons. Feminists recognize that these characteristics are of moral significance. (Sherwin, 1996a, p. 52)

Attention to contextual details is morally relevant to ethical evaluation; purely abstract considerations are often inadequate for resolving moral concerns (Sherwin, 1996a). A moral analysis that maps on to lives of adolescent girls considers contextual features.

Contextual features relevant to the three studies in the thesis involve reasons for drinking that are both internal (personal) and external (social context) (see Chapter 3, Study1).

Contextual features also include girls' own conceptualizations about alcohol use in a

social context (see Chapter 4, Study 2). Finally, the small group, single-gender context of early interventions (see Chapter 5, Study 3) is also central to this project.

Feminist ethics arises directly out of women's and girls' lives and issues that have been given only slight consideration in traditional moral theory. Certain moral issues are of particular interest to feminist ethicists, because these issues have received little or no attention in the past yet they affect women's lives. The feminist imperative is to challenge the hegemony of male ethical theory and to insist on "the women's voice" (Pearsall, 1993, p. 300). Thus, feminist ethics also focuses on issues of specific concern to women. For example, feminist ethics is concerned with reproductive rights and technologies, amongst other issues, since these reflect the centrality of women's demand for control over their bodies (e.g., see DeKoninck, 1998; Mahowald, 1995; Overall, 1995; Sherwin, 1995a, 1995b). These women's issues affect women's lives and are of central concern to feminist ethics.

In general, feminist ethics tells us girls are important. A moral imperative for doing this research is to examine how at-risk girls' experiences of gender shape their relationships with alcohol. As pointed out in Chapter 1, there are certain negative outcomes related to alcohol and other drug use that affect girls more than boys (e.g., adolescent pregnancy and its complications, and heterosexually transmitted HIV) (Amaro et al., 2001). Feminist ethics provides motivation to analyse adolescent girls' relationships with alcohol with an eye to girls' often excluded interests and reasons for drinking; it directs this investigation to insist on girls' voices. Feminist ethics encompasses a "commitment to social change that encourages us to consider how current research practices might be reformed to better serve the interests of those who have been

disadvantaged, and thus to improve their health status" (Baylis et al., 1998, p. 236). Thus, feminist ethics also motivates concrete work that has immediate prospects of improving girls' lives. These elements of feminist ethics guided the selection of tools in Study 1. In Chapter 3, we investigate how explanatory models of personality and drinking motives do – and do not – fit girls compared to boys. I include personality measures particularly suited for evaluating girls' risk (e.g., AS and TA) and include measurement of the social context of alcohol use (e.g., conformity and social motives). The understanding to be gained from including research on the lives of girls might help us in our attempt to learn more about the specifics of how gender and gendered oppression affect at-risk adolescent girls and their relationships with alcohol. Results of qualitative findings (see Chapter 4) help inform the development of a brief intervention program for certain groups of adolescent female drinkers that was then tested in a randomized controlled study design (see Chapter 5).

In addition, feminist ethics involves rethinking fundamental assumptions of moral theory including consideration of both substantive principles and those concerning philosophical method (Purdy, 1989). In mainstream ethics, conceptual and practical activities are often treated as distinct and separate tasks. Although most theorists assume there are connections between these two tasks, the nature and strength of the connections between theory and practice tends to be unexamined (Sherwin, 1996b). In contrast, Susan Sherwin (1992; 1996b) explores a conception of justice defined in opposition to oppression and stresses the importance of attending to the "interrelationship of conceptual and practical concerns when we evoke this central concept in health care

discussions" (Sherwin, 1996b, p. 189). Sherwin clarifies her principled argument against oppression:

My own proposals are also committed to the view that principles retain a role in ethics; my argument against oppression is a principled one, resting on a conception of justice that is defined in terms of its opposition to oppression. The principle to which I appeal, however, only makes sense when the relevant contextual details are spelled out. Oppression is not a phenomenon that can be adequately explored in the abstract; contextual details about the specific form of oppression and about other relevant features of the situation in question must be added to make sense of the moral concerns raised. (Sherwin, 1992, p. 82)

The principle of opposing oppression relies upon contextual details that make forms of oppression specific. Sherwin's (1992; 1996a) approach to feminist ethics insists on attending to the details and contexts of people's lives. She clarifies the sort of contextual details that feminists deem relevant for moral judgements:

I believe feminism's answer derives from its understanding that oppression is a pervasive and insidious moral wrong, and that conscious attention must be directed to its place in the practices that are being ethically evaluated. Therefore, from a feminist perspective, the relevant concrete details to be considered in our ethical deliberations include the political or power relations of the persons who are involved in or who are affected by the practice or policy being evaluated. Questions about dominance and oppression are essential dimensions of feminist ethical analysis. (Sherwin, 1996a, pp. 51-52)

Ethical deliberations cannot be made adequately in the abstract – it is only in the context of real people's lives that ethical dimensions of policy, practice or program can make sense (Sherwin, 1992; 1996b). The contextual details to be considered in this investigation include the political or power relations that shape the lives of adolescent girls involved in this research, and who are affected by the brief interventions being evaluated. Following Sherwin (1992; 1996b), these are the sort of contextual details deemed relevant for moral judgements.

In Chapter 4, we see how the experience of being girls, of being always marked (female), may connect to experiences with and understandings of alcohol use. Drinking allows some girls to step outside what are appropriate roles for girls when they are "Other" to the normalized, mainstream, dominant value system. Moreover, the contradictions inherent in notions of femininity can undermine girls' strong feelings (e.g., anger and indignation) and contribute to their disconnection from themselves and from (in Iris Marion Young's terms) "useful participation in social life" (Young, 1990, p. 53). The construction of girls as the "Other," or being marginalized in a gendered form, means, as Young puts it, being "stamped with an essence" of femaleness and its assumptions (i.e., stereotypes re: girls and femininity) (Young, 1990, p. 59). In the qualitative Study 2 (Chapter 4) some participants express pressures that can result from girls' experiences of being girls (e.g., constraints of stereotypical notions of femininity), that "Other" position, and never really fitting the dominant mould. Chapter 4 also raises related issues regarding girls' resistance to culturally defined roles and societal expectations.

Contextual details relevant to the ethical analysis in this investigation also include understanding of ways that gender interacts with race, ethnicity, sexual identity, socioeconomic status, culture, and disability in shaping girls' identities and social experiences. To suggest that adolescent girls are a homogeneous group that experience oppression in the same way is misleading. Girls' lives are not shaped by gender alone but rather are multiply constituted by gender, race, class, sexuality, nationality, age, ability and other social experiences, that they live simultaneously. The appeal to contextual features illuminates girls' complex perspectives, priorities, identities, and

diverse strategies for negotiating the competing demands of female adolescence. The complexity of girls' lives is exemplified in relation to personality factors and drinking motives. Girls differ in important ways of relating to their self-perceived qualities and characteristics that make them who they are (personality) and in their reasons for alcohol use (motives). Personality and motives differences must be considered when trying to understand girls' drinking behavior.

In addition to feminist ethics, I focus on feminist epistemology, the second aspect of feminist theory that provides the basic conceptual framework for the project. In the next section, I discuss the rationale of feminist epistemology in providing the methodological base for the thesis. I highlight two background assumptions and general points of feminist epistemology rather than examine specific research methods. (For a discussion of feminist quantitative methods, see Linton (1989). See Keddy, Sims, and Stern (1996) for a review of principles guiding feminist qualitative methodologies.)

2.3 Feminist Epistemology

In general, feminist theory encourages us to think critically about how knowledge and beliefs are formed and why they are adopted. As noted in Chapter 1, epistemology is generally defined as the theory of knowledge, and what can be known. Feminist epistemology observes this is not a neutral process. As Wendy Kolmar and Frances Bartkowski point out:

Theorists have closely scrutinized Western enlightenment models of knowledge seeking, specifically objectivity, empiricism, and positivism, methods that supposedly guarantee neutrality and prevent the knower from "biasing" the knowledge "he" produces. These models . . . deny the relevance of the identity and social location of knowers, so that they fail to notice how they perpetuate the world view of privileged, included groups and how they exclude the knowledge, experience, and questions of women and other marginalized groups. (Kolmar & Bartkowski, 2000, p. 38)

Feminist epistemology attempts to understand how the exclusion of women and other marginalized groups perpetuates hierarchy and domination. In this section, I endeavor to explain the link between feminist epistemology and my research. I describe how feminist epistemology provides methodological coherence for the three studies in the thesis that use both quantitative and qualitative approaches. Research methodology can be described as "a theory or analysis of how research does and should proceed; methodology cannot be reduced to a unit or a technique, it is a way of viewing patterns of the whole" (King, 1994, p. 20). A methodology encompasses the set of assumptions that accompany the research, which embodies the entire process of investigation. I rely on two background assumptions of feminist epistemology as a tool guiding this investigation.

The first background assumption on which this investigation is based is that in a society divided by gender, girls will see and know differently from boys. The gendered social development of girls' existence, their activities within society, and how they are esteemed in a gender-stratified culture shape their perspectives.

A fundamental thesis of feminist epistemology is that our location in the world as women makes it possible for us to perceive and understand different aspects of both the world and human activities in ways that challenge the male bias of existing perspectives. (Narayan, 1989, p. 256)

Individuals, girls and boys, are embodied, socially situated, concrete persons whose perspective is a consequence of who they are in the social world (Farganis; 1989; Jaggar & Bordo, 1989; Longino, 1990). Feminist epistemology informs us that girls' realities differ from boys and that we need to listen to girls' realities. Smith calls for a feminist research method that goes beyond interviewing practices to explore "methods of thinking that will organize our inquiry . . . so as to preserve the presence of actual subjects while

exploring and explicating the relations in which our everyday worlds are embedded" (Smith, 1987, p. 111). She characterizes epistemology as "a method of thinking (a theory if you like) about how the social can be said to exist so that we can describe it in ways that can be checked back to how it actually is" (Smith, 1987, p. 122). Drawing on the tool of feminist epistemology, I explore what drinking is about for girls.

As previously noted in Chapter 1, feminist epistemology helps us to understand the importance of inquiries into girls' realities. Feminist epistemology directs me, in Study 1, to first investigate how girls' and boys' realities differ. More specifically, I explore differences in relations of the personality factors of AS, TA, and SS to drinking motives (cf. Cooper, 1994). In describing gender patterns in personality and drinking motives, I am trying to generalize from a small number to the characteristics of a larger population.

In Study 2, I combine quantitative and qualitative methods in a complementary manner to learn more about the specifics of drinking behavior among adolescent girls at particular risk of alcohol abuse. I turn to girls' own experiences of and conceptualizations about alcohol use in a social context. When I look at drinking from the standpoint of AS and SS girls, I am trying to explore how personality, motives, gender, and other social factors penetrate and organize the experience of individual atrisk girls. I want to explore this phenomenon from a base in that experience and I want to "hold" my perspective by moving from the experiences of the girls I interviewed to broader social relations (cf. Smith, 1987). Feminist epistemology directs me to ground these two novel personality-matched interventions in the everyday lives of at-risk girls (cf. Smith, 1987). Thus, feminist epistemology guides the argument of the thesis:

- 1) girls' and boys' realities do differ, including differences in relations of the personality factors of AS, TA, and SS to drinking motives (cf. Cooper, 1994) (tested in Study 1);
- 2) girls' experiences and understandings of drinking are important and must be heard in their contextual complexity and gender-specificity (Study 2);
- 3) gender-specific patterns of harm connected with at-risk adolescent girls' relationships with alcohol are related to larger systems and structures of oppression for girls (as evidenced in Study 2);
- 4) early interventions rooted in differences of at-risk girls' from at-risk boys' relations of personality factors and reasons for drinking (Study 1) and girls' lives (Study 2) will work differently for girls than for boys (tested in Study 3).

Feminist epistemologists have examined how contingent historical factors have influenced scientific theories and practices and provided the metaphors in which scientists have conceptualized their activity (Narayan, 1989). Feminist critiques of science question the traditional view that an abstract ideal of objectivity exists corresponding to a discernible reality that the human mind can understand unencumbered by factors of class or status (religion, race, nationality, gender) (e.g., see Harding 1991; Longino, 1990). An abstract notion of objectivity disregards the role that politics and history play in science and disregards the ways in which reason and emotion mean different things and are valued in different ways by different people (Farganis, 1989; Jaggar, 1989).

Evelyn Fox Keller (1985) argues that what counts as scientific knowledge is informed by a (mis)understanding of objectivity. On her account, in the prevailing view, the aim of science is to achieve objective knowledge, where the criteria of objectivity are

emotional distance from and potential control of the object of knowledge. In Keller's (1985) view the language of mainstream science is permeated by an ideology of domination in which the search for objectivity is misidentified with the search for control over natural phenomena. In contrast, she distinguishes the notion of "dynamic objectivity" that "aims at a form of knowledge that grants to the world around us its independent integrity but does so in a way that remains cognizant of, indeed, relies on, our connectivity with that world" (Keller, 1985, p. 117). Her account embraces the assumption that gender, social location, is an important feature in how individuals experience the world. In this investigation, I attempt to adhere to existing methodological norms of scientific inquiry. The tool of feminist epistemology provides a methodological basis for the thesis by helping us to understand the importance of inquiries into girls' realities, directing us to include research into the lives of girls. This brings us to a second assumption of feminist epistemology: women's and girls' contributions to theories of knowledge and science are valuable.

Genevieve Lloyd (1984) suggests that conceptions of reason throughout history have been articulated through more or less conscious exclusions of the feminine. As Lloyd states:

It is clear that what we have in the history of philosophical thought is no mere succession of surface misogynist attitudes, which can now be shed, while leaving intact the deeper structures of our ideals of Reason. . . . Women cannot be easily accommodated into a cultural ideal which has defined itself in opposition to the feminine. (Lloyd 1984, pp. 103-4)

A noteworthy feminist argument for ways of knowing particularly relevant to this investigation, recognizes emotions as necessary to the construction of knowledge and vice versa (Jaggar, 1989). Alison Jaggar (1989) suggests both the mental and physical

aspects of emotions are each conditions of the other and maintains the necessity of rethinking the relation between knowledge and emotion and constructing conceptual models that demonstrate mutually constitutive, rather than oppositional relations, between reason and emotion. Her alternative approach is one that identifies emotion as a conceptual abstraction from a complex process of human activity that involves acting, sensing and evaluating. Jaggar (1989) claims that each of the human faculties of emotion, observation, reason and action reflect an aspect of human knowledge inseparable from the other aspects.

Jaggar is concerned with "the myth of dispassionate investigation" (Jaggar, 1989, p. 154). She describes the myth as promoting a conception of epistemological justification for the alleged authority of the dominant groups, composed largely of white men. Further, the myth vindicates the silencing of those, especially women, who are defined culturally as the bearers of emotion and so are perceived as more subjective, biased and irrational. Jagger (1989) highlights "outlaw" emotions which she distinguishes by "their incompatibility with the dominant perceptions and values" (Jagger, 1989, p. 160).

People who experience conventionally unacceptable, or what I call "outlaw," emotions often are subordinated individuals who pay a disproportionately high price for maintaining the status quo. The social situation of such people makes them unable to experience the conventionally prescribed emotions: for instance, people of color are more likely to experience anger than amusement when a racist joke is recounted, and women subjected to male sexual banter are less likely to be flattered than uncomfortable or even afraid. (Jaggar, 1989, p. 160)

Jaggar (1989) argues that recognition of the vital part emotions play in developing knowledge enlarges our understanding of women's claimed epistemic advantage in understanding the mechanisms of domination.

Emotions become feminist when they incorporate feminist perceptions and values. . .for example, anger becomes feminist anger when it involves the perception that the persistent importuning endured by one woman is a single instance of a widespread pattern of sexual harassment, and pride becomes feminist pride when it is evoked by realizing that a certain person's achievement was possible only because that individual overcame specifically gendered obstacles to success. (Jaggar, 1989, p. 160)

Jaggar (1989) suggests the most obvious way in which feminist and other "outlaw" emotions can help in developing alternatives to prevailing conceptions of reality is by motivating new investigations. "Feminist emotions provide a political motivation for investigation and so help to determine the selection of problems as well as the method by which they are investigated" (Jaggar, 1989, p. 161)

Emotions are explicitly relevant to this project in that emotions are associated with drinking alcohol. Previous research findings on drinking patterns indicate that those who use alcohol to change internal emotional states may drink more heavily and/or chronically than others (Cooper, 1994). Specifically, alcohol use motivated by a desire to reduce/avoid negative emotions (coping) or to increase internal positive emotional states (enhancement) have been shown to relate to increased levels of alcohol use (e.g., Cooper, 1994).

Study 1 (Chapter 3) draws attention to the fact that certain personality factors have been associated with heavier drinking and increased alcohol problems (Cox, 1987). As previously noted, two such personality vulnerability factors are AS and SS. Using Cooper's (1994) classification of drinking motives, my background study found AS and the related construct of TA to be associated with negative reinforcement motives (i.e., drinking to cope with negative affect, drinking to conform). In addition, my background study indicated SS was associated with elevated enhancement motivated drinking (cf.

Cooper et al., 1995). As previously noted, coping, conformity, and enhancement motives are considered "risky" due to their established associations with heavy drinking and/or drinking related problems in youth (Comeau et al., 2001; Cooper, 1994). My preliminary study thus suggests relations between anxiety-related personality variables to coping and conformity motives, and associations between SS and enhancement motives. It suggests that focus on underlying personality vulnerability and associated maladaptive alcohol use motives may provide a useful way to conceptualize and operationalize these alternative pathways to heavy and problem alcohol use in youth.

The concept of "outlaw emotions" (Jaggar, 1989) is explicitly relevant to this research in that I also explore girls' feelings about their lives and their drinking – going beyond personality or motives, to explore how girls feel about (as well as think about) their drinking. For example, rather than erupt in anger, a girl may drink to be nice to her boyfriends' friends who have invaded the privacy of her home for a party. In contrast, the same girl may express strong feelings of anger, an "outlaw emotion," by being openly resistant to a traditional cultural notion of femininity (e.g., complacency) which asks her to comply with norms established by her boyfriend and his friends. My research aims to make space for not only mainstream science (e.g., personality constructs and motivational models) but also "outlaw emotions" – how girls feel about their lives, their families, their friendships, their relationships, and their drinking. This epistemology drives my thesis.

2.4 This Investigation

In order to investigate how best to respond to socially generated needs, feminist epistemology directs us to include research into the everyday lives of adolescent girls and use the methods that help illuminate their needs and interests. Feminist ethics as

interpreted by Sherwin (1992; 1996a; 1996b; 1998; 2001), and feminist epistemology motivate this research. I study girls because I am interested in exploring how genderspecific patterns of harm connected with their relationships with alcohol are related to broader systems and structures of oppression. I am also interested in learning more about girls' resistance to stereotypes, culturally defined roles and social expectations, and various forms of oppression (e.g., sexual exploitation, racial discrimination, threat of violence) in consideration of their relationships with alcohol and their own conceptualizations about alcohol use in a social context. I believe attention to these issues is critical to the development of effective intervention programs for at-risk girls because it will help assure that the interventions do not contribute to a set of interlocking practices that maintains girls' oppression. The two empirically based matched interventions for at-risk adolescent female drinkers developed and tested in Study 3 (Chapter 5) may empower AS and SS girls in making choices and gaining more control over their lives by giving them skills and personal strategies.

In this investigation, both quantitative and qualitative research methods make use of adolescent girls' lives as sources of scientific evidence. The methods are techniques for gathering evidence, specific kinds of research practice: listening to or interviewing participants, observing behavior, measuring change, and examining historical traces and records (cf. Harding, 1986; 1991). Christina Hughes (1999) points out that exclusive reliance on one method may bias or distort the researcher's picture of a particular slice of reality (Hughes, 1999, 289). "The idea of connectiveness, which can convey a multireality and multi-voiced paradigm, thus provides greater integrity" (Hughes, 1999, 292). Guided by feminist epistemology, quantitative methods seek gender specificity in our

knowledge about adolescent alcohol use, and about the efficacy of intervention strategies tailored to the realities of girls' lives. Quantitative approaches are needed to determine the incidence of drinking and compare alcohol use patterns between girls and boys, to examine personality – motives relations by gender, and to measure the impact of tailored intervention programs. Also influenced by feminist epistemological assumptions, qualitative approaches can enrich and add depth to quantitative methods by further exploring the contexts in which girls live and develop, as well as broad sociopolitical forces (i.e., gendered social inequities). Qualitative methodologies help us to attend to the complexities of girls' social and personal relationships with alcohol from their perspective, as they themselves define them.

A very brief survey in one chapter cannot cover the complexity of issues and richness of feminist theory. However, I hope the theoretical and ethical perspectives that motivate my investigation are clear. Three studies will be reported (see Chapters 3, 4, and 5, respectively) which are used to develop and test the efficacy of brief interventions in the form of school-based coping skills training sessions for adolescent female alcohol users. I draw on the theoretical and clinical implications of a preliminary background study (Comeau et al., 2001) to explain the survey method in Study 1. This first study describes gender patterns in personality and drinking motives and provides a tool for screening adolescent girls to participate in the qualitative Study 2. Results of the second study help inform the development of intervention manuals used in the small groups for Study 3. Before moving on now to Chapter 3 and Study 1, an investigation of personality factors and associated drinking motives with particular attention to describing gender

patterns, I offer a brief reminder of how the four inter-related dimensions of feminist theory (Bunch, 1979) provide a framework for the thesis.

The description component involves deepening our knowledge of significant aspects of the lives of girls. This dimension entails looking for empirical data, gathering and interpreting facts, in order to substantiate my assertions. In this dissertation, I combine quantitative and qualitative research methods in an attempt to learn more about the specifics of drinking behavior among adolescent girls at particular risk of alcohol abuse (e.g., how personality, motives, gender, and other social factors affect their relationships with alcohol). The analysis component centers on results of the qualitative investigation that reveal connections between at-risk girls' reasons for alcohol use and gendered oppression as well as girls' resistance to being dismissed or devalued. The guiding feminist vision operates out of certain assumptions about what are valued (principles) and out of a sense of what society ought to be (goals). Following Sherwin (1992; 1996a; 1996b; 1998; 2001), I value a principle of justice defined in opposition to oppression: oppression is a form of injustice, "a pervasive and insidious moral wrong, and attention must be directed to its place in the practices that are being ethically evaluated" (Sherwin, 1996a, p. 51). It is a goal of feminism to pursue the changes necessary to transform society in ways that could eliminate all forms of oppression, including gendered oppression. In a just and fair world oppression does not lead girls to alcohol abuse and if it does, there is something we can do help them. In order to develop a strategy to get closer to this social ideal, my short-term goal is to make improvements in the lives of girls at particular risk of alcohol abuse to lessen the impact of oppression. This goal involves using quantitative and qualitative research methods to hear from atrisk girls about their current realities and tailoring school-based interventions to meet AS and SS girls' current needs. This strategy endeavors to take into account individual personality factors and related drinking motives, the impact of broader social forces on the lives of girls, and their resultant drinking behavior and drinking problems. In the final chapter, I return to my initial assumptions, look at the strategy I used and why, and evaluate the results in terms of what may be learned for the future.

Chapter Three: Describing Gender Patterns in Personality and Drinking Motives Relations

3.0 Introduction

Chapter 1 raised a research question that is central to this investigation: "How do girls compare with boys in their relationships with alcohol?" Chapter 2 highlighted that the value framework of feminist ethics, and its attention to using a gendered lens for analysis, points to the need to examine how gender-specific patterns of harm connected with adolescent girls' relationships with alcohol are related to broader systems and structures of oppression. Given the gender specific pattern of harmful negative outcomes associated with drinking among girls (Amaro et al., 2001), it is critical to begin to develop gender-informed, theory-based early interventions that might be tested for differential effectiveness by gender (Blake et al., 2001).

This chapter describes Study 1, an investigation of gender specific patterns in associations between personality factors and drinking motives. Drinking motives were conceptualized using Cooper's (1994) four categories of adolescent alcohol use motivations. Study 1 attempted to replicate the preliminary background study findings (Comeau et al., 2001; see Appendix A) and consider gender-specific patterns that could inform the development of brief interventions for girls. Study 1 also served as a screening tool for the qualitative Study 2 (see Chapter 4). By intervening at the level of personality risk, personality-matched brief interventions may be able to change risky drinking motives and ultimately drinking behavior.

3.1 A Motivational Model

A motive refers to the situation where an individual engages in a given behavior (e.g., drinking alcohol) specifically for the purpose of obtaining a desired outcome (e.g., affiliation) (Cox & Klinger, 1988, 1990). The model of alcohol use motivations proposed by Cox and Klinger (1988) contends that individuals drink to obtain certain desired outcomes that involve mood alterations (i.e., decreasing negative mood states or increasing positive mood states). Following Cox and Klinger (1988, 1990), Cooper (1994) proposed a four factor model of drinking motivations with two dimensions (source and valence) to describe the various reasons why adolescents consume alcohol. With respect to the valence of the desired outcome, an adolescent might drink to obtain a positive outcome (positive reinforcement) or to avoid a negative outcome (negative reinforcement). With respect to source of the desired outcome of drinking, a teen might drink to achieve an internal reward (e.g., mood change) or an external reward (e.g., social approval). Crossing these two dimensions yields four specific drinking motives: (a) coping (internal, negative reinforcement); (b) conformity (external, negative reinforcement); (c) enhancement (internal, positive reinforcement); and (d) social (external, positive reinforcement).

Research using the Revised Drinking Motives Questionnaire (DMQ-R; Cooper, 1994) indicates that these four drinking motives are associated with unique aspects of drinking behavior (see review in Cooper, 1994). With respect to the source dimension, patterns indicate that those who use alcohol to change internal states may use more heavily and/or chronically than others. Specifically, enhancement and coping motives have been shown to relate to increased levels of alcohol use (e.g., Cooper, 1994). With

respect to the valence dimension, it appears that drinking for negative reinforcement reasons (i.e., coping and conformity) is associated with greater drinking problems even after accounting for usual levels of alcohol use (e.g., Bradizza, Reifman, & Barnes, 1999; Carey & Correia, 1997; Cooper, 1994; Cooper et al., 1992). These findings suggest that alcohol use motivated by a desire to reduce/avoid negative emotions (coping), to reduce/avoid social censure (conformity), or to increase internal positive emotional states (enhancement) may represent relatively maladaptive functions for drinking (Cooper, 1994; Stewart, Zvolensky, & Eifert, 2002b). Thus, as noted in Chapter 1, coping, conformity and enhancement motives are considered "risky" drinking motives due to their established associations to heavy and/or problem use (Cooper, 1994). In contrast, social motives appear to be associated with a relatively lighter, non-problematic style of alcohol use and thus are considered a less risky set of reasons for drinking (e.g., Cooper, 1994). Social motives are also endorsed more strongly than the other three motives suggesting they are a more general or typical reason for adolescent drinking than coping, conformity or enhancement (Cooper et al., 1992).

3.2 Relations of Drinking Motives and Personality Factors

In general, motivational theorists argue that substance use motives are the final common pathway to substance use and abuse through which more distal risk variables, such as personality factors, exert their influences (Cooper, 1994; Stewart et al., 2002b). Such personality risk factors include AS, TA, and SS. Indeed, recent research suggests that these individual difference variables are among the most important personality factors associated with specific risky reasons for alcohol use (Comeau et al., 2001;

Conrod et al., 2000c; Cooper et al., 1995; Stewart & Devine, 2000; Stewart et al., 2001a; Stewart & Zeitlin, 1995; Theakston et al., in press).

3.2.1 Trait Anxiety (TA)

TA involves the general tendency to experience anxiety symptoms across a wide variety of stressful situations (McNally, 1996). Levels of TA have been modestly correlated with increased drinking levels in adults (Welte, 1985). My previous study indicates a relation of TA to coping motivated drinking in youth (Comeau et al., 2001). Research with young adults suggests that TA predicts coping motivated drinking among young women moreso than young men (Stewart & Zeitlin, 1995). However, a measure of conformity motivated drinking using Cooper's (1994) model did not exist at the time the Stewart and Zeitlin (1995) study was conducted and so conformity motivated drinking was not controlled. Since previous research shows that coping and conformity motives are highly correlated (Cooper, 1994), it is very important to control the overlap of coping and conformity motives before concluding a personality factor is uniquely related to either drinking motive. In addition, more young women than young men were used in the Stewart and Zeitlin (1995) sample making it possible that the "gender difference" was simply secondary to greater power to detect personality – drinking motives relations in the young women as compared to the young men. Moreover, it is not known if these results are generalizable to teens. The extent to which the trait anxiety – coping motives relationship varies by gender among adolescents thus remains to be investigated. In such an investigation, it will be important to control for the limitations inherent in the Stewart and Zeitlin (1995) study with young adults.

3.2.2 Anxiety Sensitivity (AS)

AS involves a specific fear of anxiety-related bodily sensations due to beliefs that such sensations will lead to catastrophic outcomes such as physical illness, social embarrassment, or loss of mental control (Reiss, Peterson, Gursky, & McNally, 1986).

Like SS, AS has been shown to be predictive of increased drinking levels (Stewart, Peterson, & Pihl, 1995; Stewart et al., 2001b) and a higher incidence of problem drinking symptoms (Conrod et al., 1998) in non-clinical samples of young people. Previous findings with teens (Comeau et al., 2001) and young adults (Stewart et al., 2001b; Stewart et al., 2002b) found that AS was related to conformity motivated drinking. In other words, young people who fear anxiety experiences drink to reduce or avoid social censure. Elsewhere, I have speculated that these teens may fear showing their anxiety in public and may drink to calm the anxiety they experience in social contexts (Comeau et al., 2001). The degree to which gender differences exist for adolescents in the relation of AS to risky conformity motives remains to be examined.

3.2.3 Sensation Seeking (SS)

SS, or the desire for intense and novel experiences (Zuckerman, 1994), is associated with increased risk taking and reckless behavior among youth (Arnett, 1994). SS has consistently been associated with heavier drinking and with increased risk for adverse drinking consequences (e.g., Conrod, Peterson, & Pihl, 1997; Schall, Kemeny, & Maltzman, 1992).

SS appears to be associated with a tendency to drink to experience the euphoric and intoxicating effects of alcohol (Conrod et al., 1997; Ohannessian, & Hesselbrock, 1994). These motivations resemble "enhancement motives" as described by Cooper

(1994). In fact, using Cooper's (1994) classification of drinking motives, SS has been shown to be associated with elevated enhancement motivated drinking (e.g., drinking to get high) among both young adults (e.g., Stewart & Devine, 2000) and adolescents (Comeau et al., 2001; Cooper et al., 1995). Moreover, as previously observed, my earlier study (Comeau et al., 2001) showed that previously-documented relations between high SS and enhancement drinking in youth (cf. Cooper, 1994) appear limited to the intensity-seeking (as opposed to novelty-seeking) component of SS (Arnett, 1994). [Note: I use 'SS' to refer specifically to the intensity-seeking component of sensation seeking (Comeau et al., 2001)].

Previous research suggests that male gender is associated with increased drinking for enhancement motives (Cooper 1994; Cooper et al., 1992; Stewart, Zeitlin, & Samoluk, 1996, Stewart et al., 2002b). Moreover, male gender is also strongly predictive of heavy drinking in teens (Cooper et al., 1995). In addition, boys report greater SS than girls (e.g., Ratliff & Burkhart, 1984). It remains unknown, however, whether the relation of intensity seeking to enhancement motives varies across gender among teens.

3.3 The Present Study

There are three aims to the present study: (1) To replicate my earlier findings of the two pathways of AS/TA to coping and conformity (negative reinforcement) motives versus intensity seeking to enhancement (internal, positive reinforcement) motives (see Comeau et al., 2001). (2) To examine possible gender differences in these personality – drinking motives relationships. I hypothesized that, among my entire sample of adolescents (boys and girls combined), the personality measures would predict the three "risky" alcohol use motives (coping, conformity, enhancement), over and above

demographics. (3) To provide a screening sample for the recruitment of adolescent girls to participate in the qualitative semi-structured interviews in Study 2. (This process will be described in more detail in Chapter 4: Methodology Section 4.1.)

Recent research with teens (Comeau et al., 2001) and young adults (Stewart et al., 2002b) indicates that AS is predictive of conformity motivated drinking. These findings suggest that conformity drinking may be influenced not only by external, environmental cues (e.g., social pressure to conform) but also by internal factors including a fear of anxiety-related bodily sensations. In a study with young adults (Stewart et al., 2001b) found that conformity motives mediated the association between AS and increased drinking behavior, but only in the males. Previous research also indicates male gender is associated with increased drinking for conformity motives among adolescents (Cooper, 1994) and young adults (Cooper et al., 1992; Stewart et al., 1996). Indeed, AS involves a "social concerns" component in children/adolescents (McLaughlin, Stewart, & Taylor, 1999; Silverman & Weems, 1999) which may motivate conformity-related alcohol use among individuals who fear anxiety. I hypothesized that AS would predict conformity motivated drinking in boys more than girls because AS for boys is mainly characterized by social concerns (i.e., concerns about displaying anxiety in public). So I thought high AS adolescent boys might be particularly likely to use alcohol to dampen anxiety in social contexts so they could "fit in". In sum, extending previous findings with both teens (Comeau et al., 2001; Cooper, 1994) and young adults (Cooper et al., 1992; Stewart et al., 2001b), I expected the AS – conformity motives relation would be stronger in adolescent boys than girls.

Recent research with teens (Comeau et al., 2001) and young adults (Stewart & Zeitlin, 1995) indicates that TA is predictive of coping motivated drinking. These findings suggest that coping drinking may be influenced by internal factors including a desire to alleviate negative emotions. Adolescents who report a tendency to drink to alleviate negative emotions are often heavy or problem drinkers (e.g. Cooper, 1994; Cooper et al., 1995). Research with young adults suggests that TA predicts coping motivated drinking among women more so than men (Stewart & Zeitlin, 1995). I hypothesized that TA would be a significant predictor of coping motivated drinking (cf., Comeau et al., 2001). Extending previous findings with young adults (Stewart & Zeitlin, 1995), I expected that this TA – coping motives relation would also be stronger in adolescent girls than boys.

Recent research with adolescents (Comeau et al., 2001; Cooper et al., 1995) indicates that SS is predictive of elevated enhancement motivated drinking (e.g., drinking to get high). My previous research with teens (Comeau et al., 2001) also found high intensity seeking (a component of SS; Arnett, 1994) and low AS levels to be predictive of enhancement drinking motives. These findings suggest that enhancement drinking may be influenced by internal factors including a preference for intense stimulation, as well as a low fear of anxiety-related bodily sensations. Previous research suggests that male gender is associated both with increased drinking for enhancement motives (Cooper, 1994) and with heavy drinking (Cooper et al., 1995) in adolescents. I hypothesized that intensity seeking and low AS levels would predict enhancement motives for alcohol use (cf., Stewart & Devine, 2000; Comeau et al., 2001; Cooper et al., 1995). Since prior literature seems to indicate a greater involvement of SS in the drinking behavior of boys,

I also expected that the SS – enhancement motives relation would be stronger for boys than girls (cf., Cooper, 1994).

3.4 Method

3.4.1 Participants

The sample consisted of 841 adolescents (399 female, 442 male) from one large secondary (junior and senior high) public school in the Annapolis Valley School Board in the province of Nova Scotia, Canada. Their average age was 15.4 years (SD = 1.5 years). The average level of education at the time of testing was grade 10 (range = grades 8 -12). Participants were primarily Caucasian. (As the large majority of students in this school were Caucasian, ethnicity was not a variable in the data set.) All participants spoke English fluently. This rural high school in Kings County enrolls students from surrounding communities. An aggregate-level description of the socioeconomic characteristics of the area in 2001 include a total population of 58,865 with 4070 between the ages of 15-19 (2065 males, 2005 females). The number of youth in Kings County between 15-19 in school full time was 2990 (1435 males, 1555 females). The average age of the population was 38.4 years. Of the total population, 15,280 worked full yearfull time, earning an average total income of \$34,506 compared with \$38,400 in Nova Scotia in 2001.

3.4.2 Measures

3.4.2.1 Demographics Questionnaire

An author-compiled questionnaire sought basic demographic information (cf. Stewart & Devine, 2000). Participants were asked to provide their age, gender, and their

¹ Statistics Canada (Census Division) Community Profiles, Kings County, Nova Scotia. Accessed from, http://www.statcan.ca. Accessed on 27-08-2003.

current grade level in school. Participants were also requested to indicate whether or not they had consumed any alcohol within the last four months. Only those who responded affirmatively to this past year alcohol-use item were invited to complete the alcohol use motives measure described next.

3.4.2.2 Drinking Motives Questionnaire-Revised (DMQ-R)

The DMQ-R (Cooper, 1994) is a 20-item self-report measure designed to quantify adolescents' reasons for drinking alcohol. Specifically, it was designed to tap levels of the four drinking motives in Cooper's (1994) categorical model of drinking motivations (i.e., enhancement, social, coping, and conformity). "Because it's fun" and "To celebrate a special occasion with friends" are sample enhancement and social motive items, respectively. "To forget about your problems" and "To fit in with a group you like" are sample coping and conformity motive items, respectively. Respondents rate their relative frequency of drinking for each of the indicated reasons on a 5-point Likert scale ranging from 1 ("almost never/never") to 5 ("almost always/always"). Subscale scores are computed by averaging the scores across the five items on each subscale (Cooper, 1994). The DMQ-R shows good internal consistency, factorial validity, and criterion-related validity in predicting adolescents' and young adults' levels of alcohol use and alcohol-related problems (Comeau, Stewart, & Loba, 2000; Cooper, 1994; MacLean & Lecci, 2000; Simons, Correia, Carey, & Borsari, 1998).

3.4.2.3 State-Trait Anxiety Inventory for Children-Trait subscale (STAIC-T)

The STAIC-T (Spielberger, Edwards, Montuori, & Luchene, 1973a) is a 20-item self-report questionnaire that measures TA levels. Since childhood/adolescent anxiety may manifest in ways different from adults (Campbell, 1986), Spielberger et al. (1973a)

constructed the STAIC-T as a developmentally sensitive version of the adult State-Trait Anxiety Inventory-Trait subscale (STAI-T; Spielberger, Gorsuch, Luschene, Vagg, & Jacobs, 1983) for younger test-takers. Items are rated on a 3-point frequency scale (1 = "Hardly Ever" to 3 = "Often"), with higher total scores indicating higher levels of TA. Sample items include: "I have trouble making up my mind" and "I worry too much." The STAIC-T has been used widely as a measure of TA in studies with adolescents (Silverman, Fleisig, Rabian, & Peterson, 1991; Weems, Hammond-Laurence, Silverman, & Ginsburg et al., 1998) and has been demonstrated to be a reliable and valid inventory (Silverman et al., 1991; Spielberger et al., 1973a). Although the STAIC-T is generally recommended for use with 9-12 year olds (Spielberger et al., 1973a), it has also been recommended for use with teens who are below average in reading ability (Spielberger, Edwards, Luschene, Montuori, & Platzek, 1973b). To allow for comparable scores across the age ranges tested in this study, and because our sample included some 12-yearolds as well as young people who were below average in reading ability, I chose to use the measure of TA that would be most applicable to the entire range of ages tested (i.e., STAIC-T as opposed to STAI-T) and this single measure was administered to all participants. This also allowed for direct comparison of the present results with those of my previous study (Comeau et al., 2001) where I also used the STAIC-T.

3.4.2.4 Childhood Anxiety Sensitivity Index (CASI)

The CASI (Silverman et al., 1991) is a self-report questionnaire designed to assess children's and adolescents' fear of anxiety symptoms. With a rationale similar to that involved in the development of the STAIC-T (Spielberger et al., 1973a), Silverman et al. (1991) constructed the CASI as a developmentally-sensitive version of the adult Anxiety

Sensitivity Index (ASI; Reiss et al., 1986) for younger test-takers. The CASI includes items rewritten by the authors to increase younger respondents' understanding of the questions. For example, the ASI item "It scares me when I am nauseous" was changed to "It scares me when I feel like I am going to throw up." Additional items in the CASI include "It scares me when my heart beats fast" and "When I am afraid, I worry that I might be crazy." Respondents are asked to rate their degree of agreement with each of 18 items on a 3 point Likert scale ranging from 1 = "None" to 3 = "A lot." Scores on the CASI have been shown to correlate significantly with scores on the STAIC-T in both clinical and non-clinical samples (e.g., Silverman et al., 1991), with the levels of shared variance (38-41%) suggesting that these are related, but empirically distinct, anxiety constructs (cf. McNally, 1996). The CASI has good internal consistency, acceptable twoweek test-retest reliability, and good criterion-related validity in clinical and non-clinical samples of children and teens (e.g., Weems, Berman, Silverman, & Saavedra, 2001; Weems, Hammond-Laurence, Silverman, & Ginsburg, 1998; see also review in Silverman & Weems, 1999). For example, it correlates with measures of fear/anxiety and accounts for variance in fears and TA levels that cannot be explained by anxiety frequency (Silverman et al., 1991). Our research group has shown that the CASI has a similar factor structure in boys and girls (Walsh, Stewart, McLaughlin, & Comeau, in press). Also, it has been shown to be a valid concurrent predictor of panic in a nonclinical sample of adolescents (Lau, Calamari, & Waraczynski, 1996). To allow for comparable scores across the age range tested, I chose to use the measure of AS that would be most applicable to the entire range of ages tested (i.e., CASI as opposed to original ASI) and this single measure was administered to all participants. Again, this

allowed for direct comparison with my previous study (Comeau et al., 2001) where I also used the CASI.

3.4.2.5 Arnett's Inventory of Sensation Seeking-Intensity Seeking Subscale (AISS-I)

The AISS-I (Arnett, 1994) is a 10-item scale assessing levels of intensity sensation seeking in adolescents (e.g., "I like the feeling of standing next to the edge on a high place and looking down"). For each item, respondents are asked to indicate, on a four-point scale, the extent to which the item describes them (1 = "describes me very well" to 4 = "does not describe me at all"). Three of the items are reverse keyed in order to avoid an affirmation bias (DeVellis, 1991). Following reverse-keying of these three items, all items are again reverse scored and then totaled such that higher scores indicate greater levels of intensity seeking (see Arnett, 1994). Overall, the full scale AISS has strong face validity and a clear and logical theoretical rationale (Zarevski, Marusic, Zolotic, Bunjevac, & Vukosav, 1998). There are two subscales of the full scale AISS: intensity seeking and novelty seeking supported through factor analysis (Haynes, Miles, & Clements, 2000). Comeau et al. (2001) showed that the relation between SS and enhancement drinking in youth (cf. Cooper, 1994) is limited to the intensity seeking component of SS (Arnett, 1994). Thus, I chose to administer only the AISS-I items in the present study. The AISS-I (intensity subscale) has been shown to have good concurrent validity with measures of alcohol/drug use in respondents as young as 12 years of age (e.g., Stewart, Comeau, & Loba, 2000).

3.5 Procedure

This study was approved by the Dalhousie University Health Sciences Research Ethics Board. Prior to the study, information about the study was distributed to

parents/guardians of students in grades 8-12 in a participating school in the Annapolis Valley District School Board. Parents were asked to contact the researcher or the school guidance counsellor for any further information about the study and were asked to let the researcher/guidance counsellor know if they did not consent to having their child participate. They were provided with a toll free number to contact the researcher. There were no parents who declined consent for their children to participate. Prior to testing, students were informed about the nature of the study, and willing students provided written informed consent at the time of the survey. Students were informed that the purpose of the survey was two-fold. First, the survey would be used to investigate differences between boys and girls. The survey would provide a necessary replication of the initial background study and test the robustness of the previous findings in a new sample (Comeau et al., 2001). Second, the Study 1 survey would be used to screen for eligible girls to participate in qualitative interviews in Study 2 (see Chapter 4). The Survey Student Consent Form (see Appendix A) provided students with information about the purpose of the survey, as well as the voluntary and confidential nature of the survey. Students were allowed to decline participation and, with permission of the classroom teacher, could go to the school library (under supervision of the librarian) while others were completing the survey. Approximately one dozen students opted not to participate (i.e., about a 99% participation rate). The school waived written parental authorization for the survey component of the research, opting instead for the "negative consent" procedure described above, in light of the fact that written parental authorization was required for the qualitative interviews (for which the survey functioned as a screening tool).

Data collection was conducted on a grade-level-by-grade-level basis during class time, with the permission and input of the school principal and school guidance counselor. It was reasoned that the use of class time in conducting the survey linked research goals with educational opportunities. For example, following survey administration, I offered a brief overview of how psychology research happens and students had an opportunity to ask questions regarding the questionnaire. No feedback was given regarding individual student scores. Teachers had the option of remaining in the classroom at the time of the survey. Measures were administered in a standard order consistent with my earlier study (Comeau et al., 2001). The order was as follows: CASI; STAIC-T; AISS-I; demographics questionnaire; and DMQ-R. During questionnaire completion, students were permitted to ask questions of the researchers.

3.6 Results

3.6.1 Sample Means

As previously noted, Study 1 involved a final sample of 841 adolescents (399 females, 442 males; M age = 15.4 years). The entire school population was invited to participate. Missing values replacement for those with less than 20 percent missing data were completed by calculating an item mean across that individual's scores on a given scale, and replacing the missing values with the scale's item mean. This was done for the CASI, STAIC-T, AISS-I, and the four DMQ-R subscales. With respect to missing data on the demographics measure, if a participant was missing data on the gender variable, they were dropped from the study given the importance of the gender variable in the current study. If any other demographic data was missing, it was replaced with the gender-specific mean on the missing variable. In addition to those eliminated on the

basis of missing gender information, only those cases with greater than 20 percent missing data or complete questionnaires missing were eliminated. Of the final sample of 841 participants, 604 (71.8%) self-reported using alcohol in the previous four months on the demographics questionnaire. Sample means and standard deviations for the personality and alcohol use motive measures for the total sample of drinkers are shown in Table 1 along with possible range of values for each measure.

Table 1

Means (and SDs) on Personality and Alcohol Use Motives, and bivariate Correlations
between Personality Measures and Alcohol Use Motives in the total sample of drinkers
(N = 604).

Personality Measures

CASI STAIC-T AISS-I Mean SD **Drinking Motives** 1.8 0.9 Coping 0.104*0.168**** 0.079 0.127*** 0.082* 1.5 0.8 Conformity 0.121*** 0.035 0.080* 0.214*** 2.7 1.4 Enhancement Social 0.085* 0.107** 0.216**** 2.6 1.3 35.0 27.5 Mean 27.3 SD 7.5 5.0 5.7

Notes: Personality Measures: CASI = Childhood Anxiety Sensitivity Index (Silverman et al., 1991); STAIC-T = State Trait Anxiety Inventory for Children-Trait subscale (Spielberger et al., 1973a,b); AISS-I = Arnett Inventory of Sensation Seeking-Intensity subscale (Arnett, 1994). Alcohol Use Motives assessed with the Drinking Motives Questionnaire-Revised (Cooper, 1994). Total scores for the CASI can range from 18 – 54, with higher scores indicating greater AS. Total scores for the STAIT-C can range from 20 - 60, with higher scores indicating greater trait anxiety. Total scores for the AISS-I can range from 10 - 40, with higher scores indicating higher levels of intensity seeking. Scores on each of the DMQ-R scales can range from 1 – 5, with higher scores indicating more frequent drinking for the reason indicated. Significance levels of the correlation coefficients are indicated with asterisks: *p<.05; **p<.01; ***p<.005; ****p<.005.

Sample means compare well to those of previously tested adolescent samples (cf. Comeau et al., 2001; Cooper, 1994; Silverman et al., 1991; Simons et al., 1998; Spielberger et al., 1973a; Zarevski et al., 1998).

3.6.2 Bivariate Correlations

Table 1 also presents bivariate correlations between the three personality variables and the four motive scores for alcohol use in the total sample of drinkers (boys and girls combined). As can be seen in Table 1, CASI scores were correlated with conformity motives. CASI scores also showed slight correlations with coping and social motives. STAIC-T scores were correlated with coping and conformity motives. STAIC-T scores also showed slight correlations with social and enhancement motives. AISS-I scores were correlated with enhancement and social motives, and to a lesser extent with conformity motives.

Table 2 presents bivariate correlations between the three personality variables and the four motive scores for alcohol use among adolescent girls. As can be seen in Table 2, CASI scores were correlated only with conformity motives. STAIC-T scores for girls were correlated with coping motives, and to a lesser extent, conformity and social motives. STAIC-T scores also showed a weak positive correlation with enhancement motives among girls. AISS-I scores were strongly correlated only with enhancement and social motives among the girls.

Table 2

Means (and SD's) on Personality and Alcohol Use Motives, and bivariate Correlations
between Personality Measures and Alcohol Use Motives for girl drinkers (n = 285).

Personality Measures

Drinking Motives	CASI	STAIC-T	AISS-I	Mean	SD
Coping	0.088	0.237****	0.075	1.7	0.9
Conformity	0.168***	0.193***	0.023	1.4	0.7
Enhancement	0.011	0.135*	0.196***	2.7	1.3
Social	0.089	0.192***	0.162**	2.6	1.3
Mean	28.1	36.8	25.5		
SD	5.3	7.1	4.1		

Notes: Personality Measures: CASI = Childhood Anxiety Sensitivity Index (Silverman et al., 1991); STAIC-T = State Trait Anxiety Inventory for Children-Trait subscale (Spielberger et al., 1973a,b); AISS-I = Arnett Inventory of Sensation Seeking-Intensity subscale (Arnett, 1994). Alcohol Use Motives assessed with the Drinking Motives Questionnaire-Revised (Cooper, 1994). Total scores for the CASI can range from 18 – 54, with higher scores indicating greater AS. Total scores for the STAIT-C can range from 20 - 60, with higher scores indicating greater trait anxiety. Total scores for the AISS-I can range from 10 - 40, with higher scores indicating higher levels of intensity seeking. Scores on each of the DMQ-R scales can range from 1 – 5, with higher scores indicating more frequent drinking for the reason indicated. Significance levels of the correlation coefficients are indicated with asterisks: *p<.05 **p<.01 ***p<.005 *****p<.005.

Table 3 presents bivariate correlations between the three personality variables and the four motive scores for alcohol use among adolescent boys. As can be seen in Table 3, CASI scores were correlated only with coping and conformity motives. Similarly, STAIC-T scores were correlated only with coping and conformity motives. AISS-I scores were strongly correlated only with enhancement and social motives among the boys (see Table 3).

Table 3

Means (and SD's) on Personality and Alcohol Use Motives, and bivariate Correlations

between Personality Measures and Alcohol Use Motives for boy drinkers (n = 319).

Personality Measures

Drinking Motives	CASI	STAIC-T	AISS-I	Mean	SD
Coping	0.126*	0.136*	0.068	1.8	0.9
Conformity	0.120*	0.113*	0.069	1.5	0.6
Enhancement	0.058	0.054	0.237****	2.7	1.4
Social	0.090	0.058	0.264****	2.7	1.4
Mean	26.6	33.3	29.3		
SD	6.0	7.5	5.1		

Notes: Personality Measures: CASI = Childhood Anxiety Sensitivity Index (Silverman et al., 1991); STAIC-T = State Trait Anxiety Inventory for Children-Trait subscale (Spielberger et al., 1973a,b); AISS-I = Arnett Inventory of Sensation Seeking-Intensity subscale (Arnett, 1994). Alcohol Use Motives assessed with the Drinking Motives Questionnaire-Revised (Cooper, 1994). Total scores for the CASI can range from 18 - 54, with higher scores indicating greater AS. Total scores for the STAIT-C can range from 20 - 60, with higher scores indicating greater trait anxiety. Total scores for the AISS-I can range from 10 - 40, with higher scores indicating higher levels of intensity seeking. Scores on each of the DMQ-R scales can range from 1 - 5, with higher scores indicating more frequent drinking for the reason indicated. Significance levels of the correlation coefficients are indicated with asterisks: *p<.05 **p<.01 ***p<.005 *****p<.0005.

The correlations between the various personality measures in the total sample of adolescents (N = 841) were examined. Replicating previous findings (e.g., Comeau et al., 2001) scores on the two anxiety-related measures (CASI and STAIC-T) were highly correlated ($\underline{r} = 0.64$, $\underline{p} < .001$). In addition, AISS-I scores were negatively correlated with scores on both the CASI ($\underline{r} = -0.15$, $\underline{p} < .001$) and the STAIC-T ($\underline{r} = -0.17$, $\underline{p} < .001$), also replicating previous findings (e.g., Comeau et al., 2001).

Correlations between the various personality measures followed a fairly similar pattern as above when they were examined separately by gender. In the total sample of

adolescent girls (n = 399), scores on the two anxiety-related measures (CASI and STAIC-T) were highly correlated (\underline{r} = 0.60, \underline{p} < .001). AISS-I scores showed marginally significant negative correlations with scores on the CASI (\underline{r} = -0.09, \underline{p} = .087) and the STAIC-T (\underline{r} = -0.08, \underline{p} = .094) in the girls. Similarly, for the total sample of adolescent boys (n = 442), scores on the two anxiety-related measures (CASI and STAIC-T) were highly correlated (\underline{r} = 0.64, \underline{p} < .001). AISS-I scores were negatively correlated with scores on the CASI (\underline{r} = -0.10, \underline{p} < .05) and marginally negatively correlated with scores on the STAIC-T (\underline{r} = -0.09, \underline{p} = .056) in the boys.

Given the significant shared variance among personality measures, it was important to determine the degree to which the bivariate correlations between the personality measures and alcohol use motives could be attributed to unique variance associated with each personality measure. Separate hierarchical multiple regressions (Tabachnick & Fidell, 1989) tested demographics and personality variables as predictors of each of the four alcohol use motives. However, in the case of the drinking motives measure (DMQ-R), scores on the four motives subscales were also moderately to highly intercorrelated in the total sample (cf., Comeau et al., 2001; Cooper, 1994). The DMQ coping subscale was highly correlated with the conformity subscale ($\underline{r} = 0.55$, $\underline{p} < .01$), the social subscale ($\underline{r} = 0.63$, $\underline{p} < .01$) and the enhancement subscale ($\underline{r} = 0.40$, $\underline{p} < .01$) and the enhancement subscale ($\underline{r} = 0.40$, $\underline{p} < .01$) and the enhancement subscale of the DMQ was highly correlated with the enhancement subscale of the DMQ was highly correlated with the enhancement subscale ($\underline{r} = 0.81$, $\underline{p} < .01$). This common variance may be best thought of as a general disposition or motive to drink alcohol (cf., Comeau et al., 2001; Cooper, 1994). Thus, residual scores representing relatively 'pure'

measures of each motive (rather than of alcohol use frequency in general) were created and used as criterion variables in the multiple regression analyses (cf. Comeau et al., 2001; Stewart & Devine, 2000; Stewart et al., 2001a; Stewart et al., 2002b). This was achieved by using the other three drinking motive subscale scores in a regression predicting the fourth (e.g., social, coping, and conformity subscale scores in a regression predicting enhancement subscale scores) and saving the residuals as variables for each participant.

3.6.3 Multiple Regression Analyses: Total Sample

In subsequent regression equations predicting each of the residual drinking motive scores in turn, demographics and personality predictors were entered in a hierarchical fashion. Demographics (age, gender, and grade in school) were entered as a block in Step 1. These are the three demographic variables that have been previously shown to be significantly related to certain drinking motives in prior research (e.g., Cooper et al., 1992; Cooper, 1994; Stewart et al., 1996; Stewart et al., 2002b). Scores on the three personality measures (i.e., AISS-I, CASI, STAIT-C) were entered as a block in Step 2 to determine if they predict residual drinking motives scores above-and-beyond demographics. Only significant and marginally significant (p < .10) findings are discussed. Standardized betas are reported throughout.

3.6.3.1 Drinking Motives: Coping

Overall, results indicated that high TA (cf. Comeau et al., 2001), low intensity seeking, older age, and earlier grade in school predicted coping motives for alcohol use among adolescents. AS did not add any additional information to predicting coping drinking (cf. Comeau et al., 2001). Taken together in the final equation, demographics

and personality measures scores explained a significant 4.4% of the variance in coping motive scores (F (6, 597) = 4.59, p<.0005) (see Table 4). In Step 1 of the regression equation, the block of demographic variables were significant predictors of residual coping motives scores ($R^2 = .022$; F (3, 600) = 4.59, p < .005). When the block of personality variables were added in Step 2, the dispositional measures predicted a significant additional 2.2% of the variance in coping motives scores (F_{inc} (3, 597) = 4.51, p < .005) (see Table 4).

As expected, and replicating my previous findings (Comeau et al., 2001), in the final regression equation, high TA was a significant univariate predictor of residual coping motives ($\beta = 0.156$, p < .005). Also, consistent with previous findings (Comeau et al., 2001), AS was not a significant predictor within the context of the other variables. A new finding (in contrast with my preliminary study) was that low intensity seeking levels were an additional significant independent predictor of coping motivated drinking ($\beta = -0.087$, p < .05). Of the three demographic measures, lower grade levels ($\beta = -0.291$, p < .0005) and higher age levels ($\beta = 0.226$, p < .005) also independently predicted coping motives in the final model.

Table 4
Summary of hierarchical multiple regressions using demographic (Block 1) and personality (Block 2) variables to predict risky Coping residualized motive scores for alcohol use in the total sample of drinkers (N = 604).

Residual Drinking Motive Score: Coping

	ΔR^2	β	SE
Demographic Predictors	.022***		
Age		.226***	0.174
Gender		.031	0.287
Grade		291****	0.196
Personality Predictors	.022***		
AISS-I		087*	0.028
CASI		065	0.029
STAIC-T		.156***	0.023
Overall F (d.f.:6, 597)	4.59***		

Notes: β = Standardized beta in final model; DMQ-R = Drinking Motives Questionnaire-Revised; AISS-I = Arnett's Inventory of Sensation Seeking-Intensity subscale; CASI = Childhood Anxiety Sensitivity Index; STAIC-T = State-Trait Anxiety Inventory for Children-Trait subscale. Significance levels of the correlation coefficients are indicated with asterisks: t p<.05; **p<.01; ***p<.005; ****p<.005.

3.6.3.2 Drinking Motives: Conformity

In the entire sample, findings revealed that AS and male gender predicted increased conformity drinking (cf. Comeau et al., 2001). In the final equation, demographics and personality measures together predicted a significant 4.0% of the variance in conformity motives (F (6, 597) = 4.20, p < .0005) (see Table 5).

Table 5

Summary of hierarchical multiple regressions using demographic (Block 1) and personality (Block 2) variables to predict risky Conformity residualized motive scores for alcohol use in the total sample of drinkers (N = 604).

Conformity	Residual Drinking Motive Score:				
Conformity	ΔR^2	β	SE		
Demographic Predictors	.029***				
Age		065	0.169		
Gender		.089*	0.280		
Grade		098	0.190		
Personality Predictors	.011 ^t				
AISS-I		.011	0.027		
CASI		.099 ^t	0.029		
STAIC-T		.012	0.022		
Overall F (d.f.:6, 597)	4.20***				

Notes: β = Standardized beta in final model; DMQ-R = Drinking Motives Questionnaire-Revised; AISS-I = Arnett's Inventory of Sensation Seeking-Intensity subscale; CASI = Childhood Anxiety Sensitivity Index; STAIC-T = State-Trait Anxiety Inventory for Children-Trait subscale. Significance levels of the correlation coefficients are indicated with asterisks: t p<.01 **p<.05 **p<.05 ***p<.005.

The block of demographic variables alone were significant predictors of residual conformity motive scores ($R^2 = .029$; F (3, 600) = 6.03, p < .0005). The block of personality variables predicted an additional, marginally significant 1.1% of the variance in residual drinking motives scores, over-and-above demographics (F_{inc} (3, 597) = 2.31, p = .07) (see Table 5).

As hypothesized and consistent with my previous findings (Comeau et al., 2001), in the final model, AS levels were a significant (albeit marginal) independent predictor (β = 0.099, p = .057) of residual conformity motives. Male gender also independently predicted conformity motives in the final model (β = 0.089, p < .05) (cf. Comeau et al., 2001).

3.6.3.3 Drinking Motives: Enhancement

Results indicated that for the overall sample, high intensity seeking predicted enhancement motivated drinking (cf. Comeau et al., 2001; Cooper, 1994). Taken together in the final equation, demographics and personality measures together predicted only 1.5% of the variance in residual enhancement motives (F (6, 597) = 1.52, n.s.). The demographic variables as a block in Step 1 did not prove significant predictors of enhancement motives ($R^2 = .004$; F (3, 600) = .790, n.s.). The dispositional measures predicted an additional, marginally significant, 1.1% of the variance in enhancement motives scores, above-and-beyond demographics (F_{inc} (3, 597) = 2.24, p = .083) (see Table 6).

As expected, and consistent with previous findings (Comeau et al., 2001) in the final model for enhancement motivated drinking, high intensity seeking was a significant predictor ($\beta = 0.085$, p < .05). In contrast to my previous findings (Comeau et al., 2001), lower CASI scores were not significantly, independently associated with higher residual enhancement motives scores, although the relationship was in the same direction as that seen in my earlier study (see Table 6). None of the demographic variables predicted enhancement motives in the context of the other variables, in the final model.

Table 6

Summary of hierarchical multiple regressions using demographic (Block 1) and personality (Block 2) variables to predict risky Enhancement residualized motive scores for alcohol use in the total sample of drinkers (N = 604).

Residual	Drinking	Motive	Score:	Enhancement
Nosiduai	DIMMIN	MOUVE	Score.	Limancement

	ΔR^2	β	SE
Demographic Predictors	.004		
Age		049	0.213
Gender Grade		028 .096	0.353 0.241
Personality Predictors	.011 ^t		
AISS-I CASI STAIC-T		.085* 075 .012	0.035 0.036 0.028
Overall F (d.f.:6, 597)	1.52		

Notes: β = Standardized beta in final model; DMQ-R = Drinking Motives Questionnaire-Revised; AISS-I = Arnett's Inventory of Sensation Seeking-Intensity subscale; CASI = Childhood Anxiety Sensitivity Index; STAIC-T = State-Trait Anxiety Inventory for Children-Trait subscale. Significance levels of the correlation coefficients are indicated with asterisks: t p<.05; **p<.01; ***p<.005; ****p<.005.

3.6.3.4 Drinking Motives: Social

Consistent with my previous study (Comeau et al., 2001), the personality factors did not contribute to socially motivated drinking. In Step 1 of the regression equation, the block of demographic variables were significant predictors of residual drinking motive scores ($R^2 = .030$; F (3, 600) = 6.14, p < .0005) (cf. Comeau et al., 2001). Even though the whole block of demographic predictors were significant, individual demographic variables were not significant. The demographic predictors in Step 1 were

grade (β = 0.087, p = .264) gender (β = 0.008, p = .836) and age (β = 0.093, p = .233). Consistent with the findings of Comeau et al. (2001), when the block of personality variables were added in Step 2, the dispositional measures failed to predict any incremental variance in residual social motives (F_{inc} (3, 597) = 2.34, n.s.). Thus, the predictors of residual social motives were not explored any further. Given that the personality variables did not add to the prediction of social motives, gender patterns in personality – drinking motives relations were not pursued in subsequent analyses for this motive.

3.7 Gender Specific Patterns: Rates of Drinking

Since the main goal of the present study was to examine gender-specific patterns of the personality – drinking motives relations, we first wanted to ensure that the girls and boys were comparable on factors such as rates of drinking and, among the drinkers, demographic variables. A "drinker" is defined as an individual who reported having consumed alcohol in the past four months prior to the survey. Rates of drinking as a function of gender are described first. Of the total sample of 399 adolescent girls, 285 (71.4%) reported using alcohol in the previous four months. Of the total sample of 442 adolescent boys, 319 (72.2%) reported using alcohol in the previous four months. Thus, rates of drinkers were very similar across gender in the present study. While it is difficult to draw inferences about adolescent drinking practices in general from any one study (Windle et al., 1996), the high rates of drinking among both girls and boys in the present study point to the perceived social acceptability of drinking among youth, and the increasing acceptability of alcohol use among teenage girls. With respect to demographic factors, the average age of girl drinkers was 15.8 (SD = 1.5) years and the average age of

boy drinkers was 15.6 (SD = 1.4) years. The average grade for both girls and boys was grade 10.0 (SD = 1.3). Thus, the girl and boy drinkers in the present study were very similar in terms of the demographic variables, permitting comparison of the personality – drinking motives relations across gender.

3.8 Gender Specific Patterns: "Risky" Motives

I investigated the predictors of the three "risky" motives in the adolescent girl drinkers and the adolescent boy drinkers separately. I conducted a set of hierarchical multiple regressions using the same predictors as in the analyses with the total sample, and using residual motive scores (derived from the original regressions with the entire sample) as the criterion variable in each analysis.

3.8.1 Coping Motivated Drinking among Girls and Boys

Results indicated that, consistent with hypothesis, TA was associated with risky coping motives for alcohol use in teenage girls but not teenage boys (cf. Comeau et al., 2001). In the final model for residual coping motives for girls, demographics and personality variables together predicted a significant 8.3% of the variance in coping motives (F (5, 279) = 5.03, p< .0005). In Step 1 of the regression equation, the block of demographic variables alone were significant predictors of residual drinking motive scores in the case of coping motives ($R^2 = .054$; F (2, 282) = 8.01, p < .0005). In Step 2, the block of personality variables were significant incremental predictors of coping motive scores (F_{inc} (3, 279) = 2.94, p < .05). The block of personality variables predicted an additional 2.9% of the variance in coping motives scores over-and-above demographics (see Table 7).

In the final model for coping motivated drinking for girls, high TA was a significant predictor (β = 0.214, p < .005). Neither AS nor intensity seeking was a significant incremental predictor of coping motivated drinking in girls. Of the demographic predictors, earlier grade levels (β = -0.434, p < .0005) and older age levels (β = 0.426, p < .0005) were also significant incremental predictors for coping motivated drinking in girls.

Findings revealed that low intensity seeking was related to coping motives in boys, but not girls. In the final model for coping motives for boys, demographics and personality variables together predicted a significant 4.0% of the variance (F (5, 313) = 2.59, p< .05). In Step 1, the block of demographic variables alone was not a significant predictor of residual coping motive scores ($R^2 = .014$; F (2, 316) = 2.23, n.s.). In Step 2 of the regression equation, the block of personality variables was a significant incremental predictor of coping motive scores (F_{inc} (3, 313) = 2.80, p < .05). The block of personality variables predicted an additional 2.6% of the variance in residual drinking motives scores over-and-above demographics (see Table 7). In the final model for coping motivated drinking for boys, low intensity seeking was a significant predictor (B = -0.122, p < .05) of coping motives. None of the other variables, including TA, proved significant predictors of coping motivated drinking among the adolescent boys.

Summary of hierarchical multiple regressions using demographic (Block 1) and personality (Block 2) variables to predict DMQ-R Coping residual motive scores separately in the girl drinkers (n = 285) and boy drinkers (n = 319).

	Girl D	rinkers	Воу Г	Boy Drinkers		
	R^2	β	SE	ΔR^2	β	SE
Coping Demographic Predictors	.054***	•		.014		
Age		.426****	0.234		.017	0.261
Grade		434***	0.268		133	0.289
D 14 D 15	020*			00.04		
Personality Predictors AISS-I	.029*	.000	0.046	.026*	122*	0.036
CASI		112	0.045		006	0.039
STAIC-T		.214***	0.033		.103	0.031
Overall model F (d.f.)	5.03**	*** (5, 279)		2.59*	(5, 313)	

Notes: β = Standardized beta in final model; DMQ-R = Drinking Motives Questionnaire-Revised; AISS-I = Arnett's Inventory of Sensation Seeking-Intensity subscale; CASI = Childhood Anxiety Sensitivity Index; STAIC-T = State-Trait Anxiety Inventory for Children-Trait subscale. Significance levels of the correlation coefficients are indicated with asterisks: *p<.05 ***p<.005 ****p<.0005.

3.8.2 Conformity Motivated Drinking among Girls and Boys

Findings showed that in direct contrast to hypothesis, high AS was a significant predictor of conformity motivated drinking for girls, not boys. In the final model for residual conformity motives for girls, demographics and personality variables together predicted a significant 6.4% of the variance in conformity motives (F (5, 279) = 3.76, p< .005). In Step 1 of the regression equation, the block of demographic variables alone

were significant predictors of residual conformity drinking motive scores (R^2 = .041; F (2, 282) = 5.96, p < .005) (see Table 8). In Step 2, the block of personality variables were marginally significant incremental predictors of conformity motive scores (F_{inc} (3, 279) = 2.25, p < .10). The block of personality variables predicted an additional 2.3% of the variance in conformity motives scores over-and-above demographics (see Table 8). In the final model for conformity motivated drinking for girls, high AS was the only significant univariate predictor (β = 0.158, p < .05).

Table 8

Summary of hierarchical multiple regressions using demographic (Block 1) and personality (Block 2) variables to predict DMQ-R Conformity residual motive scores separately in the girl drinkers (n = 285) and boy drinkers (n = 319).

	Girl Drinkers			Boy D	Boy Drinkers		
Conformity	R^2	β	SE	ΔR^2	β	SE	
Demographic Predictors Age	.041**	** 099	0.236	.009	022	0.249	
Grade		125	0.270		085	0.276	
Personality Predictors AISS-I	.023 ^t	017	0.046	.006	.027	0.034	
CASI		.158*	0.045		.049	0.049	
STAIC-T		014	0.033		.033	0.033	
Overall model F (d.f.)	3.76 (5, 279)		0.96 (5, 313)		

Notes: β = Standardized beta in final model; DMQ-R = Drinking Motives Questionnaire-Revised; AISS-I = Arnett's Inventory of Sensation Seeking-Intensity subscale; CASI = Childhood Anxiety Sensitivity Index; STAIC-T = State-Trait Anxiety Inventory for Children-Trait subscale. Significance levels of the correlation coefficients are indicated with asterisks: t p<.05 **p<.01 ***p<.005 ****p<.005.

In the final model for conformity motives for boys, demographics and personality variables together did not predict a significant percentage (1.5%) of the variance in conformity drinking (F (5, 313) = 0.96, n.s.). In Step 1, the block of demographic variables alone was not a significant predictor of residual conformity motive scores ($R^2 = .009$; F (2, 316) = 1.47, n.s.). In Step 2 of the regression equation, the block of personality variables was not a significant incremental predictor of residual conformity motive scores (F_{inc} (3, 313) = 0.62, n.s.). The block of personality variables predicted only an additional 0.6% of the variance in residual conformity motives scores over-and-above demographics (see Table 8). In the final model for conformity motivated drinking for boys, there were no significant univariate predictors (see Table 8).

3.8.3 Enhancement Motivated Drinking among Girls and Boys

Results also indicated that, in direct contrast to hypothesis, intensity seeking girls but not intensity seeking boys are prone to "risky" enhancement motivated alcohol use. In the final model for residual enhancement motives for girls, demographics and personality variables together predicted a non-statistically significant 2.8% of the variance in enhancement motives (F (5, 279) = 1.62, n.s.). In Step 1 of the regression equation, the block of demographic variables alone were not significant predictors of girls' residual enhancement motive scores ($R^2 = .006$; F (2, 282) = 0.92, n.s.) (see Table 9).

However, in Step 2, the block of personality variables were a marginally significant incremental predictor of residual enhancement motive scores (F_{inc} (3, 279) = 2.07, p < .10). The block of personality variables predicted an additional 2.2% of the variance in enhancement motives scores over-and-above demographics (see Table 9). In

the final model for enhancement motivated drinking for girls, high intensity seeking was the only significant (albeit marginal) univariate predictor ($\beta = 0.102$, p < .10).

Table 9

Summary of hierarchical multiple regressions using demographic (Block 1) and personality (Block 2) variables to predict DMQ-R Enhancement residual motive scores separately in the girl drinkers (n = 285) and boy drinkers (n = 319).

	Girl Drinkers			Boy Drinkers		
T. I.	R^2	β	SE	ΔR^2	β	SE
Enhancement Demographic Predictors Age	.006	112	0.282	.019*	.010	0.329
Grade		.055	0.323		.126	0.364
Personality Predictors AISS-I	.022 ^t	.102 ^t	0.055	.005	.058	0.045
CASI		102	0.054		054	0.049
STAIC-T		003	0.040		.018	0.039
Overall model F (d.f.)	1.62 (5, 2	279)		1.57 (5,	313)	

Notes: β = Standardized beta in final model; DMQ-R = Drinking Motives Questionnaire-Revised; AISS-I = Arnett's Inventory of Sensation Seeking-Intensity subscale; CASI = Childhood Anxiety Sensitivity Index; STAIC-T = State-Trait Anxiety Inventory for Children-Trait subscale. Significance levels of the correlation coefficients are indicated with asterisks: t p<.01 *p<.05 **p<.01.

In the final model for enhancement motives for boys, demographics and personality variables together predicted a non-statistically significant 2.5% of the variance (F (5, 313) = 1.57, n.s.). In Step 1 of the regression equation, the block of demographic variables alone were significant predictors of residual drinking motive scores in the case of enhancement ($R^2 = .019$; F (2, 316) = 3.05, p < .05). Even though

the whole block of demographic predictors were significant, individual demographic variables were not significant. The demographic predictors in Step 1 were grade (β = 0.132, n.s.) and age (β = 0.007, n.s.). In Step 2 of the regression equation, the block of personality variables was not a significant incremental predictor of coping motive scores (F_{inc} (3, 313) = .59, n.s.). The block of personality variables predicted only an additional 0.5% of the variance in residual drinking motives scores over-and-above demographics (see Table 9). In the final model for enhancement motivated drinking for boys, there were no significant univariate predictors.

3.9 Discussion

3.9.1 Replication of Previous Findings

Results of Study 1 replicate previous findings that the personality risk factors of AS, TA, and SS are associated with "risky" reasons for adolescent alcohol use (Comeau et al., 2001). In general, the personality variables were more strongly predictive of risky drinking motives than were demographics (Stewart & Devine, 2000). Nonetheless, personality still accounted for only a relatively small proportion of the total variance for these drinking motives (cf. Stewart et al., 2002b). This finding is not surprising when one considers that many factors (including but not limited to personality factors) contribute to risky drinking behavior (e.g., see for example Kutcher's (1994) model of adolescent risk-taking behavior).

For the entire Study 1 sample (boys and girls combined), multiple regression analyses revealed that the block of personality variables predicted each of the "risky" alcohol use motives (i.e., coping, conformity, and enhancement motives; Cooper, 1994) over-and-above demographics (cf. Comeau et al., 2001). High TA predicted coping

motives for alcohol use among adolescents while AS did not add any additional information to predicting coping drinking (cf. Comeau et al., 2001). In contrast, AS alone predicted increased conformity drinking while TA did not add any additional information to predicting conformity drinking (cf., Comeau et al., 2001). In addition, high intensity seeking (a component of SS; Arnett, 1994) predicted enhancement motivated drinking (cf. Comeau et al., 2001; Cooper, 1994). In contrast with the preliminary study (Comeau et al., 2001) low levels of AS were not associated with increased enhancement motivated drinking above high intensity seeking (cf. Comeau et al., 2001). A new finding in this study indicated that low intensity seeking levels independently predicted coping motivated drinking in the total sample. These minor differences in both cases involved findings pertaining to intensity seeking. As noted previously, my earlier study (Comeau et al., 2001) showed that previously-documented relations between high SS and enhancement drinking motives appeared limited to the intensity-seeking (as opposed to novelty-seeking) component of SS (Arnett, 1994). Thus, in the present study, I changed to an "off-scale" measure of intensity seeking where the AISS-I items were administered without the other AISS (i.e., novelty seeking) items. Therefore, I could not control for the influence of the other 10 AISS-novelty seeking items as I had in my earlier study. Furthermore, for this same reason, slight changes in measurement of the intensity seeking construct might be responsible for these differences across studies, since my original study used the AISS full scale.

Developmental factors may explain why both anxiety-related variables (AS and TA) independently predict coping motives for alcohol among previously tested adults (Stewart et al., 1997a; Stewart, Taylor, & Baker, 1997b; Stewart & Zeitlin, 1995) yet AS

was unrelated to coping motives among adolescents. Anxiousness, per se, may be important in motivating coping-related alcohol use in both adolescence (Comeau et al., 2001) and adulthood (Stewart et al., 1997a; Stewart & Zeitlin, 1995), whereas fear of anxiety symptoms may become increasingly influential in contributing to coping motivated drinking in the young adult years. More research (cross-sectional and longitudinal) should be conducted to identify the point during development where AS begins to independently impact coping motivated drinking over and above TA.

Previous findings were replicated of relations between SS (intensity seeking component; Arnett, 1994) and enhancement drinking in youth (cf. Comeau et al., 2001; Cooper, 1994). Cooper (1994) demonstrated that enhancement-motivated alcohol use in teens is associated with drinking in social settings where heavy use might be tolerated, or even encouraged by peers (e.g., underage drinking in bars). Recent research indicates that both female and male youth in Canada participate actively in activities such as drinking, partying, and socializing (Van Roosmalen & Krahn, 1996). Social context factors may explain why the expected association between SS and enhancement motives was observed for alcohol use (Comeau et al., 2001; Cooper, 1994; Stewart & Devine, 2000). Ratliff and Burkhart (1984) found that heavy drinking young adults exhibited high levels of SS. Beck, Thombs, Mahoney, and Fingar (1995) similarly found that high intensity teen drinkers scored high in SS and were more likely to drink in a context of "social facilitation". They defined high intensity drinkers as those teens who: (a) drank alcohol on at least a weekly basis, (b) consumed at least five drinks on a typical occasion, and (c) became 'drunk' on at least a monthly basis (Beck et al., 1995). Social context might engender desire for more positive affect among intensity seekers, and intensity

seeking teens might therefore drink in such contexts for reasons of increasing internal positive emotional states. It is also possible that intensity seeking teens may be more strongly motivated to drink for enhancement reasons because of their stronger beliefs in alcohol's capacity to facilitate positive emotional experiences (cf. Cooper et al., 1995). While social context might trigger beliefs that alcohol will enhance positive mood, intensity seeking teens might also encourage each other to drink for alcohol's intoxicating effects. Indeed, research suggests that SS plays a role in the formation of peer clusters involving the affiliation of high SS teens with one another (Oetting & Beauvais, 1986, 1987), possibly through mutual attraction to activities involving novelty and risk (Donohew, Hoyle, Clayton, Skinner, Colon, & Rice, 1999). Given that high SS teens search for intense, novel, and exciting situations, the selection of friends may, in itself, be an SS activity. Future research should explore whether the association of intensity seeking with enhancement motivated use of alcohol occurs only in certain types of social contexts (e.g., when a teen is accompanied by other high SS, heavy alcohol-using peers). Also considering the potential sources of stimulation (both positive and negative) that high SS friends may be providing to an SS teen, early intervention efforts might be improved by taking into account peer network factors, as well as individual variables (cf. Donohew et al., 1999).

High levels of AS were not significantly associated with decreased enhancement motives for alcohol use, thus failing to replicate previous research (Comeau et al., 2001). Thus we did not find evidence to support McNally's (1996) prediction that high AS youth would avoid the use of alcohol for its pharmacological psycho-stimulant or "enhancement" effects (Stewart et al., 1997a) (i.e., baseline heart rate acceleration; see

Peterson, Pihl, Séguin, Finn, & Stewart, 1993) which they might find aversive. Given the inconsistent findings regarding AS and enhancement motives across my two studies, I believe that the association between AS and enhancement motives requires further investigation.

3.9.2 Extension of Previous Findings: Gender Effects

While the current study replicates previous findings that TA is associated with risky coping motives for alcohol use in teenage girls (Comeau et al., 2001), unexpectedly, high AS was a significant predictor of conformity motivated drinking for girls, not boys. This finding was surprising given the previous documentation of relatively high levels of AS "social concerns" among male adolescents and young adults (e.g., Stewart et al., 1997b; McWilliams, Stewart, & MacPherson, 2000; Walsh et al., in press).

Adolescent girls may be more susceptible than boys to certain types of aversive external social pressures (e.g., unwanted sexual harassment) occurring in the types of social settings where heavy alcohol use may be condoned (e.g., at weekend parties). AS girls may be motivated to drink to avoid/escape the uncomfortable nervous feelings or fear which such aversive social pressures create (Miller & Downs, 1995). In speculating why the AS – conformity motives relation was significant only for girls, it is also important to point out previous writings on the importance of 'negative affectivity' (i.e., proneness to experiencing negative emotions like anxiety and depression) in women's problem drinking behavior (Beckman, 1975; Wilsnack & Wilsnack, 1995). For example, depression is more commonly diagnosed in alcoholic women than alcoholic men (Wilsnack & Wilsnack, 1995). Thombs, Beck, and Mahoney (1993) found that young women who drink heavily typically do so to alleviate negative affective states,

particularly anxiety, depression, and feelings of worthlessness. Brennan, Walfish, and AuBuchon (1986) found that, among female college students, quantity/frequency of alcohol use and frequency of drunkenness were positively correlated with a cluster of 'negative affectivity' variables, such as loneliness, frustration, depression, boredom, hopelessness about the future, and emotional distress. These relationships were not found among male students. See Hill (1995) for a review of sociocultural factors (i.e., social material conditions) that determine the likelihood that women will drink and the manner in which they drink. In the present study, the TA – coping motives and the AS – conformity motives gender patterns suggest that anxiety-related personality factors are more predictive of negative reinforcement drinking motives for girls than they are for boys. Negative reinforcement drinking motives among adolescent high TA/high AS girls may well prove to be powerful predictors of later-life drinking problems. It would be interesting to test if these motives mediate the greater rates of alcohol problems in high TA/high AS girls as older adolescents or adults. Studies using prospective designs in both clinical and non-clinical populations will be required to examine this issue more definitively. Qualitative research methodologies exploring broader issues shaping anxious girls' relationships to and behavior with alcohol are recommended. A substantive component of the qualitative Study 2 (Chapter 4) focuses specifically on AS girls' understandings of their relationship with alcohol, particularly in connection with tension reduction and social conformity as reasons for drinking.

In general, my findings suggest that elevated anxiety-related personality characteristic levels may increase the overall likelihood of girls' drinking for negative-reinforcement reasons (i.e., coping or conformity motives). These motives in turn may

contribute to more problematic drinking behavior (Cooper et al., 1995; Stewart et al., 2001b). These findings point to anxiety-related personality factors (TA and AS) as being particularly salient to girls' negative reinforcement drinking motives (coping and conformity, respectively).

Results of Study 1 also indicate that intensity seeking girls, but not intensity seeking boys, are prone to "risky" enhancement motivated alcohol use. The broader construct of SS has been associated with elevated enhancement motivated drinking among adolescents (Cooper et al., 1995; Stewart & Devine, 2000). Male gender also has been strongly predictive of increased drinking for enhancement motives (Cooper, 1994) and of heavy drinking in adolescents (Cooper et al., 1995). So I reasoned that intensity seeking, as a component of the broader construct of SS, would predict enhancement motivated drinking in boys more than girls. Interestingly, I found just the opposite: high intensity seeking predicted (albeit marginally) enhancement motivated drinking for girls, not boys. In attempting to understand this unexpected finding, it may be important to note that Beck et al. (1995) found that heavy drinking males were more likely than others to drink in a context of "sex seeking". It is possible that the intensity seeking – enhancement motives relation in the present study was not significant for boys because the enhancement drinking motives measure used (i.e., DMQ-R enhancement motives scale; Cooper, 1994) does not include items that specifically pertain to motivations to use alcohol to enhance sex (only about using alcohol to enhance positive emotional states). In comparison to what has been found for teenage boys, Ratcliff and Burkhart (1984) found a tendency among female college students to drink to enhance social pleasures. The enhancement motives scale on the DMQ-R may simply better tap the enhancement

outcomes desired by high intensity seeking female adolescents (e.g., "Because it's fun"), compared to those desired by high intensity seeking male adolescents.

Currently, significant gaps exist in our knowledge of drinking among high SS teenage girls, especially those in rural settings. However, my findings suggest that those girls who desire intense experiences are the girls who are more likely to drink to get high. I do not have a strong theory to explain why this relation was unique to girls as opposed to boys. The absence of such theory points to the strong need for future research to replicate this result and for other studies to examine mechanisms to explain the gender pattern. Moreover, even though the results of Study 1 suggest that intensity seeking is particularly important in explaining enhancement motivated drinking in adolescent girls, the specific needs of high intensity seeking girls have not yet received the attention necessary to suggest specific intervention strategies that would benefit them. A qualitative investigation of the drinking motives and drinking behavior of high intensity seeking girls is thus needed to better inform the development of such early intervention strategies for this at-risk group.

Study 1 findings showed that low intensity seeking was related to coping motives in boys, but not girls. This association was not expected in either gender. Prior research suggests that SS is negatively related to social fears or concerns about embarrassment for boys but not girls (Blankstein, 1975). Thus, the unexpected low intensity seeking — coping motives relation observed in the boys may well be the male equivalent of the TA — coping motives relation observed in the girls in the present study. Future studies might further investigate the association between low intensity seeking and coping motives for adolescent boys and also examine whether the link might be better explained by another

personality variable of interest not tapped in the present study (e.g., high social anxiety). High social anxiety might be a particularly interesting personality factor to investigate in this regard given that previous research links social anxiety with greater use of avoidant coping strategies (McCrae & Costa, 1986) and coping motivated drinkers tend to be self-conscious, anxious, and vulnerable (Stewart et al., 2001b; Stewart & Devine, 2000). Drinking alcohol to avoid or escape negative affective states may be but one of several maladaptive coping strategies employed by low intensity seeking, socially anxious teenage boys in attempts to deal with their more frequent experiences of negative affect.

3.9.3 Clinical Implications

Study 1 findings support the distinction between the two pathways of AS/TA to coping and conformity (negative reinforcement) motives versus intensity seeking to enhancement (internal, positive reinforcement) motives, and reveal these pathways are particularly salient for adolescent girls. All of the expected personality-motives pathways were significant in girls but not boys. This suggests the possibility that, at least among adolescents, personality factors may be more relevant for the reasons for drinking of girls than for boys. Personality factors are stable individual differences that influence behavior across situations. The present pattern of findings suggest the possibility that internal factors (personality) may be more relevant for adolescent girls' drinking whereas other factors, possibly external (such as social context), may be more relevant for adolescent boys' drinking.

Important developmental differences exist among children and adolescents and there seems to be a consensus that interventions cannot be applied with equal effectiveness across individuals of all ages (Kendall & Choudhury, 2003). The

developmental tasks for boys and girls differ (Amaro et al., 2001). For example, there are differences in cognitive processes including self-awareness of one's own temperament and personality (Baer & Bray, 1999). Although it was demonstrated that the girls and boys were equivalent in chronological age in the present study, the gender groups were not matched for overall level of cognitive development (see Kendall & Choudhury, 2003). If the girls were more developmentally mature on average than the boys, this may have translated into a greater awareness of their own personality characteristics and/or their own reasons for drinking, leading to more "valid" responses on the personality and/or drinking motives measures for the girls than for the boys. In turn, this would translate into a more "valid" (i.e., less error prone) picture of the relations of personality factors to drinking motives in the girls compared to the boys. This notion could be tested in a couple of ways. First, the validity of the personality and drinking motives measures (in predicting useful aspects of behavior) could be tested as a function of gender at each of several age ranges throughout adolescence to determine if the measures are more valid for girls than boys at the earlier phases of adolescence. Second, the relations between personality and drinking motives could be tested in future as a function of gender at each of several age ranges throughout adolescence to determine if the stronger relations in girls than boys are only evident at the earlier phases of adolescence. Finally, it should be noted that even if this speculation were true, the study would still have the same clinical implications since the personality measures would likely only be useful for selecting adolescent girls for relevant early interventions. Presumably there would be too much error in the responses of boys to these measures, at least in the younger adolescent age ranges.

It should be cautioned that there was a relatively low magnitude of relations between the personality factors and the drinking motives. For example, the maximum variance in residual motives scores predicted by the demographics and personality variables together in the final model was just over 8% (i.e., for residual coping motives among the girls). Thus, there are other things also going on when it comes to being an adolescent girl and drinking, such as socio-cultural influences including familialenvironmental factors (e.g., Hill, 1995) and social forces of oppression (e.g. childhood victimization; Miller & Downs, 1995). The Study 1 findings are nevertheless important in demonstrating gender specific-patterns between certain personality factors and risky reasons for alcohol use, many of which have not been reported previously, and which might have important implications for early intervention. Results revealed significant connections between the anxiety variables and coping and conformity motives for girls, but not boys. Significant connections were also discovered between intensity seeking and enhancement motivated drinking for girls, but not for boys. I find these exploratory findings particularly exciting because they indicate that the associations of AS and TA to coping and conformity motives, and intensity seeking to enhancement motives are particularly salient for teenage female drinkers.

Study 1 findings support the association between anxiety related personality variables to risky coping and conformity motives and intensity seeking to enhancement motives. These results suggest the hypothesis that early interventions that reduce or help manage AS/TA or intensity seeking, respectively, may also reduce adolescent girls' risky motives for alcohol use. A reduction in risky drinking motives may in turn reduce their heavy alcohol use and/or alcohol-related problems. Findings emphasize that focusing on

underlying personality factors and associated risky alcohol use motives may provide a useful way to conceptualize and operationalize these alternative pathways to problem alcohol use, particularly among adolescent girls. Thus, the understanding gleaned to date of the personality vulnerability variables' association with risky alcohol use motives among adolescents can be used to design and test motive-specific, brief interventions for alcohol using teenage girls (see Chapter 5).

Although the use of multiple regression analysis allows strong inference and the description of the results may imply causality, Study 1 results do not confirm or prove causal relationship between the variables. An investigation of the causal nature of the relationships of personality and drinking motives using Cooper's (1994) model will require both longitudinal and intervention studies using randomized, controlled designs. Longitudinal studies would allow the researcher to follow those children with a given personality risk factor to determine whether they develop the associated drinking motive at higher rates than others when entering adolescence. Longitudinal studies would also allow researchers to determine if these high personality risk teens also develop higher rates of heavy drinking and drinking problems over time by virtue of their maladaptive drinking motivations. Randomized, controlled intervention studies would allow researchers to determine whether early interventions focusing on reducing risky drinking motives in adolescents at high personality risk actually result in decreases in alcohol use and alcohol problems and whether such behavioral changes are mediated by reduction in risky drinking motives. In addition, it should be noted that there are heavy and problem drinking adolescent females who are not characterized by the personality variables of AS, TA, or intensity seeking. The relative degree of prediction of the personality constructs

might be strengthened by inclusion of other theoretically relevant personality variables in future research (e.g., hopelessness, impulsivity; see Conrod et al., 2000b). Results of Study 1 nonetheless underscore that attention to gender in future research is necessary to better understand the impact of personality and motivational effects on adolescent alcohol use.

3.9.4 Study Limitations

There are several potential limitations to the present study. First, the sample included individual participants from only one school rather than drawing from a representative sample of schools, so results may not be generalizable. The convenience sample used in the current study has limitations not found in a stratified cluster sample design (e.g., Poulin & Elliot, 1997; Poulin & Graham, 2001). A single-stage cluster sample of randomly selected classes stratified by grade and school district or board would account for the possibility that one single school population is a culture unto itself thus resulting in a biased sample (cf. Poulin & Graham, 2001). However, results with the total sample (boys and girls combined) did provide a replication of the background study findings (Comeau et al., 2001) which did include five different schools, albeit within the same school board.

An additional study limitation pertains to the fact that the present sample was relatively homogeneous in terms of age, race, education levels, and locale (i.e., all rural dwelling youth), possibly limiting the degree to which the results can be generalized to more diverse samples (e.g., First Nations teens, lesbian, gay, and bisexual young people, youth with disabilities, or urban youth. Future research should incorporate measures of social class and ethnicity.

Study 1 was further limited in that I did not separate adolescents by age group. Previous research suggests that age may be an important variable in understanding adolescents' motivations for alcohol use. For example, Cooper (1994) found that coping motives were more strongly related to drinking problems among younger than among older adolescents. An additional practical limitation of the present study is that the same criteria were used to define alcohol use for adolescents of all ages, ethnic groups, and both genders. A number of studies have examined variations in the patterns of drinking between various racial, gender and age groups in samples of adolescents (see review in Windle et al., 1996; see also Amaro et al., 2001). Given the relative homogeneity of the sample, I chose to apply the same rather broad alcohol use criteria to all participants (cf. Bradizza et al., 1999). The alternative was to have different cut points for entry to the study for boys and girls. However, this would have placed limitations on the degree to which I could compare the results for boys versus girls. In sum, I looked at the various options for defining alcohol use and chose the best one for the purposes of the study.

A further limitation was the relatively small magnitude of some statistically significant relations between personality factors and alcohol use motives, emphasizing that (as mentioned previously) personality factors are only one of a number of variables that may influence why adolescents use alcohol for specific reasons. The study was further restricted by failure to investigate the use of drugs other than alcohol (e.g., cannabis and nicotine). Use of these substances is also problematic in teens (Hansen & O'Malley, 1996; Perry & Staufacker, 1996) and my previous research shows that motives for use of these two substances are also influenced by personality factors (Comeau et al., 2001). Moreover, patterns of use of substances other than alcohol also vary by gender

(Hansen & O'Malley, 1996; Perry & Staufacker, 1996). The approach used in the present study may be useful in future work to determine if personality – motives relations vary by gender for substances other than alcohol.

Finally, the present findings should be extended beyond self-report methods. For example, future lab-based research using adolescents in the legal drinking age range could explore whether the association of AS to conformity motivated alcohol use reflects increased susceptibility to fear of public loss of control and/or coping with social anxiety. However, issues such as drinking age limit and parental consent, for example, place additional constraints on the use of lab-based research methods with adolescents and make self-report research crucial in the search to understand adolescent alcohol use and abuse (Comeau et al., 2001). Since it is necessary to rely heavily on self-report methods in alcohol use research with teens, we need to move away from retrospective reports toward longitudinal research methodologies. For example, (as suggested earlier) we should test whether AS or TA youth are at increased risk of developing alcohol problems over time due to their heightened negative reinforcement drinking motives, and whether such findings vary by gender and by social context (e.g., social material conditions).

3.10 Summary

Results of Study 1 revealed significant connections between the anxiety variables and coping and conformity motives for girls, but not boys. Significant connections were also discovered between intensity seeking and enhancement motivated drinking for girls, but not for boys. Thus, findings from Study 1 support the adaptation of existing motive-specific brief interventions designed for clinical populations of adult women substance abusers (e.g., Conrod et al., 2000b) for use in early intervention efforts with groups of at-

risk teenage female drinkers. Specifically, interventions that reduce or help better manage AS/TA and intensity seeking, respectively, may also reduce adolescent girls' risky motives for alcohol use, which may in turn reduce their heavy drinking and/or alcohol related problems. While Study 1 findings point to TA and AS as being particularly salient to girls' negative reinforcement drinking motives (coping and conformity, respectively), I chose to focus on one of these anxiety-related personality factors for Study 2 (Chapter 4) and Study 3 (chapter 5). I chose AS as opposed to AS and TA in part to simplify the screening process for both the qualitative interviews and the interventions, respectively. In addition, I chose AS as opposed to TA alone because, like SS, AS has been shown to be predictive of increased drinking levels (Stewart et al., 1995; Stewart et al., 2001b) and a higher incidence of problem drinking symptoms (Conrod et al., 1998) in non-clinical samples of young people. In contrast, levels of trait anxiety, as previously noted, have been only modestly correlated with increased drinking levels in adults (Welte, 1985).

In the qualitative Study 2, in addition to exploring AS girls' understandings of their drinking (particularly in connection with tension reduction and social conformity as reasons for alcohol use), I also turn to intensity seeking girls' own conceptualizations of their reasons for alcohol use. [Note: In Study 2, I also use 'SS' to refer specifically to the intensity-seeking component of sensation seeking (Comeau et al., 2001)]. Feminist epistemology tells us that in a society divided by gender, girls will see and know differently from boys. As previously noted, the gendered social development of girls' existence, their activities within the world and how they are esteemed in a gender-stratified society shape their perspectives. Given the gender specific pattern of harmful

negative outcomes associated with drinking among young women (Amaro et al., 2001), it is critical to begin to know more about how broader social forces impact these two groups of at-risk adolescent girls' relationships with alcohol. Thus, in the qualitative study (Study 2), I explore how AS and SS girls' experiences of gender, personality, motives, and other social factors shape their relationships with alcohol and influence their understandings of why they drink (i.e., their socially located knowledge about their drinking). Results of qualitative Study 2 help inform the development of brief interventions that can then be tested for differential effectiveness by gender. Future qualitative research with boys regarding their own conceptualizations about alcohol use in a social context may enrich the content of brief intervention manuals tailored specifically for boys.

In the next chapter, Study 2 more fully explores the nature of AS girls' personality traits and coping and conformity motivated alcohol use, and SS girls' personality traits and enhancement motivated drinking. The qualitative study also investigates these two groups of girls' own perceptions of relations between aspects of their personality and their reasons for drinking. Results of Study 2 substantially enrich the findings of Study 1 by providing a more complete picture of internal factors (girls' own emotional states, needs, drives, etc.) and broader social factors (e.g., marginalization) influencing connections between these two distinct sets of personality factors and particular alcohol use motives for girls. Qualitative interviews provide girls with the opportunities to structure their own answers without the constraints of predetermined drinking motives categories, and to offer their own opinions regarding the nature and meaning of negative reinforcement and enhancement motivated drinking.

Chapter Four: "Why I drink? To just like let go, relax and have a good time."
4.0 Introduction

Chapter 1 raised an important question: "How do personality, motives, gender, and other social factors shape girls' relationships with alcohol?" Chapter 2 set up a feminist conceptual framework for exploring this question. Chapter 3 investigated gender patterns in personality and drinking motives revealing significant connections between the anxiety-related variables and coping and conformity motives for girls, but not boys. Significant connections were also discovered between SS and enhancement motivated drinking for girls, but not for boys. In Chapter 4, I focus on the idea of extending Study 1 findings by exploring these same issues but from girls' own perspectives. As previously noted in Chapter 3, the magnitude of relations between the personality factors and the drinking motives was relatively low. Thus, there are other things also going on when it comes to being an adolescent girl and drinking. In Study 2, I turn to girls' own conceptualizations about alcohol use in a social context and use qualitative interviews to hear from girls what they think may be going on.

Qualitative interview data add to the understanding of relations between the anxiety-related personality factors and SS with girls' motives for drinking by exploring in greater depth these girls' understandings of their alcohol use. First, I consider AS and SS girls' experiences of being girls. Themes that surface have to do with what factors may be important to these girls' understandings of their relationship with alcohol (e.g., sexuality, social expectations). Second, I explore directly at-risk girls' understandings of their reasons for drinking. I investigate the thinking of girls regarding their views on whether an association exists between their personality and their alcohol use. Third, I

explore AS and SS girls' resistance to stereotypes, culturally defined roles and social expectations, and various forms of oppression (e.g., sexual exploitation, racial discrimination, threat of violence) in consideration of their relationships with alcohol. The discussion attempts to clarify how qualitative interview data add to the understanding of relations between anxiety-related personality factors and SS with girls' reasons for drinking using the organized structure of Cooper's (1994) motivational model for alcohol use. Chapter 5 will take up how these qualitative thematic data analyses were combined with data from Study 1 to inform the development of brief interventions.

4.1 Methodology

The Dalhousie University Health Sciences Research Ethics Board approved this study. Seventeen female adolescent drinkers from a rural high school in Nova Scotia participated in sixty-minute interviews exploring their self-perceived reasons for alcohol use as well as any perceived relations of personality style to their understanding of their drinking. Girls were recruited from the overall sample of 841 in Study 1 to participate in a face-to-face interview. Surveys were identified through a research number and students were asked *not* to indicate their name on the forms. Confidentiality was protected by a numeric coding system that linked names with questionnaires (i.e., all survey data collected were identified by an assigned research identification number). Only I, as principal investigator, kept a master list linking questionnaire numbers with the names of female students interested in finding out more about the interviews. I established a toll-free phone number for the purposes of the research, should students have had any questions about the survey forms in particular or about the research project more generally. The privacy of each call was ensured.

Two groups of girl drinkers were recruited through the screening sample: 1) those with high AS and 2) those high in the "intensity" component of SS. "High" was defined as at least one standard deviation (SD) above the normative mean for their gender on one of the selection variables and at or below the mean on the other. This rule for selection ensured distinct sets of personality groups. Both groups were recruited from among the girls who were drinkers. As in Study 1, a "drinker" was defined as an adolescent who had consumed at least one alcoholic beverage in the past four months. One alcoholic beverage equals one 12 oz. (355 ml.) bottle/can of beer, or one small 4 oz. (118 ml.) glass of wine, or one 1- oz. (29.6 ml.) shot of hard liquor, either straight or with a mixer. This definition allowed for wide variation in drinking behavior, i.e., infrequent light drinking to regular, heavy drinking. Clearly non-drinkers were excluded from an interview as they wouldn't have been able to answer the questions (see Appendix B: Interview Guide).

In order to protect the students from being singled out and labeled (e.g., as problematic drinkers or otherwise), each survey was numbered at the top with no space for name or any identifying information whatsoever. At the time of survey administration, students were informed that volunteers were needed to participate in interviews with me. Students were asked to complete a student interest sheet where there was a section asking whether or not they were interested in participating in an interview (see Appendix C: Interview Information Sheet). This student interest sheet was also numbered with the same number as on each respective questionnaire pack. (The parent authorization forms were numbered in the same way). I explained that interviews would be conducted for the purpose of learning more about adolescent girl's views regarding alcohol. I also noted that the aim of the research was to develop future alcohol abuse

prevention efforts that would be more meaningful to the lives of young women. It was further explained that completing the form did not mean that they had to attend, only that they were interested in finding out more about the interview. Those who indicated that they might be interested in participating then completed a second part of the form where they wrote their name and phone number and a good time to reach them at their number. The actual interviews with girls selected based on survey scores were held in the privacy of a comfortable room in the Teen Health Center of the school.

I held brief individual meetings with each of the girls interested and eligible to participate in the interviews in order to distribute parent information sheets (see Appendix C: Interview Information Sheet) and parent authorization forms (see Appendix D: Interview Parent Authorization Form), and answer any questions from participants. In addition, times for the interviews were confirmed and girls were informed that parental authorization forms would have to be brought to the interview for them to participate.

In total, twenty female drinkers were interested and eligible to participate in the interviews. Two girls opted not to take part due to demands of conflicting schoolwork; one girl did not have parental consent. Nine girls were members of the SS group and eight girls participated as members of the AS group. The average age of the girls was 16.06 (SD = 1.52) years. The average grade level was 10.76 (SD = 1.39). The seventeen participants lived in a predominantly White area of rural Nova Scotia. The majority of girls I interviewed were Caucasian; one member of the SS group was of Asian descent.

It should be noted that five drinks per occasion is usually considered heavy drinking (cf., Poulin & Wilbur, 2002). The group of AS and SS girls combined (N = 17), reported drinking, on average, 5.82 (SD = 3.73) drinks per drinking occasion. The AS

girls (n = 8) reported drinking, on average, 4.87 (SD = 2.17) drinks per occasion, whereas the SS girls (n = 9) reported drinking an average of 6.67 (SD = 4.69) drinks per occasion. Girls' quantity/frequency of alcohol consumption was assessed in a manner previously described by Stewart et al. (1995). The average number of times the AS and SS girls combined reported drinking per week was .83 (SD = 1.13). The AS girls reported drinking on average .83 (SD = 1.51) times per week. Similarly, the SS girls reported drinking .83 (SD = .73) times per week. In sum, girls in both the AS and SS groups were drinking at or above the cutpoint for classifying heavy drinking at each drinking occasion (rounding drinking quantity values to the closest whole number of drinks) close to once per week. Evidently, the girls selected were a heavy drinking sample.

In addition to noting levels of drinking quantity and frequency among the girls interviewed, it is also important to note girls' scores on the measure of alcohol problems. With respect to drinking problems as measured on the Rutgers Alcohol Problems Index (RAPI; White & Labouvie, 1989), the recommended clinical cutoff is a mean score of 15 indicating substantial alcohol problems (cf., Thombs & Beck, 1994). (Note: For a detailed description of the RAPI, see Chapter 5, Study 3 Section 5.3.2.5.). The RAPI mean score for the AS and SS groups combined was 14.25 (SD = 18.12). The RAPI mean score for the AS girls only was 13.00 (SD = 12.91). The RAPI mean score for the SS girls only was 15.2 (SD = 22.09). Thus, on average, RAPI scores for girls in the both the AS and SS groups combined and the AS group alone were very close to the clinical cutoff indicating substantial alcohol problems (cf., Thombs & Beck, 1994). The mean RAPI score for the SS group alone fell just above the clinical cutoff. Evidently, the girls

selected were not only a heavy drinking sample but also were experiencing clinically significant levels of alcohol problems in many cases.

Each interview participant was assured confidentiality in all oral and written research reports, with the exception of circumstances under the law which require researchers to disclose information (see "Duty to report" Section 23 (1) Nova Scotia Children and Family Services Act). Legal parameters of school board policy included limits to confidentiality when an adolescent indicated that he/she was in current danger of harming him/herself or others or being harmed by another. In cases where confidentiality was broken, for example, should an adolescent have indicated that he/she was in current danger of harming him/herself or others or being harmed by another, I would have been obligated to share this information with the school counsellor. Limits to confidentiality were clearly explained to all participants prior to obtaining their written informed consent for participation (see Appendix E: Interview Student Consent Form). It was agreed that I would share no identifying information with other students, teachers or family members.

Each interview participant was asked to provide as much as information as she liked in answering the questions. The interviews followed a semi-structured format. I used a portion of the Comprehensive Drinker Profile (CDP; Marlatt & Miller, 1984) that provided seven open-ended questions related to drinking motives or reasons for drinking (see Appendix B: Interview Guide). Open-ended questions guided the interview, while allowing participants to go in whatever direction they chose as they told their stories. Responses during the interviews were audio-taped so information would not be missed. The interviews were conducted during school time.

Interviews were transcribed verbatim. Transcripts were coded with ethnograph software (Scolari, 1999) for theoretically relevant themes and novel narratives that emerged. The raw data from each transcript source was first analyzed for motive-specific information. I made an initial attempt to do a priori coding, using code categories obtained from the CDP (Marlatt & Miller, 1984). I found the CDP coding guide did not adequately capture or make sense of the rich qualitative data, so I returned to the transcripts for inductive coding, discerning themes from the data. Commonalties and disjunctures in the themes were analyzed by personality group membership as well as across groups. Drinking motives were investigated by examining AS and SS girls' internal (personal) and external (social context) reasons for alcohol use (Cooper, 1994). For example, internal reasons included drinking to obtain a desired outcome that involves mood alterations (i.e., decreasing negative mood states or increasing positive mood states). External reasons included drinking to achieve an external reward or obtain a positive outcome (e.g., social approval) or to avoid a negative outcome (e.g., being labeled as "not cool" or being left out of a group by friends who are drinking). Social context information also helped to clarify motives. For example, social context factors helped clarify whether an SS individual was drinking because she was bored, restless, and wanted action or because she craved even more excitement in a highly stimulating moment. With respect to commonalties across personality groups in particular, I attended to how at-risk girls spoke about gender and being girls in relation to their drinking, and to their lives.

I use these stories because they focus on girls' strong and complex feelings about their relationships with alcohol and their resistance in response to broader social forces.

Chapter 1 highlighted attention that has been recently given to adolescent girls' struggles and signs of psychological trouble (see Amaro et al., 2001). There is evidence that their experiences of gender oppression play a role. It is important, however, to be clear that girls are not always or only "victims" of oppression. They are also agents, actors in their own lives. As Lyn Mikel Brown explains:

Such attention to the psychological losses many girls experience, while certainly pointing to the effects of injustice, may . . . inadvertently contribute to an over-emphasis on passive indoctrination and an under-emphasis on girls' resistance that might inform strategies for encouraging and sustaining their voices. (Brown 1998, p. 4)

Similarly, Sarah Carney (2000) raises related issues regarding girls' resistance to culturally defined roles and societal expectations. She questions whether social science might indeed be closing itself off to the possibility that girls may conceive of their bodies as "sites of freedom, of expressiveness, and of beauty" by limiting its perspective on girls' bodies to one of problems or illnesses to be cured (Carney, 2000, p.125). Carney also recognises a dual discourse wherein "girls are in fact performing the roles that we have assigned them culturally while "yearning" for places to explore new ways of being" (Carney, 2000, p. 135). Her analysis stands alongside a critique of social scientific considerations of cultural standards and pressures for femininity facing young women (see for example, Brown, 1998; Brown & Gilligan, 1992). In my research, it is critical to find ways to acknowledge that girls both are constrained by gender norms within a sexist society, and are capable of acting on their own behalf as agents. In this chapter, I attempt to recognize and give value to girls' resistance to gendered social expectations. First, however, I want to explore how these girls at particular risk of alcohol abuse connect their drinking with experiences of gender.

4.2 At-Risk Girls' Experiences of Being Girls

First, I consider AS and SS girls' experiences of gender, motives, and other social factors that shape girls' relationships with alcohol. The following themes surface as important in relation to girls' experiences of being girls and drinking: sexuality, social expectations regarding femininity, powerlessness, isolation, and not fitting in. All names are pseudonyms; each girl is identified as AS = Anxiety Sensitive or SS = Sensation Seeking, at the end of a quotation in order to convey personality group membership and emphasize commonalties and disjunctures in the themes by personality group as well as across groups. Furthermore, there may be many themes evident in one quote, such that it could be placed in multiple categories.

4.2.1 Sexuality

The developmental challenges typically associated with adolescence include dealing with sexual maturation and thinking about and experimenting with sexuality and sexual identity (Kutcher, 1994; Phillips, 1998). Linda Beckman and Kimberly Ackerman (1995) describe sexuality as a multidimensional concept. They suggest four dimensions when examining alcohol use and female sexuality: physiological sexual responsiveness, subjective feelings of sexuality, expectations about alcohol and sexuality, and type and number of sexual partners (Beckman & Ackerman, 1995). On Beckman and Ackerman's (1995) account, each dimension interacts with other dimensions and more than one dimension may have a specific effect.

The theme of sexuality has particular relevance to the girls I interviewed. Girls are experimenting with sexuality and using alcohol to do that. Themes are often not discreet but connected within the girls' quotes. For example, powerlessness is not

disconnected from sexual vulnerability and whose responsibility it is. Two AS girls talk about alcohol and other substances resulting in promiscuity for others though not themselves. Brianna and Joyce describe their girlfriends who "brag it up" about how they would "make out" with a guy.

Brianna: Like he could be like the hottest guy . . . so they would make out, and then they brag it up about how they did. (AS)

Joyce: Like I said my friend . . . I realized that she does drugs for the fact that she can say that she did Ecstasy, that she did Mesc, that she is so bad. And she screws around with a lot of guys just to make herself feel better, I know that. (AS)

While girls are experimenting with sexuality and using alcohol to do that, at the same time they also articulate a desire to be in control and responsible for their behavior.

Candice: I mean it has happened. Whether you've had a boyfriend or not, you have fooled around with some guy when you were drunk. I mean that is what alcohol does to a person in a lot of cases. And that is why I don't drink so much any more because I couldn't walk, I couldn't do anything. It was insane. I was so stupid to drink that much. (SS)

Candice wants to experiment sexually and feels responsible for herself and her actions.

Candice: Because when I was 14, which is about 3 years ago, I was partying there or whatever, 12 beer, a litre of cooler, 2 joints. I was pretty bad. And I was pretty passed out. You know, like all over the place. I couldn't walk up the stairs and walk down the stairs at all. And anyway, this guy carried me up to the attic or whatever, and a bunch of stuff happened. Like I mean I am still a virgin so it wasn't that but it was pretty close. I had a boyfriend at the time. I mean he wasn't around the whole night. He promised me before he was going to stay by me. I guess it is still not really much of an excuse except I wasn't awake. But at a party, you expect things to happen. I mean that is not something I have been like, "Oh, look what he did," because I was irresponsible for drinking at 14 and getting high, period, and everything. When I am drunk, I am very flirty, and I probably lead him on quite a bit. (SS)

Candice describes herself as "still a virgin." Possibly, for Candice, losing her virginity is going 'too' far (by her own standards). She considers herself responsible for not going this far. If you aren't careful, things might happen, you could lose your virginity.

Some girls are experimenting with sexuality when their ability to have control over their behavior (e.g., ability to make choices) is impaired.

Brianna: Like I said my friends do it mostly but one time I did make out with a guy, and I felt really awful about it the next morning. Like I was like, "I can't believe I did that." Like it really upset me so that is why now, I don't like doing that at all. I didn't have sex, just other things, and I felt really gross, and I didn't tell anyone about it. Like I was disgusted pretty much. I don't remember very much at all. We just all were there, and I was outside, and I don't really remember. The next morning, I was like kind of like I remembered it but I didn't remember it clearly. I just remember at the end, I was like, "Oh." And then my friends told me about it too, what that guy did. And I was just like, "Oh." I had to deal with it the next day and face him. It was weird. He said he liked me and all but I didn't mean for it to happen. (AS)

Brianna expresses regrets about her intoxicated actions, an articulation of feelings that seemed to happen for AS girls more than SS girls. Brianna didn't tell anyone about what happened. Her expressed lack of use of social support was more characteristic of AS girls compared to girls in the SS group. Brianna's statement "I didn't mean for it to happen" indicates that at some point she lost control of her decision-making capacity. Girls may experience a loss of control over decision-making capacity while under the influence of alcohol. Exploration of the realm of sexuality can be risky for adolescent girls, especially when alcohol is involved.

Brianna: I felt really bad about it. Like I don't know, I was really disgusted with myself. Not with him. I was not mad at him at all, even though there was 2 people. But I felt really ashamed big time. (AS)

Brianna expresses ambivalence: on one hand she claims "It wasn't me but it was him too", and at the same time she "was really disgusted" with herself and "ashamed" for what happened. The private nature of sexuality could be intertwined with her resulting feeling of shame, causing disgust in herself.

Many feminists talk of gender oppression as having to do with sexuality (Frye, 1983; MacKinnon, 1989; Young, 1990). The sexual objectification of women and girls places value on females as sexual objects liable to violation in some circumstances (MacKinnon, 1989). Catharine MacKinnon defines sexual objectification in which women and girls are valued as sexual objects:

To be sexually objectified means having a social meaning imposed on your being that defines you as to be sexually abused, according to your desired uses, and then using you that way. (MacKinnon, 1989, p. 443)

Advertising and pornography are examples of means through which sexuality is "socially constructed." MacKinnon elaborates on the social construction of sexuality through pornography:

It [pornography] constructs women as things for sexual use and constructs its consumers to desperately want women to desperately want possession and cruelty and dehumanization. . . . Women are in pornography to be violated and taken, men to violate and take them, either by screen or by camera or pen, on behalf of the viewer. Not that sexuality in life or in media never expresses love and affection; only that love and affection are not what is sexualized in this society's actual paradigm, as pornography testifies to that. (MacKinnon, 1989, p. 442)

Girls are always vulnerable to the risk of sexual exploitation because the personal lives of girls are highly affected by gender-based relations of power. Sex differences function explicitly as power differences under sexism (Frye, 1983). However, girls are not passive victims with everything done *to* them; they also act on their own accord. A sense of responsibility seems in tension with a desire to experiment with sexuality when under the influence of alcohol. Brianna displays good judgement:

Brianna: I was at a party with a guy who was following me around, like actually following me around. So I actually left because I was really uncomfortable. Because all my friends were drunk. There was no sober people there. And I was with my friends, it was like, "Keep me here," type of thing. Like keep him away. And then they were too drunk, and

they just kept walking off so I was by myself. And then I was just like... So I called my dad, and I told him to pick me up. I said I don't want to be at the party any more because he was making me really uncomfortable. But I stopped drinking, that is for sure, and I didn't... I don't know I told him to pretty much leave me alone but he still wasn't. I don't know why. He was really gone. He was like, "Oh, I'm sorry. I'm just really drunk," but he just kept doing it. (AS)

Sexual harassment is prominent and normalized no less so for adolescent girls than women (Phillips, 1998). While sexual harassment is typically defined in general terms such as unsolicited and unreciprocated behavior that values a person's sex role over other functions, Ann Duffy (1995) suggests that this offense does encompass violent behaviors such as coerced sexual touching and rape.

Many of the girls who articulate experiences of experimenting with sexuality and using alcohol to do that are liable to violation connected with sexual exploitation. Girls are vulnerable to both sexual harassment and fear of violent crime. As MacKinnon notes, "All women live in sexual objectification like fish live in water. Given the statistical realities, all women live all the time under the shadow of threat of sexual abuse" (MacKinnon, 1989, p. 446). A recent report by the Nova Scotia Advisory Council on the Status of Women (NSACSW; McFadyen, 2001) indicates that although the majority of both women and men in Canada report they feel safe from violent crime, women are more likely than men to feel unsafe in certain circumstances (e.g., using or waiting for public transportation and walking alone after dark). Not surprisingly, more than 8 times as many women as men (17 % versus 2%) stay home at night because they are afraid to go out alone (McFadyen, 2001). Violence is an act, it is not simply a moral wrong against another person but is also systemic, it exists as a social practice. What makes

violence systemic is that it is directed at members of a group simply because they are members of that group (Young, 1990). As Young explains:

Any woman, for example, has reason to fear rape. . . . The oppression of violence consists not only in direct victimization, but in the daily knowledge shared by all members of oppressed groups that they are liable to violation, solely on account of their group identity. Just living under such a threat of attack on oneself or family or friends deprives the oppressed of freedom and dignity, and needlessly expends their energy. (Young, 1990, p. 62)

While violence was not a topic for the interviews, many girls live with the "daily knowledge" that they are "liable to violation" and "just living under such a threat" causes a personal awareness of lack of safety that often increases for some girls when alcohol is involved. While under the influence of alcohol, Maggie has difficulty remembering all the details and is vulnerable to acquaintance rape.

Maggie: I remember parts of it. This one guy, Joey, I think his name was, came over and he was like, "Are you feeling better?" And then he mainly put my head on his shoulder, and I was like, "Man, I just want to lay my head back on the log." I was comfortable, and I didn't feel sick when I was there. And he was like, "Okay." And then I don't remember how I got back laying on the log but my friend Annette was standing behind me, and he was trying to put his hands up my shirt. And then that is when my friend Matt came and chased him away. But then I didn't know that he was gone. And my friend Annette was behind me. And I was like, "That guy had his hands up my shirt." She said, "Yeah, he had his hands down your pants too. Didn't you notice?" And I was like, "No, I couldn't tell." And that was pretty much it. (SS)

There does seem to be subtle differences between the AS and SS personality groups with respect to girls' discussions about alcohol and sexuality. I see SS as rule-violators enjoying how they can incorporate alcohol into their sexual risk taking to enhance this experience and thereby putting themselves at even greater risk then their SS tendencies alone. In contrast, I see AS girls as being nervous about sexual experimentation and using alcohol to give self-persuasion to do so. Risk increases by

virtue of alcohol use – risk that is not there normally. In addition, I see the AS group as very regretting of their alcohol intoxication behavior.

In general, there is a lack of personal control among girls (and boys) when under the influence of alcohol, leading often times to youth experimenting with sexuality when their ability to make choices and take responsibility is impaired. Alcohol use involves complex personal tensions for some girls: trying to balance a desire to experiment with their sexuality and using alcohol to do this, while dealing with a sense of personal responsibility for not going 'too' far, and at the same time being vulnerable to sexual exploitation. This risky balancing act might actually generate stress regarding genderspecific drinking practices in some cases. Some girls seemed to impose strict sanctions and self-judgement on their behavior when associated with alcohol abuse or getting drunk. As Candice (SS) articulated, "I was irresponsible for drinking at 14 and getting high, period," which lead to her going too far with sexual experimentation by her own standards. (I would speculate that SS girls have a younger age of onset of this type of experimentation (cf. Donohew et al., 1999).) Brianna (AS) noted, "I was really disgusted with myself." Interestingly, these two girls articulate a subtle difference between SS and AS girls with respect to self-assessment of their behavior. Candice (SS) is acknowledging a fact rather than feeling guilty like Brianna (AS). In general, girls in both personality groups are faced with the challenge of balancing restrictions on behavior and asserting their identities. It may be stressful for girls trying to find and maintain these balances. We will see in a later section how stress may be connected to alcohol use, particularly for high AS girls.

4.2.2 Femininity: Social Expectations

Social norms about sexuality are just one area where girls may experience conflicts around gendered social expectations. I follow Caplan and Caplan (1994) in using the term "gender" to refer to the following:

... the social role of being a woman or being a man. Gender means 'being feminine' or 'being masculine,' standards that look different in different societies. . . . Gender is composed of the whole list of features that the society in question labels as appropriate for, or typical of, one sex (but not the other, or more than the other), including feelings, attitudes, behaviour, interests, clothing, and so on. The issue of how biological sex and social gender interact -- how much our "masculine" or "feminine" behaviour is unavoidably determined by our physical sex -- underlies most of the controversies in the science of sex and gender. (Caplan & Caplan, 1994, pp. 4-5)

Adolescents are in the thick of gender socialization, learning to be 'properly' masculine or feminine.

Very much at the core of a sociological understanding of youth culture in Western society is the connection between separate private/public spheres with corresponding youth cultures of femininity/masculinity to explain the leisure forms of youth (McRobbie, 1990; Van Roosmalen & Krahn, 1996). A polarized youth culture model defines female culture as peripheral and invisible or passive and familial, and male culture as mainstream, visible, active, and peer-oriented (McRobbie, 1990). Boys are thought to occupy the "street-based," public world of their leisure activities, while girls are thought to resort to the "home-based," private sanctuary of the bedroom where they indulge in fantasies with their girlfriends about rock stars (Van Roosmanlen & Krahn, 1996, p. 3).

Such dichotomous thinking tends to focus adolescents and gender roles into rigid polarities and may help explain why alcohol use among teenage boys is often normalized while the same behavior among adolescent females is regarded as deviant. Indeed,

teenage drinking is more readily viewed as an active, peer-oriented, street-based behavior than a passive, familial, home-based activity (McRobbie, 1990; Van Roosmalen & Krahn, 1996). As such, there is a dependence of girls on boys for access to and participation in social spaces where drinking may occur, reinforcing unbalanced power relations in our society. A dichotomized model of youth culture contributes to the continued re-creating of the male-dominated gender order and thus to the continued oppression of women and girls. Hence, feminist researchers in sociology (e.g. McRobbie, 1990; Van Roosmalen & Krahn, 1996) are especially eager to shift the focus away from a dichotomized view of youth culture. Conflicts around societal expectations see the notion of girls as "home-based" and private vs. "street-based" or public being challenged. Interestingly, recent findings from a sociological study of Canadian young people indicate both male and female youth participate actively in street-based as well as home-based activities (Van Roosmalen & Krahn, 1996). Also identified was the presence of additional activities engaged in by both males and females that could not accurately be classified as home-based or street-based (Van Roosmalen & Krahn, 1996).

Nonetheless, the experience of being girls involves such social expectations around gender. In Western culture, for the most part, women and girls have been encouraged to be "dependent, passive, fragile, childlike, naïve, innocent, soft, cooperative and emotional" (Abbott, 1994, p. 71). Girls are expected to be good and caring. Good girls look after others. Emily addresses the gendered expectations of "caring" and looking after others (cf. Gilligan, 1982; Noddings, 1984) in her articulation of conflict surrounding gendered social expectations.

Emily: It is also knowing which friends trust you the most to kind of take care of them when they are drinking. It is not that they expect you to but it

is just when you drink, because you worry about them, you kind of do take care of them a little bit. So they get to trust you and they just eventually expect that you will. I like that they kind of depend on me a little bit to do that. But like it is hard to always be expected to do that. Well, it is not all people. Just a lot of my friends. I don't drink a lot when I am with them so I'm not sure it has much of an effect at all. It's just something that we do. (AS)

Emily is not drinking precisely because she is supposed to take care of others. Within expectations of a traditional gender role, that is what being a 'good' girl involves, as she understands it. For Emily, the term 'good' seems equated with doing the right thing or taking care of others. At times, girls may be judged as good or bad in relation to gendered social expectations. However, it is difficult for her to always try to accommodate the needs of everyone else. Social expectations of girls are in tension with girls' actual behaviors. In her words, Emily finds it "hard" to meet social expectations that are associated with fulfilling a traditional gender role. In general, AS girls seemed to buy more into gendered social expectations in their desire to be liked and accepted relative to SS girls. As noted in Chapter 2, it is important to be wary of dangers inherent in accepting or legitimizing gender patterns that have been established within a sexist society.

As previously noted in Chapter 2, feminist theory helps reveal "how expectations are derived from deeply entrenched social patterns that structure social institutions and practices" (Baylis et al., 1998, 235). Several of the girls I interviewed were struggling with expectations about being girls. Sometimes girls drink to be a *good* girl. Others drink to not be a *good* girl.

Kathy: Normally I am uptight and kind of a stressed out person. If other people are drinking around me, and I am not, then I get this attitude like I am better than you, kind of thing. So if I'm having a drink or two with them, I sit down and relax and I am not so snotty. (AS)

Kathy drinks to let go of the expectation to be a 'good' girl because good girls are "snotty" and "uptight," as she understand it. For Kathy, the term 'good' seems associated with being popular. Girls struggle with the contradictory expectations telling them what it means to be a good girl. Girls are told not to challenge social expectations; not to be "snotty," to "relax," have fun, but not go too far.

Societal expectations of girls are also in tension with girls' actual behaviors in that girls display resistance to gender role stereotypes. Brown elaborates:

In a dominant culture that has such difficulty with girls' straight forwardness, the question of resistance to stereotypes and various forms of oppression becomes central to girls', and ultimately women's, psychological health. Encouraging girls' strong feelings and taking seriously their social critique invites them to participate in the social and political world around them, a radical act with potentially transformative consequences. Girls' open resistance to the psychological and physical denigration inherent in dominant cultural definitions of femininity is disturbing; it is disruptive and, to many, frightening. (Brown, 1998, p. xii)

Kathy is openly resistant to a traditional cultural notion of femininity (e.g., meek and complacent), which asks her to comply with norms established by her boyfriend and his friends. She expresses strong feelings of anger, reminiscent of Jaggar's (1989) "outlaw emotions." Kathy is young to be living with her boyfriend and financially supporting herself and possibly her partner. Although she is working, it was not clear whether he had a job.

Kathy: I moved in there shortly after we got together. I have come home from work at 11:30 at night, and he's got a house full of people, and all his friends are drunk and he's been drinking. He says, "Oh, I'm not drunk," but it is pretty obvious that he is. But coming home from work at 11:30 at night, all you want to do is sit down and relax and eat something, and then you've got a house full of people. And they are stumbling all over the place, and puking in the bathroom. I've taken my boyfriend aside in another room and yelled at him. I said, "Get these people out of this house or I'm leaving. I'm leaving for good." And maybe I shouldn't do that.

Maybe I should just come home and feel nice to see my friends or something like that. But I am not. I never am. And I got mad, and I started throwing my stuff in my bags, and I said, "I ain't dealing with your crap tonight. I just want to go somewhere and eat and watch some TV and go to bed." Sometimes if he is drinking and pretty drunk then I get mad at him too. Like I get the attitude that I am better than you. Then he doesn't understand where I am coming from because he just wants me to be and feel and act like him. And I don't want to do that and so we get into a fight then, where he doesn't understand where I am coming from, and gets mad about it. (AS)

Conflicting gendered expectations about being girls may connect to experiences with and understandings of alcohol use that involve complex personal tensions for some at-risk girls as they struggle in a balancing act between being good girls and not so good girls. If they aren't doing the balance well enough then they may be viewed as pathological (Nixon & Glenn, 1995; Bordo, 1989). Female heavy drinkers may be considered "obnoxious," "unfeminine," and "promiscuous" (Kagle, 1987, p. 22). When adolescent girls display typically male patterns of alcohol use or behavior such as anger, aggression, or sexual assertiveness, they may even be assumed sick and advised or prescribed substances to help them cope. Joyce, for example, said her parents had decided she was clinically depressed and had sent her to a therapist and was prescribed medication. Anger is also sometimes considered unfeminine. Nina sees her own anger as unacceptable. She was seeing a psychiatrist. Nina uses alcohol in part to help quell anger that might be considered gender-inappropriate.

Nina: I don't get as mad as easily, which is really good because I've got quite a temper. I find myself more calm towards things that would normally anger me. And it's better when I am not angry because I am in a very good mood and I always want to talk to people, and stuff like that. I've got quite the temper when I am not drinking. But when I am drinking, I'm like always in a good mood. It's weird. I usually keep quiet to myself about a lot of things, like how I feel about different people. I kept those sort of things very, very to myself. And the psychiatrist I was seeing, she was like, "Well, you shouldn't be so closed up about a lot of

things because that is what leads to that sort of thing." But I've always been like this. I've always been very, very quiet about things. (AS)

Nina's comment "it's better when I am not angry," raises the question, "Why is it not okay for girls to be angry?" Interestingly, this attitude or belief seemed more common to AS girls relative to SS girls (i.e., it is not okay to have strong negative emotions), which may be in part explained by these individuals' greater attempts to control aversive inner experiences more generally (cf. Stewart et al., 2002b). In general, contributing factors for girls in both personality groups may be gender role stereotypes and associated conflicting social expectations (cf. Lundy, 1987). Stereotypes refer to specific beliefs about the characteristics of members of groups (Bento, 1997) and are combined into schemas or structured knowledge about people that are used to interpret ongoing behavior and action (Haslett & Lipman, 1997). Our gender schema for girls might include the expectation for nurturant or emotional behavior whereas our schema for boys might reflect expectations for aggressive or direct behavior. Haslett and Lipman (1997) comment that stereotypes and schemas act both descriptively and prescriptively; boys and girls behave in certain ways, and those are the ways in which they should behave. (I use italics here to problematize the concept as some stereotypes reflect a cultural consensus in which the expectations are all in the same direction and discrimination results.) Gender-role conflict can result when girls are portrayed as one-dimensional, either as victims (pathologized as passive and helpless) or villains (wild and out of control), when in fact girls are multi-faceted and often competent, active initiators in their relationships, schools, and communities.

In Joyce's story of a friend, drinking allows the friend to step outside gender roles, albeit through aggression.

Joyce: She just likes to fight with guys, and she loves it. It is the funniest thing. Like she is not mad at them for doing it. She doesn't cry. She doesn't go, "I give," or anything. She just totally fights back. It is like the best thing to watch. But they never do anything like really mean. I remember one night, she was bugging them so bad that one of them ripped her shirt off, like by accident. That was funny. She is not like that at all when she is sober. I have never seen her like that when she is sober. That is what is so strange. Like the moment she gets drunk... Like she won't dance when she is sober. She will like dance non-stop when she is drunk. She doesn't fight or anything when she is sober but she will fight non-stop when she is drunk. (AS)

In this case, alcohol gives license to escape a passive feminine stereotype with its restrictions on behavior. Drinking gives Alexandria permission to speak her mind.

Alexandria experiences this alcohol-related freedom from convention as a double bind.

Alexandria: I think it can be a positive thing because it's stuff that I need to say. Most of time, what I say is stuff that's just been on my mind that I've been wanting to say to people. And I just haven't because it would start a fight or whatever and...but sometimes when I'm drinking, it just kind of comes out of me – then it's said, right. I mean, they think it's, "Oh, you were drinking, so you didn't mean it." (AS)

When Alexandria does express herself, others may not take her seriously because she was drinking.

While alcohol appears to facilitate self-expression (i.e., "I have never seen her like that when she is sober"), there is a difference for girls in the AS and SS personality groups in trying to deal with self-expression under alcohol's influence. Drinking leads Pauline (SS) and Susan (SS) to blurt things out, whereas alcohol gives Brianna (AS) courage to express what she wants to. Brianna, much like Pauline, wants to express herself.

Pauline: I wanted to tell this guy I liked him for the longest time, and then I got really drunk one time and I told him. So it was funny but, I don't know, I wish I could have done it when I was sober. But I regretted it though. He knew I was really drunk so he didn't say nothing. He just hung out with me that night. I'm very vulnerable. And I am not that smart

when it comes to guys. Because I thought this guy really, really liked me, and he told me he liked me and everything. And then he told my best friend the same thing. I was pretty dumb when it came to that. (SS)

Susan: You embarrass yourself in front of guys a lot when you are drinking. I do at least. I like walk up to a guy, "I love you," and stuff. Or I would say to them if they had a girlfriend, "I'm going to beat up your girlfriend." And I really don't mean it. (SS)

Brianna: But when I was drinking, it just all came up. Like everything I wanted to say came. Like I knew what I wanted to say so I called him up and told him pretty much not nicely, and just told him all about it. And he hung up on me. I could see me drinking again and then calling him up again just because I have the guts to again, and just talking to him more. But that is pretty much the way I see it. I would still be willing to call him up and not really learning from it. I don't know why. Kind of like if I drink, I can always call him up and talk to him type of thing. So it's been on my mind. But I should really do it on my own, I know. (AS)

In general, the quality of self-expression under the influence of alcohol differs for SS girls relative to girls in the AS group. Alcohol seemed to give many high SS girls increased impulsiveness. In contrast, alcohol appeared to give several high AS girls a liquid courage to say what they want to say in some circumstances.

Clearly girls are struggling with tensions between conflicting social expectations. If girls go too far they may be considered pathological or too angry or too something. The themes of polarized cultures; gender roles of good girl/bad girl; girls not allowed to express anger; traditional feminine roles or untraditional roles leaving girls stuck, are all about conflicting messages: "You should be feminine," "Being feminine is not okay," "Being unfeminine is not okay." Lynn Phillips (1998) describes the "double binds" women and girls face.

If they fail to accommodate the expectations placed on their gender, they are often perceived as unfeminine, selfish, or "acting out." Yet, if they do follow these gendered scripts, they may be dismissed as weak, dependent, and less competent than boys or men. Of course these factors vary across cultural groups and different communities. But given the importance of

social acceptance during adolescence, it is easy to see how girls' senses of self might be challenged by the competing demands imposed on women in a society fraught with gender-based double binds. (Phillips, 1998, p.11)

Even if girls accept a stereotypical model of femininity and work to achieve the roles, behaviors, and attitudes associated with such a model, they may find that the larger society tends to devalue those very characteristics.

Growing up in a male-dominated society, girls face pressures to conform to cultural notions of femininity that promote compliance and self-sacrifice, while discouraging resistance and entitlement to pursue one's own desires (Phillips, 1998; Carney, 2000). Another difference that surfaces in these at-risk girls' resistance to cultural notions of femininity by personality group was a slight distinction in relation to their future aspirations. Here, the SS girls' again expressed a tendency to reject the stability of conventional femininity moreso than the AS girls.

Luanne: I am going to be independent. I'm going to have a career for myself, and I'm not going to be relying on a husband or somebody. I am not going to let myself get in a situation where things can just go like that. (SS)

Joyce: I think it is just a realization that I'm going to grow up, I'm going to have a minimum wage job or something, I'm going to have like a super high mortgage with like 2.0 children, and not like what I do with my life. I just see my future and I don't enjoy what I see. (AS)

Luanne expresses determination to pursue her own desires in constructing a future. Joyce may be expressing a hopelessness about her future which is shaped in part by constraints of low socioeconomic status and marginalization by class. She articulates a lack of entitlement and appears to find it difficult to imagine other possibilities for her self. The difference might be related to aspects of the AS personality construct. In general, individuals with AS get nervous more than individuals high in SS (Conrod et al., 2000b). For girls in the AS group, feeling nervous is a particularly uncomfortable experience;

Simply feeling nervous makes them even more anxious. Joyce (AS), moreso than Candice (SS), may tend to worry something bad is going to happen when she feels stressed out or anxious. Sometimes individuals with AS feel there are nothing they can do to get rid of the uncomfortable sensations and find it hard to imagine how to change that feeling. Indeed, recent research (Conrod et al., 2000b) has placed AS within the broader context of other personality and psychopathology variables that are known to be associated with alcohol abuse (e.g., hopelessness or poor self-esteem). Above, Joyce may be extending sentiments she is accustomed to experiencing in the present (e.g., difficulty imaging other possibilities for herself), toward how she sees herself in the future. Nonetheless, girls in both personality groups articulated experiences of conflicting gendered expectations around dominant cultural notions of femininity. For AS and SS girls, on some level, it appears to be an ongoing struggle simply being a girl—and alcohol can bring freedom, as well as new conflicts.

4.2.3 Powerlessness

Among the girls I interviewed, many articulated interpersonal relationships structured by social forces of domination and power. Generally, girls experience powerlessness in relation to adults (e.g., parents and teachers). Maggie's response is a vivid illustration of a strong voice not being heard.

Maggie: Well, there are some teachers, if I don't understand something, I'll be like, "I'm sorry. I know you just taught this twice but I don't understand it still." And my math teacher last year, my friend was like, "I don't understand this," and she [the teacher] walks up in front of the class and says, "Oh yeah, like that is a first." Like they can be really ignorant. If they talk about something, I'll be like, "Can I explain my point?" If I get in an argument with a teacher, I'll be like, "Can you just be quiet for a second and let me say my point," and they are like, "No, go to the office." They don't give you time to explain anything. (SS)

Teachers and other adults may unwittingly marginalize some girls as not smart or rebellious (which may be more likely for SS girls given their desire for intense experiences is associated with increased risk taking and reckless behavior among youth (Arnett, 1994)). Such treatment from adults may enhance the likelihood that these girls will not fit in the dominant value system, remaining disconnected, and possibly ineffective (cf. Brown, 1998).

Some girls speak of an experience of powerlessness in a gendered form in their relationships with boys. For example, Susan's boyfriend was directly controlling.

Susan: Whenever I was around him, I thought I wasn't good enough or I was stupid. Around him, I didn't feel like I was myself. And he was sort of possessive with me. I didn't have any guy friends when I was going out with him because he didn't like me talking to any guys. And stuff like that. He was just weird. ... At school, it was hard because I had so many guy friends at school. And when I started going out with him, he would tell me on the phone that he didn't want me seeing...hanging around with guys any more. And he was picking my friends for me. He was friends with one of my friends, and he wanted me to be friends with her and her friends. But I was moving apart from her – being myself instead of the person that she wanted me to be. Like she drank and stuff like that. And now I just don't want to be like that any more. (SS)

Similarly, Maggie spoke of the use of male power (and the threat of violence) to control her behaviors. Interestingly both Susan (SS) and Maggie (SS) asserted themselves in these situations.

Maggie: Matt, that is the 22 year old guy, he wanted to go out with me but I was just like, "No, man, you are just my friend." And I explained that to him every single day. But then I went up there one time and he freaked out at me. He didn't punch me or anything. Like he went up to his freezer and nailed it, and almost broke his fist. I was like, "Matt, don't do that, man. You're just making things worse for yourself." And he said, "You don't want me to do that?" so he got up and did it again. . . He'll do that and try and get things out of me to see if I'm doing stuff or anything. (SS)

In a context of peer pressure and adolescent desires to be part of the group, some girls articulate experiences of powerlessness vis a vis other girls. In contrast with Susan and

Maggie, Josephine (AS) attempted to deal with her experience by getting away.

Josephine may be more vulnerable to experiences of powerlessness shaped in part by differing gaps in socioeconomic status among her small group of friends and other students in school.

Josephine: I don't know, people calling me names. And I was having a really bad time. Like I only have 4 friends in my class because everybody else is like preps. And me and my 4 friends are like the only ones. Like we sit in a little group and everything. And they are not losers or anything. But we just sit there and we talk. One of my friends, she talks to all the preps and everything. So anyways, one time I got mad because they started making fun of me. They were like, "Oh, you are so fat." But I'm not. They were like, "Oh, I hate you so bad. Get the fuck away from me." So I just walked home. That was like 3 months ago. (AS)

Girls experience powerlessness in relation to adults, boys, and other girls. The theme of powerlessness does seem to be differentiated between SS and AS groups in that there seems to be a different response to the general oppressive experiences of powerlessness. SS girls tend to try to assert themselves in situations of powerlessness whereas AS girls tend to escape.

Young (1990) explains the meaning of a structural understanding of domination and power in relation to powerlessness. Domination is "the institutional constraint on self-determination" (Young, 1990, p. 37). On Young's (1990) account, domination means structural or systemic phenomenon that excludes people from participating in determining their actions or the conditions of their actions.

In saying that power and domination have a structural basis, I do not deny that it is individuals who are powerful and who dominate. Within a system of domination some people can be identified as more powerful and others as relatively powerless . . . The structured operation of domination whose resources the powerful draw upon must be understood as processes. (Young, 1990, p. 32)

Domination then, as a social process, is enacted through the widely dispersed powers of many agents mediating the decisions of others (Young, 1990). A structural understanding of both domination and oppression is necessary to identify systemic constraints on individuals and groups that do not necessarily result from a few people's choices or policies (Young, 1990). While oppression and domination overlap on Young's account, it is important to note that "not everyone subject to domination is also oppressed" (Young, 1990, p.38). She clarifies:

Hierarchical decision making structures subject most people in our society to domination in some important aspect of their lives. Many of those people nevertheless enjoy significant institutionalized support for the development and exercise of their capacities and their ability to express themselves and be heard. (Young 1990, p. 38)

Powerlessness designates a social position that allows persons little opportunity to "express themselves and be heard," or to develop and exercise communication skills. Young notes, "An individual is powerless in the sense that their life lacks an orientation toward progressive development of capacities and avenues for recognition" (Young, 1990, p. 57). I seek greater understanding of how AS and SS girls can transform their positions of vulnerability and become more engaged in the deliberations which shape their lives.

To recognize that girls articulate experiences of powerlessness within their social network is not to say that they are passive, with everything done *to* them. Some girls react to their experience of powerlessness by showing resistance. There may be more AS and SS differences that surface in connection with the theme of powerlessness, but the data on girls' experiences of powerlessness are thin, scant. Girls in both personality groups may not be especially aware of this feature, or able to talk about it – nor was it an intended part of the interviews.

4.2.4 Isolation

Ann Abbott points out that power or control has historically been primarily in the hands of one white males (although not all white males), "with the majority of others being relegated to the ranks of the disempowered" (Abbott, 1994, p.71). Abbott (1994; 1995) explains how, for some, being relegated to this lesser state, powerlessness and despair are often accompanied by isolation, depression and lowered self-esteem. "Many female substance abusers present with symptoms of lower self-esteem, depression and heightened states of hopelessness and helplessness" (Abbott, 1994, p. 71). Luanne compares an abusive family dynamic with "having alcoholic parents." Sometimes the family is not always able to be supportive, leaving Luanne alone with significant emotional responsibility. Luanne's mother is over drinking and her children are under sixteen.

Luanne: The most violence that ever happened was when my mom and dad broke up. And it all may be different but I can relate if people were in an abusive situation. It is kind of like having alcoholic parents because there is nothing you can do about it. Abuse is different because if you are getting abused in your family then there are things you can do about it. But it is kind of the same way because you don't want to do anything about it because they are your family. And you don't want to do anything to hurt your actual mother. You know what I mean? You wouldn't want to run out and tell so and so that she is drunk and she is not taking proper care of her kids right now. Do you know what I mean? As an example, it is not something that you just want to go out and rat on your mom. So it is kind of a shitty situation to be in, is when you have to deal with things with people that you love and you care about. And they are doing things that are harming themselves, and you are watching it happen, and there is nothing you can do about it. That is kind of stressful. It's stressful. (SS)

Luanne articulates her experience of isolation, reflecting the struggle for interpretation that some girls experience daily. Kathy's psychological reality is also painted with strong feelings of isolation, she says she doesn't have any friends.

Kathy: I had dropped out of school. I didn't feel like I had anybody to talk to. Like there was my mom but you know, I couldn't really talk to her either because she goes to church, and she is such a strong Christian that if you say anything negative about parties or drugs or anything like that, and she just loses her mind and totally freaks out. I could talk to her about not having friends but I couldn't really give her good reasons why I didn't have any friends. And so I felt like I didn't have anybody to talk to. (AS)

Isolation may be a reason for drinking, for some girls. For Kathy it also deepens her isolation, preventing connection with her mother, as did moving out of home and living with her boyfriend.

The theme of isolation does not seem to be differentiated between AS and SS girls, but we cannot know that definitively. As with the theme of powerlessness, the data on girls' experiences are thin. Drawing on the work of Conner and Babcock (1980), Schaef (1987), and Van den Bergh (1991), Abbott (1994) suggests that isolation not only impairs one's ability to act on one's own behalf, it also provides social and psychological conditions which fuel the development of addictions.

Because of feelings associated with disempowerment and worthlessness among women and other minorities, the tone is set for pursuing something that increases one's sense of being in control. Because value is primarily determined by an outside force, a solution frequently is sought in a source external to self, in this case, alcohol or drugs. Initially the user feels power over the use of the chosen substance, but as dependence and tolerance begin to develop, the user is once again primarily controlled by an external force – the substance. Frequently the roles that society assigns to women and other minorities reinforce their disempowered state. (Abbott, 1994, p. 71)

At the same time, however, the assumption that the female at-risk of alcohol problems is a bored, isolated, middle class housewife appears to be a myth (cf. Kagle, 1987; see also Wilsnack & Wilsnack, 1995). Women with elevated rates of heavy drinking and/or adverse drinking consequences include younger women, women lacking valued social roles or occupying unwanted social statuses, women in nontraditional jobs,

cohabitating women, and ethnic minority women experiencing rapid acculturation (see review in Wilsnack & Wilsnack, 1995). "Risks of heavy and/or problem drinking are also greater among women with a heavy-drinking husband or partner; depression; sexual dysfunction; or violent victimization in childhood or adulthood" (Wilsnack & Wilsnack, 1995, p. 29). Women and girls with alcohol problems are less often confronted and urged to seek help than are men (Kagle, 1987). In part because they may live in families where alcohol is abused, some women and girls are victims of family violence and need help with current and past family relationships (Kagle, 1987; Abbott, 1994). "For many this means initiating changes in their relationships with spouses or partners and developing new interpersonal skills, as well as vocational skills" (Kagle, 1987, p. 26).

While the young women I interviewed have a diverse range of social and familial backgrounds, and some are also members of other subordinated social groups (e.g., members of racialized minority groups or part of the disability community), they share the common bond of being girls. Girls face ambiguous and conflicting gendered social expectations and responsibilities, sometimes without needed material and social resources (e.g., support of adults, peers, and even family). When they drink heavily, their drinking upsets the delicate balance between their personal resources and their social obligations. In fact some girls seem to drink intending to upset this balance. At the same time, some girls may experience isolation as a result of alcohol use, others as a cause. We need greater understanding of how to effectively help young female drinkers develop skills to deal with the circumstances of everyday life in healthy ways.

4.2.5 Not Fitting In

Gender is not the only relevant feature of girls' lives. AS and SS girls who articulate experiences of oppression on the basis of gender (e.g., sexual objectification, sexual exploitation, and the threat of violence) often also face other forms of oppression based on features such as race, economic class, and sexual orientation. The intersection of gender with race and class was made explicit by the girls' scrutiny of what has been labeled normal. Natashya speaks about racial prejudice and stereotyping.

Natashya: I think that people look at coloured people to be alcoholics, like especially the girls. I don't know, there is always stereotypes for coloured people, that they are always bad and things like that. (AS)

Ka Wai knows what it feels like to not fit in through her firsthand experiences with racism.

Ka Wai: Well, it is different because my parents are traditional Asians. You are growing up, and your parents are always like, "You'll never be as good as a white person just because of the racism around here." But like I think things are changing. The thing is they push us to work hard and be smart . . . Because we live in Canada, where this isn't our country, we have to have an edge in order to get a job or things like that. I guess because people always see themselves as like better than other people. And we are not saying that we are better than them but we are just working hard so we can be better. (SS)

Some girls articulate experiences of not fitting in with respect to social class or poverty.

Maggie: A lot of the students I don't get along with just because I think in my opinion, they have really bad attitudes. I'll go up and I'll be like, "Hi. How are you guys doing?" They'll be like, "Excuse me, what do you think you're doing?" I'm not apparently good enough for them, and I don't like that. I think that is really rude. I don't like it. And I have seen people in this school... Like if someone wore a pair of sweat pants or something to school, people would be like, "Oh you dirty bum." That is what a lot of people in this school are like. And I think it is rude, and I don't like it. (SS)

Luanne: Like income-wise, my family is on the lower side. Like this is a military base and military school so everybody kind of has everything that

they need. I don't even have a VCR. I don't have a car. I don't have just a computer. I don't have things that everybody talks to you about on a day to day basis. Like that is a regular thing in life I have a different outlook on the way things go. Like I have seen in my life, like my mom and my dad when they were together, I was well off as anybody else. And I watched a family like totally just snap and just go from a really great family to totally different. And it is not because of the people, it is because of the situation. Like my dad worked and he was supporting all of us. And then he left my mom. Like they were married for 15 years, for Christ's sake. And he kind of left her in a situation. She didn't know about Welfare or anything. I lived 2 weeks off of rice. Like just things that I went though in my life that a lot of my friends haven't ever had to deal with and don't understand. I'm glad. I think that is better for me. I would say that for my age level, I am more mature than a lot of people. Like I don't advertise that I think that or anything. And you wouldn't think though because I am being brought up in a family that is less fortunate than most families so you would think that maybe the families with more would be able to come out with more. But yet when you look at it from my point of view, in the long run, I came out with more in the end of the deal than the people with money came out with because I learned more from it. (SS)

Experiences like Maggie's and Luanne's may increase their marginality, making it difficult to fit in as teenagers.

Forms of oppression intersect; poverty has its own relationship to oppression and alcohol via marginality. Ka Wai notes that alcohol use can be one way to temporarily alleviate the struggles of poverty, although does not make direct reference to her own struggles.

Ka Wai: The thing is we live in like a small secluded area where people don't really care about life, and they use it [alcohol] to get away, to make their problems go away. So they forget things and they feel good for like a few hours. You see, that is how it is around here. That is how all the people are. (SS)

Similarly, some of the girls know the feeling of not fitting in because of multiple forms of marginalization and use alcohol as a way of dealing with that. Although having spoken

of experiences of not fitting in and marginalization based on class, Josephine speaks of her friend's use of alcohol but not her own.

Josephine: I have a friend, she is really poor. And that [drinking] is like how she gets over her problems. It's like she is away from the world. (AS)

Adolescent girls are not a homogeneous group; their experiences vary by gender, race, class, disability status, personality type, and so on. The recognition that girls are among the subordinated groups who have been devalued in many complex ways by the dominant value system is reason to examine all structures of domination, whether based on gender, race, class, sexuality, nation, or some other difference (cf. Sherwin, 1992).

Girls' articulation of experiences tells us that just being girls may bring tensions involving conflicting social expectations (i.e., be good, cool, bad), as well as the balancing of stereotypes and restrictions on behavior (e.g., it's okay to show aggression but only when drunk). Some girls speak of trying to make full use of their bodies yet have to deal with the threat of violation. Girls are also faced with the challenge of balancing restrictions on behavior and asserting their identities. As previously noted, it may be stressful for girls trying to find and maintain these balances. In addition, they struggle with conflicting gender role expectations. Moreover, the contradictions inherent in notions of femininity can undermine girls' strong feelings (e.g., anger and indignation) and contribute to their disconnection from themselves.

Girls are sometimes openly resistant to traditional cultural notions of femininity and express strong feelings of anger and independence. We have observed different responses of the two personality groups to these same demands. This resistance is also expressed in a dual manner, or "doubled discourse" (Carney, 2000, p. 127). A discourse

is an account of reality, a way of making sense of experience that finds its way into our stories about our relationships, our friends, and us. "It becomes a way of talking about our lives – of framing interviews in other words" (Carney, 2000, p. 129). The girls do acknowledge and critique feminine gender role expectations – as one girl notes, "I got mad, and I started throwing my stuff in my bags, and I said, I ain't dealing with your crap tonight." Their discourse doubles, however, when they note (almost simultaneously) that they buy into and are compliant with traditional gender roles. The girls I interviewed seemed sometimes protective of their desire to "feel nice" and be "girls" – thus, they end up vacillating between buying into gendered social expectations and pushing the boundaries. Indeed, it seems AS and SS girls differed in which part of the continuum they vascillated toward, here. Many of the girls I interviewed struggled with current conceptions of femininity and actively sought out room for self-expression. In girls' resistance and "doubled discourse" we discover enactments of self-expression on their own behalf (cf. Carney, 2000, p. 131).

I found the adolescent girls I interviewed adept at using a discourse of successful femininity to describe themselves. Some seemed to obsess about having thin, socially desirable bodies and felt obliged to help others when needed. However, evident from behind the sometimes passive, compliant, and subservient discourses that embraced delicacy and fragility, these girls did also conceptualize themselves in terms other than issues of appearance and being not good enough. Their, at times, visible efforts in describing personal potential or success suggest the importance of and the need for places where young people, in this case predominantly White-able-bodied girls, can create new discourses, and enact new versions of self and embodiment on their own behalf.

In consideration of the impact of gender, personality, motives, and other social factors in shaping girls' understanding of their alcohol use, one theme that arises frequently from listening to adolescents in both personality groups is relaxation. While the majority of the girls interviewed drink to relax, girls in the different personality groups emphasized different qualities of stress and relaxation. Further exploration of the relaxation theme yields discovery about the experiences and associated influences in the lives of AS and SS girls.

4.3 At-Risk Girls' Understandings of their Reasons for Drinking

Not surprisingly, given the tensions described above, the language used by many girls in describing their understandings of their reasons for alcohol use centers on drinking to relax. Here we see distinct differences in what relaxation means for SS relative to AS girls. Luanne (SS) is talking about letting loose. Relaxing for her is when you don't have to worry.

Luanne: Just stress, if anything it would be just basic stresses of life. Just to be able to let loose and relax for a night and know that you don't have anything to worry about tonight. So you can just relax and not have to worry about getting up for school or not have to worry about getting up for work or whatever on the weekends. (SS)

While Luanne drinks to ease the demands and social expectations of a busy life, it is a positive mood that is prompting her behavior (i.e., it's the weekend, time to relax).

Luanne values time to herself.

Luanne: Like you've just got over a week of school and work, and it's just nice to be able to sit down and have a drink on the weekend. Just to know that you don't have to go anywhere and do anything. It's just free time instead of knowing that you have to get up. It's kind of like I can go home say Saturday and whatever and smoke a joint, and just feel... I know that I don't have to do anything and I don't have to be somewhere at a certain time for somebody else, and I don't have to do this and do that. And I can just relax and have my own time. (SS)

Similarly, Kai Wai talks about alcohol as giving her a feeling of relaxation and freedom in that she doesn't have to "think" or "concentrate on anything really hard."

Ka Wai: Sometimes it gives you...you are a little more relaxed and it gives you a little more freedom, I guess you could say, because you are not really concentrating or anything really hard. (SS)

In contrast, Emily drinks to forget about things that make her uptight or stressed.

Emily: I would drink more like at a party with a lot of people. You can talk about anything or whatever, and it loosens you up. Like you are not uptight to begin with usually with your close friends but there is like always some things that you don't always want to talk about. But when you are drinking, you just kind of forget about it. (AS)

Similarly, Joyce (AS) talks about drinking primarily to relive stress.

Joyce: Why I drink? To relieve stress. Basically that is the main reason. To just like let go, relax and have a good time. That is basically I think everyone's main reason at this age. You are not stressed out and having to act a certain way. I guess the situation helps out. But I would say the actual alcohol as the main effect on relieving stress. (AS)

When drinking, Joyce (AS) feels "relaxed" versus being "stressed out." The main reason AS girls drink is to relieve stress. Drinking may free them from attempts to control aversive inner experiences, i.e., the worry that often accompanies being stressed out about feeling anxious, possibly due in part to constraints or social expectations to behave or "act a certain way." Given the social forces shaping girls lives, it is not surprising that AS girls articulate self-consciousness in a social situation about acting a certain way. However, in Joyce's comment that "the situation helps" but it is "the actual alcohol" that relieves stress, we hear worry about the physical sensations of being anxious that alcohol lessens or dampens.

The theme of relaxation has a definite emotive component for AS and SS girls.

Some girls use alcohol to deal with anger, sadness and pain, and the stress of a busy life.

Pauline said, "When I am really sad, I can't stop crying so sometimes I drink." She drinks to numb the pain.

Pauline: I don't know, sometimes when I'm really upset or I want to forget something, I do it too just to get rid of all the pain sometimes. But it doesn't really work. You are too drunk to realize. When my sister first moved out, I felt really upset, and I was sad all the time so I would sneak something to drink or whatever when my parents were gone out just to get the madness gone. (SS)

Pauline's (SS) emotions have more to do with anger, which may be an interesting point of intersection between SS and AS girls. This connection with anger, an "outlaw emotion" distinguished by its incompatibility with the dominant perceptions and values (Jagger, 1989), may be in part because of a shared desire among AS and SS girls to resist compliance with norms of behavior established by a traditional cultural notion of femininity (e.g., complacency). Natashya (AS) talks about drinking to numb discomfort of "bad feelings."

Natashya: If you don't [drink] then you get all those feelings come back, like your emotions and bad feelings. Like things from your past, like things that you have never really thought of. Like say if your grandfather died and you just put it away, but then it kind of comes back to you. Like all the bad things that have happened to you, it comes back to you. Like you realize that you are not like the perfect person, the most perfect person in the world. And so you just want to get rid of those feelings, which motivates you to drink more. I mean it is not a good thing at all but it's just a boost to get you to stop to worry. (AS)

Kathy drinks to control the hurt and anger she feels. The intensity of her description of rage is somewhat startling.

Kathy: It's like having this...you get hurt by somebody, and you get that feeling deep down in your stomach. Like you are going to be sick or you just want to hit something really, really hard – like a big ball of rage. And I get that feeling. Like I'll sit there and if I don't say anything then that feeling just builds up and builds up and builds up, and eventually I just say, "Get out of my house. Get out of my face. I don't want to see you." And they don't understand why. (AS)

Girls experience tension in interpersonal relations. Social concerns are a complex worry for girls in both personality groups. Many girls drink to reduce their concern with how they appear to others and lessen their worry about what is happening around them or that people are looking at them.

Natashya: You don't really know at first what you are doing. It kind of makes you feel like really motivated. Like it doesn't. You don't think about anything bad at the moment. It kind of takes your worries away. (AS)

Natahsya talked about drinking every day for "probably about a week" three months ago.

When asked if there was anything in particular going on for her 3 months ago she elaborated.

Natahsya: Yes, I broke up with my boyfriend. And he said if I ever broke up with him then he would kill himself. And I was freaked out, and I wasn't allowed to call him and I didn't know where he lived. And I was sad because he said he was going to buy me a \$100 ring, and I broke up with him. And he worked all summer for \$100. So I'm sitting there, like, "Oh, I'm so sad," and I started drinking. (AS)

While drinking to deal with anger may be a point of intersection between AS and SS girls, in general, AS girls drink primarily to relieve stress and worry about what is happening in the moment and helps them care less about what people think. In contrast, SS girls talk more about a positive mood prompting their behavior.

Candice: But it is nice to be able to go out and just . . . have fun. And so when I want to do that, I call them up and I go, "Hey, what are you guys doing?" And they are like, "Oh, so and so is having a party," so we go there and I have fun. I don't do it like every month or anything but it is nice to be able to go out with them. (SS)

There is evidence that both AS and SS girls experience social concerns. These concerns may be attributable to social factors (e.g., racial discrimination, family stresses, and vulnerability to sexual objectification) in addition to internal processes of adolescent

developmental challenges (e.g., increased peer group involvement, balancing priorities between families and peers) or to individual personality characteristics of adolescents (e.g., SS, AS).

Interestingly, girls in the two personality groups – SS and AS – seem to respond differently to social concerns. Candice (SS) and Josephine (AS) draw out a distinction between the two personality groups. Drinking for SS girls appears to help take worries about ones' performance within a peer group away, whereas drinking for AS girls helps lessen concerns about ones' position within a peer group. Drinking for Candice seems to be more of a performance in front of peers.

Candice: So I don't know, it's a way for me to be able to let loose. The thing that people don't like it about the most is that you do things that you don't realize that you are doing. But that is partly what I like about it because then I don't have to worry about, "Oh, they are looking at me." It's just like, "Hey everybody, look at what I am doing." I find it fun for that reason. (SS)

In general, drinking is a positive incentive for SS girls, it helps them enjoy being the center of things. In contrast, one of the appeals of drinking for AS girls has more do with one's position in the group.

Josephine: Yes, when I drink with my smaller group of friends, like my prep friends, it's like I'm doing it because everybody else is doing it. And they are like really cool so I just do it anyway because I don't think it is going to hurt me or something like that. And so I just do it because there is like a whole bunch of cool people hanging around, and they are all doing it. And then when I am with my smaller group, I try to resist but they are like, "Oh no, come on do it. You did it like a while ago, and you'll do it now." So I just do it then. (AS)

Josephine describes conformity motivated drinking (Cf. Cooper, 1994) to a tee. She "tries to resist" but worries if she shows she is nervous, her friends won't think she's cool and she won't be part of the group. Drinking helps her fit in, conform.

Brianna: Sometimes when people don't drink, they do other things, and they just think you drink a lot too. So it's kind of a sign. (AS)

For Josephine, Brianna, and other AS girls, alcohol appears to serve a symbolic function; namely as a "sign" of personal position within a peer group.

Josephine: I brought the booze to school and showed it to them, and they were like, "Oh, yah, that is really cool," and stuff like that. And, "Can I have a drink of it?" But I wouldn't let them. Actually I acted like I accidentally dumped it down the sink because I didn't want to get in trouble. And then they said that, "Well, why did you do that?" And I said, "Well, it was an accident. I bumped into it." And then I asked them if they like me for who I am now that I don't have the booze, and they said yes, that I'll just have to start earning their trust and stuff like that. (AS)

Drinking for AS girls seems to be an effort to express ones' place within a group.

Josephine marks off social boundaries by connecting successful participation in the popular peer group with drinking.

Josephine: Everybody thinks you are cool, and they think you are funny. Like they laugh at you because you are like saying nonsense and stuff like that. Everybody is laughing at you, and they think you are funny. And they tell you everything the day after, like, "Oh, you were so cool doing this, and you were so funny." It's cool. (AS)

Josephine likes the attention because she is fitting in with her peers and is seen as being funny and cool. Candice (in the SS group) also likes attention from others, not so much because she is *fitting in*, but because she is *standing out*. A distinction surfaces here between girls in the SS and AS groups. Candice goes from an "Oh, they are looking at me" experience, to "Hey everybody, look at what I am doing." The rush of the performance, of *standing out*; is fun and drinking helps provide that feeling. Drinking serves to enhance the moment. Indeed, Candice "finds it fun for that reason." Here we see strong support for the association between SS and drinking for enhancement motivated reasons.

In contrast, AS girls' relationships with alcohol tell us about a connection between conformity motivated drinking and coping, in that conformity related concerns about how one appears to others are part of the reason why some AS girls drink to cope with worries about their position within a peer group. Josephine, for example, has a similar "Oh they are looking at me" experience. However, some of the appeal for her is that she is fitting in. As Josephine admits, "I'm doing it because everybody else is doing it." Social censure is avoided or reduced by her drinking.

Girls in the SS group may be more inclined to "just go with it" when they "don't know what can happen" than girls in the AS group. Candice acknowledges that sometimes "you do things that you don't realize you are doing." She admits this is partly what she likes about drinking. Alcohol use changes her worry that people are looking at her to a desire for attention. Emily's insight in describing the behavior of some of her friends helps explain, "When you don't know what can happen, you just go on with it and think it is just fun and it is just something that teenagers do." In contrast with some of the friends she describes, Emily (of the AS group) seems less inclined to "just go with it."

Emily: I don't take drinking as lightly as some people do. It is negative because it just worries you about what is going to happen or like how much should I drink, or who is going to be there. And how much are your friends going to drink. Because like you worry about your friends because you know which friends are more likely to drink a lot and just lose control of themselves. You might hear about people that just drink a lot and will like pressure people around them to, even if they don't want to or whatever. And like guys that will take advantage of girls or whatever. (AS)

Emily worries that people will pressure others, and possibly her, to drink "even if they don't want to" and she worries "guys will take advantage of girls." At the same time that

drinking creates anxieties for Emily, it also helps her "loosen up." Alcohol helps reduce her worries.

Emily: It just loosens you up. Because you don't pay attention to little things about people. They don't bother you as much. And you can dance or whatever, and it just doesn't matter. You are not as judgmental of people. It helps it, I find. Just that you don't worry so much. You can loosen up. (AS)

In observing that alcohol makes her not as judgmental of people, Emily may be indicating that she is worried about being judged herself.

There are theoretical and practical distinctions between the two personality constructs. Brianna expresses AS in that she notices her uncomfortable physical sensations and worries about these anxious feelings; she makes herself more stressed out just by worrying that something bad is going to happen when she feels nervous.

Brianna: When I get upset, I feel sick – like flip flopping, my stomach – when I am upset about something. I don't know, if I start to cry, I normally get sick because of it and I get all worked up. But that is just the way I am normally. If I start to cry and I am not feeling...it just makes it all worse and just makes me lay there and just throw up type of thing. I just get myself all worked up, like right away. (AS)

Candice expresses the attraction to intense and novel experiences characteristic of a person who is high SS: "It's just like, 'Hey everybody, look at what I am doing.' I find it fun for that reason." She focuses on the obvious, highly stimulating aspects of situations and seeks excitement without thinking much about what could happen. While Candice worries that people are looking at her, part of the appeal of drinking for her is that alcohol takes this worry away.

In consideration of possible associations among forms of oppression and drinking to relax, a strong pattern exists. All the girls in the SS group who use alcohol to relax, name some form of oppression in their lives: sexual objectification, sexual exploitation,

threat of violence, and/or articulate experiences of intersecting forms of oppression (i.e., sexism, racism, classism). A strikingly similar pattern is evident among the AS group: all the girls in the AS group articulate experiences of oppression drink alcohol primarily to relieve stress. AS girls have the additional concern of removing not just the stress but the anxiety about being stressed.

We now proceed to investigate the thinking of at-risk girls about whether an association exists between their personality and their alcohol use. In both personality groups girls tend to offer reflective, descriptive comments about who they see themselves to be. Many describe how they perceive their personality to be connected with their drinking and drinking situations. For the majority of girls in the SS and AS groups, interpersonal relations and the notion of being "social" surface as important factors in the association between personality and their understanding of their alcohol use. Only one girl in each group felt her personality was not connected to reasons for drinking.

The theme of interpersonal relations surfaced when looking more closely at the concept of personality and where drinking fits. Some girls articulate relationships salient to their drinking. As Emily articulates, "Who you are with mostly will make it either stop you or make you want to [drink]." Kathy responds to my question, "Do you think your personality has anything to do with your reasons for drinking alcohol?"

Kathy: No, not really. My personality, I was never raised around alcohol. Like my father never had alcohol in the house, and neither did my stepmom. My mom doesn't drink. You get your personality from a young child, and you grow up with that. And so I don't really think my personality has a lot to do with it. (AS)

While Kathy said her personality was not connected to her drinking, when asked if her worries were connected to her reasons for drinking, she did see an association "most of the time," rooted in relations with others.

Kathy: Yes, most of the time. Because if I am around my friends then I need to relax, otherwise I'll just explode at all of them. (AS)

When it comes to girls' understandings of their personality as connected to their drinking, several say that sometimes personality has a role and sometimes not.

The majority of girls speak about what kind of person they are and how this encourages or discourages drinking in differing social contexts.

Pauline: Like the outgoing me likes to drink sometimes. But I don't know, the like quiet me that wants to stay in my room just sits there and just thinks. Just wants to be herself. I have like a split personality kind of thing. Sometimes. Like I don't know, I am but I just feel like a part of me is not being myself. Because I'm only 14, and I know I shouldn't be doing all this. But I don't know, I just want to have fun while I'm still a kid. (SS)

For Pauline, a group context tends to lead to drinking while being alone does not. For Luanne, a group setting seems to lessen her tendency to drink – because she is a caretaker.

Luanne: I am pretty much a person who deals with all the drunk people on the weekend. I don't usually do the drinking. (SS)

Ka Wai speaks of dealing with restrictions/social sanctions of particular settings. When asked if she thinks her personality has anything to do with her reasons for alcohol use, Ka Wai expresses an ambivalence, first replying no, then yes.

Ka Wai: No. Like the same thing that alcohol does to me, I could get by having a lot of sugar. Like I could be on a sugar high and it would be just the same. I just wouldn't have a headache in the morning. Like it does, yes. If I am just spacey or I'm tired, I could have the same effect. It is just like another drink to me even though it does have restrictions. Like I wouldn't drink it during the day. I wouldn't drink it at school or

something like that. Personality? I think personality does have to do with it. (SS)

In probing, there is a sort of permissiveness about drinking reflected in her comment that sugar, or being tired, has the same effect as alcohol. However an awareness of sanctions in society surrounding alcohol also is at play. Ka Wai associates her personality with being capable of setting limits on herself in certain contexts. Unlike some of the girls I interviewed, she "wouldn't drink it during the day" or "at school."

Maggie first articulates there is not really an association between personality and her alcohol use, then admits a connection when she is having a "bad day." Again, she is responding to the question, "Do you think your personality has anything to do with your reasons for drinking alcohol?"

Maggie: Not really. I can't say that it is because it makes me socialize more because I'm social when I don't [drink] anyways. No, I don't think so. Not really. Unless... Okay, no, I don't. That is totally different. I was just going to say unless I've had a bad day but that is not about my personality. I don't know, because when I drink, I'll be like... I don't know, it is just a natural habit when I drink, I'm just like, "Alright, I'm doing this because when I do..." Like most times when I do drink, I'm in a good mood. It puts me in a good mood. And I know that so then I'll just try and forget everything I did that day and just be like, "Alright, focus on right now. Right now everyone else is in a good mood so you get in a good mood and just have fun for tonight." And then it usually helps quite a bit because then I'll talk about whatever it was that was bothering me during the day, and stuff like that. (SS)

Another SS girl refers to social context and her perception of self as "social."

Candice: I am very social. But for me, because even if I don't have alcohol, in most cases, not like I did the other night, but in most cases, I can go there and I can still be bouncing off the walls. And I'll be going, "Hi." You know, I think that helps me in a way. Well, I think that is why a lot of times I drink, because the people I hang out with drink, and that is how they are. So like with my boyfriend and my best friend, they are not the loudest people you know. So I think that is how it makes me, because I can go there and everyone else is doing the same thing so no one is really hearing or listening to anybody. But we can still go there and yap forever,

and not have someone go, "Man, shut up and play your cards. Come on." (SS)

Candice links the association between personality and her alcohol use through the notion of being "social." Interestingly, for Candice, the connection between personality and her alcohol use has more to do with making her shy friends more social. Michelle, who does not see a connection between her personality and her alcohol use, comments that drinking makes her more "outgoing" but her personality is "outgoing" whether drinking or not. Candice and Michelle are both members of the SS personality group, describing themselves as "social" or "outgoing."

Michelle: No. Well, I'm an outgoing person. And I'm outgoing when I'm drinking. So I'm just kind of eccentric, I guess. That is about it. I don't really think there is much in there. (SS)

We hear from girls that sometimes personality is connected to reasons for drinking and sometimes it is connected to reasons for not drinking, or not drinking as much.

Emily: Well, because I am a more uptight person than some of my friends. Like sometimes it will stop me from drinking but sometimes it will urge me to drink to make myself loosen up, make myself looser. (AS)

Emily describes herself as "more uptight" than others. This sometimes "stops her from drinking" and sometimes "urges" her to drink. Evidently Emily's personality plays a role in determining whether social context will lead her to drink.

Nina sometimes experiences anxiousness around 'not' being social. At first glance, her comments indicate a possible limitation of AS construct, as she initiates a party situation. This seems unusual for a person said to be high in AS. However, on another level, Nina's story offers a richness in telling us more about what social anxiety might be like for her.

Nina: I like being alone a lot. And at times, I don't like being alone. I am very odd. I am scared of being alone sometimes. And other times, I love being alone. So I think that might have a little bit of a reasoning – because the need to be social and stuff like that. Sometimes if I don't want to be alone, I'll just like tell my dad I want to have a party just for the sake of having a party, to be social and so I am not by myself. (AS)

Nina's response helps delineate a difference between the AS group and the SS group which might be explained in relation to the personality constructs. Nina's "sometimes yes, sometimes no" seems to rest not so much on peer influence but her need to be with someone and an associated fear of being alone versus a need to be alone. Nina speaks of a need to be social. It may seem that the need to be social pushes the boundaries of the AS personality construct and the social anxiety often associated with this personality factor. However, Nina's story tells us that social anxiety for an AS girl could involve anxiousness around not being social that expresses itself in a fear of being alone and associated need to be with others. The inner tension for some anxiety sensitive girls has much to do with social anxiety or worry about not "being social" and a worry about how one is perceived by others.

Natashya experiences insecurity and anxiety about how others will see her particularly in relation to not drinking.

Natashya: I felt insecure. And it made me feel kind of worried about what people would think about me if I were to take that drink or if I were to not touch it. I always worry about what people think. Like if I should do it, what are they going to say if I don't do it, and what are they going to say. So I think that its actually what got me to actually drink, was I was scared of what they were going to think of me if I didn't do it. (AS)

The notion of being "social," then, is pivotal in girls' understanding of the varying connection between their personality and their alcohol use. For Natashya, and other AS girls, social anxiety is characteristic of the construct of AS in that an AS girls may worry

that if she shows she is nervous or anxious, her friends won't think she is cool and she won't fit in. For AS girls, drinking may help to calm nervous feelings and worries about feeling anxious. Although the SS girls acknowledge they are "outgoing" or "social," they did not tend to connect this with their reasons for drinking (i.e., drinking may make some SS girls more "social" but they describe themselves as "social" anyway). This is quite interesting, as their drinking did tend to occur in social contexts. The issue arises whether SS girls are unaware of the connection or do they see the connection as indirect, i.e., SS girls have a desire to be social which leads to immersion in social contexts that facilitate/promote drinking.

The complexity of girls' personal and social lives can be a struggle for some.

Daisy describes both the pressure to fit in socially, and her efforts to resist that pressure, something that an SS girl may be better able to do. Daisy conveys awareness and judgement.

Daisy: Peer pressure definitely does exist. I think it has to do with the stronger the person is, the more they are able to resist it. Like teenagers tend, and even sometimes me, you can be manipulated very easily by your friends. I am but not about stuff that I am really strong against, like drugs. If you believe in something then stand up for it. Like don't sit back. It is being hypocritical. I don't like it. (SS)

Natashya speaks to an internal "hurt" involved when she is less able than Daisy to resist social pressure.

Natashya: I think that when people pressure you to do something, it makes your views a lot different. Like inside you, you don't want to do it, and it hurts because you know you want to say no but you can't say it. And like when people pressure you to do something like alcohol, it changes you. It's hard to explain. It changes you because you know you are better, like you were brought up better or like you were taught different than to do that. The same thing that a lot of people have – friends just telling you it is okay, it is fun, why don't you try it, it's only once, you only have to have one. And then you end up having more than what you

think. They would like you better. They tell you that you become more in with this group, and then people would take you for who you are. It's not taking you for who you are, it's taking you for who someone else made you to be. (AS)

We see again a "doubled discourse" (Carney, 2000) wherein some girls are in fact performing culturally available roles or scripts ('good' girls for some, 'bad' girls for others) while seeking avenues to explore new ways of being. Alcohol use may very well be connected to this exploration for some girls; "we kind of do more just to push yourself," but not for others, "It's not taking you for who you are, it's taking you for who someone else made you to be."

The notion of "being social" is not simple (particularly for AS girls), especially when alcohol is involved, for exactly the reason Natashya notes above: you may find yourself doing things you don't really want to do.

Joyce: I remember at one party, a friend of mine was like in her bra because guys told her they would give her a beer if she took off her shirt. (AS)

Brianna: But sometimes it also goes further, when the guys are saying, "Chug more," or something. Then we kind of do more just to push yourself. (AS)

Josephine: Before I drink, all my friends are like, "Come on, do it." And then there are a whole bunch of guys around, and I want them to like me and stuff like that so I do it. And then like I start drinking and I get a little buzz. And everybody is like, "Oh, you are acting so funny." And I'm like, "No, I'm not." It's like so funny. And then everybody is laughing at me, and they think I'm all cool. And everybody else is drunk, and I don't want to be the only sober one. Because I don't know, it is just not good because everybody picks you out as the loser. So I start drinking and then I get too drunk that I don't even remember what is going on. (AS)

Joyce, Brianna, and Josephine are members of the AS group. The experiences of all three appear to involve an element of drinking to reduce or avoid social censure. Such conformity motivated drinking may be part of a need to use alcohol to cope with anxiety

in a social situation. Some girls in the AS group expressed drinking quickly on arrival to a social situation (e.g. party) in anticipation of feared anxiety, often their anxiousness would occur well in advance of the social situation. Josephine, for example, expresses her desire to reduce/avoid negative emotions in a social situation: "it is just not good because everybody picks you out as the loser." The notion surfaces that conformity is connected with coping emotions in a social context for AS girls.

Colleen Lundy and colleagues (1996) point out that girls in their teens "experience social pressures and contexts that are unique to women in our society" (Lundy, Carver, & Pederson, 1996, p. 39). Some of the pressure and contexts that these three girls are dealing with appear also to relate to their experiences of being girls. Joyce, Brianna, and Josephine remind us of the risky balancing act among broader social expectations in the lives of adolescent girls. Social context for girls involves trying to balance a desire to experiment with their sexuality and using alcohol to do this, while at the same time being vulnerable to unwanted sexual attention or activity. If they go too far in being "outgoing" or "social" they can be considered too loose.

In both the AS and SS groups, personality played a role in determining whether social context would lead girls to drink. AS individuals get nervous more than others. For them, feeling nervous is a particularly uncomfortable experience. Simply feeling nervous makes then even more anxious. An AS girl may make herself more stressed out just by worrying that something bad is going to happen when she feels nervous. She may worry her friends can tell she is anxious and won't think she is cool and she won't fit in. Conformity issues appear to be an important part of coping motivated drinking for AS girls. In contrast, drinking to enhance their experiences in a social situation seems

important for girls in the SS group. SS individuals crave excitement and often act without thinking clearly about what could happen. Sometimes an SS girl might be very bored and just seek excitement without thinking about what she is doing. At other times, when she is feeling high energy, she might find herself craving even more excitement when she feels a rush, and desire to intensify that rush. This kind of excitement is fun for an SS individual and drinking helps provide that feeling. Drinking serves to enhance the moment. Intensity seeking issues seem an important part of enhancement motivated drinking for SS girls.

The notion of being "social" also appears connected to girls' understanding of the varying connection between their personality and their alcohol use. For some of the AS girls, "social" has to do with a need to be with others as opposed to alone even though there is anxiety associated with both options (i.e., fear of being alone; a worry how they will be perceived by others, respectively). For several SS girls, "social" is an adjective describing an aspect, if not one of the central aspects, of who they perceive themselves to be. In fact, SS is part of the higher order construct of extraversion (see Stewart & Divine, 2000) which captures this very tendency to be outgoing. Social concerns (e.g., being connected with a peer group) are an important domain for girls in both personality groups.

In this section we have observed not only that AS and SS girls have particular connections with each other but also that there are important differences among at-risk girls to be explored. We move on now to consider these girls' resistance to "psychological and physical denigration" (Brown, 1998, p. xii) inherent in stereotypes, powerlessness, and marginalization. Their attempts to exert control on their alcohol use

by setting limits on drinking may be one sign of their ability to actively resist the influence of gendered social expectations.

4.4 At-Risk Girls' Resistance and Setting Limits on Drinking

When girls protest the realities of their experiences, they are likely to be accused of being a victim or complaining too much. The negative language of being a victim or complaining too much reveals a cultural denial or dismissal of girls' social and psychological realities. Protesting the reality of inequities is a form of political resistance. Referring back to when her parents were younger, Ka Wai articulates how, if given a choice between a "white and non-white person," white people were usually advantaged "even if they were not as smart." She views things as "changed somewhat" in that now "they want different people because of the knowledge." Ka Wai shares her experiences of racism.

Ka Wai: I honestly am trying to get away from here because I don't like how everyone is narrow-minded. Like I quit a job at a store because people were racist. Well, I put up with it for a few months. And I put up with it because I put up with it all my life. But then the manager started blaming things on me because I was different so I quit because I wouldn't take it. Well, it's horrible. . . . My younger sister, she is more sensitive. When they called her Holly Hong Kong and they made comments about eyes and our different ethnic structures and things like that, it was bad. But it wasn't something I would go home and cry over. I like being different. It doesn't affect me as much. (SS)

Like Ka Wai, Luanne is determined to construct a different future, where she plans to actively seek out space for self-expression and to explore new ways of being.

Luanne: I'm going to be independent and do it for myself, and be able to raise both my kids on my own income and not have to worry about relying on other people. And I don't want to live week to week on a pay cheque. I want to be able to, if something pops up and I have to pay for it, like the car breaks down or something, I want to be able to have money there so I'm not stressed out about it. But then again, I am not going to feed my kids everything in a silver platter and give it to them. Like they are going

to learn responsibility, just in a different way than I learned it. But I know the lesson. I just have to teach it in a different way to my children, and stop the cycle. Like for me, the chances are that I will become an alcoholic. I mean looking at the whole picture with my family, like coming down the generations. But why not stop it, the cycle? It doesn't interest me. (SS)

Luanne knows she is strong and resistant. She knows she wants to be independent. She articulates her strength in her daily life and aspirations.

The adolescent girls I had the privilege of interviewing are a dynamic group; each girl embraces issues and concerns that vary with context and enrich rather than displace a common struggle. Many girls articulate resistance to social forces that constrain or construct them. For example, Brianna resisted pressures around drinking and unwanted sexual activity.

Brianna: I felt really good after I went home and nothing happened. Because most of my friends will sit there and like just. They sit there and brag the next morning about how they did things with a guy. And they were like, "Why did you leave?" And I was like, "Well, I don't need to do that with a guy." Like I was glad that I left and not stayed there and drank. (AS)

Other girls exhibit resistance to powerlessness. Candice demands independence in intimate relationships.

Candice: Well, whether it is girlfriend/girlfriend, boyfriend/girlfriend or boyfriend/boyfriend, I mean more intimate relationships. But like my best friend, her and her boyfriend. They are never apart. Everything has to be based around that person. They just depend too much on their significant other. I think me and my boyfriend are okay now. I don't care how hot he is. I don't care how much money he has. I will never be in a controlling relationship. That got cleared up the second we started going out. (SS)

Some girls display resistance to the threat of violence. Candice describes a friend's insistence on controls over her own sexuality.

Candice: They were at another girl's house, whatever, and there was a guy there. So there were just 3 people. And he is like, "Yah, Susie, why don't you come downstairs and show me this and this?" And they had

been joking around all night so she figured he really wanted to see downstairs. But it was different than downstairs he wanted to see. So anyway, he got her there or whatever, and he was pushing her a lot in a lot of ways, you know. And she was like, "Man, I am serious. Get off and don't touch me." And then he was like, "Sorry," and he didn't do anything again. (SS)

Some girls exhibit resistance to other forms of disadvantage, such as disability and isolation from one's peer group.

Pauline: I like the way I am. I am glad that I have [a disability]. I wouldn't change it. Like if I could [be able-bodied], I would. But like I'm not mad that I [am not]. I don't freak out and cry every time I realize I have [a disability]. I just deal with it. If I can't do it, I'll just be like, "I can't do it, and I'll deal with it." But usually if it is like something I really want to do, I'll try. I'll try. (SS)

Josephine: I used to have like really, really low self-esteem. I used to think, "Oh, why should I live?" and stuff like that. But now I don't because, I don't know, I've gotten more friends and they are really, really nice to me. I used to have really low self-esteem, and now I'm building up on it. (AS)

Girls may be actively resisting the controlling influence of gendered social expectations through attempts to establish their own parameters for behavior wherein they can exert control on their drinking by setting limits. Girls show active resistance to dominant cultural notions of femininity through attempts to create places and "a language of possibility" where they can express themselves and explore new ways of being (Carney, 2000, p. 129). Drinking may be connected to this exploration for some girls.

Susan: I know how much I can drink. I know my limits. Different alcohol, I know my limits on them. I can drink a glass and I won't do anything stupid. But if I drink more than that then I will get a little stupid and act not like myself, differently. I'm just not the person I want to be. (SS)

Nina: When I start feeling really tipsy. And then it is like, "Okay, that is my limit. I don't want to look like an idiot." (AS)

¹ I am avoiding disclosing Pauline's disability to ensure her confidentiality.

Pauline: Well, I would know if I was going to get drunk or not. So I wouldn't drink very much. I would like limit myself to 1 or 2 drinks. But like I know 4 drinks of whiskey is way too much for me. I know when to stop. (SS)

The girls in both personality groups articulate the importance of being in control of their drinking, of being able to "control the way that I wanted to behave," even though they are heavy drinkers.

Emily: I know the feeling. I know when to stop. You need to know when your body has had enough. Not only your body. Like emotionally you need to know when you need to stop. But really the only way to learn that is to go over it. But I just think it is best to be able to do that around people that you are comfortable with. It depends on who you are comfortable with or how comfortable you are with people you don't know that well. Or if you are even going to drink around people you don't know that well. When I feel like I am not in control physically then I know that I'm not going to be able to be in control emotionally. (AS)

Ka Wai: It was by choice. You see, it wasn't really the alcohol, it was me – how I wanted to be that night. Well, like I have different sides. Sometimes I have to be serious, and sometimes you want to be happier. I by choice act certain ways. It is not something that I have to control because it is under control. I'll drink if I feel like having a drink, not because I need it. (SS)

Daisy: I lost my step-brother when I was 12. And I had known him like since we were like babies. He died when he was 14, and I was 12. He died from a drunk driver. He got hit by a drunk driver so that is why drinking is not a big thing in my life. Like I have very good reasons to not. I don't begrudge anybody to have a drink but if you get in the car then I don't like you. Like I'll hate you. If I didn't think that I could control the way that I wanted to behave then I would probably be a recluse and just go and drink and be like the majority. Or be like that percentage that just drinks to get drunk, and drinks because other people are drinking. I don't know, I look down on that. They don't rank well in my scale of 1 to 10. I really respect people who have control and do it not because they need it. Just because, you know, it is there so why not. But not because everybody else is doing it. (SS)

In establishing limits or parameters for one's drinking, a girl may actually be engaged in creating a space where she can have some personal control and maintain concern about

appearances when under the influence of alcohol. Some girls set limits when experimenting with sexuality and using alcohol to do that.

Candice: Because of past experience, I know how much not to drink so I won't be there passed out where anything could happen. So I don't drink that much any more. That is what I use to keep myself at a certain level. I know how much I can drink now without being on the floor laughing with some guy taking my clothes off. Like I said, it is just pretty much a caution for me now. I know how much now I can drink without being totally tanked and falling all over the place . . . without making a total ass of myself. (SS)

Jane: I'll just wait a little while just to let things cool off if I'm drinking too fast so I don't get that sick feeling. But it's usually emotions. Like if I feel like I'm in danger or something, like if people are getting rowdy at a party and you need to control things then I'll stop. My friends and I talk about how a sex issue gets involved when people are drinking. And I can control that. I don't go out and do stuff like that when I have been drinking because obviously that can have you be pressed under charges because that can be issued as a rape case. I don't do anything like that. I just sit back and either dance or just talk to friends. (SS)

While some girls are experimenting with sexuality and use alcohol to do that, they also articulate a confidence in their ability to exert personal control over their alcohol use and set limits on their behavior. I observed that SS girls more often expressed this tendency to limit their drinking behavior than AS girls. Stewart and Chambers (2000) in their investigation of self-perceived reasons for drinking among young adults and drinking restraint (preoccupation with controlling alcohol intake) found behavioral attempts at alcohol restriction to be predicted by enhancement motives scores. Interestingly enhancement drinking motives are associated with SS moreso than AS, as found in Study 1 (cf. Comeau et al., 2001).

The responses of girls to their social and psychological realities often include strong feelings and vivid illustrations. These responses reflect the struggle for interpretation that adolescent girls experience every day. Susan describes this as a struggle to be her own person.

Susan: My personality has changed so much since I moved here – my confidence. I have been my own person. I have been myself for over a year. It is not very long but it's good for me because my whole life, I have always acted differently than what I wanted to. But personality, it's just not the person I am. I just don't think drinking is the answer to any problem. If you have a problem, you should deal with it right then. Because if you keep putting it off, it will bring more problems. (SS)

Like Susan, many of the girls I interviewed are actively engaged in a struggle, and often a risky balancing act, to sort out the meanings of their lives, many times contesting the pressures to align with a reality that often devalues and dismisses them.

The majority of at-risk girls in both personality groups have many positive creative activities in their lives to help with self-expression, build confidence, and deal with stress. I am struck by girls' capacity for creative active ways of dealing with the struggles I heard in the privacy of the interviews.

Natashya: I write a lot now. Like I like making up my own little books or articles or things like that. It's fun. It's like a diary. But I like to write in a form of a newspaper article. And I write about my life, like stories. Like past things that I remember were fun, or trips for volleyball and things like that. I write a lot about negative things because when I have a bad situation that I can't fix, I find myself writing a lot about it so it will calm my nerves a little bit and it will make me realize what I have done and what I should do about the situation, and things like that. That is the first thing I'll do if I have a problem. I'll write about it. It helps a lot. (AS)

Josephine: I am really good at poetry. I was like depressed for like half my life so I just started writing poetry and it just helps me a lot. I just write it down on paper, and it helps me a lot. (AS)

Daisy: I am not like a normal kid, I don't think. Like I never really followed the crowd very much. I always made my own decisions. I was always part of Students Against Drinking and Driving right from when I was in grade 5. And I'm part of Safe Grad here. When I did get drunk, I felt irresponsible. And that is not like me because of my history of being in SADD and being in TADD and being involved in the community and

stuff like that. It didn't sit well in my head. Like I knew it was wrong so I don't want to do it again. (SS)

Nina: My dad bought me a dictionary so I could go through and correct my spelling in my little journal that I keep. I love writing. I've got many, many poetry books filled with poetry. It is very, very private. Because that is how I express myself, is like through writing and stuff like that. I'll sit down and read over it, and it's like that is very, very morbid. Some of them are about like different relationships that have fallen apart, and other ones are about like my best friend. He died like 3 years ago. And a lot of them are about him and how I felt about it when it happened, and how I feel now about it, and everything. (AS)

In summary, the period of adolescence represents a time when relationships, feelings, and actions change and girls' struggle with the definition of reality. Girls are not simply experiencing the usual difficulties of moving away from childhood toward the acceptance of adult reality. Listening to girls, I come to understand that they are questioning the very terms of their social reality. Their strong voices call into question the stability of conventional femininity. I would suggest that through their drinking behavior, girls implicitly and sometimes explicitly ask whose construction of reality is to be given legitimacy and authority. Adolescent girls can see and name the effects of oppressive forces on their lives. They do not want to narrow their feelings or muffle their voices, which is often required if girls are to make an easy transition into the dominant culture.

4.5 Discussion

4.5.1 Enriched Understanding from Qualitative Findings

In general, qualitative results confirm and substantially extend results of prior studies using quantitative, questionnaire-based measures of drinking motives (e.g., Comeau, et al., 2001). As explained in Chapter 3, AS and SS have been consistently linked with risky drinking patterns in adolescents and young adults. Personality factors

have been associated with different reasons for alcohol use (e.g., Comeau et al., 2001, Cooper, 1994). AS teens report increased negative reinforcement motives (i.e., coping with negative affect, or conforming to peer pressure) whereas SS teen drinkers report increased enhancement motives for alcohol use (drinking to increase pleasurable emotions). Coping, conformity and enhancement motives are reportedly risky reasons for drinking in that they are associated with heavier use and an increase in alcohol related problems (Cooper, 1994). In contrast, social motives appear to be associated with a relatively lighter, non-problematic style of alcohol use and thus are considered a less risky set of reasons for drinking (e.g., Cooper, 1994).

The findings of these qualitative interviews confirm certain theoretical and practical distinctions between the two personality constructs. Many girls in the AS group articulated noticing their uncomfortable physical sensations and express worries about these anxious feelings. These girls often make themselves more stressed out just by worrying that something bad is going to happen when they feel nervous. Sometimes AS girls may feel there is nothing they can do to get rid of the uncomfortable sensations and find it hard to imagine other possibilities, how to change that feeling. Some girls in the AS group articulated a lack of entitlement to pursue their own desires toward future aspirations which might possibly be related to a difficulty imaging other possibilities for oneself, to low self-esteem or hopelessness about the future. In contrast, girls in the SS group expressed the attraction to intense experiences characteristic of those who are sensation seekers. These girls shared stories in which they would often focus on the obvious, highly stimulating aspects of situations and would seek excitement without thinking much about what could happen.

This chapter has allowed deep exploration of some aspects of the personality constructs as well as other factors that shape drinking motives. An exploration of a link between personality and girls' understanding of their alcohol use indicated that interpersonal relationships were salient to their drinking. While the personality constructs were not particularly salient for girls as associated with their understanding of their drinking, the majority of girls did see some aspects of the personality constructs as part of their identity. Personality played a role in determining whether social context would lead girls in both the AS and SS groups to drink.

4.5.2 Themes within Personality Groups

Qualitative interview data has permitted girls to speak in their own words without the constraints of pre-determined drinking motives categories and allows for the identification of themes related to drinking motives of AS and SS teenage female drinkers. Results from qualitative Study 2 open up our understanding with respect to certain issues that stood out for girls in each of the personality groups.

4.5.2.1 Anxiety Sensitivity (AS)

In the AS group, two themes surfaced as characterizing these girls: one pertains to the notion of "being social," the other is associated with conformity and coping motivated drinking. First, "being social" for AS girls seemed more to have to do with an internally generated need to be with others versus being alone. AS girls indicated worry and stress associated with both contexts. There is a distinction to be made between this notion of "being social" and social drinking motives under Cooper's (1994) model of drinking motivations which involve drinking to obtain positive social rewards. One is a drinking motive and the other isn't. Social drinking motives, on Cooper's account, are externally

generated and are considered to be specific to social contexts (Cooper, 1994). In contrast, "being social" for some AS girls has to do with an internally generated need to be with others as opposed to alone even though there is anxiety associated with both options (i.e., fear of being alone and a worry about how they will be perceived by others, respectively).

Second, conformity issues (i.e., desire to avoid social censure) appear to be an important part of coping motivated drinking for AS girls. Here, qualitative results substantially enrich our understanding regarding the findings from the first study reported in Chapter 3. Recall that an aim of Study 1 was to replicate the pathways of AS/TA to coping and conformity (negative reinforcement) motivated drinking. Quantitative findings revealed that these pathways are particularly salient for adolescent girls. We began Study 1 knowing AS was related to conformity drinking. Conformity motives are externally generated and involve drinking to avoid social rejection (Cooper, 1994). In general, AS girls drink to fit in with the group; they are seen as funny or cool when drinking because this means they are fitting in – they have successfully avoided social rejection. Qualitative results strongly suggest that conformity is connected with negative coping emotions in a social context. Recall that under Cooper's (1994) model, coping motives involve drinking to reduce negative emotions, which are more likely to be controlled by internal rather than social factors. Here, qualitative findings suggest that both conformity and coping motives are important in social situations. Results indicate the importance of viewing conformity as part of coping, not independent from coping. Qualitative findings open up our understanding of the negative reinforcement motives

(coping and conformity) and help justify the reason for doing coping in addition to conformity based interventions for high AS girls.

4.5.2.2 Sensation Seeking (SS)

Similarly, two themes surfaced as being particularly distinctive for girls in the SS group: one theme pertains to the notion of "being social," the other theme is associated with enhancement motivated drinking. In contrast with girls in the AS group, for many SS girls, "being social" is an adjective describing one of the central aspects of who they perceive themselves to be. Interestingly, SS girls did not tend to connect "being social" with their reasons for drinking (i.e., drinking may make some SS girls more "social" but they describe themselves as "social" anyway). Externally generated social motives (drinking to affiliate; Cooper, 1994) are distinct from enhancement motives, where a girl drinks to experience a rush. Enhancement motives involve drinking to heighten positive mood and are likely to be internally generated (Cooper, 1994). A primary aim of the thesis was to explore the social contexts in which adolescent girls' drinking occurs. We see support from the qualitative data for an association between SS girls and drinking for enhancement motivated reasons. Indeed, the social context seems to promote this association. SS girls have a desire to be social (i.e., SS leads to immersion in social contexts that facilitate/promote drinking). For SS girls, enhancement motivated drinking seemed connected with the rush of a performance for others or standing out in a peer group. Enhancement is an internal state. In the social context, for SS girls, the rush of the performance, of standing out, is fun and drinking helps provide that feeling. Drinking serves to enhance the enjoyment of the moment. As one SS girl notes, she "finds it fun

for that reason." Thus, qualitative findings enrich our understanding of how intensity seeking may be related to enhancement drinking motives in girls.

4.5.3 Shared Themes across Personality Groups

While there may be theoretical and practical distinctions between the two personality constructs, there are similarities among girls in the AS and SS groups. Five themes surfaced as important in relation to at-risk girls' experiences of being girls and drinking which were shared within and among girls in both personality groups: sexuality, social expectations, powerlessness, isolation, and not fitting in. Girls' experiences of being girls crosses personality groups, although AS and SS girls differed in important ways.

There did seem to be subtle differences between the AS and SS personality groups with respect to girls' discussions about alcohol and sexuality. SS girls acted more as rule-violators seeming to enjoy how they could incorporate alcohol into their sexual risk-taking to enhance this experience. They thereby put themselves at even greater risk than their SS tendencies alone. In contrast, AS girls were nervous about sexual experimentation and used alcohol to help persuade themselves to do so. Risk increased by virtue of alcohol use – risk that was not present normally. In addition, girls in the AS group were more regretful of their alcohol intoxication behavior relative to SS girls. I observed a subtle difference between SS and AS girls with respect to self-assessment of their behavior. In general, SS girls seem to articulate facts regarding their behavior whereas AS girls seemed more inclined to articulate feelings of guilt. I also observed that SS girls more often expressed a tendency to limit their drinking behavior than AS girls,

although not entirely realistic. As previously noted, among these 17 participants, SS girls drank more drinks per drinking occasion than AS girls (5.8 versus 4.9).

The girls I interviewed seemed to vacillate between buying into traditional cultural notions of femininity with its gendered social expectations and pushing the boundaries. The SS girls expressed a tendency to reject the stability of conventional femininity more so than the AS girls. AS girls seemed to buy into gendered social expectations more in their desire to be liked and accepted relative to SS girls. The attitude or belief that it was better not to have strong negative emotions seemed more common to AS girls relative to SS girls, which may be in part explained by these individuals' greater attempts to control aversive inner experiences more generally (cf. Stewart et al., 2002b). Girls in the SS group seemed more openly resistant to traditional cultural notions of femininity and expressed strong feelings of anger and independence. The quality of self-expression under the influence of alcohol seemed to differ for SS and AS girls. Alcohol seemed to give many high SS girls increased impulsiveness. In contrast, alcohol appeared to give several high AS girls a liquid courage (giving them the guts) to say what they want to say in some circumstances.

I also heard from some of the stories that oppression is a factor in the life experiences of at-risk girls. For example, both AS and SS girls articulated experiences of oppression on the basis of gender (e.g., sexual objectification, sexual exploitation, and threat of violence) as well as experiences of marginalization based on class and race. AS and SS girls differed somewhat in their responses to experiences of oppression and ways they handled these similar pressures. For example, SS girls tended to show aggression

and were often impulsive and inclined to speaking out, whereas AS girls tended to attempt to escape.

It is important to note that the complexity of girls' lives does not fit neatly into the two personality constructs of AS and SS. As previously noted, girls' lives are shaped by broader social context factors, i.e., social class. It is important to find ways to support adolescent girls' resistance to being devalued or dismissed and to identify and challenge broader social forces and events that threaten girls' visibility and effectiveness. Drawing on previous work with Carol Gilligan in a study of girls and young women (Brown & Gilligan, 1992), Lyn Mikel Brown (1998) focuses attention on the need to preserve girls' tendency to stay in touch with feelings such as anger and frustration.

Teaching girls how to pinpoint what is causing them anger or pain and how to act on their feelings constructively provides a kind of warrior training for social justice. Out of such clarity, the outlines of creative action and the possibility for human freedom are born. (Brown, 1998, 224)

The development of personality-matched brief interventions in this investigation begins with the knowledge of such struggle and resistance and is predicated on the possibility of healthy, expressive pathways for girls. Feminism tells us to value these young women as adolescent girls at a certain place and point in time. Feminism also tells us to find out their views and try to respond.

In this chapter, I have documented how a small number of adolescent girls from rural Nova Scotia understand their relationships with alcohol and navigate their daily lives. Chapter 5 takes up how the quantitative date from Study 1 and the qualitative data from Study 2 were combined to inform the development of two school-based training sessions for adolescent female alcohol users. These brief interventions represent what we might do for girls on an individual basis. The context of the brief interventions in Study

3 aims to provide space and opportunity for trained facilitators to hear and respond to girls' thoughts, feelings, and relationships with alcohol. This chapter has also attempted to examine some broader social and political forces (e.g., gender, race, class) in which girls' struggle and resistance takes place. We have seen some processes by which girls' voices are constrained and regulated and explored various ways that girls resist such regulation. I will use this enriched understanding in evaluating the school-based brief intervention program described in the next chapter. The personality-matched early interventions discussed in Chapter 5 were tested with girls and boys in single-gender groups to test gender-specificity in outcome results.

Chapter Five: Test of Novel Personality-Matched Early Interventions 5.0 Introduction

Chapter 5 presents the method and results of Study 3, a test of two brief personality-matched early interventions using a randomized control planned comparison design. As previously noted, AS and SS are two personality risk factors for alcohol use disorders, each associated with a different maladaptive drinking motive (i.e., coping/conformity and enhancement, respectively; Comeau et al., 2001; Stewart & Zeitlin, 1995). Study 1 findings indicated that the associations of anxiety related personality variables to risky coping and conformity motives, and intensity seeking to enhancement motives, are particularly salient for teenage female drinkers. Results of qualitative Study 2 (Chapter 4) suggested that conformity drinking motives among high AS teenage girls involved coping with negative emotions in a social context, indicating the importance of viewing conformity drinking as a subset of coping motives (Cooper, 1994), not completely independent from coping. Thus, I conceptualized the target drinking motives of high AS teenage girls to involve both conformity and coping components. Study 2 findings also confirmed an association between SS and enhancement motivated drinking. In general, SS girls enjoyed the feeling of being disinhibited that frequently accompanied their drinking experiences. The rush of standing out in a peer group was described as fun by many SS girls and drinking often helped provide that enjoyable feeling. The personality factors and associated risky drinking motivations of these two groups of adolescent drinkers (AS and SS) are the specific targets of the personality matched brief interventions described in this chapter. Study 2 also pointed to commonalties across personality groups highlighting the

experience of being girls in relation to their drinking and supporting the gender specificity of the interventions. In the substance abuse treatment literature, most recommend that treatment groups consist of same-gender clients (Hodgins et al., 1997; Stewart et al., 2002a). In view of this trend, the early interventions were administered in single-gender groups. In addition, by testing the interventions with girls and boys, I have a contrast group for the notion of gender-specificity and am able to describe gender patterns in outcome results.

The gender-specific associations between the personality factors and drinking motivations observed in Study 1, and the enriched understanding of those connections resulting from Study 2, informed the development of these novel motive-specific interventions. As previously noted in Chapter 1, these early interventions were derived from community-based personality-matched treatments for addictive disorders in AS and SS adult women (Conrod et al., 2000b). Conrod et al. (2000b) demonstrated that substance-abusing women, classified according to specific personality profiles (e.g., AS versus SS), manifested distinct patterns of addictive and non-addictive psychopathology and coping skills deficits. Moreover, treatment focused on provision of subtype-specific coping skills was found to reduce substance use problems in these women relative to control interventions, particularly when the coping-skills were provided in a "matched" fashion (i.e., when an AS women received an intervention targeting AS). These findings highlighted the importance of developing intervention strategies that differentially target subtype-specific personality, motivational, and coping skills profiles (Conrod et al., 2000b). I reasoned that we should be able to extend this treatment approach for use in early intervention with at-risk groups of AS and SS teenage female drinkers. However, I would need to make the interventions developmentally-sensitive and relevant to the lives of AS and SS girls.

Study 3 is an efficacy test of the two personality-matched early interventions developed to treat "risky" or maladaptive drinking motives (i.e., coping, conformity, and enhancement; Cooper, 1994) and ultimately reduce excessive drinking and alcohol problems in at-risk teenage girls. This chapter describes how these two brief interventions were developed and tested for their efficacy across gender.

As noted previously, the early interventions were modified from the Conrod et al. (2000a) model with input from the qualitative semi-structured interviews with groups of AS and SS teenage female drinkers, described in Study 2 (Chapter 4). The three main components of my early interventions were (a) psychoeducation, (b) behavioral coping skills training, and (c) cognitive coping skills training. These specific components are discussed in detail in the procedure section. The coping skills portions of the group activity involved motivation-specific behavioral strategies and cognitive restructuring training taken from previous empirically-supported interventions (e.g., Harrington, Telch, Abplanalp, & Hamilton, 1995). The coping skills training sections also included discussion of "scenarios" (i.e., stories from the girls' real lives) or examples that were informed by the qualitative thematic analyses of Study 2 data in which context and consequences of risky or maladaptive behavior (including but not limited to alcohol use) were generated.

The early interventions were developed in handbook form involving a manual for the facilitators and a workbook for the participants which is a subset of the material found in the facilitator manual. The facilitator manuals include the participant workbook plus instructions for the facilitators. (Note: All pages of the participant workbook were numbered separately in bold yellow circles with the exception of 'practice sheets' at the end. Appendix F contains pages from the AS and SS facilitator manuals for the specific purpose of content illustration). The manuals and workbooks made use of images that, like the scenarios, were informed by the results of qualitative Study 2. The two groups of girls' diverse experiences and contexts of alcohol use, based on the multiplicity of their social and cultural identities, interests, and experiences, were documented and conveyed in the introductory composite images (refer to Appendix F: AS manual, p. 277 and SS manual, p. 278). Several of the scenarios tried to capture the complexities of girls' social and personal relationships with alcohol as the girls in Study 2 defined these relations. Some scenarios focused on maladaptive coping strategies in an attempt to document the interviewed girls' diverse experiences with and contexts of alcohol use (see Appendix F: AS manual, p. 279 and SS manual, p. 280).

The personality constructs of AS and SS and their relationship to drinking motives were both supported and broadened in the qualitative data. For example, AS girls did talk about drinking to lessen worries about feeling anxious while SS girls did talk about drinking to enhance feelings of fun and having a good time (see Appendix F: AS manual (Erin's situation), p. 281 and SS manual (Katie's situation), p. 282). However, extending beyond what was already known on the basis of the qualitative Study 2 findings, AS girls talked about drinking quickly in advance of or immediately upon arrival at a party to ease the feelings of anxiety they would experience in a social context. Similarly, the interviews extended what was known about SS girls' enhancement motives in that these girls spoke of the rush of standing out in their peer

group which drinking afforded them. The scenarios were designed to illustrate these specific functions of alcohol and to illustrate girls' stories of how drinking for these reasons could lead to the situation "spiralling out of control" (see Appendix F: AS manual, p. 283 and SS manual, p. 284). As the interventions were being tested with boys, I attempted to make the manuals more applicable to boys. I included male characters in some scenarios. For example, see Appendix F: AS manual (p. 285) for the story of Nick and Candice. Examples that would be particularly relevant for boys were included; see Appendix F: AS manual (p. 286) for an example of Taher who gets stressed out by uncomfortable physical feelings he experiences when he worries about things. Also, refer to Appendix F: SS manual (p. 287) for an example of Jason who gets a kick out of driving fast. I also modified some scenarios in an attempt to make them relevant for the boys; see Appendix F: AS manual (p. 288) for a story about Erin. Here, I included a male friend, Andrew, who has characteristics of AS – he knows what it is like to worry about feeling nervous. See also Appendix F: SS manual (p. 289) for a story about Katie in which I included a male friend, Ivan, who has characteristics of SS – he feels bored and restless studying and wants action. While deliberate efforts were made to include male characters and images, the scenarios used were modeled on the stories told by girls in Study 2.

5.1 Intervention Sample Selection

The chosen sample size was determined via power analyses (Cohen, 1977) using the results of a cognitive behavioral AS brief treatment intervention study (Harrington et al., 1995) with non-clinical young adults, and the previously-mentioned treatment matching study with clinical substance abusing women (Conrod et al., 2000b). The AS

brief treatment intervention (Harrington et al., 1995; Otto & Reilly-Harrington, 1999) produced a moderate effect in reducing levels of AS relative to an attention only control. Similarly, in the treatment matching study with clinical substance abusers (Conrod et al., 2000b), the matched interventions produced moderate effects in reducing substance abuse levels relative to the control intervention (i.e., watching a motivational film about women's substance abuse). We used these findings to calculate the number of participants necessary to observe pre- to post-treatment differences in each cell of our 2 x 2 ((treatment group: matched intervention vs. no treatment control) x (gender: girls vs. boys)) design.

5.2 The Present Study

The purpose of the present study was to investigate whether matched early interventions targeting personality factors and associated risky drinking motives reduce risky drinking behavior and have an impact on problem-drinking more so than no intervention (i.e., the passage of time and completion of study measures alone). Testing for simple effects of time in each of the four groups separately, I anticipated that drinking behavior and drinking problems would decrease most from pre to post intervention for individuals who received the matched interventions relative to those in the no treatment control conditions. Similarly, I anticipated that the risky drinking motives (i.e., coping, conformity, and enhancement) would decrease most from pre to post intervention for individuals who received the matched interventions relative to those in the no treatment control conditions. Given the results in the thesis to date (Study 1 and Study 2), I expected increased efficacy of the interventions for girls relative to boys. These hypotheses were tested using a series of planned comparisons (cf. Tabachnick & Fidell,

2001). Testing the interventions with boys as well as girls provided a contrast group and allowed for a description of gender patterns in outcome results.

5.3 Method

5.3.1 Participants

The participants in this study were recruited from a larger screening sample. Eligible teens were "drinkers" scoring at least one standard deviation (SD) above the gender-specific norm on the Childhood Anxiety Sensitivity Index (CASI; Silverman et al., 1991) or the Arnett Inventory of Sensation Seeking, Intensity subscale (AISS-I; Arnett, 1994). Similar to Study 1, a "drinker" was defined as an individual who reported having consumed alcohol in the past four months prior to the screening survey. This resulted in a final sample of 135 participants who completed the entire study including the post-intervention follow-up.

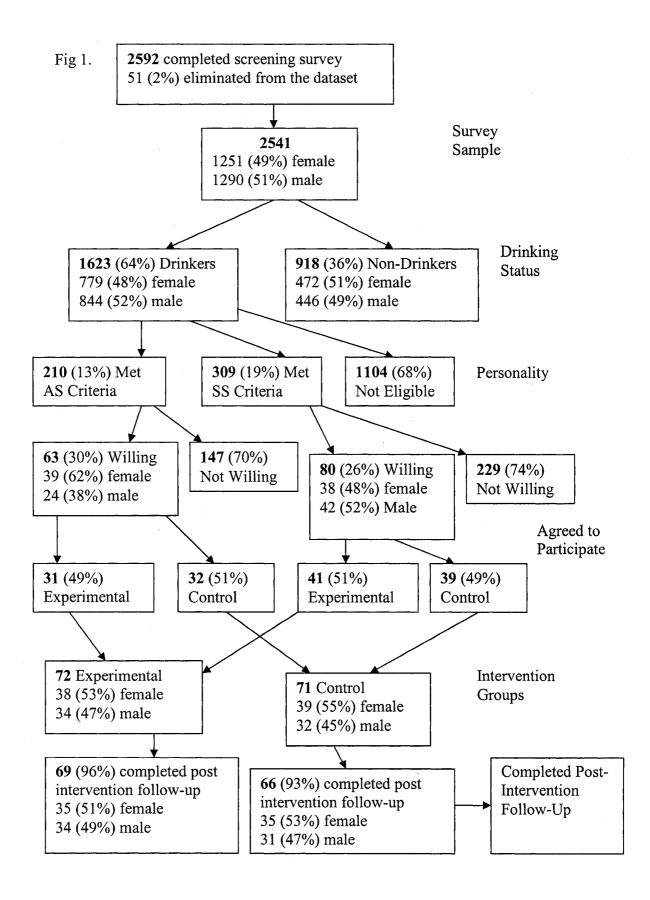
Participants were recruited through local secondary (junior and senior high)

public schools in the Annapolis Valley School Board in Nova Scotia, Canada. Figure 1

presents a participant flow chart illustrating the characteristics of students at each stage of
the study process from initial screening to post-intervention follow-up. First, screening
(baseline) measures were administered to 2592 adolescents from four schools.

Approximately 98% of those students present at school on the day of the survey
participated. Missing values replacement for those with less than 20 percent missing data
were completed, and participants with more than 20 percent missing data were
eliminated, as described in Study 1 (Chapter 3). Of the total number of 2592 students
who completed the screening survey, 51 subjects were eliminated from the data set due to
missing data (n = 47) or computerized answer forms that were hampered by stray marks

(n = 4) which made the majority of their answers unintelligible. Of the 2541 students who provided usable data on the screening measures, 1623 (64 %) self-reported using alcohol in the previous 4 months on the demographics questionnaire and were therefore classified as "drinkers" eligible to participate in the early intervention study. Of the 1623 drinkers, 511 (31%) fit the personality criteria (205 AS and 306 SS). If a student met criteria for more than one personality risk group, they were assigned to the group where they scored highest relative to the gender-specific norms. While this selection criterion is less stringent than that used in Study 2 (Chapter 4 Methodology Section), it did allow for distinct personality groups and prevent the elimination of potential participants in testing the efficacy of the interventions. Of those 511 eligible students, 143 (28%) students agreed to participate in the interventions (63 AS and 80 SS). Students were considered ineligible if they did not drink and if they did not score high in one of the two personality characteristics (AS or SS). Most potential intervention group members were lost at the level of willingness to participate. All eligible students who agreed to take part received parental consent save two students who did not require parental consent because they lived on their own (i.e., emancipated minors).



All participants in the experimental groups (AS and SS) attended the first of two same-gender sessions. Details of the interventions are provided later in this chapter (see Procedure Section 5.4). Five students did not complete the second session (4 girls were absent, 1 boy was suspended from school). These 5 students were invited to complete the outcome survey since efforts were made to have them review the same material that was covered in the second group. These 5 students were also among the 135 who completed the post-intervention follow-up. Of the 143 intervention group participants, 8 did not complete the four-month follow-up survey: 3 graduated, 1 moved from the area, 2 opted not to participate, and 2 dropped out of school.

Thirty-five girls were selected for their status as high AS drinkers and completed the post-intervention follow-up measures (18 AS girls: experimental group; 17 AS girls: control group). Similarly, thirty-five girls were selected for their status as high SS drinkers and completed the post-intervention outcome survey (17 SS girls: experimental group; 18 SS girls: control group). Twenty-three boys were selected for their status as high AS drinkers and completed the post-treatment follow-up measures (12 AS boys: experimental group; 11 AS boys: the control group). Forty-two boys were selected for their status as high SS drinkers and completed the post-intervention follow-up measures (22 SS boys: experimental group; 20 SS boys: control group). Thus, the Study 3 sample included a total of 135 students who completed both the pre-treatment package and the post-intervention follow-up measures (69 students in the experimental group who took part in the interventions and 66 students in the control group who did not take part in the interventions; 70 girls and 65 boys).

Of the final sample of 135, participants were 15.6 years old (SD = 1.2) on average, and their average level of education at the time of testing was grade 10.3 (SD = 1.1). The majority of participants were Caucasian (n = 121 or 89%). Overall, 2 students were First Nations, 5 were Black, and the remaining 7 were of "other" ethnic decent. Participants were largely from lower-middle class family backgrounds (e.g., on average participants reported an annual family salary in the range of \$25,000 - \$40,0000 CDN). All participants spoke English fluently.

5.3.2 Measures

5.3.2.1 Demographics and Drinking Behavior

An author-compiled questionnaire sought basic demographic information (cf. Stewart & Devine, 2000). Participants were asked to provide their age, gender, current grade level in school, ethnicity, and estimated income range of their family of origin.

Annual income was coded on a 5-point scale with anchors of 1 = \$25, 000 (CDN) or less per annum to 5 = \$70,000 (CDN) or more per annum. Participants were requested to indicate whether or not they had consumed any alcohol within the past four months.

Only those who responded affirmatively to this past four-month alcohol-use item were invited to complete the alcohol use measures. Quantity of alcohol consumption was assessed in a manner previously described by Stewart et al. (1995). Specifically, students indicated the average number of standard alcoholic beverages (one drink equals one 12 oz. bottle/can of beer, or one small 4 oz. glass of wine, or one 1-oz. shot of hard liquor, either straight or with a mixer) they had typically consumed on a single drinking occasion over the last four months. The drinking quantity item was presented in an open-ended fashion to enhance accuracy of the retrospective self-report (cf. Sobell & Sobell, 1990).

In regard to drinking frequency, students reported how often they usually drank alcohol over the same four-month period. This information was assessed on a 5-point Likert scale with the following anchors: 1 = "less than monthly", 2 = "once a month", 3 = "2 or 3 times a month", 4 = "weekly", and 5 = "daily or almost daily". To increase response accuracy, the drinking behavior items were embedded within the demographic questions to reduce their salience and confidentiality was assured (cf. Sobell & Sobell, 1990).

5.3.2.2 Drinking Motives Questionnaire-Revised (DMQ-R)

The DMQ-R (Cooper, 1994) is a 20-item self-report measure that yields scores on four subscales representing the four motives for drinking (coping, conformity, enhancement, and social) identified in Cooper's (1994) model. (See Study 1 [Chapter 3]: Measures Section 3.4.2.2 for a detailed description of the DMQ-R.)

5.3.2.3 Childhood Anxiety Sensitivity Index (CASI)

The CASI (Silverman et al., 1991) is an 18 item self-report questionnaire designed to assess children's and adolescents' fear of anxiety symptoms. (See Study 1 [Chapter 3]: Measures Section 3.4.2.4 for a detailed description of the CASI.)

5.3.2.4 Arnett's Inventory of Sensation Seeking-Intensity Seeking Subscale (AISS-I)

The AISS-I (Arnett, 1994) is a 10-item scale assessing levels of intensity sensation seeking in adolescents (AISS-I; e.g., "I like the feeling of standing next to the edge on a high place and looking down"). (See Study 1 [Chapter 3]: Measures Section 3.4.2.5 for a detailed description of the AISS-I.) Note: This measure of intensity seeking was administered "off-scale"; without the other AISS (i.e., novelty seeking) items.

5.3.2.5 Rutgers Alcohol Problems Index (RAPI)

The RAPI (White & Labouvie, 1989) is a 23-item self-report measure that assesses adolescent problem drinking symptoms (e.g., "Felt that you needed more alcohol than you used to use in order to get the same effect"). The RAPI asks respondents to indicate on a 5-point scale how many times during the last 4 months they have experienced negative consequences due to their alcohol use. The anchors of the problem frequency item scales are 0 (never) and 4 (more than 10 times). Responses were summed across the 23 items as recommended by the authors of the RAPI, to yield a composite score that takes problem frequency into account (cf. Winters, 1999). The RAPI has been well validated for use with both clinical and community samples of adolescents and young adults (Leccese & Waldron, 1994; Winters, 1999; White & Labouvie, 1989; 2000). The moderate correlation between alcohol use intensity and RAPI provides convergent validity (White & Labouvie, 1989).

5.4 Procedure

This study was approved by the Dalhousie University Health Sciences Research Ethics Board. The entire school population of each of the 4 schools was invited to participate. Study information was distributed to parents/guardians of students through school newsletters. Prior to testing, students were informed about the nature of the study, and willing students signed consent forms (see Appendix G). Consent forms indicated that the teen's participation was voluntary, and that the young person's confidentiality would be maintained. As in Study 1 (Chapter 3), the school waived written parental authorization for the survey in light of the fact that parental authorization was required for the intervention groups (for which the survey functioned as a screening tool). As in

Study 1 (Chapter 3), parents were informed of the survey and were given a toll free number to call to get more information or to indicate if their child was not permitted to participate.

5.4.1 Pre-Intervention Screening Survey

As described earlier, a large sample of adolescents completed the screening survey. I conducted the data collection with the help of a research assistant. Data collection took place on a grade-level-by-grade-level basis in assemblies held during class time. The screening procedure was nearly identical to that described in Study 1 (Chapter 3). No feedback was given regarding individual student scores. Teachers had the option of remaining in the assembly room at the time of the survey. Measures were administered in a standard order as follows: Demographics and Drinking Behavior, CASI, STAIT-C, AISS-I, DMQ-R, and the RAPI. During questionnaire completion, students were permitted to ask questions of the researchers. Questionnaires were completed using a time frame of the previous four months. The pre-intervention survey was administered just before the commencement of the brief interventions (i.e., within weeks).

At the time of survey administration, I explained to students that two types of group sessions would be conducted, designed to help teens cope with anxiety and to deal with risky behaviors, respectively. Students were informed that volunteers would be needed to participate in these groups. Students were also informed that groups would offer training in coping skills that might prove useful to them in a variety of situations. I explained that the two 90 minute sessions would be conducted in small groups with their gender-matched peers (e.g., all-girl groups). Students were told that spots would be

limited and that we will not be able to have all interested students participate since this was a pilot test of the effectiveness of the groups rather than a school-wide program.

This was designed to reduce the likelihood that students would feel singled out if chosen (or feel rejected if not chosen).

Prior to survey completion, students were asked to complete the participant interest form where there was a section asking whether or not they might be interested in participating in one of groups (see Appendix H). It was explained that completing the forms did not mean that they would be required to attend, only that they were indicating interest in finding out more about the groups.

In order to maintain confidentiality and protect the students from feeling singled out or labeled as problematic drinkers, when the students completed the questionnaire battery, each was numbered at the top with no space for their name or any identifying information whatsoever. At the time of passing out the questionnaires, a separate sheet was given to students for indicating their interest or lack of interest in participating in the groups. The participant interest forms were also numbered with the same number as on the questionnaire packs to allow the researchers to later match up the contact information and screening data for those who had indicated interest in participating, to determine their eligibility as described previously. A master list linked questionnaire numbers with the names and contact information for students interested in the group sessions.

No-treatment groups of male and female students meeting criteria for study entry served as controls for the administration of the brief interventions to determine whether the provision of the early interventions had any effects on the dependent measures in either gender, over-and-above the passage of time and/or repeated completion of the

questionnaires, per se. Inclusion of these control conditions involved randomizing high SS and high AS male and female drinkers to either a brief intervention or to a notreatment control cell. Those randomized to the no-treatment control conditions had to agree to fill out post-intervention follow-up measures. The control group participants did not receive any further intervention.

Eligible students were invited to an information session during class time at which time they were informed of the nature of the 2 x 90-minute sessions. This information was also summarized for them in an information sheet about the study that was provided to each student (see Appendix I). At this time, students were also informed of the schedule for two sessions of the appropriate personality-matched intervention (see Appendix J). Parent consent forms were also distributed to students at this initial information session (see Appendix K). The parental consent forms were numbered with the same number as on the student interest sheet and questionnaire packs to assure that each participating student had a signed consent form. Questions from students were welcomed.

Students were told that it would be necessary for them to bring completed forms to the first group session if they wished to participate. The parent authorization form outlined confidentiality issues (e.g., that information revealed by students during the group would remain confidential). This was to ensure that parents understood that they would not have access to the intervention efficacy data for their child, nor to their child's results on any of the outcome measures, nor to any information revealed by their child during the group sessions. In cases where confidentiality was broken, i.e., when an adolescent was at risk of harming him- or her-self or others or was at risk of being

harmed by another, information was to be shared immediately with the school guidance counsellor. Such limits to confidentiality were clearly explained to all members in the group sessions and prior to obtaining their written informed consent for participation at the beginning of session 1 (see Appendix L). Completed student and parent consent forms were collected at the beginning of the first intervention session. If a student forgot his or her completed parent consent form, verbal parent consent was obtained by telephone through the school guidance counselling office prior to the process of randomization and the student was required to bring the signed parent consent form with them to the second session. Verbal parental consent was obtained in this fashion on five occasions. Written parental consent was submitted following the first session in all of these exceptional cases.

The process of randomizing to the experimental and control groups occurred at the beginning of the first session of each of the four intervention groups (AS girls, AS boys, SS girls, and SS boys). A number of cardboard cards (half marked with "X" and half marked with "Y") equal to the number of students in attendance, were placed in a bag. I explained the process of randomization for the purpose of the research project. Student picked an "X" or a "Y" out of the bag. The "X"s would remain for the small group session and the "Y"s were asked to return to class. The "Y"s were invited to join the group at the end of the class period for pizza and pop (at which time "X"s were encouraged not to talk about session content). Students were told that both the "X" and "Y" groups would be invited to take part in a second phase of the research project in four-months time.

5.4.2 The Intervention Sessions

Brief interventions were co-led by one of four participating clinical therapists from the provincial "Choices" Adolescent Addiction Treatment Program and one graduate student in the Clinical Psychology training program at Dalhousie. All five facilitators had completed Master's degrees in a relevant program of study (e.g., social work, school psychology) and all had prior experience in working with adolescents. There were 2 co-facilitators (including myself) with a minimum of a Bachelor's degree in a relevant program of study. Facilitators and co-facilitators participated in a one-day training event specifically designed to prepare them for intervention delivery. This training was directed by Dr. Sherry Stewart, Professor, Psychology, Dalhousie University. The one facilitator who was a graduate student in clinical psychology at Dalhousie completed her facilitation of the groups as a practicum requirement for her PhD program and thus received weekly supervision from Dr. Stewart throughout and following the delivery of the interventions. The clinical therapists from the Choices program completed their facilitation of the groups as part of their regular job mandate. All facilitators and co-facilitators were female with the exception of one male facilitator and all were young adults.

The intervention sessions were held in a classroom setting in two schools, a teen health centre in one school, and in an average size meeting room in one school. To protect students' confidentiality, teachers and other school personnel were not in the room at the time of the group sessions. Pizza and beverages were provided for students at the end of both sessions 1 and 2. The sessions occurred approximately one week apart. Two sessions were rescheduled due to school cancellations on account of weather.

As in previous treatment-matching efforts with clinical substance abusers (Conrod et al., 2000b), alcohol use behavior was a relatively minor focus of the interventions. Each intervention incorporated principles from the motivational (e.g., Bien, Miller, & Tonigan, 1993; Monti, Barnett, O'Leary, & Colby, 2001) and the cognitive behavioral literatures (e.g., see review in Kendall & Choudhury, 2003). The interventions began with a psycho-educational component: girls and boys were educated about the personality factor in question. For example, similar to an existing AS brief treatment intervention (Harrington et al., 1995), girls and boys in the AS management single-gender groups were educated about anxiety and the physiological aspects of the anxiety response and about fear of anxiety (AS). They were also educated about links between the personality factor in question and alcohol use/misuse. In an interactive fashion, students were encouraged to discuss the short-term reinforcing properties of alcohol, as an attempt to help them understand their coping and conformity or enhancement motives for alcohol use, respectively. This was followed by a discussion of the long-term negative consequences of alcohol use/misuse (e.g., to encourage understanding of the longer-term anxiety-enhancing effects of alcohol misuse among AS individuals).

The coping skills training portion of the interventions involved previously developed motivation-specific cognitive restructuring training for AS individuals (Barlow & Craske, 1988; Harrington et al., 1995) and for SS individuals (Kendall & Braswell, 1985). In addition to cognitive restructuring, rehearsal of coping self-statements has been shown to have a positive impact on the reduction of symptoms and maladaptive cognition in various psychological disorders (Barlow, 1985). Therefore, the interventions also involved the use of exercises in which girls and boys in single-gender groups engaged in

activities designed to induce automatic thoughts (e.g., imaginary exposure for the AS management group; Harrington et al., 1995). Adolescents were simultaneously instructed by the facilitator to utilize cognitive restructuring techniques to counter such thoughts (Kendall & Braswell, 1985; Barlow, 1985).

The student workbooks and facilitator manuals used in the interventions were identical in all respects save that student manuals were printed single sided and facilitator manuals were printed double sided with the left hand pages in the facilitator manual containing script and tips for running the groups. The content of the manuals took into account developmental characteristics of this age range: peak of parental struggle, very self-involved in all relationships, strong bonding with peer group, increased sexual interest, difficulty with postponement of gratification, increased cognitive abilities, and verbalized value clarification (Hicks, Batzer, Batzer, & Imai, 1993). These developmental considerations were gleaned from three sources: a) the literature (e.g., Miller, Turner, & Marlatt, 2001; Smith & Anderson, 2001); b) review of intervention manual drafts by a panel of 8 experts (Appendix M); and c) the semi-structured, qualitative interviews with adolescent girl drinkers high in AS or SS (Study 2; Chapter 3). The manuals and interventions provided space for the students to creatively document and express their active choices, personal strengths, and priorities. Copies of selected portions of resulting AS and SS facilitator manuals are provided in Appendix F; student manuals are not included herein as their content is duplicated in the facilitator manual.

5.4.3 Post Intervention Outcome Measures

Four months post-treatment, outcome measures were administered (identical to those administered at the pre-treatment screening). Students in the experimental and

control groups were invited to a session held during class time (lasting approximately one class period) during which time they completed the follow-up survey. A back-up time was scheduled at each school for those students who were absent on the day of the post-intervention follow-up. Measures were administered in a standard order consistent with the pre-intervention survey: demographics and drinking behavior questionnaire, CASI, AISS-I, DMQ-R, and the RAPI. Pizza and beverages were provided following post-intervention survey completion.

5.5 Results

5.5.1 Demographics and Behavioral Variables: Comparing Girls' and Boys' Experimental and Control Groups at Baseline

Demographic variables (age, grade, family income, and ethnicity) were examined as functions of intervention group and gender to ensure that random assignment to either the experimental or control groups was effective in balancing groups on potentially confounding variables. A series of 2 x 2 (intervention group [experimental vs. control] x gender [boys vs. girls]) ANOVAs were performed on the demographic and drinking behavior variables.

Since the very large majority of the participants were Caucasian (as described previously), for the purposes of statistical analysis, I dichotomized the ethnicity variable into Caucasian versus "Other". In the intervention group x gender ANOVA on ethnicity, no significant effects were observed for group ($\underline{F}(1, 131) = 1.124$, n.s.), gender ($\underline{F}(1, 131) = 0.434$, n.s.), or group by gender ($\underline{F}(1, 131) = 1.124$, n.s.). In the girls' experimental group, 32/35 or 91.4% were Caucasian. In the boys' experimental group,

28/34 or 82.4% were Caucasian. In the girls' control group, 32/35 or 91.4% were Caucasian. In the boys' control group, 29/31 or 93.5% were Caucasian.

The intervention group x gender ANOVA for grade revealed no significant effects for group (\underline{F} (1, 131) = .536, n.s.), gender (\underline{F} (1, 131) = .064, n.s.), or group by gender (\underline{F} (1, 131) = 2.286, n.s.). The average education level in the girls' experimental group was grade 10 (SE = .187); boys' experimental group average education level was also grade 10 (SE = .190). Similarly, in both the girls' and boy's control groups, the education levels were grade 10 (SE = .187 vs. SE = .199, respectively).

The intervention group x gender ANOVA for family income range showed no statistically significant effects for group ($\underline{F}(1, 131) = .561$, n.s.), gender ($\underline{F}(1, 131) = 2.347$, n.s.), or group by gender ($\underline{F}(1, 131) = 0.081$, n.s.). In the experimental groups, girls' mean family income was in the range of \$25,000-\$40,000 (SE = .217) and boys' mean family income was also in the range of \$25,000-\$40,000 (SE = .220). Similarly, for the control groups, girls' mean family income was in the range of \$25,000-\$40,000 (SE = .187) and boys' mean family income was in the range of \$25,000-\$40,000 (SE = .230). (Note: SEs correspond to values on the 1-5 scale, whereas means are presented on the range of salaries corresponding to the mean value on the 1-5 scale for ease of interpretation.)

The intervention group x gender ANOVA for age showed no statistically significant effects for group (\underline{F} (1, 131) = .720, n.s.) or gender (\underline{F} (1, 131) = .204, n.s.). However, there was an unexpected significant group by gender interaction (\underline{F} (1, 131) = 4.671, p = .032). Inspection of the means revealed that boys tended to be older than girls in the control group (girls' mean age = 15.2 years (SE = .193); boys' mean age = 15.8

years (SE = .240)) whereas girls tended to be older than boys in the experimental group (girls' mean age = 15.8 years (SE = .197); boys' mean age = 15.5 years (SE = .208)). However, independent sample t-tests revealed that neither gender effect was significant (i.e., t (64) = -1.792, n.s. for the control group; t (67) = 0.217, n.s. for the experimental group).

The drinking behavior variables examined were: quantity of drinking, frequency of drinking, and a measure of alcohol problems – the RAPI (White & Labouvie, 1989). Scores on these three behavioral measures were examined as a function of intervention group x gender in a set of 2 x 2 ANOVAs to ensure that random assignment to intervention groups was effective in balancing groups on these potentially confounding variables. The intervention group x gender ANOVA for drinking quantity showed no statistically significant effects for group (\underline{F} (1, 131) = 1.177, n.s.). A marginally significant gender effect was observed ($\underline{F}(1, 131) = 3.087$, p = .081), with a tendency for the boys to drink more heavily than the girls (cf. Stewart et al., 2001b). However, no significant group x gender interaction was observed (F (1, 131) = 0.275, n.s.), showing that the effect of gender on total drinking quantity scores did not differ across the two intervention groups. In the experimental group, boys' mean drinking quantity score (or standard drinks per drinking occasion) was 7.19 drinks (SD = 5.22), and girls' corresponding mean score was 6.03 drinks (SD = 4.45). In the control group, boys' mean drinking quantity score was 8.71 drinks (SD = 6.36), and girls' corresponding mean score was 6.56 drinks (SD = 5.79). As noted in Chapter 4, five drinks per occasion is usually considered heavy drinking (cf., Poulin & Wilbur, 2002). On average, all four groups are drinking above this level at each drinking occasion at baseline. It should be noted that

the only group to show reductions in average drinking quantity to less than the cutoff of 5 drinks per drinking occasion is the experimental girls' group (rounding drinking quantity values in to the closest whole number of drinks). They are at 4 drinks per occasion on average post-treatment whereas the mean score of girls in the control group fell at 5 drinks per occasion post-treatment. This would suggest that girls in the control group are still, on average, drinking to intoxication when they do drink. Evidently, the students selected are a heavy drinking sample to begin with and the interventions for girls are not only reducing average drinking quantity per occasion, it is reducing it into a clinically safe range (i.e., below the cutpoint for classifying heavy drinking). The interventions are consistent with a "harm reduction approach" which is broadly defined as consisting of "strategies focused on minimizing the consequences associated with drinking and other high-risk behaviors" (Miller et al., 2001, p. 58; see review of the "harm reduction approach" in Miller et al., 2001).

The intervention group x gender ANOVA for the typical drinking frequency measure showed no significant effects for group (\underline{F} (1, 131) = 0.267, n.s.), gender (\underline{F} (1, 131) = 2.481, n.s.), or group by gender (\underline{F} (1, 131) = 0.434, n.s.). Thus, unlike the drinking quantity measure where boys tended to score higher than girls, no gender differences were noted on the drinking frequency measure. This is consistent with previous research suggesting that gender differences in drinking behavior relate more to drinking quantity than to drinking frequency (Fillmore, Golding, Leino, & Motoyoshi, 1993). In the experimental group, boys' mean score on the 1-5 drinking frequency scale was 2.44 (SD = 1.21) and girls' corresponding mean score was 2.26 (SD = 1.12) at baseline. In the control group, boys' mean score on the 1-5 drinking frequency scale was

2.68 (SD = 1.22) and girls' corresponding mean was 2.23 (SD = 1.11). The means of each of the four groups corresponded to average drinking frequencies of about one to two occasions per month.

The intervention group x gender ANOVA on the measure of alcohol problems (RAPI) scores revealed no statistically significant effects for group (\underline{F} (1, 131) = 0.384, n.s.), gender (\underline{F} (1, 131) = 1.441, n.s.), or group by gender (\underline{F} (1, 131) = .003, n.s.). In the experimental group, boys' mean RAPI score was 20.29 (SD = 23.41) and girls' corresponding mean was 16.23 (SD = 20.62). In the control group, the boys' mean RAPI score was 18.29 (SD = 23.14) and the girls' corresponding mean RAPI was 13.83 (SD = 14.41). It should be noted that the average boy in both the experimental and control groups exceeded the recommended clinical cutoff of 15 indicating substantial alcohol problems (cf., Thombs & Beck, 1994). Although the average girl in the experimental group exceeded this clinical cutoff, the mean score of the girls in the control group fell just short of this clinical cutoff. Nonetheless, the ANOVA indicated that all four groups were indeed equivalent at baseline on levels of alcohol problems, and this reference to the RAPI norms (Thombs & Beck, 1994) reveals that the selected sample was quite high in levels of clinically-significant alcohol problems at study outset.

In summary, randomization to the interventions groups was successful in that random assignment to either the experimental or control groups was effective in balancing groups on potentially confounding demographic and behavioral variables.

Marginally significant gender effects were observed for the typical drinking quantity measure, with a tendency for the males to drink more than the females (cf. Stewart et al., 2001b). Despite this trend toward heavier drinking among the boys, there were no gender

effects for the measure of alcohol problems (RAPI; White & LaBouvie, 1989) indicating that both the boys and girls selected for the present study were experiencing similarly high levels of adverse consequences of their drinking behavior.

5.6 Gender Specific Patterns: Behavior Outcomes

To determine whether behavioral outcomes varied as a function of intervention group and/or gender, scores on the two drinking behavior measures (typical drinking frequency, typical drinking quantity) and the measure of alcohol problems (RAPI) were submitted to a set of a priori planned comparisons in each of the four cells separately: girls' experimental, girls' control, boys' experimental, and boys' control. Due to insufficient power, I had to collapse across personality groups (AS vs. SS) and therefore will not be reporting on personality measure outcomes or on alcohol outcomes as a function of intervention type (AS management or SS management) (cf. Conrod et al., 2000a).

5.6.1 Girls' Experimental Group

To determine whether drinking levels and outcomes (i.e., drinking quantity, drinking frequency, and alcohol problems on the RAPI) changed for the experimental group of girls (AS and SS experimental participants combined) from pre to post intervention, a series of paired sample *t*-tests was conducted on each behavior outcome variable by time (pre vs. post). Table 1 presents the results of these *t*-tests for the 35 female participants in the experimental group.

The quantity of drinking measure showed a significant effect of time (t (35)= 2.62, p < .05; $\eta^2 = .168$), with scores decreasing from pre- to post-treatment. Thus, for girls in the experimental group, there was a statistically significant change in quantity of

drinking from pre to post intervention, with girls drinking significantly fewer drinks per occasion after the intervention (see Table 1).

Table 1

<u>Descriptive Measures for Behavioral Outcome Variables for Girls' Experimental Group</u>

<u>at Pre and Post Intervention (n=35).</u>

Girls Intervention (AS and SS Groups Combined)

Pre-Post Intervention

	Pre-Intervention		Post-Intervention			
Outcome Variables	M	(SD)	M	(SD)	t	η^2
Quantity Drinking	6.03	4.45	4.20	3.16	2.62*	.168
Frequency Drinking	2.26	1.12	2.09	1.01	0.92	.024
RAPI	16.23	20.62	11.14	11.52	2.08*	.113

Notes: Alcohol Use Behavior: Quantity of Drinking/Frequency of Drinking (Stewart et al., 1995); RAPI = Rutgers Alcohol Problems Index (White & Labouvie, 1989). Significant changes from pre- to post-intervention are indicated with asterisks: *p<.05.

The frequency of drinking measure pre to post showed no significant effect of time (\underline{t} (35) = .92, n.s.; η^2 = .024). Thus, for girls in the experimental group, there was no change in frequency of drinking from pre to post intervention (see Table 1).

For girls in the experimental group, RAPI scores showed a significant effect of time (t (35) = 2.08, p < .05; η^2 = .113). This effect indicated a change in alcohol problem

scores from pre to post intervention, with girls showing fewer alcohol problems as defined by the RAPI after the intervention (see Table 1).

5.6.2 Girls' Control Group

Table 2 presents the results of an equivalent a series of paired sample *t*-tests conducted on the behavioral measures for the 35 female participants in the control group.

Table 2

Descriptives for Behavioral Outcome Variables for girls' Control group at Pre and Post

Intervention (n = 35).

Girls Control (AS and SS Groups Combined)

Pre-Post Intervention

	Pre-Intervention		Post-Intervention			
Outcome Variables	M	(SD)	M	(SD)	t	η^2
Quantity Drinking	6.56	5.79	4.77	3.93	1.76	.084
Frequency Drinking	2.23	1.11	2.03	.98	1.27	.045
RAPI	13.83	14.41	10.26	11.78	1.54	.065

Notes: Alcohol Use Behavior: Quantity of Drinking/Frequency of Drinking (Stewart et al., 1995); RAPI; Rutgers Alcohol Problems Index (White & Labouvie, 1989).

The quantity of drinking pre to post for the control group showed no significant effect of time (t (35) = 1.76, n.s., η^2 = .084). Although there was a decline in girls' drinking quantity, it was not statistically significant. I am relying on statistics to determine what is a difference and what is not. There was also no significant change in

their frequency of drinking from pre- to post-intervention (t (35) = 1.27, n.s., η^2 = .045). There was also no significant change in mean scores on the measure of drinking problems (t (35) = 1.54, n.s., η^2 = .065). Thus, for girls in the control group, there was no significant change in drinking quantity, drinking frequency, or alcohol problem (RAPI) scores from the pre- to post-intervention testing points (see Table 2). These results show that the reduction in drinking quantity and alcohol problems in observed in the experimental group girls cannot be attributed to their completing the measures twice or to the simple passage of time.

5.6.3 Boys' Experimental Group

Table 3 presents the results of an equivalent series of paired sample t-tests conducted on the behavioral measures for the 34 male participants in the experimental group. The quantity of drinking showed no effect of time (t (34) = -.43, n.s.; η^2 = .006). Similarly, the frequency of drinking measure showed no significant effect of time (t (34) = .48, n.s.; η^2 = .007). Moreover, there was also no effect of time for RAPI scores from pre to post-intervention for the experimental boys (t (34) = .64, n.s., η^2 = .012). Findings from the girls' experimental group compared to the boys' experimental group indicates that the intervention effects in reducing drinking levels and adverse outcomes appear to be specific to girls (as opposed to boys) receiving treatment.

Table 3

<u>Descriptive Measures for Behavioral Outcome Variables for Boys' Experimental Group</u>

at Pre and Post Intervention (n=34).

Boys Intervention (AS and SS Groups Combined)

Pre-Post Intervention

	Pre-Intervention		Post-Intervention			
Outcome Variables	M	(SD)	M	(SD)	t	η^2
Quantity Drinking	7.19	5.22	7.68	7.51	43	.006
Frequency Drinking	2.44	1.21	2.32	1.41	.48	.007
RAPI	20.29	23.41	17.06	22.05	.64	.012

Notes: Alcohol Use Behavior: Quantity of Drinking/Frequency of Drinking (Stewart et al., 1995); (RAPI; Rutgers Alcohol Problems Index (White & Labouvie, 1989). Significance levels are indicated with asterisks: *p<.05.

5.6.4 Boys' Control Group

Table 4 presents the results of an equivalent series of paired sample t-tests conducted on the self-rated behavioral measures for the 31 male participants in the control group. The quantity of drinking measure showed no effect of time (t (31) = .49, n.s., η^2 = .008). The frequency of drinking measure also showed no significant effect of time (t (31) = 1.65, n.s.; t = .083). Finally, the RAPI for the boys' control group also showed no effect of time (t (31) = .70, n.s., t = .016). This pattern suggests that all three drinking behavior measures failed to change from pre- to post-treatment for the boys randomized to the no-treatment control group.

Table 4

<u>Descriptive Measures for Behavioral Outcome Variables for Boys' Control Group at Pre</u>
and Post Intervention (n=31).

Boys Intervention (AS and SS Groups Combined)

Pre-Post Intervention

	Pre-Intervention		Post-I	ntervention		
Outcome Variables	M	(SD)	M	(SD)	t	η^2
Quantity Drinking	8.71	6.36	8.03	6.30	.49	.008
Frequency Drinking	2.68	1.22	2.29	1.16	1.65	.083
RAPI	18.29	23.14	15.68	19.35	.70	.016

Notes: Alcohol Use Behavior: Quantity of Drinking/Frequency of Drinking (Stewart et al., 1995); RBQ = Reckless Behavior Questionnaire (Arnett, 1996); (RAPI; Rutger Alcohol Problems Index (White & Labouvie, 1989).

5.6.5 Summary

In sum, the results from the analysis of the drinking behavior data indicate that drinking quantity was significantly reduced for girls in the experimental group but that there was no change in drinking quantity for boys in the experimental group, or for either boys or girls randomized to the no treatment control group. Encouragingly, the interventions for girls are not only reducing average drinking quantity per occasion, it is reducing it into a clinically safe range (i.e., below the cutpoint for classifying heavy drinking).

Similarly, reduction in alcohol problems on the RAPI (White & Labouvie, 1989) was significant for girls in the experimental group but not for at-risk teens in the other three groups. Encouragingly, although the average RAPI score for girls in the experimental group prior to the interventions was 16.23 (above the "cut-off" score of 15, indicating substantial alcohol problems; cf. Thombs & Beck, 1994), the mean score on the RAPI for girls in the experimental group reduced to 11.14 (below the "cut-off" score), four-month post-interventions. In contrast, the post-intervention RAPI scores of both groups of boys remained above the clinical cutoff score. (Note: Control girls' mean RAPI score also fell below the cutoff score at the post-intervention assessment point, but their mean RAPI score was below the cutoff prior to the intervention as well.) None of the four groups showed change in drinking frequency from the pre- to the post-treatment assessment.

5.7 Drinking Motives: Comparing Girls' and Boys' in the Experimental and Control Groups at Baseline

Drinking motive variables from the DMQ-R were examined as functions of intervention group and gender to ensure that random assignment to either the experimental or control groups was effective in balancing groups on potentially confounding variables at baseline. Since the AS and SS brief interventions targeted different risky drinking motives (i.e., coping/conformity vs. enhancement, respectively) and since the data from the AS and SS interventions were combined for the purposes of data analysis (cf., Conrod et al., 2000b), it was important to have a metric of the degree to which the interventions were effective in reducing risky motives overall. Thus, scores on the three "risky" DMQ-R (Cooper, 1994) drinking motives (i.e., coping, conformity, and

enhancement) were combined into a single composite variable by totaling the three subscale scores and dividing by 3. This resulted in a combined "risky" drinking motive composite which was on the same 5 to 25 relative frequency scale as the DMQ-R social motives subscale scores. A set of 2 x 2 (intervention group x gender) ANOVAs were then performed on (a) the "risky" drinking motives composite scores and (b) social drinking motives scores. The intervention group x gender ANOVA on the "risky" drinking motive composite scores showed no statistically significant effects for group (\underline{F} (1, 131) = 0.659, n.s.), gender (\underline{F} (1, 131) = 0.058, n.s.), or group by gender (\underline{F} (1, 131) = 0.172, n.s.). The intervention group x gender ANOVA for social drinking motives also showed no statistically significant effects for group (\underline{F} (1, 131) = 0.080, n.s.), gender (\underline{F} (1, 131) = 0.009, n.s.), or group by gender (\underline{F} (1, 131) = 0.210, n.s.). Thus, random assignment to either experimental or control groups was effective in balancing groups on potentially confounding drinking motives variables at baseline. The girls and boys did not differ in their overall levels of drinking for either risky motives or for the relatively less risky social motives, at baseline.

5.8 Gender Specific Patterns: Drinking Motives

5.8.1 Girls' Experimental Group

Table 5 presents the results of a series of paired sample *t*-tests conducted on the two drinking motives measures for the 35 female participants in the experimental group. The DMQ-R "risky" motives composite showed a significant effect of time (t (35) = 3.50, p < .001, p = .265). Thus, for girls in the experimental group, there was a significant change in "risky" motives from pre to post intervention, with experimental girls showing a reduction in scores on the composite "risky" drinking motives variable from pre-

intervention baseline to post-intervention follow-up. The effect size showed the interventions counted for more than 26% of the variance indicating an effect of moderate magnitude (cf. Cohen, 1977) (see Table 5). In other words, this means that approximately 26% of the variance in "risky" motives for the experimental group may be due to the interventions. The DMQ-R social motive scores showed no significant effect of time (t (35) = 0.99, n.s., η^2 = .028). Thus, for girls in the experimental group, there was no change in social motives for drinking from pre to post intervention.

Table 5

<u>Descriptive Measures for Two Drinking Motives Outcomes for Girls in the Experimental</u>

<u>Group at Pre and Post Intervention (n=35).</u>

Girls Intervention (AS and SS Groups Combined)

Pre-Post Intervention

	Pre-Intervention		Post-I	ntervention		
Outcome Variables	M	(SD)	M	(SD)	t	η^2
Social Motives	12.97	5.93	11.66	5.12	0.99	.028
"Risky" Motives	11.71	4.05	8.94	2.89	3.50***	.265

Notes: "Risky" drinking motives = coping, conformity, enhancement. Drinking motives were measured by the Drinking Motives Questionnaire Revised (DMQ-R; Cooper, 1994). Significance levels are indicated with asterisks: ***p<.001.

5.8.2 Girls' Control Group

Table 6 presents the results of a series of paired sample *t*-tests conducted on the drinking motives measure for the 35 female participants in the control group. Pre to post,

the DMQ-R risky motives showed a significant main effect of time (t (35) = 2.40, p < .05, η^2 = .144). Thus, as was seen for girls in the intervention group, for girls in the control group, there was a significant change in risky motives from pre to post intervention, with control girls also showing significantly less risky drinking motives post intervention. The effect size showed that the passage of time counted for 14% of the variance in risky motives scores. This is a small magnitude effect, which was about half the size of the effect observed in the girls' experimental group (see Table 6).

Table 6

<u>Descriptive Measures for Two Drinking Motives Outcomes for Girls in the Control</u>

<u>Group at Pre and Post Intervention (n=35).</u>

Girls Intervention (AS and SS Groups Combined)

Pre-Post Intervention

·	Pre-Intervention		Post-Intervention		-	
Outcome Variables	M	(SD)	M	(SD)	t	η^2
Social Motives	12.14	5.96	12.89	6.43	-0.66	.013
"Risky" Motives	11.37	4.75	9.75	3.93	2.40*	.144

Notes: "Risky" drinking motives = coping, conformity, enhancement. Drinking motives were measured by the Drinking Motives Questionnaire Revised (DMQ-R; Cooper, 1994). Significance levels are indicated with asterisks: *p<.05.

The DMQ-R social motive scores showed no significant main effects of time (t (35) = -.66, n.s., η^2 = .013). Thus, for girls in the control group, as for girls in the

experimental group, there was no change in social drinking motives from pre to post intervention.

5.8.3 Boys' Experimental Group

Table 7 presents the results of a series of paired sample *t*-tests conducted on the drinking motives measure for the 34 male participants in the experimental group.

Table 7

<u>Descriptive Measures for Two Drinking Motives Outcomes for Boys in the Experimental</u>

<u>Group at Pre and Post Intervention (n=34).</u>

Boys Intervention (AS and SS Groups Combined)

Pre-Post Intervention

	Pre-Intervention		Post-I	ntervention		
Outcome Variables	M	(SD)	M	(SD)	t	η^2
Social Motives	12.35	6.70	12.85	6.53	-0.41	.005
"Risky" Motives	12.25	5.09	9.89	4.35	2.43*	.151

Notes: "Risky" drinking motives = coping, conformity, enhancement. Drinking motives were measured by the Drinking Motives Questionnaire Revised (DMQ-R; Cooper, 1994). Significance levels are indicated with asterisks: *p<.05.

The DMQ-R "risky" motives showed a significant effect of time (t (34) = 2.43, p < .05, η^2 = .151). Thus, for boys in the experimental group, like for girls in the experimental group, there was a significant change in risky motives from pre to post intervention, with experimental boys showing significantly less risky drinking motives post intervention. The effect size showed the interventions counted for 15% of the variance in risky

drinking motives scores. This is an effect of small magnitude that is about half of the size of the effect observed in the experimental girls (see Table 7). The DMQ-R social motive scores showed no significant effect of time (t (34) = -0.41, n.s., η^2 = .005). Thus, for boys in the experimental group, as for both groups of girls, there was no change in social drinking motives from pre- to post-intervention (see Table 7).

5.8.4 Boys' Control Group

Table 8 presents the results of a series of paired sample *t*-tests conducted on the drinking motives measure for the 31 male participants in the control group.

Table 8

<u>Descriptive Measures for two Drinking Motives Outcomes for Boys in the Control Group on Pre and Post Intervention (n=31).</u>

Boys Intervention (AS and SS Groups Combined)

Pre-Post Intervention

	Pre-Intervention		Post-Intervention			
Outcome Variables	M	(SD)	M	(SD)	t	η^2
Social Motives	12.55	7.33	11.13	5.00	1.07	.037
"Risky" Motives	11.23	5.54	8.77	3.00	2.42*	.164

Notes: "Risky" drinking motives = coping, conformity, enhancement. Drinking motives were measured by the Drinking Motives Questionnaire Revised (DMQ-R; Cooper, 1994). Significance levels are indicated with asterisks: *p<.05 **p<.01 ***p<.005.

The DMQ-R "risky" motives pre to post showed a significant main effect of time (t (31) = 2.42, p < .05, η^2 = .164). For boys in the control group, like participants in the other

three groups, there was a significant change in risky motives from pre to post intervention, with boys showing significantly less risky drinking motives post intervention. The effect size showed the passage of time counted for 16% of the variance. Again, this is an effect of small magnitude that is about half the size of the effect seen in the experimental girls' group (see Table 8). The DMQ-R social motive scores from pre to post for the control group showed no significant main effects of time (t (31) = 1.07, n.s., η^2 = .037). Thus, for boys in the control group, as for the participants in the other 3 groups, there was no change in social motive scores from pre to post intervention.

5.8.5 Summary

The relatively healthier or less risky social motives for alcohol use (see Cooper, 1994) showed no change from pre- to post-intervention in any of the four groups in the present study. In contrast, the risky motives composite (i.e., coping, conformity, and enhancement motives combined) showed reductions from pre- to post-intervention among all four groups. At first glance this pattern does not appear to support my initial hypothesis that risky motives would decrease specifically in those teens randomized to the brief interventions (particularly the experimental group girls). However, the magnitude of reduction in "risky" drinking motives (i.e., coping, conformity, and enhancement combined; Cooper, 1994) was about twice as large in the girls assigned to the experimental group than in teens assigned to each of the other three groups.

5.9 Discussion

There has been a recent emergence of studies indicating that brief motivational interventions for teen alcohol abuse are an effective and inexpensive means of assisting

adolescents in reducing their alcohol consumption and related problems (Monti et al., 2001). The present study similarly demonstrated the effectiveness of a form of brief motivational intervention in assisting adolescent female alcohol users to reduce their quantity of alcohol use and related problems over a four-month period. My brief motivational intervention differed from those described previously in the adolescent literature in that it was not specifically designed to increase adolescents' motivation to change their drinking behavior. Rather, two brief interventions were designed that targeted the personality profile-specific motivations for alcohol misuse and related maladaptive coping strategies in high-risk groups of AS and SS teen drinkers.

The interventions proved to be more effective than the passage of time in reducing drinking quantity and alcohol problems for girls. Reduction in drinking quantity was significant for girls in the experimental group but there was no change in drinking quantity for experimental boys, or for either boys or girls in the no treatment control groups.

While reduction in drinking quantity was significant for girls in the experimental group, the efficacy of the intervention strategy appeared somewhat dependent on the outcome variables investigated. The interventions were not shown to be effective in reducing frequency of alcohol consumption. In fact, frequency of alcohol use did not change from the pre- to the post-intervention assessment session in any of the four groups tested. One possibility for the differences in intervention efficacy across the two measures of alcohol use behavior (i.e., quantity versus frequency) is that my brief interventions actually did differentially influence these two aspects of drinking behavior. By learning to better deal with and manage their personality dispositions, the AS and SS

girls may have been less inclined to drink as heavily to meet their needs, even though there may have been little change in the frequency with which they engaged in drinking. In fact, there is a good deal of research suggesting that drinking quantity is a much more important indicator of drinking behavior than drinking frequency in terms of its negative health implications (see review in Stewart et al., 1998). Thus, if my intervention was to impact on only one of these two drinking parameters it would be most important for it to reduce teens' typical drinking quantity.

Sobell, Sobell, and Gavin (1995) commented on the need to report a full range of outcome variables when presenting addictions treatment outcomes (cf. Conrod et al., 2000a). Consistent with recommendations made by Sobell et al. (1995), I included not only measures of quantity and frequency of drinking, but also a measure of alcohol problems that was specifically designed to tap the kinds of alcohol problems experienced by teenagers and young adults (i.e., the RAPI; White & Labouvie, 1989). In addition to a significant reduction in drinking quantity for girls in the experimental group, I observed a significant reduction in alcohol problems on the RAPI for members of this group but not for teens in the other three groups. Identification of a reduction in alcohol problems as a function of the treatment is important because alcohol problems may signify more severe and pervasive current difficulties, as well as pose increased risk for the subsequent development of an alcohol disorder (Windle et al., 1996).

Unfortunately, due to small cell sizes, I did not have the statistical power to investigate the efficacy of the interventions as a function of intervention type (AS vs. SS). Instead, I had to collapse groups across personality measures for statistical analysis.

Therefore, I was unable to explore the relative clinical efficacy of two separate early

interventions that specifically target distinct dimensions of personality risk for alcohol abuse (AS and SS, respectively). Consequently, I was also unable to determine whether reductions in personality risk factors explain the efficacy of this approach in reducing heavy and problem drinking. Thus, it remains unknown whether, for example, the SS intervention might work in reducing high SS girls' heavy and problem drinking by way of actually reducing these girls' general tendency to seek out intense stimulation.

Similarly, it remains unknown whether, for example, the AS intervention works to reduce high AS girls' heavy and problem drinking by way of reducing their fear of anxiety. This research was conducted in affiliation with a larger study funded by the Alcoholic Beverage Medical Research Foundation Grant-in-Aid (ABMRF; Stewart & Conrod, 2001-2003) which included a sample of students in British Columbia. An increased sample size is necessary to address these remaining issues, and this increased sample size will be accessible in the near future when we combine the data collected across the two sites.

However, our results do nonetheless provide some indication of the mechanisms by which my intervention worked in effecting change in drinking quantity and problems among the adolescent girls. Specifically, examination of the relative magnitude of reduction in "risky" drinking motives across the four groups in the present study indicates that the magnitude of reduction in coping, conformity, and enhancement motives combined in the girls assigned to the experimental group was about twice as large as that seen in teens assigned to each of the other three groups. The effect size showed the interventions counted for approximately 26% of the variance in risky motives scores in the experimental girls group – a moderate effect size. The girls who received no

treatment and the two boys' groups showed a much smaller magnitude reduction in risky motives scores over this same time period (small magnitude effects, in each case). Given the parallel pattern of results seen with the drinking behavior measures (i.e., where the largest magnitude reductions were observed in the experimental girls' group), this suggests the possibility that the intervention may have proved effective in the girls because it effected moderate magnitude changes in risky drinking motives. In other words, changes in risky motives may "mediate" or explain the observed changes in girls' drinking levels and drinking problems. Future studies using larger samples could apply mediator analyses (Baron & Kenny, 1986) to test this hypothesis. Also, future research could track adolescents throughout and after the brief intervention to determine if changes in risky motives precede changes in drinking behavior and drinking problems as would be implied by a mediational perspective.

In contrast to the findings with the risky drinking motives composite, none of the groups showed change in social motives for alcohol use. Given the moderate magnitude change in risky motives seen in the experimental girls, the lack of change in social motives is not concerning, as "social motives appear to be more normative [than other motives], as indicated by higher mean levels of endorsement across all race and gender groups" (Cooper et al., 1992, p. 131) and since social motives are unrelated to heavy or problem drinking in youth (Cooper, 1994).

In conclusion, the results suggest promise for my novel early interventions in reducing heavy drinking and problem drinking, at least among teenage girls. The results with boys were far less encouraging, however. There are at least three possible reasons for the superior efficacy of this approach for adolescent girls as opposed to adolescent

boys. The first concerns the conceptual basis for the development of the interventions and the qualitative findings that informed manual development. I used feminist epistemology as a guide to explore girls' socially located knowledge about their drinking - in particular, how girls' experiences of gender influence their understandings of why they drink. By concentrating on the knowing of girls to make sense of their experiences and their perspectives in relation to alcohol use as they themselves described these experiences and perspectives, I tried to tailor the interventions to meet girls' needs. Scenarios and images in the brief intervention manuals were informed by results of the interviews with AS and SS female drinkers. Even though I made efforts in the manual development phase to include examples that would resonate for adolescent boys, these examples were not informed by the reported experiences of adolescent boys in the same way as they were informed by the experiences of adolescent girls. Therefore, the content of the manuals may have been more realistic and meaningful to the lives of girls and, thus, there may have been a greater likelihood that girls would apply the coping skills strategies to their everyday lives. Future qualitative research with boys regarding their own conceptualizations about alcohol use in a social context may enrich the content of brief intervention manuals tailored specifically for boys.

The second possible reason for the superior efficacy of this approach for adolescent girls pertains to the initial empirical findings on which the interventions were developed. Specifically, results of the explorative Study 1 supported the design and testing of particular brief interventions for alcohol-using female adolescents by suggesting that the associations of anxiety related personality factors to coping and conformity motives, and SS to enhancement motives, were particularly salient for

adolescent girl drinkers. The findings of Study 1 thus strongly suggest that a personality and motivation-based approach to early intervention should be more effective for at-risk adolescent girls.

Third, there may have been facilitator-student matching effects over gender (Piper, Joyce, McCallum, Azim, & Ogrodniczuk, 2002) considering that all five intervention facilitators were female except for one. Having facilitators matched to students on gender may allow for better identification of the students with the facilitator and/or may enrich the effectiveness of facilitator disclosures. For example, a female facilitator may be able to better draw on her own life experiences in relaying examples to students when working with girls. It will be important to establish the relative stability of these differential intervention outcomes using a mixed factorial design with male versus female facilitators running groups of boy versus girl at-risk teen drinkers. If future research does in fact support effects of facilitator gender in terms of match with student gender, this would have clearly important implications for the clinical provision of these interventions in future.

5.9.1 Study Limitations

Despite these very promising findings, there are several possible limitations to the present investigation that should be acknowledged. First, interventions in the present study were limited in their narrow attempt to take into account age and cultural differences in therapeutic needs (see Monti et al., 2001, for a more substantive treatment of age and cultural differences in brief interventions with adolescents). Study 3 findings suggest the strong possibility that treatment interventions rooted in girls' lives will be more effective for girls. Based on the results of my three thesis studies, it is possible that

a similar approach could be used in meeting the specific early intervention needs of minority groups (e.g. Black youth, First Nations teens, lesbian, gay, and bisexual young people, or youth with disabilities). These groups of adolescents will likely have differences in life experiences that are salient in reality.

Second, it will be important to replicate my novel early interventions using a larger sample size to further investigate the mechanisms underlying the reductions in drinking quantity and alcohol problems observed in the adolescent girls in the present study. As mentioned previously, future research could test whether changes in coping or conformity motives (for the AS management intervention) or changes in enhancement motives (for the SS management intervention) mediate changes in drinking behavior/consequences (Baron & Kenny, 1986). In addition, future research could examine whether changes in AS (for the AS management session) or changes in SS (for the SS management session) actually mediate changes in drinking outcomes.

Third, even for girls in the experimental group, the observed treatment effects were not large in magnitude (i.e., treatment effect sizes in the experimental girls group ranged from small to moderate in magnitude). Furthermore, a possible limitation is that the five students who did not complete the second intervention session (4 females and 1 male) were invited to complete the four-month follow-up measures. Their inclusion may have weakened treatment effect as they did not participate in the full 2 x 90-minute treatment sessions. Thus, future studies could focus on discovering ways to enhance treatment efficacy from within the current approach. For example, those with greater levels of alcohol problems at baseline may need a more intensive approach than the brief interventions tested here. It is also possible that provision of personalized feedback on

the results of the baseline personality, motives, and drinking behavior tests would be useful. This was one aspect of the original interventions with substance abusing women (Conrod et al., 2000b) that was not incorporated into the present early intervention program since we administered our interventions in a group format as compared to Conrod et al.'s (2000b) one-on-one individual treatment format. Winters (2001) also commented on the advisability for brief motivational interventions to incorporate baseline assessment results on self-report measures into the treatment itself. He suggested that self-report scores can be used both as part of personalized feedback and as part of the decisional balancing exercise (see Appendix F: AS manual, p. 290 and SS manual, p. 291 for samples of the decisional balancing exercise used in our brief interventions). Although it is difficult to conceptualize how personalized feedback might be readily incorporated into a group intervention, future research could explore whether the addition of an initial individual session involving personalized feedback would improve the efficacy of the current approach over and above the efficacy possible when using the group format (with no personalized feedback) alone.

A fourth possible limitation is the failure to test for longer-term outcomes beyond four months post-intervention. It will be important for future research to extend the follow up period to determine the durability of the gains observed in the adolescent girls in the present study. It is also possible that more robust differential intervention effects might be observed at even later follow-up periods. For example, if those untreated participants in the control group increased their drinking behavior or developed more problematic drinking patterns in the longer term while those in the intervention group maintained their current levels, or vice versa.

Fifth, the present investigation excluded measures of several other cognitive variables related to behavioral change that have been prominently discussed in the substance abuse literature. For example, expectancies about behavioral outcomes and the related construct of risk perception (Christiansen, Goldman, & Brown, 1985), readiness for behavior change (Prochaska, DiClemente, & Norcross, 1992), and "self-efficacy" or the confidence in one's general ability to accomplish personal goals (Miller & Rollnick, 1991), are all constructs worthy of further investigation as possible mediating factors in explaining the effectiveness of my novel intervention in changing the drinking behavior of adolescent girls.

Finally, like all studies in the current dissertation, the present study did not consider other types of personality risk factors for alcohol abuse (e.g., hopelessness, impulsivity; cf. Conrod et al., 2000b). Approaches similar to the present one focusing on early interventions for these other personality risk groups also merit future investigation.

Despite these practical limitations, the present study highlights the importance of basing early interventions on extensive input from youth. Likewise, the results emphasize the need to consider both qualitative and quantitative research findings to inform the development of intervention materials. While the psychoeducational and cognitive behavioral therapy techniques generically apply to both males and females, the specific scenarios and images used in the manuals were developed on the basis of stories and experiences of adolescent girls. These scenarios and images were designed as "springboards" to help the adolescents apply these techniques to their real world experiences. The superior efficacy of the current early intervention approach among adolescent girls strongly suggests that psychoeducational and cognitive behavioral

interventions can be strengthened through the use of gender-informed, qualitative research methods that can substantially enrich results from questionnaire-based investigations.

5.9.2 Other Future Directions

There are several exciting directions for this research to take in future beyond those already mentioned above. These include examining the efficacy of the brief interventions for treatment of co-morbid mental health disorders and making the interventions more acceptable, attractive, and accessible to those teens in most need.

Considering the elevated and problematic co-occurrence between addictive and non-addictive disorders in adolescents (Myers, Brown, Tate, Abrantes, & Tomlinson, 2001), the current intervention strategy presents clinical benefits over other treatment strategies because this new approach has the possible advantage of improving coping skills related to both the alcohol abuse and co-morbid disorders. For example, AS is a known risk factor not only for alcohol abuse problems but also for anxiety disorders including panic disorder which are commonly co-morbid with alcohol abuse (see Taylor, 1999). The psychoeducational and cognitive-behavioral components of the present AS intervention are similar to those used in a panic prevention program developed for young adults (Harrington et al., 1995). It is possible that the efficacy of my AS management intervention may extend beyond alcohol use outcomes – it may also prove effective in preventing or treating panic attacks and panic disorder. The implications that my brief intervention approach may someday have for co-morbid adolescents or those at risk for co-morbid disorders are an important avenue for further investigation in future.

One of the most problematic aspects of the present study was in engaging eligible students to want to participate in our school-based interventions. Statistics showed that less than one third of eligible teens chose to participate. The fact that the interventions took place in a school context may have made them unattractive to a substantial number of at-risk youth. Thus, a future challenge will be to find ways to make these interventions more accessible to the very students who most need the help. One possibility is to attempt to try to make the school-based interventions more appealing to eligible teens (e.g., through exposure to testimonials from those who have completed the interventions). Another possibility would be to remove the interventions from the school-based context and find alternative mediums for their implementation. For example, delivering the interventions through a web based medium is an exciting potential avenue for further investigation (e.g., see Skinner, Maley, Smith, Chirrey, & Morrison, 2001, for a recent review of therapeutic applications of substance use web sites). I turn now to the final Chapter 6 where I revisit feminist theoretical frameworks to help structure my analysis of the findings across my three dissertation studies.

Chapter Six: Framing Solutions

Using the Four Components of Feminist Theory

6.0 Introduction

This final chapter highlights key findings of the empirical investigation and relates them to some important insights of feminist ethics and feminist epistemology. To structure Chapter 6, I return to the four inter-related components of feminist theory (Bunch, 1979) described in Chapter 2 that have provided a framework for the thesis. I begin with the vision component followed by a discussion of description and analysis to explain how findings from the empirical investigation contribute to our understanding of adolescent girls and their relationships with alcohol. I conclude the thesis with a multi-level strategy to get closer to the social ideal that I envision: solutions to work towards.

6.1 Vision

The vision component of feminist theory advocates a social ideal: what a society ought to be like if it were just and fair. As pointed out in Chapter 2, the guiding feminist vision operates out of certain assumptions about what is valued (principles) and out of a sense of what society ought to be like (goals). This aspect of theory involves making a conscious choice about principles of justice in order to make visions and goals concrete (Bunch, 1979). In order to promote fairness in the world, we need to know the measure of justice to apply in the short term as well as the long term. My vision for girls in this thesis is motivated by feminist ethics as interpreted by Sherwin (1992; 1996a; 1996b; 1998; 2001). She claims that the core principle of feminist ethics is that the subordination of one group by another is morally wrong. As Sherwin observes, "those engaged in ethical theorizing and policy formation should always ask about the

connections between the subject at hand and patterns of oppression, especially, but not solely, those associated with sexism" (Sherwin, 1992, p. 56). Following Sherwin (1992), I adhere to a conception of justice defined in opposition to oppression.

My broader vision is motivated by a feminist commitment to justice and concern about ways in which gender oppression can harm girls in the absence of positive forces. Hence, I believe that a world that is fair and just would provide healthy opportunities to thrive during adolescence and develop and preserve a sense of self worth for all adolescent girls (including those who are lesbian, bisexual, immigrant, (dis)abled, of color, etc.). In a fairer world, girls and boys would feel safe and valued (e.g., be encouraged and supported in their social contexts). A world that is fair and just would fully capitalize on girls' strength, creativity, and power to manifest a more equitable social reality for them. In a fair world, girls and boys would have access to a health care system that spreads preventive health information, offers resources necessary for healthy living, and fosters self-help approaches to health matters that would allow teens maximum control over their own health. The necessities of healthy living would be provided through collaborative work among medical practitioners, community agencies, advocacy groups and self-help support networks committed to ending oppression and restoring or preserving the health of oppressed persons (cf. Sherwin, 1992). In this world group differences (e.g., gender) would exist but they would not be a source of domination or oppression. In particular, I want a world in which social disadvantage does not lead teenage girls to unhealthy practices such as alcohol abuse.

While justice defined in opposition to oppression provides a social ideal both in the short term and long term, this thesis is about short-term, practical (non-utopian) improvements. This ideal tells us we need to understand better what alcohol is doing in the lives of teenage girls. In a just and fair world oppression does not lead girls to alcohol abuse and if it does, there is something we can do help them. To achieve this vision, I focused on improvements in the present and conducted three studies that give a better understanding as to how alcohol fits into the lives of at-risk adolescent girls.

6.2 A Better Understanding

Because of my motivation and vision, the three studies lead me to a better understanding of girls' relationships with alcohol. I attempt to convey this understanding using the components of description and analysis. In general, the description component of feminist theory identifies and examines the social reality of gender difference (and especially gender-based oppression). The analysis dimension explores the origins and reasons for the perpetuation of the oppression of women and girls (Bunch, 1979) in order to better understand how to make the necessary social changes. In the next two sections, I explain how what I have discovered in the results of the three studies contributes to our described knowledge of the social reality of adolescent girls and I discuss at-risk girls' resistance to being devalued or dismissed. The description and analysis components reveal that these girls are not passive victims with everything done *to* them; they also act on their own accord.

6.2.1 Description

The description component involves deepening our knowledge of significant aspects of the lives of girls and women. In this dissertation, I focused on evidence for the empirical claim that gender matters in a systemic and problematic way in girls' lives and this was no less true when it comes to their relationships with alcohol. In adherence to

existing methodological norms of scientific inquiry, I combined quantitative and qualitative research methods to reveal the specifics of drinking behavior among adolescent girls at particular risk of alcohol abuse.

Feminist epistemology informs us that girls' realities and their worldviews differ from those of boys (cf. Farganis; 1989; Jaggar & Bordo, 1989; Longino, 1990). Girls and boys are embodied, socially situated, concrete persons whose worldviews are, at least in part, a consequence of their gendered positions in the world. Girls' gendered social development, their activities within society, and how they are (or are not) esteemed in gender-stratified culture shapes their perspectives. Feminist epistemology helps us to understand the importance of inquiries into girls' realities. It directed me to begin my research in girls' lives (cf. Harding, 1991; Smith, 1987), and so I used feminist epistemology first as a guide to explore gender specific patterns in associations between personality factors and drinking motives in Study 1. Here, findings supported the claim that girls' and boys' realities do differ, including differences in relations of the personality factors of AS, TA, and SS to drinking motives (cf. Cooper, 1994). Significant connections were found between the anxiety variables and coping/conformity motives for girls, but not for boys. As previously noted, Study 1 replicated previous findings that TA was associated with risky coping motives for alcohol use in teenage girls (Comeau et al., 2001). Unexpectedly, high AS was a significant predictor of conformity motivated drinking for girls, not boys. Results of Study 1 also suggested that SS girls but not boys were especially prone to "risky" enhancement motivated alcohol use. Overall, these findings supported the hypothesis that associations of AS/TA to coping and conformity motives and SS to enhancement drinking motives, were particularly salient

for at-risk groups of adolescent female drinkers. Thus findings supported the development and testing of two personality-matched, motive-specific, gender-specific brief interventions for alcohol-using females (Study 3).

In addition, I combined quantitative and qualitative research methods in a complementary way to explore girls' socially located knowledge about their drinking – in particular, how at-risk girls' experiences of gender and personality influence their understandings of why they drink. Qualitative Study 2 enlisted the active engagement of adolescent girls themselves in the knowledge production process. This involved at-risk girls talking about their alcohol use, defining their own alcohol related problems, and being actively listened to. The participants in Study 2 were selected on the basis of their status as members of two specific subgroups of at-risk drinkers, namely those with the personality factors of AS or SS.

Qualitative results confirm and substantially extend the results of prior studies that have used quantitative, questionnaire-based measures of drinking motives (e.g., Comeau, et al., 2001). In response to my question "Do you think your personality has anything to do with your reasons for drinking alcohol?", many girls I interviewed said that sometimes personality has a role and sometimes not. Differences emerged between girls in the AS versus SS personality groups. Several AS girls articulated that drinking lessened their worry about their physical sensations of being anxious and helped reduce concerns about their position within a peer group. Drinking helped them to fit in with their peers. In contrast, drinking helped many SS girls enhance their situation (e.g., the rush or excitement of the moment).

With respect to the negative reinforcement motives (coping and conformity), Study 2 findings suggest that conformity motives (Cooper, 1994) are connected with negative coping emotions in a social context for AS girls, indicating the importance of viewing conformity as part of coping, not completely independent from coping (Cooper, 1994). More specifically, conformity related concerns about how one appeared to others were part of the reason why some AS girls used alcohol to cope with worries about their position within a peer group. Conformity motives seemed connected with coping emotions in relation to a worry about *not* "being social," coupled with worry about how they were perceived by others, particularly if they didn't drink when others in their peer group did. Some AS girls expressed drinking quickly on arrival to a social situation (e.g. a weekend party) in anticipation of feared anxiety; often their anxiousness would occur well in advance of the social situation. Thus, Study 2 broadened our understanding of the negative reinforcement motives (coping and conformity; Cooper, 1994) suggesting a reason for doing coping interventions for high AS.

With respect to the SS girls, qualitative findings confirm an association between enhancement motivated drinking and SS. In the social context, for several SS girls, drinking helps to enhance their situation by maximizing their desire for and enjoyment of attention. The rush of the moment and of performance, of standing out in their peer group, is fun for them and drinking helps provide that feeling. In addition, girls in the SS group appear inclined to, as one girl described, "just go with it" when they "don't know what can happen." It is as if the unknown provides a certain intensity to the drinking experiences of some SS girls. As another articulates, "you do things that you don't realize you are doing," which appears to be precisely part of the appeal of drinking for some SS

girls. Study 2 findings suggest that those girls who desire intense experiences are the girls who are more likely to drink to get high.

The understanding gained from including research into the lives of girls (Study 2) helped develop and test early interventions (Study 3) that would be meaningful to their everyday lives. Results from Study 3 (Chapter 5) showed a significant reduction in drinking quantity for girls in the experimental group but there was no change in drinking quantity for experimental boys, or for either boys or girls in the control group. There was also a reduction in alcohol problems for girls in the experimental group, but not for teens in the other three groups. In addition, the magnitude of reduction in "risky" drinking motives (i.e., coping, conformity, and enhancement combined) was about twice as large in the girls assigned to the experimental group than in teens assigned to each of the other three groups. I am excited by these findings because they provide evidence for the feminist epistemological claim that we should include the active engagement of adolescent girls themselves in the knowledge production process. Girls' experiences of, and understandings of, drinking are important and must be heard – in their contextual complexity and gender-specificity. If we do not listen to girls, there is reason to believe we will not get positive results in terms of treatment efficacy. Drawing on feminist epistemology, Study 3 findings suggest that treatment interventions rooted in girls' lives will be more effective for girls. By the same token, the failure to get comparable results with boys indicated that effective interventions for them must also begin with specific attention to their experiences and beliefs.

The value of some streams of feminist theory (cf. Brown, 1998; McRobbie, 1990; Van Roosmalen & Krahn, 1996) is supported through this research. It could be argued

that I showed gender bias and discrimination in considering only the perspectives of girls in creating my interventions. This research was done in the context of a long history of alcohol research focused on men and boys (Gomberg, 1982; Greaves, 1996). Until the last twenty years, alcohol research has been done almost exclusively with men and then results just applied to both men and women with little attention to the fact that there may well be important gender differences (Abbott, 1994; Greaves, 1996; Kagle, 1987). I used feminist epistemology as a guide to explore girls' socially located knowledge about their drinking – in particular, how girls' experiences of personality, motives, gender, and other social factors influence their understandings of why they drink. I discovered, among other things, that alcohol use for these at-risk girls is a political issue (cf. Gomberg, 1982), linked to gender roles, power, ambivalence, hidden angers and fears.

By concentrating on the knowing of girls to make sense of their experiences and their perspectives in relation to alcohol use as they themselves described these experiences and perspectives, I tried to tailor the interventions to meet girls' needs. Scenarios and images in the brief intervention manuals were informed by results of the interviews with AS and SS female drinkers. For example, drinking for girls in both personality groups had a definite emotive component, whether using alcohol to deal with anger, sadness and pain, and/or the stress of a busy life. Some of the images in the intervention manuals attempted to convey this emotive component in an attempt to portray the AS and SS girls' diverse emotive experiences. See Appendix F: AS manual (p. 292) for an image of Erin who feels in a panic state. (Note: Appendix F manual page references in the bold yellow circles refer specifically to the student workbooks.) See Appendix F: SS manual (p. 293) for an image of Jillian who feels aggressive. Indeed,

emotions having more to do with anger may be an interesting point of intersection between SS and AS girls. The expression of anger by girls in both personality groups expression of anger could be affected by their social status and by the definitions of appropriate femininity communicated to them through their surrounding communities, their family and friends (cf. Brown, 1998). This connection with anger, an "outlaw emotion" distinguished by its incompatibility with the dominant perceptions and values (Jagger, 1989), may be in part because of a shared desire among AS and SS girls to resist compliance with norms of behavior established by a traditional cultural notion of femininity (e.g., complacency).

Even though I made efforts in the manual development phase to include examples that would resonate for adolescent boys, these examples were not informed by the reported experiences of adolescent boys in the same way as they were informed by the experiences of adolescent girls. Therefore, the content of the manuals may have been more realistic and meaningful to the lives of girls and, thus, there may have been a greater likelihood that girls would apply the coping skills strategies to their everyday lives.

My research has shown that gender is an important variable in adolescent alcohol research. It seems likely that it is possible that a similar approach could be used in meeting the specific early intervention needs of at-risk boys; this would require research that is attentive to the gender differences that are salient in reality. I suggest that future qualitative research (grounded in feminist theory and masculinity theory) with at-risk boys regarding their own conceptualizations about personality, gender, and drinking motives in a social context is necessary to enrich the content of brief intervention

manuals tailored specifically for boys. The complexities, injustices and inequities in the lives of boys as well as girls need to be examined. Grounded in feminist theory, future development and testing of personality matched early interventions for boys should optimally incorporate a critical, social and political analysis of the complexities of masculinity in the lives of at-risk boys (cf. Frank et al., 2003). While the thesis paid particular attention to injustice based on gender experienced by women and girls, I oppose all forms of injustice including, for example, the powerlessness that minority boys and girls experience together (see Frank et al., 2003). Following Sherwin, the value scheme that motivated this thesis and helped with evaluation of the empirical investigation was an approach to feminist ethics that opposes oppression in all forms, including gendered oppression (Sherwin, 1992).

6.2.2 Analysis

As in any project of theory development, my analysis component looked for a causal story behind the systemic and problematic ways in which at-risk girls' relationships with alcohol are connected with gender-specific patterns of harm. In conducting an analysis, Bunch (1979) recommends initially focusing on a phenomenon in a limited context, considering a wide range of factors that may affect it, then expanding the analysis as that context is better understood. Results of qualitative Study 2 revealed connections between at-risk girls' drinking motives and forms of oppression. In Chapter 4, Sections 4.2.1, 4.2.2, and 4.2.3, I considered connections that surfaced between girls' reasons for drinking and oppression based on gender. Then, I expanded my analysis in Sections 4.2.4 and 4.2.5, to consider how intersecting forms of oppression (e.g., race, class, disability) may be connected to girls' drinking.

Study 2 pointed to sexual exploitation and/or exploration and alcohol use as an important topic area(s) in which research is missing and could be related to some girls' subjective experiences of alcohol use. Many girls in Study 2 who were experimenting with sexuality and using alcohol to do that were liable to violation connected with sexual exploitation. In general, this threat caused a personal awareness of lack of safety that often increased for some girls when alcohol was involved; girls were clear that they knew they were vulnerable to unwanted sexual attention or activity and/or acquaintance rape. On the other hand, some girls used alcohol to disinhibit sexually.

Alcohol use involved complex personal tensions for some girls: trying to balance a desire to experiment with their sexuality and using alcohol to do this, while dealing with a sense of personal responsibility for not going too far, and at the same time being vulnerable to sexual exploitation. This risky balancing act may actually have generated stress regarding gender-specific drinking practices in some cases. Many girls I interviewed grappled with conflicts around gendered expectations about being girls that may connect to experiences with and understandings of alcohol use as they struggled in a balancing act between being 'good' girls and not so good girls. Sometimes girls drank to be good girls. Others drank to not be 'good' girls – to let go of the expectation to be good. If female heavy drinkers are not doing the balance well enough they may be viewed as pathological (Nixon & Glenn, 1995; Bordo, 1989) or obnoxious, unfeminine, and promiscuous (Kagle, 1987). When adolescent girls displayed typically male patterns of alcohol use or alcohol-disinhibited behavior such as anger, aggression, or sexual assertiveness, they may even have been assumed to be sick and advised or prescribed substances to help them cope. Some AS girls saw their own anger as unacceptable and

used alcohol in part to help quell anger that might be considered gender-inappropriate. The attitude or belief that it was better not to have strong negative emotions seemed more common to AS girls than to SS girls, which may be in part explained by these individuals' greater attempts to control aversive inner experiences more generally (cf. Stewart et al., 2002b). Similarly, for other girls, it appeared to be not okay to express themselves or speak their mind unless they were drunk. If girls went too far in being 'outgoing' or 'social' they might be considered too loose. Drinking allowed other girls to step outside gender roles; alcohol gave license to flout a passive feminine stereotype with its restrictions on behavior. Drinking seemed to be a form of rebellion or resistance to culturally defined roles and social expectations. Some girls articulated drinking in resistance to denigration inherent in stereotypes of femininity.

In general, at-risk girls seemed to vacillate between buying into traditional cultural notions of femininity with its gendered social expectations and pushing the boundaries. At-risk girls' articulation of experiences tells us that just being girls may bring varied tensions involving conflicting social expectations (i.e., be good, cool, bad) as well as the balancing of stereotypes and restrictions on behaviors (e.g. it's okay to show aggression but only when drunk). Girls who articulated experiences of oppression on the basis of gender (e.g., sexual objectification, sexual exploitation, and threats of violence) often also faced other forms of oppression based on such factors as race, economic class, and sexual orientation that may increase girls' marginality. Some spoke of what it felt like to not fit in with the dominant value system through firsthand experiences with racial prejudice and stereotyping. Others spoke of alcohol use as a way to temporarily alleviate the struggles of poverty (e.g., inadequate or unsafe housing, unemployment, lack of

hope). Some girls knew the feeling of not fitting in because of multiple forms of marginalization and used alcohol as a way of dealing with that. The role of the physical, social, and economic environment in connection with alcohol use is apparent in Study 2. Such stresses as produced by poverty, racial discrimination, and powerlessness appear associated with some girls' reasons for drinking. Results of the descriptive and analysis dimensions point to the significance of underlying social conditions as well as psychological underpinnings of alcohol use.

While I heard from some of the stories that oppression is a factor in the life experiences of at-risk girls, many quite often resisted being devalued or dismissed. The existence of oppressive social forces and environmental conditions is common to girls in both personality groups but the individuals' ways of dealing with it seemed to vary by group. While AS and SS girls articulated experiences of oppression on the basis of gender (e.g., sexual objectification, sexual exploitation, and threat of violence) as well as experiences of marginalization based on class and race, they differed in their responses to experiences of oppression and ways they handled these similar pressures. For example, SS girls tended to show aggression and were often impulsive and inclined to speaking out, whereas AS girls tended to attempt to escape. It is also important to note that qualitative findings indicate that factors other than gender oppression are causes of drinking in girls.

Several of the scenarios and worksheet activities in the intervention manuals tried to emphasize girls' capacity for healthy ways of dealing with the struggles I heard in the interviews. Some scenarios focused on the positive creative activities in girls' lives to help deal with stress; see Appendix F: AS manual (p. 286) for a story about Brandi who

enjoys writing and keeps a journal. See also Appendix F: SS manual (p. 294) for a story about Kayleigh who loves to sew and creatively designs all sorts of garments. Girls in both personality groups were taught thinking tools and behavior strategies to build on their strengths in dealing effectively with their respective personality characteristic (AS or SS) in managing real life situations (e.g., see Appendix F: AS manual, p. 295). Certain worksheet activities encouraged girls in both groups to apply these thinking tools and behavior strategies (the Five F's) to real life situations. These worksheet activities were utilized in conjunction with situations in the manual (see Appendix F: AS manual, p. 296 and SS manual, p. 297) and in their own lives (see Appendix F: sample practice sheets 'a' and 'b', pp. 298-299, which appear in both the AS and SS manuals). Documentation of girls' diverse experiences of alcohol use and the contexts of use, based on the multiplicity of girls' social and cultural identities, interests, and experiences, informed the development of brief interventions that had a positive impact on girls' drinking behavior.

In sum, analysis reveals that a full understanding of adolescent girls' drinking patterns requires us to take into account oppressive forces in the lives of girls. We must go beyond therapeutic interventions and seek to reduce these social forces if we are to achieve a world in which social disadvantage does not lead teenage girls to alcohol abuse. Based on the results of the three studies, we have reason to assume that we have to be even more specific when dealing with other distinctive social groups (e.g. Black youth, First Nations teens, or youth with disabilities). These groups of adolescents will have distinctive experiences and worldviews that are likely to be salient to their relationships with alcohol. This research contributes to the effort of challenging oppression. I listened

to AS and SS girls describe the current realities of their lives and I seek to empower girls in making choices and gaining more control over lives by giving girls skills and personal strategies that meet their specific needs in preventing risky alcohol use behavior. But therapeutic intervention can only do so much in the context where broader social forces and relations structure or influence patterns of drinking.

Moreover, the ways in which those social forces and relations structure or influence patterns of drinking are surely different for boys than for girls (cf. Frank & Davison, 2000). Boys and girls are not similarly situated in society. Boys also have stories that should be heard (e.g., Frank & Davison (2000) address masculinity and adolescence using four case studies to discuss how boys negotiate masculine identities in schools and other social situations). However, that is a project for another thesis.

6.3 Strategy

The strategy component of feminist theory moves from the description of social reality toward the social ideal of justice and is closely connected to the political agenda of feminism that concentrates on the transformative ways of organizing our world to free it from dominance structures. The strategy dimension includes short term and long term goals. Short term goals concentrate on making improvements here and now to lessen the impact of oppression. Long term goals concentrate on the broad social ideal of a just and fair society. To come closer to the ideal world where girls will not suffer from oppression and where social disadvantage does not lead to unhealthy practices, I recommend two strategies. The first includes identifying and pursuing additional areas of research that will further extend our understanding of girls' relationships with alcohol. The second entails altering social practices.

Research is necessary that will unearth new understandings about adolescent girls and what approaches can be shown to support their development (Phillips, 1998). We require research that focuses on girls' assets and analyzes the problems they face in the context of larger societal inequities and cultural power issues. Adolescent girls are often competent and active initiators in their relationships, schools, and communities. As Phillips (1998) notes, "Researchers should emphasize how girls understand and actively strategize to deal with both the positive and negative aspects of their lives" (Phillips, 1998, p. 94). As the description and analysis components revealed, at-risk girls are not passive victims with everything done to them; they can – and do – act on their own accord. Research is necessary to explore these and other girls' modes of resistance to being devalued or dismissed through intersecting forms of oppression or denigration inherent in stereotypes of femininity, culturally defined roles and/or social expectations. Research efforts are also needed to investigate the availability and effectiveness of victim support services and to learn more about the conditions that encourage or discourage girls from using such services. Research should also explore what is needed to prevent victimization of girls and what can help girls deal with victimization they witness or experience themselves. For example, research is required that investigates the impact of violence prevention programs (Holmes & Lundy, 1990; Wekerle, 2001) and curricula that foster boys' and mens' respect for girls and women (Lundy, Davies, Holmes, & Urquhart, 1996; Phillips, 1998). The moral imperative to understand girls' lives, including girls' drinking, within the context of gender inequality and resistance to oppression might lead to future study designs that empower adolescent girls through both their research processes and findings.

In order to make a significant public health impact, David Abrams and Richard Clayton (2001) call for different research and social practice agendas that are united into a comprehensive and integrated "stepped-care approach" to intervention and policy (Abrams & Clayton, 2001, p. 324).

This coordination will require at least three steps. Less intensive interventions (Step 1) directed at primary prevention in whole populations may have to be coupled with screening for high-risk subgroups who receive moderate or brief motivational interventions (Step 2). Brief interventions may have to be stepped up to more intensive clinical interventions (Step3) for the smaller but important subgroup with severe problems who continue to progress toward the patterns that are typical of older chronic adult populations. (Abrams & Clayton, 2001, p. 325)

Research agendas that encompass comprehensive interventions are needed to prevent and reduce alcohol use and misuse among adolescents in racially, ethnically, and economically diverse urban and rural communities. The kinds of treatment interventions that will be helpful in reducing girls' alcohol involvement include well-controlled intervention trials with sufficient sample sizes so gender differences in program effects can be compared reasonably and new theoretical models can be tested (Blake et al., 2001). As Blake and colleagues advise, "Careful consideration also must be given, when evaluating the relative impact of gender-informed or gender-specific interventions, to determine whether findings, or the lack thereof, are attributable to programmatic implementation, or underlying theoretical issues" (Blake et al., 2001, p. 319). My research does not answer this question either in terms of intervention effects or gender-specificity of these effects. However, other interesting research questions have emerged from the investigation. For example, future research could test whether AS or TA youth are at increased risk of developing alcohol problems over time due to their heightened negative reinforcement drinking motives, and whether such findings vary by gender. In

addition, qualitative methodologies are also recommended that would explore broader issues shaping anxious girls' and boys' relationships to and behavior with alcohol. Future studies might also investigate the association between low intensity seeking and coping motives for adolescent boys and also examine whether the link might be better explained by another personality variable not tapped in the present study (e.g., high social anxiety).

In addition, the absence of a theory to explain why girls who desire intense experiences are more likely to drink to get high (as opposed to boys) points to the strong need for future research to replicate this finding from Study 1 and examine mechanisms to explain the gender pattern. An investigation of the causal nature of the relationships of personality and drinking motives using Cooper's (1994) model will require both longitudinal and intervention studies using randomized, controlled designs. Longitudinal studies would allow the researcher to follow those children with a given personality risk factor to determine whether they develop the associated drinking motive at higher rates than others when entering adolescence. Longitudinal studies would also allow researchers to determine if these high personality risk teens also develop higher rates of heavy drinking and drinking problems over time by virtue of their maladaptive drinking motivations. Randomized, controlled intervention studies would allow researchers to determine whether early interventions focusing on reducing risky drinking motives in adolescents at high personality risk actually result in decreases in alcohol use and alcohol problems and whether such behavioral changes are mediated by reduction in risky drinking motives. Future studies might also involve heavy and problem drinking adolescent females who are not characterized by the personality variables of AS, TA, or

intensity seeking. The relative degree of prediction of the personality constructs might be strengthened by inclusion of other theoretically relevant personality variables in future research (e.g., hopelessness, impulsivity; see Conrod et al., 2000b).

Results of Study 3 do provide some indication of the mechanisms by which my intervention worked in effecting change in drinking quantity and problems among the adolescent girls. Specifically, the magnitude of reduction in risky drinking motives (i.e., coping, conformity, and enhancement combined) was twice as large in the girls assigned to the experimental group as in teens assigned to each of the other three groups showing a moderate effect size (cf. Cohen, 1977). Given the parallel pattern of results seen with the drinking behavior measures (i.e., where the largest magnitude reductions were observed in the experimental girls' group), this suggests the possibility that the intervention may have proved effective in the girls because it effected moderate magnitude changes in risky drinking motives. In other words, changes in risky motives may have "mediated" or explained the observed changes in girls' drinking levels and drinking problems. Future studies using larger samples could apply mediator analyses (Baron & Kenny, 1986) to test this hypothesis. Future research could also track adolescents throughout and after the brief intervention to determine if changes in risky motives preceded changes in drinking behavior and drinking problems as would be implied by a mediational perspective. It will be important for future studies to extend the follow up period to determine the durability of the gains observed in the adolescent girls in the present study. It is also possible that more robust differential intervention effects might be observed at even later follow-up periods. For example, if those untreated participants in the control group increased their drinking behavior or developed more problematic drinking patterns

in the longer term while those in the intervention group maintained their current levels, or vice versa.

It will be important to establish the relative stability of these differential intervention outcomes using a mixed factorial design with male versus female facilitators running groups of boy versus girl at-risk teen drinkers. If future research does in fact support effects of facilitator gender in terms of match with youth gender (cf. Piper et al., 2002), this would have clearly important implications for the clinical provision of these interventions in the future. Qualitative research with boys regarding their own conceptualizations about alcohol use in a social context may enrich the content of brief intervention manuals tailored specifically for boys.

Future research could also focus on discovering ways to enhance treatment efficacy from within the current approach. For example, those with greater levels of alcohol problems at baseline may need a more intensive approach than the brief interventions tested here. It is also possible that provision of personalized feedback on the results of the baseline personality, motives, and drinking behavior tests would be useful (e.g., Conrod et al., 2000b; Winters 2001). Future studies could explore whether the addition of an initial individual session involving personalized feedback would improve the effectiveness of the current approach over and above the efficacy possible when using the group format (with no personalized feedback) alone. Finally, I hope to be involved in future research that integrates individual and/or group based interventions with an examination of the health-related impacts of such issues as child mal-treatment, dating violence, social support, and the presence or absence of community and school programs on girls' and boys' alcohol use. Research that explores varying cultural values

associated with girls' and boys' health, as well as conditions that teens, their families, and those working with them perceive as hindering or fostering their physical health and psychological well-being may also help target underlying conditions of oppression.

In addition to other areas for research, I suggest that altering social practices is part of a multi-level strategy to alleviate broader systems and structures of oppression that are related to gender-specific patterns of harm connected with adolescent girls' relationships with alcohol. Gender-specific programming which focuses on girls' assets, rather than deficits, can counter negative portrayals of girls as passive, frail, or voiceless and attend to girls' complex realities and healthy ways to deal with stress and struggles of daily life (cf. Amaro et al., 2001; Phillips, 1998). Broad strategies that target social practices provide the scope necessary to explore solutions to the political problem of oppression. For example, innovative and supportive public policy is necessary to break down barriers, and bring about changes that may enhance girls' health. More specifically, public policies that challenge economic barriers and social conditions that threaten girls' (and boys') health and safety in their homes, schools, and communities are required.

Many social problems that are connected to health and chronic health problems that arise from circumstances of oppression, such as violence and inadequate resources, seldom receive the care required. We want the voices of the most marginalized, the most at-risk girls to help shape policy. Many of these adolescent girls may not be in school. Sherwin (1992) argues that fairer provision of health services in society will require investigation into ways to respond more effectively to differing needs and situations.

One important step in that task would be to broaden the base of the network of "experts" who shape the definition of health needs in our

society. We can assume that, by virtue of their very success in their roles, those currently recognized as authorities on health matters are removed from the perspective of many of the members of society who face the most serious health risks. (Sherwin, 1992, pp. 233-234)

I believe a multi-level strategy that targets the individual level as well as broader social practices is necessary to challenge oppression and reduce its effect on girls' use of alcohol.

While I am interested in learning how gender-specific patterns of harm connected with adolescent girls' relationships with alcohol are related to larger systems and structures of oppression, the kind of feminist strategy I am advocating in this thesis is a narrow one. More specifically, my strategy entails using quantitative and qualitative research methods to hear from AS and SS girls about their current realities and involves tailoring school-based interventions to meet girls' current needs. However, I do recognize that women and girls who suffer harms that occur as a result of their oppressed status (violence and sexual and emotional abuse) do not just need assistance; they also need the resources to be heard by policy makers and service providers. They need an effective voice in policy. As Sherwin notes:

A feminist alternative would recommend that the health care system be principally concerned with empowering consumers in their own health by providing them with the relevant information and the means necessary to contribute to their health. (Sherwin, 1992, p. 239)

In order to recognize and address the moral injustice of oppression and investigate how best to respond to socially generated needs, more egalitarian structures for health care policy formation and decision making are necessary. Sherwin calls for a feminist model of health care that resists hierarchical structures:

Not only would these alternatives be more democratic in themselves and hence more morally legitimate, they would also help produce greater social equality by empowering those who have been traditionally disempowered. (Sherwin, 1992, p. 239)

This would involve recognizing voices that are now largely unheard and hearing the needs by listening to those who are harmed by oppressive forces. Experiential knowledge is essential to understanding how oppression affects health and how the damage of oppression can be reduced. Being in a position to respond to the needs these young women express would involve assessing the support services available, identifying gaps in services and combining collective efforts to meet the needs (Sherwin, 1992). In the context of my own research, results of Study 3 suggest the potential positive health impact when girls' voices help shape interventions for girls. Moreover, the cognitive behavioral approach behind the early intervention is based on the understanding that each of the human faculties of emotion, observation, reason, and action reflect an aspect of human knowledge inseparable from the other aspects (cf. Jaggar, 1989).

Feminist ethics motivates concrete work that has immediate prospects for improving the lives of women and girls. As previously noted, attention to contextual details is morally relevant to ethical evaluation; purely abstract considerations are often inadequate for resolving moral concerns (Sherwin, 1996b). Contextual features pertaining especially to the studies in the thesis included the following three dimensions. First, the importance of contextual features guided the selection of investigative tools for the Study 1. More specifically, I investigated how explanatory models of personality and drinking motives do – and do not – fit girls compared to boys. I incorporated personality measures particularly suited for evaluating girls' risk (e.g., AS and TA) that include measurement of the social context of alcohol use (e.g., conformity and social motives). This investigation explored reasons for drinking that included internal (personal) and

external (social context) motives. Second, the sort of contextual details deemed relevant for moral judgements included the political or power relations that shape the lives of adolescent girls involved in this research (cf. Sherwin, 1992; 1996a). In Study 2, I explored at-risk girls' own conceptualizations about alcohol use in a social context (see Chapter 4, Study 2). Third, the small group, single-gender context of early interventions was important (cf. Hodgins et al., 1997; Schmidt & Weisner 1995; Stewart et al., 2002a) (see Chapter 5, Study 3). Clearly, the focus of the three studies was adolescent girls at particular risk of alcohol abuse based on specific personality factors and their association with risky drinking motives. The three studies in the dissertation did not consider other types of personality risk factors for alcohol abuse (e.g., hopelessness, impulsivity, cf. Conrod et al., 2000b); these are worthy of future study. Moreover, there are other nonpersonality factors operating which place adolescents at particular risk for alcohol abuse, such as familial-environmental factors (e.g., Hill, 1995) and childhood victimization (Miller & Downs, 1995). Approaches similar to the present one focusing on early interventions for other at-risk youth among diverse minority groups (e.g. Black youth, First Nations teens, lesbian, gay, and bisexual young people, or youth with disabilities) also merit future investigation.

6.4 Summary

Ethical deliberations cannot be made adequately in the abstract – it is only in the context of real people's lives that ethical dimensions of policy, practice or program can make sense (Sherwin, 1992; 1996b). A conceptual model of health care reflecting the insights of feminist ethics is concerned with empowering young women in their own health (see Sherwin, 1992). Such a model can guide action to help undermine the

ideological assumptions on which many of our oppressive practices rest. To suggest that adolescent girls are a homogeneous group that all experience oppression in the same way is misleading. Girls' lives are not shaped by gender alone but rather are multiply constituted by gender, race, class, sexuality, nationality, age, ability and other social experiences that they live simultaneously. The complexity of girls' lives is exemplified in relation to personality factors and drinking motives. Girls differ in important ways of relating to their self-perceived qualities and characteristics that make them who they are (personality) and in their reasons for alcohol use (motives). Personality and motives differences must be considered when trying to understand girls' drinking behavior.

This research aimed to take into account the contexts in which girls live and develop, and the impact of social and political or power structures on the lives of girls as expressed in their own words. There are multiple strategies appropriate to different projects in feminism collectively aimed at the elimination of the many forms of oppression. While the strategy component in this thesis is focused on helping individuals, I recognize we must have strategies for future work that are most effective in dealing with the social reality of gender oppression on a larger scale. Targeting underlying conditions and social structures that contribute to the continued subordination of women and girls (and other social groups that have been devalued in complex ways) is a way to attend to the social forces and relations that may shape teenage girls' relationship with alcohol. Focus on underlying social inequities helps us see that support for girls requires social and institutional change. I suggest that future evaluation of brief intervention strategies include analysis of gender-based power relations.

The three studies in my dissertation highlighted the importance of a conceptual framework grounded in feminist theory and combined quantitative and qualitative research methods: it based early interventions on extensive input from youth and it supported the need for gender-specific programming. In conclusion, my feminist approach to understanding adolescent at-risk girls' relationships with alcohol advocates future multi-level strategies that move beyond a question of individual choice in order to situate girls' drinking within a broader scope that addresses all of the conditions relevant to the empowerment of women and girls. I maintain there is a need to consider research agendas in terms of the broader social practices with which they connect, attending to the effect of these larger practices on women's and girls' pursuit of greater power in a society that currently subordinates them.

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Appendix A

Survey Student Consent Form

Research Project Title:

"Adolescent Student Survey"

Supervisor:

Dr. Susan Sherwin, Philosophy, Dalhousie University

Principal Investigator:

Nancy Comeau

Toll-Free Phone Number:

1-877-563-4404

Note: Students must read this form and sign the following page to confirm that they understand and accept conditions before the survey can begin.

To all students:

You are being invited to participate in a *research* project related to the doctoral degree program of Nancy Comeau, Principal Investigator. The Health Sciences Research Ethics Board of Dalhousie University, which has approved this project, requires that researchers using human subjects conform with ethical guidelines currently suggested by most professionals and research granting agencies. These guidelines require:

- 1) That you be informed of the purpose of the research program and any attendant inconvenience, risk, or benefits.
- 2) That the character of the task required be explained to you.
- 3) That you be made aware that participation is voluntary and that you may decline to continue as a participant at any point during the course of the research project, without penalty.
- 4) That you be assured that all information assembled is entirely confidential.

Please read the following that provides these details about the current research project.

<u>Purpose of the research project</u>: The purpose of the survey has two parts: one part is to conduct a research study on gender (looking at differences among boys and girls). The second part is to screen for young women who may be interested in another study that involves one-to-one interviews with the principal investigator, Nancy Comeau.

<u>Task requirements</u>: As a participant, you will be asked, along with all students at West Kings District High School (WKDH), to complete a questionnaire. The principal investigator will be conducting the survey and will be assisted by a trained research assistant(s). You will be asked to complete the survey during class time at WKDH school. No students at WKDH will be excluded from participating in the survey.

You will be asked to provide written indication of my interest in finding out more about another study which involves interviews with female students and the principal investigator. At the end of the class period, you will be asked to fold your survey and drop it in a box at the front of the class.

Hazards, risks, inconveniences, or benefits associated with participation:

There are circumstances under the law which require the researcher to disclose information ("Duty to report" Section 23 (1) Children and Family Services Act). Legal parameters of school board policy include limits to confidentiality when an adolescent indicates that he/she is in current danger of harming herself or others or being harmed by another. In cases where confidentiality must be broken, for example, should you indicate that you are in current danger of harming yourself or others or being harmed by another, the researcher will share this information with Nancy Hennebery, school counsellor and co-ordinator of the Teen Health Centre at WKDH.

<u>Compensation</u>: You will not be provided with compensation for your participation.

<u>Confidentiality</u>: All of the information that you provide will be treated with the strictest of confidence, with the exception of the cases noted above. Your data will be identified only with a code number and not your name, and your questionnaire will be kept in a locked filing cabinet. Only the principal investigator alone will keep a master list linking questionnaire numbers with the names of female students interested finding out more about the interviews.

Please sign below to confirm that you understand the information provided above, and that you are aware that all questionnaires are entirely confidential, and that you may discontinue at any point in the study. Feel free to address any questions you may wish to the investigator either now or after you have participated. A toll-free number is provided: 1-877-563-4404. The privacy of each call will be ensured.

aspect of your participation in this study, you may contact the Human Research Ethics / Integrity Coordinator at Dalhousie University's Office of Human Research Ethics and			
Student's Signature:	Date:		

In the event that you have any difficulties with, or wish to voice concern about, any

Appendix B

Interview Guide

The questions below guided the interview process.¹

- 1/ What are the main reasons why you drink? In other words, when you are <u>actually drinking</u>, what for you is the most positive or desirable <u>effect</u> of alcohol? What do you like best about alcohol?
- 2/ Are you aware of any inner thoughts or emotional feelings, or things <u>within</u> you as a person, which "trigger off" your need or desire to take a drink at a particular moment in time?
- 3/ Are you aware of any particular situations or set of events, things which happen to you in the <u>outside world</u>, which would result in your feeling like having one or more drinks?
- 4/ In terms of your <u>life as a whole</u>, what are the most positive <u>effects</u> or consequences of drinking?
- 5/ When you are <u>actually drinking</u>, what for you is the most negative or undesirable <u>effect</u> of alcohol? In other words, what is the thing you like least about alcohol when you are drinking?
- 6/ In terms of your <u>life as a whole</u>, what do you see as the most negative effects or consequences of your drinking?
- 7/ Can you describe a situation or set of events which would be <u>least likely</u> to result in your feeling like drinking? In other words, when do you feel least inclined to drink?
- 8/ Your personality can be defined as qualities and characteristics that make you who you are and make you difference from others. I would like you to think for a moment about yourself and your personality. I would like you to describe for me the qualities and characteristics that make you who you are and make you different from others.
- 9/ Do you think your personality has anything to do with your reasons for drinking alcohol?

¹ The first 7 open-ended questions are from 'Motivational Information - Reasons for Drinking' of the "Comprehensive Drinker Profile"; Marlatt, G. & Miller, W. R (1984). The Comprehensive Drinker Profile. Odessa, FL: Psychological Assessment Resources, Inc. The last 2 questions are author generated.

Appendix C

Interview Information Sheet

Mr. Vic Fleury, West Kings District High (WKDH) School Principal and Nancy Hennebery, School Counsellor are pleased to announce that WKDH is participating in a research project with Dalhousie University this year. The project is approved by Dr. Jim Gunn, Superintendent, Annapolis Valley Regional School Board and will be supported by the Health Sciences Research Ethics Board of Dalhousie University.

All WKDH students will be invited to participate in the "Adolescent Alcohol Use Prevention Study." As a participant, each student will be asked, along with all students at WKDH, to complete a questionnaire during class time. Student participation is voluntary. Nancy Comeau, the principal investigator, will be conducting the survey and will be assisted by a trained research assistant. Students will also be asked to provide written indication of their interest in participating in a follow-up interview with Ms. Comeau. The purpose of the interview is to learn more about adolescent's views regarding alcohol. The interviews will be conducted through the WKDH Teen Health Center. The aim of the research is to develop future alcohol prevention efforts that are more meaningful to the lives of young people. For further information, contact Nancy Hennebery, School Counsellor at: 847-4453

Appendix D

Interview Parent Authorization Form

Research Project Title:

"Student Interview"

Supervisor:

Dr. Susan Sherwin, Philosophy, Dalhousie University

Principal Investigator:

Nancy Comeau

Note: Parents must read this form and sign the following page to confirm that they understand and accept conditions of their child's participation in a one-to-one interview with the principal investigator (Nancy Comeau)

To parents:

Your child has been invited to participate in a *research* project related to the doctoral degree program of Nancy Comeau, principal investigator. The Health Sciences Research Ethics Board of Dalhousie University, which has approved this project, requires that researchers using human subjects conform with ethical guidelines currently suggested by most professionals and research granting agencies. These guidelines require:

- 1) That you be informed of the purpose of the research program and any attendant inconvenience, risk, or benefits.
- 2) That the character of the task required be explained to you.
- 3) That you be made aware that your child's participation is voluntary and that your child may decline to continue as a participant at any point during the course of the research project, without penalty
- 4) That you be assured that all information assembled is entirely confidential.

Please read the following that provides these details about the current research project.

<u>Purpose of the research project</u>: The purpose of this study is to conduct one-to-one interviews with young women in order to learn more about adolescent girls' views regarding alcohol. The aim of the research is to develop future alcohol prevention efforts that are more meaningful to the lives of young women.

<u>Task requirements</u>: As a participant, your daughter will be asked to take part in a one-to-one interview with the principal investigator (Nancy Comeau). Your daughter will be asked about her own views with respect to alcohol use. The interview will take place in a private room within the West Kings District High School Teen Health Centre. The interview will take approximately one hour. Your child does not have to answer any questions that she is not comfortable with. Your child's interview with the principal investigator will be recorded on tape so that no important information is missed.

Hazards, risks, inconveniences, or benefits associated with participation:

There are circumstances under the law which require the researcher to disclose information ("Duty to report" Section 23 (1) Children and Family Services Act). Legal parameters of school board policy include limits to confidentiality when an adolescent

indicates that he/she is in current danger of harming herself or others or being harmed by another. In cases where confidentiality must be broken, for example, should and your child indicate that she is in current danger of harming herself or others or being harmed by another, the researcher will share this information with Nancy Hennebery, school counsellor and co-ordinator of the Teen Health Centre at WKDH.

Compensation: Your child will not be provided with compensation for her participation.

<u>Confidentiality</u>: All of the information that your child provides will be treated with the strictest of confidence. Record of her interview will be identified only with a code number and not her name, and will be kept in a locked filing cabinet at the Psychology Department of Dalhousie University.

Please sign below to confirm that you understand the information provided above, and that you are aware that your daughter's records are entirely confidential, and that your daughter may discontinue at any point in the study. Feel free to address any questions you may have about this research project or about the procedures this study will follow to the investigator. A toll-free number is provided: 1-877-563-4404. The privacy of each call will be ensured.

In the event that you have any difficulties with, or wish to voice concern about, any aspect of your participation in this study, you may contact the Human Research Ethics / Integrity Coordinator at Dalhousie University's Office of Human Research Ethics and Integrity for assistance (902) 494-1462, patricia.lindley@dal.ca.

You may also address questions to Ms. Nancy Hennebery, Counsellor and Co-ordinate of the Teen Health Center at the school: 847-4453.			
Parent's Signature:	Date:		

Appendix E

Interview Student Consent Form

Research Project Title:

"Student Interview"

Supervisor:

Dr. Susan Sherwin, Philosophy, Dalhousie University

Principal Investigator:

Nancy Comeau

Phone Number (Toll- Free): 1-877-563-4404

Note: Students must read this form and sign the following page to confirm that they understand and accept conditions before the interviews can begin.

To students interested in participating in a one-to-one interview:

You are being invited to participate in a research project related to the doctoral degree program of Nancy Comeau, Principal Investigator. The Health Sciences Research Ethics Board of Dalhousie University, which has approved this project, requires that researchers using human subjects conform with ethical guidelines currently suggested by most professionals and research granting agencies. These guidelines require:

- 1) That you be informed of the purpose of the research program and any attendant inconvenience, risk, or benefits.
- 2) That the character of the task required be explained to you.
- 3) That you be made aware that participation is voluntary and that you may decline to continue as a participant at any point during the course of the research project, without penalty
- 4) That you be assured that all information assembled is entirely confidential.

Please read the following that provides these details about the current research project.

Purpose of the research project: The purpose of this study is to conduct one-to-one interviews with young women in order to learn more about adolescent girl's views regarding alcohol. The aim of the research is to develop future alcohol prevention efforts that are more meaningful to the lives of young women.

Task requirements: As a participant, you will be asked to take part in a one-to-one interview with the principal investigator (Nancy Comeau). For you to be included in a one-to one interview, you must have consumed at least one alcoholic beverage in the last four months. One alcoholic beverage equals one 12 oz. (355 ml.) bottle/can of beer, or one small 4 oz. (118 ml.) glass of wine, or one 1-oz. (29.6 ml.) shot of hard liquor, either straight or with a mixer. You will be asked questions about experiences you have had that involve alcohol.

The interview will take place in a private room within the West Kings District High School Teen Health Centre. The interview will take approximately one hour. You do not have to answer any questions that you are not comfortable with. Your interview with the principal investigator will be recorded on tape so that no important information is missed.

Hazards, risks, inconveniences, or benefits associated with participation:

There are circumstances under the law which require the researcher to disclose information ("Duty to report" Section 23 (1) Children and Family Services Act). Legal parameters of school board policy include limits to confidentiality when an adolescent indicates that he/she is in current danger of harming herself or others or being harmed by another. In cases where confidentiality must be broken, for example, should you indicate that you are in current danger of harming yourself or others or being harmed by another, the researcher will share this information with Nancy Hennebery, school counsellor and co-ordinator of the Teen Health Centre at WKDH.

<u>Compensation</u>: You will not be provided with compensation for your participation.

<u>Confidentiality</u>: All of the information that you provide will be treated with the strictest of confidence. Record of your interview will be identified only with a code number and not your name, and will be kept in a locked filing cabinet.

Please sign below to confirm that you understand the information provided above, and that you are aware that all records are entirely confidential, and that you may discontinue at any point in the study. Feel free to address any questions you may wish to the investigator either now or after you have participated. A toll-free number is provided: 1-877-563-4404. The privacy of each call will be ensured.

Integrity Coordinator at Dalhousie Un	dy, you may contact the Human Research Ethics / iversity's Office of Human Research Ethics and
Integrity for assistance (902) 494-1462	2, patricia.iindiey@dai.ca.
Student's Signature:	Date:

In the event that you have any difficulties with, or wish to voice concern about, any

LEARNING TO DEAL WITH ANXIETY SENSITIVITY

Each story in your handbook is a summary of real life experiences as told by teenagers. Names and identifying characteristics have been changed.

LEARNING TO DEAL WITH SENSATION SEEKING

Each story in your handbook is a summary of real life experiences as told by teenagers.

Names and identifying characteristics have been changed.





Alcohol and other drugs

(8)

Using alcohol and other drugs is a risky way of coping with anxiety. For example, a person who drinks regularly to feel less anxious can get used to alcohol. This means a person needs more drinks to get the same calming feeling.

In the short term, alcohol can have calming effects that only last 20-30 minutes and after that can cause more anxiety. For example, you might drink to fit in or to forget about your worries. You could end up drunk and wake up the next day with more nervous feelings to worry about, not less.



Alcohol and other drugs

Using alcohol and other drugs is a risky way of coping with the urge to do something exciting. This can lead to dangerous outcomes like falling off a wharf or a balcony or falling down the stairs.

Drinking alcohol or taking other drugs can increase your nervous energy and make you crave even more excitement.



Amanda has been up for a party all week. She arrives feeling energetic and ready for a good time. All her friends are there. She downs a cooler. "I want to get a buzz on. The party will be even more fun!"

Alcohol and other drugs can have

Alcohol and other drugs can have

Ong-term effects

One or two drinks may make a person feel energetic.

One or two drinks may make a person feel that buzz

One or two drinks may make a person feel that buzz

One or two drinks may make a person feel that buzz

One or two drinks may make a person feel that buzz

One or two drinks may make a person feel energetic.

That means he or she
is getting used to alcohol. That means he offect.

is getting used to alcohol. That means he or she
needs more drinks to get the same effect.



Amanda wakes up the next day. She feels sick, tired, and jittery. She is supposed to work today but the very thought of just getting up makes her dizzy. "If I don't do this shift, I could lose my weekend job and I need the money."

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Erin's situation

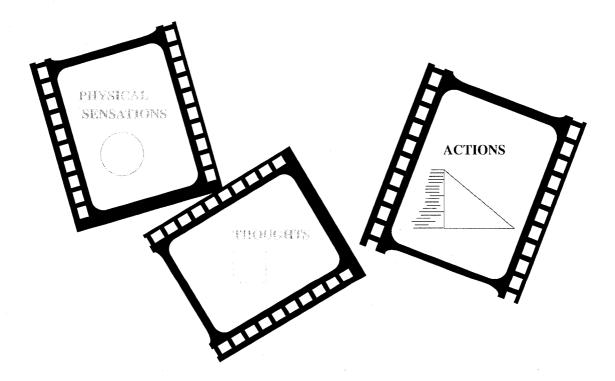
Most days when Erin gets on the school bus, she's worried about something. Today she has to give a presentation in class. On the bus she starts to feel nauseous. She hates the feeling. She is afraid that she'll be sick in front of everyone. Last night she talked with her friend Andrew, and he told her that he worries about being nervous too.

 $\widehat{13}$

Erin has an upset feeling in her stomach when she gets off the bus. She can feel herself trembling. She has difficulty breathing. She is stressed out by these feelings she experiences when she's nervous. This makes her heart beat faster and she starts to sweat. She worries about these anxious feelings.

Erin is afraid her friends might notice she is anxious and think she's not cool. "I can't do this presentation in front of everybody. The way my stomach feels now, I'll probably be sick in front of the class. Then I'll have no friends."

Erin walks to the picnic table under the tree to avoid meeting up with anyone. She rummages through her knapsack pretending to be busy so no one will bother her. Erin looks over her shoulder, then takes out the pint she has been carrying. "Another drink will settle me down. I won't be so afraid of these nervous feelings."



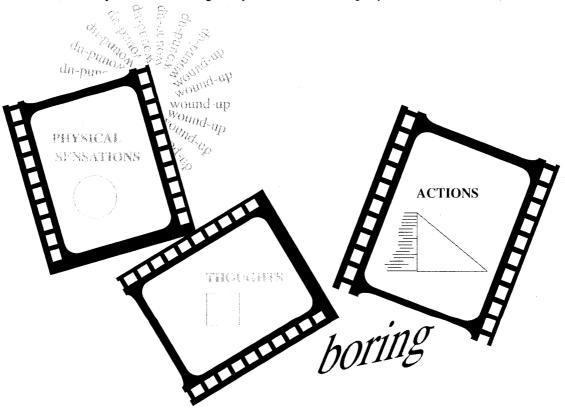
Katie's situation

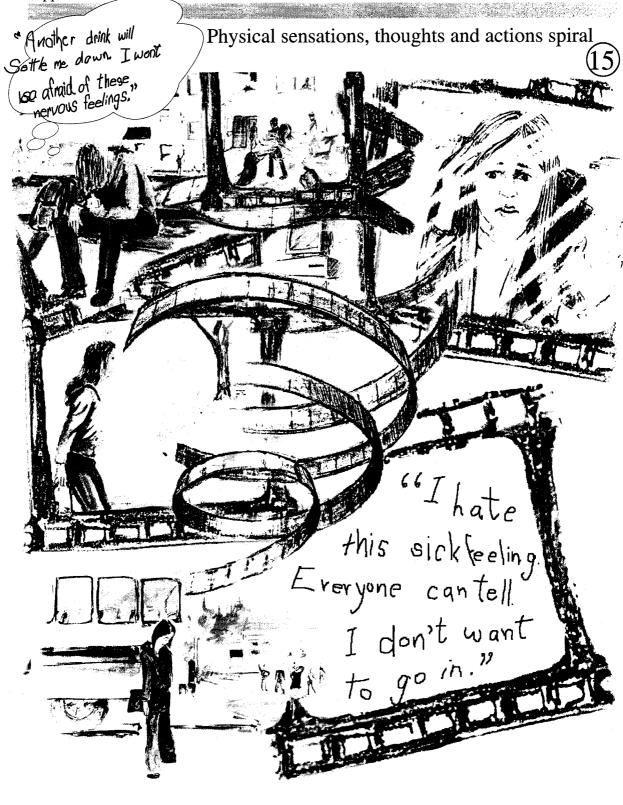
Katie is not doing badly at school. She's pretty popular too. Often she finds her schoolwork boring. It's Thursday night. Tomorrow she has an exam at 9 a.m. She usually crams for tests and she generally does OK. It's about 7:30 p.m. She's been studying for maybe ten minutes. Already she's bored. She's yawning her head off. She feels restless and has read the same sentence at least five times. It's really hard to sit still when she feels this fidgety.

 $\overline{13}$

Sometimes when she's really bored with her homework, Katie will spend an hour or so in a chat room. Maybe she'll see if anyone's in the chat room. Just then the phone rings. It's Ivan. He has the same test tomorrow. He gets bored studying too and wants some action. He tells Katie about a party Bryan is having tonight. Katie thinks to herself, "I could use some fun. I'll die if I have to stay here any longer." She agrees to meet Ivan at Bryan's place.

Katie is feeling energetic when she gets to the party. She starts dancing right away. After a few dances she has a real thirst happening. Katie drinks a cooler and feels hyped. "Awesome party, feels like more." Katie opens another cooler. "Way much fun," she says to herself. "I'll get Roy to check out Lee's party across town with me."







Nick and Candice

25

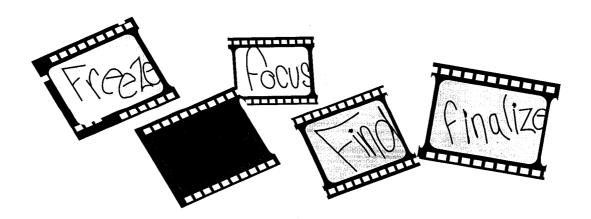
Nick gets nervous when he has to be around people because he thinks he might make a fool of himself. His friends decide to go to the school dance and persuade Nick to come, even though he's anxious about it.

Almost as soon as he gets there, Candice offers him a beer outside the school. He drinks the beer to calm his nervous feelings and fit in.

When they go inside, Candice asks Nick to dance. He begins to feel even more nervous before they get on the dance floor. His heart beats faster. His knees tremble. He begins to sweat.

"I'm going to pass out in front of everyone." He is sure everyone sees how anxious he is. Nick is so worried that he stops paying any attention to Candice. He feels panicky and escapes through the door just before the next song starts playing.





I wish I could stop
Worrying over these
nervous feelings.



Brandi is a good listener. She likes that her friends confide in her but she worries about the things they have to deal with. Brandi keeps a journal. Writing helps, but sometimes she gets a headache and nervous feelings when she trys to sort it all out and deal with her own things. Sometimes, just by worrying the worst is going to happen when she feels nervous, Brandi makes herself feel more stressed out.

Brandi and Taher





Taher is a good soccer player and he likes to read. He tries to do well in whatever he does. Taher worries about life in general. He gets stressed out about the uncomfortable physical feelings he experiences when he worries about things. Just by worrying something bad is going to happen when he feels anxious, Taher makes himself more stressed out.

Introduction to Sensation Seeking

A person who craves excitement and often acts without thinking clearly about the consequences is said to be high in SENSATION SEEKING.



Sometimes you might be very bored and just seek excitement without thinking about what you are doing. At other times, when you are feeling high energy, you might find yourself craving even more excitement.



Characteristics of Sensation Seeking

- 1. Focusing on the obvious, highly stimulating aspects of situations.
- 2. Chasing the fun. This means you crave even more excitement when you feel a rush.
- 3. Being often bored and restless. You want action.
- 4. Seeking excitement without thinking much about what could happen.

Anxiety Sensitivity



What are other ways to describe these feelings of being stressed out about feeling anxious?

Most days, when Erin gets on the school bus, she's worried about something. Today she has to give a presentation in class. On the bus she starts to feel nauseous. She hates the feeling. She is afraid that she'll be sick in front of everyone. Last night she talked with her friend Andrew, and he told her that he worries about being nervous too.

Erin has an upset feeling in her stomach when she gets off the bus. She can feel herself trembling. She has difficulty breathing. She is stressed out by these feelings she experiences when she's nervous. This makes her heart beat faster and she starts to sweat. She worries about these anxious feelings.

Erin is afraid her friends might notice she is anxious and think she's not cool. "I can't do this presentation in front of everybody. The way my stomach feels now, I'll probably be sick in front of the class. Then I'll have no friends."

6



Katie is not doing badly at school. She's pretty popular too. Often she finds her schoolwork boring. It's Thursday night. Tomorrow she has an exam at 9 a.m. She usually crams for tests and she generally does OK. It's about 7:30 p.m. She's been studying for maybe ten minutes. Already she's bored. She's yawning her head off. She feels restless and has read the same sentence at least five times. It's really hard to sit still when she feels this fidgety.

Sometimes when she's really bored with her homework, Katie will spend an hour or so in a chat room. Maybe she'll see if anyone's in the chat room. Just then the phone rings. It's Ivan. He has the same test tomorrow. He gets bored studying too and wants some action. He tells Katie about a party Bryan is having tonight. Katie thinks to herself, "I could use some fun. I'll die if I have to stay here any longer." She agrees to meet Ivan at Bryan's place.

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Fill in the decis	tional box below based on an exam	Decisional bepare of avoidance as a coping behavior.	alanc
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Positive consequences			
Negative consequences			
	ping behavior:		
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Fill in the d		er way of coping with boredom. (Think of an
Fill in the d	lecisional box below based on another	er way of coping with boredom. (Think of an Long term
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Identifyi	ng the parts (14)
	Thoughts
Physical sensations	Thinking a certain way leads to specific action.
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Sometimes people act aggressively when they feel in need of stimulation.

People who are afraid they will lose control of a situation may act tough and rowdy as a way of looking like they are more in control than they feel.

Jillian had a fight with her ex-boyfriend. She sees Marc in the hallway and there is no way to avoid him. She doesn't want to talk to him. She glares at Marc aggressively as he approaches in the hall. She blurts out an insult.

Avoidance

Sometimes people try to avoid boredom by seeking the fun. If a situation is intolerably boring, they may just walk out.

Katie found her schoolwork intolerably boring. She avoided boredom by going after the fun of a party.

(J)	your noves	
(I)		



You may bounce from reactivity to the next never completing anything. Rayleigh loves to sew She adds huge Patches to her Jeans Sh She adds huge Patches the hatertops. Sh She turns belts with sparkles, adorns belts with sparkles, She has all kinds of other ideas for cool clothes, like making a vest for her brother Roger,

	your notes			
(J)				
(D)				
		<u> </u>		

but she never finishes anything.

Freeze Frame Focus Find Finalize



- Freeze means to stop and think.

 A cue to help you know when it is time to freeze is when you first begin to feel those uncomfortable physical sensations. Aware of your anxious feelings, you can then step back and consider what you are thinking.
- Frame means to identify and challenge HOT THOUGHTS.

It is never easy to change your thinking. Automatic thoughts are habits. Your task with these thinking tools is to form a new habit.



Focus means to pay particular attention to the connection between your HOT THOUGHT and your worried feelings about being anxious. Gather evidence before overestimating possibilities and thinking the worst will happen.

- Find means to weigh the pros and cons of alternative behavior and look for a goal you feel you can reach.
- Finalize means to choose an action that leads to your goal.

 You can take small steps to achieve your goal in a creative way.

	ould Nick be aware of to know when it is time to freeze?
Frame mean	ns to identify and challenge HOT THOUGHTS.
Write Nick's	S HOT THOUGHT and a question to challenge it.
about being a	s to pay attention to the connection between your HOT THOUGHT and your worried feel inxious. Gather evidence before overestimating possibilities and thinking the worst will hap
Find means	to weigh the pros and cons of alternative behavior and look for goal you feel you can read
Identify a pa	articular behavior that shows Nick failed to challenge his HOT THOUGHT.
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	rnative behavior for Nick challenging his HOT THOUGHT. Weigh the pros and cons.
Behavior	
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Frame means t	to identify and challenge HOT THOUGHTS.	
Write Samira's	HOT THOUGHT and a question to challenge it.	
	o pay particular attention to alternative ways of thinking and how your thought to your actions.	ts
Find means to	weigh the pros and cons of alternative actions and look for a goal you feel you can	an reach.
	icular action that shows Samira failed to challenge her HOT THOUGHT.	
Behavior ₋		-
Pros -	<u> </u>	
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	ative action for Samira. Weigh the pros and cons that might result if she challe HT. Try to come up with a positive behavior.	nged her
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Finalize means to choose an action that leads to your goal. You can take small steps to achieve your goal in a creative way. Write an action that Samira could take to achieve her goal.

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7			

Write about a recent situation in which you worried about being anxious.

Freeze means What cue shou			Freeze when it is time to		Focus	Find	Finalize
Frame means	to identify and	d challenge HC	т тноиснт	S.			
Write your HO	ЭТ THOUGH	T and a questi	on to challenge	it.			
about being an	xious. Gather e	evidence before	ion between you overestimating justing the	possibilities	and thinkin	g the wo	rst will happen.
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Write the goal and cons of alt			challenged you	т НОТ ТН	OUGHT as	nd weigh	ed the pros
You can take s	small steps to a		ds to your goal. oal in a creative ve your goal.	way.			

Appendix G Dalhousie University



Department of Psychology Halifax, Nova Scotia Canada B3H 4J1

> (902) 494-3417 FAX: (902) 494-6585

Student Survey Consent Form

Research Project Title:

"Adolescent Student Survey"

Supervisor:

Dr. Susan Sherwin, Philosophy, Dalhousie University

Principal Investigator:
Toll-Free Phone Number:

Nancy Comeau 1-877-563-4404

Note: Students must read this form and sign the following page to confirm that they understand and accept conditions before the survey can begin.

To all students:

You are being invited to participate in a *research* project related to the doctoral degree program of Nancy Comeau, Principal Investigator. The Health Sciences Research Ethics Board of Dalhousie University, which has approved this project, requires that researchers using human subjects conform with ethical guidelines currently suggested by most professions and research granting agencies. These guidelines require:

- 1) That you be informed of the purpose of the research program and any attendant inconvenience, risk, or benefits.
- 2) That the character of the task required be explained to you.
- 3) That you be made aware that participation is voluntary and that you may decline to continue as a participant at any point during the course of the research project, without penalty.
- 4) That you be assured that all information assembled is entirely confidential.

Please read the following that provides these details about the current research project.

Purpose of the research project: The purpose of this survey has two parts: one part is to conduct a research study on gender (looking at differences among girls and boys). The second part is to screen for students who may be interested in another study that involves two small group sessions that will present information and strategies on how to deal with anxiety issues and risky behaviour, including risky behaviour involving alcohol.

<u>Task requirements</u>: As a participant, you will be asked to complete a questionnaire. The principal investigator will be conducting the survey and will be assisted by a trained research assistant(s). You will be asked to complete the survey during class time at school.

No students at your high school will be excluded from participating in the survey. You will be asked to provide written indication of your interest in finding out more about another study which involves two small group sessions on how to deal with anxiety issues and/or risky behaviour, including risky behaviour involving alcohol. At the end of the class period, you will be asked to drop your survey in a box at the front of the class.

Hazards, risks, inconveniences, or benefits associated with participation:

There are circumstances under the law which require the researcher to disclose information ("Duty to report" Section 23 (1) Children and Family Services Act). Legal parameters of school board policy include limits to confidentiality when an adolescent indicates that he/she is in current danger of harming her/himself or others or being harmed by another. In cases where confidentiality must be broken, for example, should you indicate that you are in current danger of harming yourself or others or being harmed by another, the researcher will share this information with your school counsellor.

<u>Compensation</u>: You will not be provided with compensation for your participation.

<u>Confidentiality</u>: All of the information that you provide will be treated with the strictest of confidence, with the exception of cases noted above. Your data will be identified only with a code number and not your name, and your questionnaire will be kept in a locked filing cabinet. Only the principal investigator alone will keep a master list linking questionnaire numbers with the names of students interested in finding out more about the small group sessions.

Please sign below to confirm that you understand the information provided above, and that you are aware that all information you provide will be treated with the strictest of confidence, and that you may discontinue at any point in the study. Feel free to address any questions to the investigator either now or after you have participated. A toll-free number is provided: 1-877-563-4404. The privacy of each call will be ensured.

In the event that you have any difficulties with, or wish to voice concern about, any aspect of your participation in this study, you may contact the Human Research Ethics/Integrity Coordinator at Dalhousie University's Office of Human Research Ethics and Integrity for assistance (902) 494-1462, patricia.lindley@dal.ca.

Student's Signature:	Date:	

Appendix H



Dalhousie University

Department of Psychology Halifax, Nova Scotia Canada B3H 4J1

> (902) 494-3417 FAX: (902) 494-6585

Student Interest Form -Small Group Sessions-

Are you interested in finding out more about two small group sessions that will take place during class time?

Completing this form does **not** mean that you have to attend the group sessions, only that you are interested in finding out more information.

If you are interested in finding out more about the group sessions please fill in your name and grade.

NAME:		
	First	Last
GRADE:		

THANK YOU

Appendix I



Dalhousie University

Department of Psychology Halifax, Nova Scotia Canada B3H 4J1

> (902) 494-3417 FAX: (902) 494-6585

Dear Students and Parents:

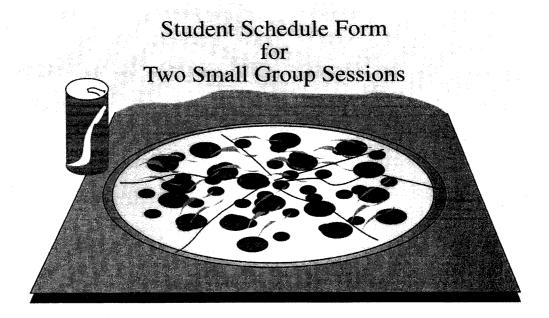
This notice is to inform you of a study at your child's high school. The study is part of a research project related to the Dalhousie University doctoral degree program of Nancy Comeau, principal investigator.

<u>Purpose of the research project</u>: The purpose of this study is to conduct small group, same-gender sessions with adolescents that will present information and strategies on how to deal with anxiety issues and risky behaviour.

Student participation is voluntary. The research project includes two same gender groups for adolescents which will be held at the high school. The groups will be facilitated by a trained clinical therapist and research assistant(s). Each group session will be approximately 90 minutes long.

Each same gender group session will involve approximately 15 students at various grade levels and will focus on strategies to deal with anxiety issues and risky behaviour, including behaviour involving alcohol. All information provided by students will be treated as confidential.

Please address any questions you may have about this research project or about the procedures in this study will follow to the principal investigator, Nancy Comeau at the following toll-free number: 1-877-563-4404. The privacy of each call is ensured.



Student's name

is participating in two sessions at school. The sessions are part of a research project with the Annapolis valley Regional School Board and Dalhousie University.

SESSION 1		
Block	Date	Time
Permission required fi	om subject teacher	
SESSION 2		
Block	Date	Time
Permission required fi	rom subject teacher	

Both group sessions will take the entire period.

Appendix K



Dalhousie University

Department of Psychology Halifax, Nova Scotia Canada B3H 4J1

> (902) 494-3417 FAX: (902) 494-6585

Group Study Parent Authorization Form

Note: Parents must read this form and sign the following page to confirm that they understand and accept conditions of their child's participation in a group study.

To parents:

Your child has been invited to participate in a research project related to the doctoral degree program of Nancy Comeau, principal investigator. The Health Sciences Research Ethics Board of Dalhousie University, which has approved this project, requires that researchers using human subjects conform to ethical guidelines currently suggested by most professions and research granting agencies. These guidelines require:

- 1) That you be informed of the purpose of the research program and any attendant inconvenience, risk, or benefits to your child.
- 2) That the character of the task required of your child be explained to you.
- 3) That you be made aware that your child's participation is voluntary and that your child may decline to continue as a participant at any point during the course of the research project, without penalty.
- 4) That you be assured that all information assembled is entirely confidential.

Please read the following that provides these details about the research project:

<u>Purpose of the research project</u>: The purpose of this study is to conduct same-gender, small group sessions with adolescents that will present information and strategies on how to deal with anxiety issues and risky behaviour.

<u>Task requirements</u>: As a participant, your child will be asked to take part in one of two groups for adolescents which will be held at your child's high school. The groups will be facilitated by a trained clinical therapist and research assistant(s). Each group session will be approximately 90 minutes long.

Hazards, risks, inconveniences, or benefits associated with participation:

There are circumstances under the law which require the researcher to disclose information ("Duty to report" Section 23 (1) Children and Family Services Act). Legal parameters of school board policy include limits to confidentiality when an adolescent indicates that he/she is in current danger of harming him/herself or others or being harmed by another. In cases where confidentiality must be broken, for example, should

your child indicate that she is in current danger of harming herself or others or being harmed by another, the researcher will share this information with the school counsellor at your child's high school.

Your child may benefit from the coping strategies presented in the group sessions.

Compensation: Your child will not be provided with compensation for her participation.

<u>Confidentiality</u>: All of the information that your child provides will be treated with the strictest of confidence.

Please sign below to confirm that you understand the information provided above, and that you are aware that all information your child provides will be treated with the strictest of confidence, and that your child may discontinue at any point in the study. Feel free to address any questions you may have about this research project or about the procedures this study will follow to the principal investigator, Nancy Comeau. A toll-free number is provided: 1-877-563-4404. The privacy of each call will be ensured.

In the event that you have any difficulties with, or wish to voice concern about, any aspect of your participation in this study, you may contact the Human Research Ethics/Integrity Coordinator at Dalhousie University's Office of Human Research Ethics and Integrity for assistance (902) 494-1462, patricia.lindley@dal.ca.

A STATE OF THE STA	
I give my permission for _	
of grade	to participate in the research project at his/her high school.
Parent's Signature:	Date:

Appendix L



Dalhousie University

Department of Psychology Halifax, Nova Scotia Canada B3H 4J1

> (902) 494-3417 FAX: (902) 494-6585

Small Group Consent Form

Supervisor:

Dr. Susan Sherwin, Philosophy, Dalhousie University

Principal Investigator:
Toll-Free Phone Number:

Nancy Comeau 1-877-563-4404

Note: Students must read this form and sign the following page to confirm that they understand and accept conditions before the groups can begin.

To students interested in participating in a group:

You are being invited to participate in a research project related to the doctoral degree program of Nancy Comeau, Principal Investigator. The Health Sciences Research Ethics Board of Dalhousie University, which has approved this project, requires that researchers using human subjects conform with ethical guidelines currently suggested by most professions and research granting agencies. These guidelines require:

- 1) That you be informed of the purpose of the research program and any attendant inconvenience, risk, or benefits.
- 2) That the character of the task required be explained to you.
- 3) That you be made aware that participation is voluntary and that you may decline to continue as a participant at any point during the course of the research project, without penalty.
- 4) That you be assured that all information assembled is entirely confidential.

Please read the following that provides these details about the current research project.

<u>Purpose of the research project</u>: The purpose of this study is to conduct small group sessions that will present information and strategies on how to deal with anxiety issues and risky behaviour, including risky behaviour involving alcohol.

<u>Task requirements</u>: As a participant, you will be asked to take part in one of two groups for adolescents which will be held at your high school. We are trying out different combinations of groups involving personality characteristics and coping skill strategies. Two types of groups will be conducted, designed to help with anxiety problems and risky behaviors. Volunteers are needed to participate in these groups.

We are interested in testing the effectiveness of the coping skills training groups and various ways of organizing the groups based on personality characteristics.

You will be assigned to groups that will offer coping strategies that may be useful in a variety of situations. The groups will be facilitated by a trained clinical therapist and research assistant(s). Each group session will be approximately 90 minutes long. For you to be included in a group, you must have consumed at least one alcoholic beverage in the last four months. One alcoholic beverage equals one bottle/can of beer, or one small glass of wine, or one shot of hard liquor, either straight or with a mixer.

Hazards, risks, inconveniences, or benefits associated with participation:

There are circumstances under the law which require the researcher to disclose information ("Duty to report" Section 23 (1) Children and Family Services Act). Legal parameters of school board policy include limits to confidentiality when an adolescent indicates that he/she is in current danger of harming her/himself or others or being harmed by another. In cases where confidentiality must be broken, for example, should you indicate that you are in current danger of harming yourself or others or being harmed by another, the researcher will share this information with the school counsellor at your high school.

An additional risk includes difficulties you may have with issues related to anxiety or alcohol use. You may benefit from learning strategies to deal with anxiety and situations involving alcohol.

<u>Compensation</u>: You will not be provided with compensation for your participation.

<u>Confidentiality</u>: All of the information that you provide will be treated with the strictest of confidence.

Please sign below to confirm that you understand the information provided above, and that you are aware that all information you provide will be treated with the strictest of confidence, and that you may discontinue at any point in the study. Feel free to address any questions to the investigator either now or after you have participated. A toll-free number is provided: 1-877-563-4404. The privacy of each call will be ensured.

In the event that you have any difficulties with, or wish to voice concern about, any aspect of your participation in this study, you may contact the Human Research Ethics/Integrity Coordinator at Dalhousie University's Office of Human Research Ethics and Integrity for assistance (902) 494-1462, patricia.lindley@dal.ca.

Student's Signature:	 Date:	

Appendix M

Comments from Review Panelists on Initial Drafts of Manuals

"I think the general structure of these training programs is excellent and the successive steps in the process of each program should be very clear and intuitively compelling for the participants." Dr. Phil Dunham, Developmental Psychologist, Department of Psychology, Dalhousie University, Halifax, NS, Canada

"I would suggest reducing the density of print. The manual has too much of a textbook feel about it." Dr. Marvin Krank, Experimental Psychologist and Alcohol/Substance Abuse and Adolescent Risk Taking Researcher, Department of Psychology, Okanagan University College, Kelowna, BC, Canada

"The concepts are excellent but the text is dense. I would suggest the use of visuals that aid understanding. Tone must be more kid-adolescent-teen focused." Dr. Patrick McGrath, Clinical Child Psychologist, Department of Psychology, Dalhousie University, Halifax, NS, Canada

"The content is excellent, the layout and ordering seems good. One aspect that I really likes that is worth mentioning is the film production theme . . . It might even be worth playing this up a bit (e.g., spending a bit of time telling them about how "real" film directors use script boards)." Dr. Charlotte Johnston, Clinical Child Psychologist, Department of Psychology, University of British Columbia, Vancouver, BC, Canada

"Include some positive actions as examples. If these teens are not already into problems, they may have many positive coping skills which need to be noticed, acknowledged and reinforced." Dr. Wade Junek, Child and Adolescent Psychiatrist, Izzak Walton Killam Health Center – Mental Health Division, Halifax, NS, Canada

"I recommend a student handbook vs. workbook with spaces for students to write key concepts. Shorten the text in the sensation-seeking manual as these teens are bored easily." Dr. Darcy Santor, Clinical Psychologist and Adolescent Risk Taking and Depression Researcher, Dalhousie University, Halifax, NS, Canada

"The manuals could be better tailored to an adolescent audience. Less text, more examples, and more visual representation of the concepts." Dr. Margo Watt, Clinical Psychologist and Anxiety Researcher, St. Francis Xavier University, Antigonish, NS, Canada

"The manuals are very user-friendly." Nancy Hennebery – West Kings District High School, Annapolis Valley District School Board, Guidance Counselor, Auburn, NS, Canada