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**FACULTY OF GRADUATE AND
POSTDOCTORAL STUDIES**

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GRADE / DEGREE

School of Psychology

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**Puberty, Peers and Risky Behavior : An Examination of the Relationships Between Pubertal
Development , Peer Affiliation, Sexual Behavior and Delinquency**

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between Pubertal Development, Peer Affiliation, Sexual Behaviour and
Delinquency**

Laurie Clark, B.Sc.

**Thesis submitted to the Faculty of Graduate and Postdoctoral Studies
In partial fulfillment of the requirements for the
PhD degree in Clinical Psychology**

**School of Psychology
Faculty of Social Sciences
University of Ottawa**

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Your file *Votre référence*
ISBN: 978-0-494-65582-5
Our file *Notre référence*
ISBN: 978-0-494-65582-5

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Acknowledgments

I would like to thank several people who contributed, in many different ways, to the realisation of this thesis. First, I would like to thank my thesis supervisor, Dr. Jane Ledingham. It was through her support, insight, intellect and sense of humour that allowed me to finish this marathon. I cannot count the number of things that I have learned from Jane and I always left her office full of new ideas and optimism. I would also like to thank my thesis committee, Dr.'s Philip Firestone, Barry Schneider and Alastair Younger. Their input on this project was extremely helpful and they never made me feel that I was out of my league (even when I was).

Also of mention are Eastern Ontario Young Offender Services, The Boy's and Girl's Club of Ottawa and the Nova Scotia Department of Justice, who aided in the collection of data for this project. Thank you.

I need to thank my family for their continued support throughout my academic career. To my parents, Albert and Elaine, thank you for the endless love and support that you have given me – words cannot express how grateful I am. Throughout this process you reminded me of my goals and the bigger picture, and provided sage advice, which I appreciated even when I didn't take it. Of course, the ethics advice was always helpful Dad, thanks. To my brothers and sisters-in-law, thank you for somehow knowing when to ask how the thesis was going and when to not ask. A special thank you to Eric and Sen-Mei for all of the meals, rides and lodging over the years – I can't express how helpful you have been. To my nieces and nephew, thank you for the distraction and endless giggles, and for only laughing once at the fact that I was in "adult school".

To my classmates and friends, thank you for the support and encouragement. The nights we spent around the kitchen table discussing our plight as graduate students kept me going during the stressful times.

Last, I would like to thank the youth who participated in this project. They opened up their world to me and answered my many, many questions without complaint. I cannot express my gratitude to you all.

Table of Contents

Acknowledgements.....	ii
Table of Contents.....	iii
List of Tables.....	v
List of Figures.....	vii
List of Appendices.....	viii
Abstract.....	1
Introduction.....	2
Puberty, Peers and Delinquency.....	2
Externalizing Disorders & Delinquent Behaviour.....	2
The Scope of Delinquent Behaviour and Drug Use among Youth.....	4
Drug Use.....	6
Gender Differences in Antisocial Behaviour.....	9
Pubertal Maturation and Delinquency and Drug Use.....	10
The Role of Peer Affiliation in Delinquency and Drug Use.....	13
The Role of Sexual Behaviour in Delinquency and Drug Use.....	16
Method.....	18
Procedure.....	18
Youth involved in the justice system (justice group).....	18
Community comparison group (community group).....	22
Participants.....	23
Measures.....	24
The National Youth Survey Self-Reported Delinquency and Drug Use Modules.....	24
The National Youth Survey Peer and Romantic Partners Affiliation Module...	28
Familiarity with Members of the Opposite Sex.....	31
The National Youth Survey's Deviant Attitudes Scale.....	31
The Pubertal Development Scale.....	32
Sexual Behaviour Questionnaire.....	34
The Children's Social Desirability Scale	35
Results.....	36
Demographic Data.....	36
Antisocial Acts, Drug Use, and Sexual Behaviour.....	40
Peer and Romantic Partner Affiliations.....	50
Pubertal Development.....	52
Correlations among Pubertal Development, Relationships with Peers and Romantic Partners, Delinquency, Drug Use, and Sexual Behaviour Indices.....	54
Social Desirability as a Function of Recruitment Group and Gender.....	62
Prediction of Delinquency, Drug Use and Sexual Behaviour by Pubertal Timing and Peer Affiliation	62
Peer and Romantic Relationships.....	81
Friends.....	84
Romantic Partners.....	86
Discussion.....	88
Major Findings.....	88
Strengths and Weaknesses of the Present Study.....	104

References..... 112

Appendices..... 125

List of Tables

Table 1: Demographic Data by Participant Gender and Recruitment Group.....	39
Table 2. Means and Standard Deviations of Pubertal Development Indices, by Participant Gender and Recruitment Group.....	43
Table 3: Indices of Peer Involvement and Peer Delinquent and Drug Use Behaviour	44
Table 4. Mean Delinquency Scores (and Standard Deviations), for the Past Year, by Recruitment Group and Gender.....	45
Table 5. Mean Delinquency Scores (and Standard Deviations), for Lifetime Frequency, by Recruitment Group and Gender.....	46
Table 6. Means (and Standard Deviations) of Lifetime Delinquency Variety Scores by Recruitment Group and Gender.....	49
Table 7. Means (and Standard Deviations) of Drug Use Indices, by Recruitment Group and Gender.....	51
Table 8: Mean Scores and Standard Deviations of Sexual Behavior Indices, by Group and Gender.....	53
Table 9. Correlation Matrix for Indices of Pubertal Development and Timing, and Friendship and Romantic Partner Indices for Females.....	56
Table 10. Correlation Matrix for Indices of Puberty and Friendship and Romantic Partner Indices for Males.....	57
Table 11. Correlation Matrix for Measures of Puberty, Association with Peers and Romantic Partners and Delinquency, Drug Use and Sexual Behavior for Females.....	60
Table 12. Correlation Matrix for Measures of Puberty, Association with Peers and Romantic Partners and Delinquency, Drug Use and Sexual Behavior for Males...	61
Table 13. Standard Multiple Regression: Lifetime Variety of Delinquent Activity in Females.....	64
Table 14. Standard Multiple Regression: Lifetime Variety of Delinquent Behaviour in Males.....	65
Table 15. Standard Multiple Regression: Lifetime Frequency of Delinquent Behaviour in Females.....	66
Table 16. Standard Multiple Regression: Lifetime Frequency of Delinquent Behaviour in Males.....	67
Table 17. Standard Multiple Regression: Past Year Frequency of Delinquent Behaviour in Females.....	68
Table 18. Standard Multiple Regression: Past Year Frequency of Delinquent Behaviour in Males.....	69
Table 19. Standard Multiple Regression: Lifetime Variety of Drug Use in Females..	72
Table 20. Standard Multiple Regression: Lifetime Variety of Drug Use in Males.....	73
Table 21. Standard Multiple Regression: Lifetime Frequency of Drug Use in Females.....	74
Table 22. Standard Multiple Regression: Lifetime Frequency of Drug Use in Males..	75
Table 23. Standard Multiple Regression: Past Year Frequency of Drug Use in Females.....	76
Table 24. Standard Multiple Regression: Past Year Frequency of Drug Use in Males	77
Table 25. Standard Multiple Regression: Lifetime Variety of Sexual Behaviour in Females.....	78

Table 26. Standard Multiple Regression: Lifetime Variety of Sexual Behaviour in Males.....	79
Table 27. Mean Scores and Standard Deviations for Friend and Romantic Partner Indices, by Participant Gender and Recruitment Group.....	83

List of Figures

Figure 1: Interaction Effect of Mean Age Difference between Youth and their
Romantic Partners..... 87

List of Appendices

A. Recruitment scripts for staff of cooperating agencies.....	125
B. Consent to contact forms.....	128
C. Information letters (including consent forms) for Youth Involved in the Justice System	131
D. Telephone Recruitment scripts.....	143
E. Information packages for Ontario Community group participants.....	150
F. Measures.....	163
National Youth Survey's Peer and Romantic Partners Affiliation Module	
Peer and Romantic Partner Information Form	
National Youth Survey's Self-Reported Delinquency Module	
National Youth Survey's Drug Use Module	
National Youth Survey's Deviant Attitudes Scale	
Relations with Peers of the Opposite Sex Scale	
The Pubertal Development Scale – Female Version	
The Pubertal Development Scale – Male Version	
The Sexual Behavior Questionnaire – Female Version	
The Sexual Behavior Questionnaire – Male Version	
Children's Social Desirability Scale	
G. Psychometric Properties and Scale content of the National Youth Survey's Self-Reported Delinquency Module	254
H. The Temporal Sequencing of the Tanner Stages of Pubertal Development.....	258
I. Alternate Regression Analyses.....	260
Step-Wise Multiple Regression Analyses	
Standard Multiple Regression Analyses with Age at Menses	

Abstract

The present study is an investigation of the relationships between pubertal timing, peer and romantic relationships, and delinquent and risk-taking behaviour in a sample that included youth heavily involved in such behaviours. Ninety-nine youth, males and females aged 13 to 19, were recruited through public advertisements (Community Group) and community agencies who serve youth involved with the justice system (Justice Group) to participate in the study. Youth were interviewed individually to assess peer relationships, romantic relationships, delinquent behaviour and drug use, and completed questionnaires to assess pubertal development, sexual behaviour, relations with opposite-sex peers and social desirability response bias. In order to determine the relationship between pubertal timing and involvement with delinquent peers on the one hand, and the behaviours of interest on the other, standard regression analyses were conducted. It was found that pubertal timing did not account significantly for any of the variance in delinquency, drug use, or sexual behaviour scores with one minor exception. For males, both involvement with delinquent peers and pubertal timing were significant predictors of sexual behaviour variety scores, such that late pubertal timing and greater association with delinquent peers were associated with higher sexual variety scores. Gender comparisons, investigated via a series of ANCOVAs, found that males reported engaging in a greater variety of delinquent behaviours and a greater frequency of delinquent behaviours across their lifetime than did females. Males also reported an earlier age of onset of delinquent behaviour, by approximately 2 years. However, there was no gender difference in past year frequency of delinquent behaviour, nor on any of the indices of drug use and sexual behaviour. Justice Group Females reported significantly greater mean age differences (2.45 years) between their romantic partners and themselves in comparison to the three other participant groups.

Puberty, Peers and Risky Behaviour: An Examination of the Relationships between
Pubertal Development, Peer Affiliation, Sexual Behaviour and Delinquency

Research on developmental psychopathology addresses the course of mental illness across the lifespan. Within the field, a great deal of attention has been focused on the childhood and adolescent years, as researchers have postulated that psychological difficulties experienced during these periods tend to persist into adulthood and/or lead to other psychological problems (Loeber & Farrington, 1999; Olweus, 1979; Shaw, Bell & Gilliom, 2000). This is especially true in the area of externalizing behaviour disorders and antisocial behaviour. Most adults with antisocial characteristics have a history of childhood/adolescent externalizing problems - in fact, it is rare for an individual to commit his/her first antisocial act in adulthood (Frick et al., 1993, p.320, as cited in Eme & Kavanaugh, 1995; Moffitt, Caspi, Rutter & Silva, 2001; Stattin & Magnusson, 1989).

Externalizing Disorders & Delinquent Behaviour

In discussing antisocial behaviour, two overlapping bodies of literature are important to review. The first body of knowledge deals with the study of antisocial behaviour from a mental health perspective and is predominantly organized around the diagnoses of Oppositional Defiant Disorder, Conduct Disorder and Antisocial Personality Disorder, as defined in the *Diagnostic and Statistical Manual of Mental Disorders – Fourth Edition – Text Revised* (APA, 2000). Conduct disorder, the diagnosis most pertinent to this discussion, describes a pattern of behaviour that violates major societal norms (APA, 2000). Within this diagnosis antisocial behaviours of interest are categorized into four main categories: aggressive conduct that causes harm to other people or animals, non-

aggressive conduct that causes property loss or damage, theft and deceitfulness, and serious violations of age-appropriate norms (APA, 2000). Thus, psychopathological research on child and adolescent antisocial behaviour encompasses both acts that are illegal as well as acts that are deemed appropriate only for adults, such as drinking alcohol and engaging in sexual intercourse.

The second body of literature that is pertinent to this discussion is that surrounding the study of delinquency and crime. This research grows out of the disciplines of criminology, sociology, and forensic psychology and seeks to explore and explain the causes and correlates of criminal behaviour. This body of research informs our understanding both of the relationships between various types of antisocial behaviour, such as that between theft and assault for example, and of the relationships between antisocial behaviours and additional psychosocial variables such as family cohesion, school achievement, and financial stability. The two bodies of research investigating antisocial behaviour overlap greatly with one another and researchers from each of these fields have often collaborated on research and theory (Loeber & Farrington, 1999; Moffitt et al., 2001).

In reviewing both bodies of literature, two issues that are striking are those of gender differences in the onset and prevalence of antisocial behaviour and lifestyle-related correlates of antisocial behaviour, such as peer affiliation, drug use, and sexual behaviour. Before delving into either of these issues, it seems pertinent to discuss the prevalence and incidence of antisocial behaviour among youth more generally. In addition, because drug use is closely tied to delinquency, often being considered a subset of antisocial behaviour, it seems pertinent to discuss its incidence and prevalence among youth as well.

The Scope of Delinquent Behaviour and Drug Use among Youth

Prevalence and incidence rates of conduct disorder allow one to begin to understand the scope of antisocial behaviour in youth. The reported prevalence rate of Conduct Disorder varies widely depending on the population sampled and the methods used to diagnose the disorder (Moffitt et al., 2001; Shaffer et al., 1995). The American Psychiatric Association (2000) reported in the DSM-IV-TR that the general population rate of conduct disorder appears to be somewhere between 1% and 10%. Recently, Canadian researchers reviewed 6 recent large-scale epidemiological studies performed in the U.S., Canada, and Great Britain in an effort to estimate the fiscal and human costs associated with mental illness in children (Waddell, Offord, Shepard, Hua & McEwan, 2002). In looking at the community prevalence rates of Conduct Disorder across studies, they estimated the overall prevalence rate to be 4.2%. At this prevalence rate, 333,000 Canadian youth would meet criteria for Conduct Disorder (Waddell et al., 2002). It should also be noted that, despite the population sampled and the measures used, conduct disorder is more prevalent in males than in females (APA, 2000; Moffitt et al., 2001; Zahn-Waxler, 1993). It is estimated that the male: female ratio is approximately 2-4:1 (Moffitt et al., 2001; Shaffer et al., 1995).

In looking at the criminological literature on antisocial behaviour in youth, a more specific picture of rates of antisocial behaviour is formed. In 2003, official police reports indicated that approximately 3,800 charges per 1,000,000 youth aged 12-17 were officially brought against Canadian youth aged 12-17 (Statistics Canada, 2005). However, official reports reflect only those crimes for which someone was arrested and charged. It is thought that a more accurate estimate of delinquent behaviour is that reflected by self-report data (Loeber, Farrington & Wachbusch, 1999). In a Canadian national household sample of youth aged 12-15 years conducted in 1998-1999, 39% of youth reported engaging in at

least one delinquent act during the past twelve months (Latimer et al., 2003). Assuming that the sample is representative of the country's youth, this would be equivalent to approximately 540,000 teenagers across Canada engaging in delinquent acts. When the number of offences and the seriousness of offences are taken into account, however, most of these youth - 68% of them - would be considered to be minor offenders (Latimer et al., 2003). The most common offences reported were stealing money from parents (22.8%), stealing from a store or school (18.2%), and damaging property (13.1%), while the least common offenses were forcing someone to have sex (0.9%), carrying a gun to defend oneself (1.7%), and making threats in order to obtain money or possessions (2.2%).

With respect to older youth, studies in the United States have yielded somewhat mixed findings. Aseltine (1995) found that 35% of his sample of grade nine, ten and eleven students in Boston, Massachusetts, reported that they had engaged in at least one delinquent act during the past twelve months. The National Youth Survey (NYS), a longitudinal study of youth which began in 1976 in the United States, collected delinquency data annually on a cohort of youth throughout their adolescent years (Elliott, Huizinga & Menard, 1989). In 1976, when the cohort was aged 11 to 17 years, prevalence rates based on self-report data indicated that 76.1 % of males and 52.1% of females (56.2% of youth overall) reported that they had engaged in some delinquent behaviour during the past 12 months. In 1980, when the cohort was aged 15 to 21 years, 59.2 % males and 35.1% of females reported engaging in some form of delinquent behaviour in the past 12 months. In 1983, when the cohort was 18 to 24 years of age, 12-month prevalence rates decreased further, with only 53.0% males and 27.1% of females reporting delinquent behaviour.

Discrepancies in the delinquency rates reported here may be due to differences in measurement between the studies. The National Longitudinal Study (NYS) surveyed youth about 40 different delinquent acts, while Aseltine's study probed for only 10 offences and the study conducted by Latimer and colleagues in Canada probed for only 14 offences (Aseltine, 1995; Elliott et al., 1985, 1989; Latimer et al., 2003). In addition, Aseltine's study was conducted in a school setting, which could have an effect on the amount of information youth were willing to report. Aseltine himself admitted that the study probably underrepresented youth who were not attending school (Aseltine, 1995), and adolescents who are not in school are more likely to be involved in delinquent activity. What is clear from these self-report studies and others like them is that engaging in some delinquent activity during adolescence is the rule rather than the exception. However, most youth engage in only relatively minor and infrequent antisocial behaviour. In fact, in the NYS study the most commonly occurring forms of delinquent behaviour were status offences (e.g., lying about one's age, engaging in sexual intercourse, etc.), public disorder (e.g., hitchhiking, public drunkenness, obscene telephone calls, etc.) and minor assault (i.e., hitting a fellow student, parent, or teacher; Elliott et al., 1989). Many of these behaviours could be seen as attempts to assert independence and gain adult status in the world.

Drug Use

A behaviour that is strongly associated with delinquency and is often considered to be a subset of delinquent behaviour is drug use. It appears that approximately one third of adolescents engage in drug use and approximately two thirds consume alcohol at least once per year (Statistics Canada, 1995, 2003). In the Ontario Student Drug Use Survey, a large scale, on-going self-report study, approximately one third of Ontario youth in grades 7

through 12 reported that they had used illicit drugs at least once during the past year (Statistics Canada, 2003). Furthermore, approximately two thirds of the study participants said that they had consumed alcohol at least once, and 27% said that they had engaged in binge drinking, defined as having five or more alcoholic drinks on a single occasion, at least once during the past year. The most popular drugs reported were cannabis (30% of youth reported having used cannabis at least once during the past year), cigarettes (19%) hallucinogens (10%), solvents (6%), stimulants - non-medical (6%), cocaine (5%), and ecstasy (4%). While it appears that the largest proportion of youth using drugs are engaging in marijuana use, which some would call a fairly benign illicit drug, it should be noted that 15% of youth in this survey reported that they had used an illicit drug other than marijuana during the past year (Statistics Canada, 2003). In reviewing the frequency of cannabis use, cannabis users reported using the substance an average of 16 times during the past 12 months, and approximately 14% of users, 4% of the students surveyed, reported using it on a daily basis. Similar results have been found in other studies of youth in other parts of Canada and the United States (Aseltine, 1995).

In reviewing age and gender trends in the Ontario Drug Use Survey, it appears that the use of alcohol, including binge drinking, and of most drugs increases across the high school years, with more grade 11 and 12 students reporting use as compared to younger students. The average age of first cannabis use has decreased in recent years and is currently 14 years of age. The only drugs that were found to decrease in use with age were solvents and glue, such that a greater number of Grade 7 and 8 students reported their use than did their older counterparts. With respect of gender differences in drug use, significant differences were found for the use of alcohol (including binge drinking), hallucinogens, LSD, PCP, tranquilizers (non-medical), ketamine, and heroin, with boys reporting greater

use than girls. Conversely, females reported greater use of stimulants for non-medical purposes.

The Ontario Drug Use Survey is an ongoing study that surveys high school students every two years (Statistics Canada, 2003). In comparing the data collected in 2003 to that collected in 1999, it appears that cocaine use has increased in recent years, from 3.6% to 4.8%, as has cannabis use in females. The use of cigarettes, ecstasy, LSD, and barbiturates decreased from 1999 to 2003.

As drug use is considered a subset of delinquent behaviour, it should not be surprising that rates of drug and alcohol use among delinquent youth are higher than those in the general adolescent population (Latimer et al., 2003; Moffitt et al, 2001). Through the National Longitudinal Survey of Children and Youth, researchers found that two thirds of those youth who reported engaging in at least one delinquent act during the past twelve months also reported some illegal drug use, while only one third of non-delinquent youth surveyed reported the use of illegal drugs (Latimer et al., 2003). The authors of the Dunedin Longitudinal Study, who followed a cohort of New Zealanders from birth into adulthood, also found a significant relationship between a lifetime diagnosis of conduct disorder and both the variety of drugs used and the presence of symptoms of dependence on alcohol and marijuana (Moffitt et al., 2001). Thus, it appears that delinquency and drug and alcohol use are closely linked to one another. This suggests that drug and alcohol use should be studied alongside other delinquent behaviours so that we can understand better the nature of their relationships to each other.

Gender Differences in Antisocial Behaviour

Until recently, most of the research on antisocial behaviour has focused almost exclusively on boys and men. Within the area of adolescent externalizing disorders, researchers have begun to delineate two types of conduct disorder in boys: life course-persistent conduct disorder and adolescence-limited conduct disorder (APA, 2000; McCabe, Hough, Wood & Yeh, 2001; Moffitt, Caspi, Dickson, Silva & Stanton, 1996; Moffitt et al., 2001; Silverthorn, Frick & Reynolds, 2001). Men with life course persistent characteristics have an onset of antisocial behaviour problems before the age of 10 and tend to persist with these behaviours into adulthood, whereas individuals with adolescence-limited conduct disorder begin to display antisocial characteristics after the age of 10 years and their behaviour problems tend to be limited to a span of a few years, usually during mid-adolescence (APA, 2000; Moffitt et al., 1996; Nagin & Tremblay, 1999).

Although antisocial behaviours are more prevalent among men, women do participate in such activities (Elliott, et al., 1989; Moffitt et al., 2001). However, while fewer girls and women participate in delinquent activities or exhibit externalizing disorders, those who do engage in such activities tend to be more seriously affected by these problems than is the case for boys and men (Eme, 1992; Loeber & Keenan, 1994). Although research has found support for two types of conduct disorder in men, little is known about the course of the disorder in women. Some studies have shown that women who begin displaying antisocial behaviours in adolescence are similar to men with life-course persistent characteristics in that they tend to persist in displaying antisocial behaviours into adulthood (Silverthorn & Frick, 1999; Silverthorn et al., 2001). Other studies indicate that most conduct disordered girls fall into the adolescent-limited category (Moffitt et al., 2001). Thus, the long-term outcomes for these girls are not precisely known.

Pubertal Maturation and Delinquency and Drug Use

Several investigators have suggested that a link exists between adolescents' pubertal timing and externalizing behaviour problems (Caspi, Lynam, Moffitt & Silva, 1993; Cota-Robles, Neiss & Rowe, 2002; Ge, Brody, Conger, Simons & Murray, 2002; Moffitt et al., 2001; Storvoll & Wichstrom, 2002; Williams & Dunlop, 1999). The term puberty refers to a sequence of biological events, involving both endocrine processes and somatic changes, which transform the child's body into that of an adult, complete with reproductive abilities and secondary sexual characteristics. Two common indices used to measure the extent of pubertal development are pubertal status and pubertal timing. Pubertal status refers to the degree of development an individual has attained at a given point in time. Pubertal timing is a relative term, indicating an individual's degree of development in relation to his or her same-age, same-sex peers (Graber, Brooks-Gunn & Petersen, 1996). Thus, an adolescent's development could be characterized as early, on-time, or late in relation to his/her peers.

Numerous studies have shown links between the timing of pubertal development and depression, delinquency, disruptive school behaviours, behaviour disorders, school success, cigarette smoking, and drug and alcohol abuse in both male and female adolescents (Caspi et al., 1993; Cota-Robles, Neiss & Rowe, 2002; Graber, Lewinsohn, Seeley & Brooks-Gunn, 1997; Simmons & Blyth, 1987; Stattin & Magnusson, 1990; Wilson, et al., 1994). In an American study of mental health problems in female adolescents, Simmons and Blyth (1987) found that early-maturing girls were more likely than on-time or late-maturing girls to have conduct disorder problems in school, lower academic success, and body image disturbances. In a study of Swedish youth conducted by Stattin and Magnusson (1990), early-maturing girls reported more norm violations and more sexually precocious behaviour than did their later-maturing counterparts. The

Dunedin Longitudinal Study (New Zealand) yielded similar results: those girls who developed ahead of their same-age peers were at highest risk for developing conduct problems, particularly if they were attending mixed-sex schools (Caspi & Moffitt, 1991, Caspi et al., 1993; Moffitt et al., 2001). Thus, timing of pubertal development appears to be an individual risk factor for conduct disorder and delinquency in girls. However, it is unclear whether or not pubertal timing is a risk factor for all types of delinquent behaviour, or whether it affects some antisocial behaviours more than others.

It has been suggested by some that it is the discrepancy between physical maturation and cognitive-social maturation that puts early-maturing girls at a greater risk for mental health problems (Alaskar, 1995; Graber, Brooks-Gunn & Petersen, 1996). As Alaskar points out in her 1995 review article, pubertal maturation is not a private event. Rather, the somatic changes that occur, presumably as a result of underlying endocrine changes, are publicly observable to all. Others may attribute greater social maturity to early-maturing girls because of their mature physique than is warranted by their chronological age (see also Graber et al., 1996). It is also possible that others are less interested in their social maturity than they are in their physical maturity.

One issue that remains to be determined is the duration of this increased risk for mental health problems for early-maturing girls. While the Dunedin study showed significant differences in rates of delinquent behaviour between early-maturing and late-maturing girls, the researchers reported that these differences narrowed by age fifteen (Caspi & Moffitt, 1991; Caspi et al., 1993; Moffitt et al., 2001). Thus, one of the objectives of the present was to determine whether or not early pubertal maturation is associated with mental health problems after development is complete for the majority of a girl's age cohort.

The results of research on pubertal timing in boys are not as clear-cut. Some researchers have reported that early-maturing boys engage in higher levels of violent and non-violent delinquent behaviour (Cota-Robles et al, 2002), and tend to begin drinking alcohol at an earlier age than their on-time peers (early alcohol use is associated with greater risk of progression to alcohol disorders use in adulthood; DeWitt, Adlaf, Offord & Ogborne, 2000), while others found that early-maturing boys are generally well adjusted (Graber et al., 1996; Graber et al., 1997). However, other studies have shown that it is late-maturing males who are at higher risk for psychological problems (Brooks-Gunn, Petersen & Eichorn, 1985; Graber et al., 1997). Thus, another purpose of the present study was to gain a better understanding of how pubertal processes relate to antisocial and risk-taking behaviours in males as well as females.

In attempting to understand why it is both early- and late-maturing males but only early-maturing females who appear to suffer negative effects of their off-time maturation, one may look at current societal sex role norms and standards of attractiveness and beauty. In considering the current-day pressures for women to be thin, for a young girl to begin to develop hips and gain weight before any of her peers have done so may affect her social acceptance (Graber, et al., 1997). As previously stated, secondary sex characteristics are much more evident for females than they are for males, and developing these characteristics early may encourage others to treat a girl in a manner that is more adult-like than her age would suggest. For males, both early and late maturation may have negative effects on social status, self-concept, and psychosocial coping. Like early maturing females, early maturing males may be treated as being more mature than their age and psychosocial maturation would normally command, thereby leaving them psychologically unprepared for how they are treated by others. For late maturing males, in a society that values

strength and athleticism in males, their less mature appearance and stature (i.e., not yet having had a growth spurt, undergone a voice change, or "filled out") may cause them to evaluate themselves negatively in comparison to their peers, and/or experience social difficulties (Graber et al., 1997). Thus, it may be that it is not being off-time in general that is a problem; it is being deviant from the norms and expectations of one's social milieu.

The Role of Peer Affiliation in Delinquency and Drug Use

Peer affiliation, like pubertal timing, appears to be related to delinquent behaviour during adolescence, and has been identified by many theorists as an important source of influence on antisocial behaviour in youth. Such theories include Sutherland and Cressey's Theory of Differential Association (later called Social Learning Theory; Sutherland & Cressey, 1955, as cited in Rowe & Osgood, 1984), Social Disorganization Theory (Shaw & McKay, 1942, as cited in Rowe & Osgood, 1984), Strain Theory (Cohen, 1955, as cited in Rowe & Osgood, 1984), Problem Behaviour Theory (Jessor & Jessor, 1977; developed originally to explain drug use) and the Interactional Theory of Delinquency (Thornberry, 1987). Other theories, such as Hirschi's Control Theory (1969) and that of Glueck & Glueck (1950), maintain that affiliation with deviant peers is more a by-product of antisocial behaviour than a cause or source of influence. More recently, theorists have taken the position that the relationship between peer affiliation and antisocial behaviour, including drug use, is bidirectional and that affiliation with deviant peers is just one of many pathways leading to deviant behaviour (Conger, 1976; Elliott, Huizinga & Ageton, 1985, Hawkins & Weis, 1985).

Many studies have been conducted to investigate the relationship between peer affiliation on the one hand, and delinquency and drug use on the other. In a study of drug

use in eighth, ninth and tenth graders, Pruitt and colleagues (1991) asked youth about their own drug use, their friend's drug use, and the amount of information about various illegal drugs that they had received from their friends. They found that the most significant predictor of drug use was a youth's own report of their friends' drug use. Using data from the National Youth Survey conducted in the United States with youth initially aged eleven to seventeen, Elliott, Menard, and colleagues found involvement with deviant peers to be the strongest predictor of both delinquency (both general delinquency and index offences) and alcohol and drug use (Menard & Elliott, 1994; Elliott et al., 1985). Thus, those who had more frequent contact with deviant peers also reported more delinquent behaviour and drug use. By comparing three consecutive waves of data, Menard & Elliott (1994) found that association with delinquent peers tended to precede initiation into delinquent behaviour. However, the relationship between affiliation with deviant peers and drug use appeared to differ depending on the type of offence being considered. When index offences, which include breaking and entering, gang fights, aggravated assault, sexual assault, stealing items worth more than fifty dollars, and strong-arming were considered, the relationship between the two was reciprocal in both time-lagged and contemporaneous models. This was not the case when minor offences were considered; here the relationship was reciprocal for the time-lagged model but was only one way for the contemporaneous model, such that peer affiliation affected delinquent behaviour (Elliott & Menard, 1990, 1992, as cited in Thornberry & Krohn, 1995). What is not clear, however, is how peer affiliation relates to more serious antisocial behaviour, as most of the research in the area has focused on minor delinquency and status offences and/or has used school-based samples that included only youth who have engaged in behaviours on the less serious end of the delinquency spectrum (Thorneberry & Krohn, 1995).

In comparing the effects of peer affiliation on males and females, some studies have shown that, whereas female adolescents who participated in delinquent behaviours tended to associate with older peers, this was not the case for male adolescents (Ge, Conger & Elder, 1996; Magnussen, 1988; Silverthorn et al., 2001; Storvoll & Wichstrom, 2002). Other researchers have reported that antisocial young women tend to associate more with male peers than do their non-delinquent counterparts (Caspi et al., 1993; Moffitt et al., 2001).

It appears that the relationship between of pubertal development and antisocial behaviour is, in part, mediated through peer affiliation. In the Dunedin Longitudinal Study, early puberty was followed by delinquent behaviour only in those girls who reported both associating with male adolescents on a daily basis and knowing more youth who engaged in delinquent activities than did the average female youth (Caspi et al., 1993; Moffitt et al., 2001). Young women's delinquency was greatly exacerbated when they became romantically involved with an antisocial mate. In contrast, young men's antisocial behaviour was not affected by the antisocial characteristics of their romantic partners in this way (Caspi et al., 1993; Moffitt et al., 2001).

How and why early-maturing girls come to associate with older boys and men remains unknown. It has been hypothesized that these girls seek out older adolescents and adults who are more like them physically than their same-age peers (Caspi et al., 1993; Moffitt et al., 2001). Conversely, or perhaps in addition to these females seeking out of older acquaintances, older antisocial males may seek these females out because of their immaturity, which may make them easier to manipulate. It has also been suggested that, because these early-maturing adolescents may be less socially skilled than their bodies suggest, they may also be more vulnerable to peer pressure (Alaskar, 1995; Eichorn, 1975).

The Role of Sexual Behaviour in Delinquency and Drug Use

In light of the aforementioned research and hypotheses regarding the relationship between peer affiliation and both delinquency and drug use, it seems pertinent to consider some research on sexual behaviour, as it is no doubt an important part of many male-female adolescent relationships. Some researchers have suggested that early initiation of sexual intimacy is a rule-breaking antisocial behaviour similar to drug use and delinquency (Jessor & Jessor, 1977; Rowe, Lee, Meseck-Bushey & St., 1989). In a five-year longitudinal study of high school youth, Crockett and colleagues (1996) found that females who were involved in sexual intercourse prior to the age of 15.5 years were more likely to engage in drug use and minor delinquency. Additionally, they found that early-maturing boys but not girls tended to engage in sexual intercourse earlier than their on-time and late-maturing counterparts. However, other researchers have found that early-maturing girls engage in sexual intercourse earlier than their on-time and late-maturing counterparts (Stattin & Magnusson, 1990; Moffitt et al., 2001). Thus, there is conflicting evidence regarding the relationships among sexual behaviour, pubertal timing, and antisocial behaviour. If one is predicting that early-maturing females engage in more delinquent activity at least in part due to their affiliation with older, antisocial males, it seems likely that sexual behaviour is an important facet of these relationships.

The purpose of the present study was to clarify the relations among pubertal development, peer affiliation, and antisocial behaviours. Most of the studies in this area have been conducted on community samples or have drawn their subjects from regular high schools (Elliott et al., 1989; Moffitt et al., 2001). While a community sample will be included in the present study as a contrast group, this investigation was designed to

determine whether or not these relationships remain significant in adolescent boys and girls with severe delinquent and health-risky behaviours who are not attending regular high school (often because of their antisocial behaviour). In addition, both males and females were included in the present study, as many of the studies discussed earlier involved only males or females, thereby making it difficult to assess gender differences in the relationships of interest.

In the first set of analyses, the significance of pubertal timing and affiliation with antisocial peers on delinquent activity, drug use, and sexual behaviour was explored in youth involved in the justice system and in a community comparison group. It was hypothesized that early-maturing females would be more likely than their on-time or late-maturing same-sex peers to engage in antisocial and risk-taking activities, including delinquent acts, drug use, and sexual behaviour. It was also hypothesized that early-maturing females would be more likely to associate with older peers, male peers, and more antisocial peers. Specifically, the aforementioned theories of Caspi, Moffitt and colleagues and Alaskar and Graber and colleagues predict that early-maturing girls would be more likely than their on-time and late-maturing same-age peers to associate with older, more deviant male peers in both sexual and non-sexual ways, and that these early-maturing girls would subsequently engage in more delinquent behaviour than other girls.

With respect to the maturational timing of boys, it was expected that off-time boys, both early and late maturing, would exhibit more antisocial and risk-taking behaviour than their on-time peers. It was also expected that late-maturing boys would have fewer female friends, and that the female friends that they did have would be younger than the female friends of on-time and early-maturing boys. Conversely, it was predicted that early-maturing boys would have more friends of the opposite sex than both on-time and late-

maturing boys. In contrast to predictions for girls, it was expected that greater numbers of opposite-sex friendships would not predict more delinquent acts in boys.

With respect to gender comparisons, it was hypothesized that males would engage in more antisocial behaviour, drug use, and sexual behaviour than females of the same age. Although it was predicted that early-maturing females would associate with more males and more antisocial peers than other females, overall it was predicted that males would associate with more antisocial peers than females. More generally, it was predicted that sexually active females would be more likely to engage in delinquent behaviour than their non-sexually active same-sex peers.

Method

Procedure

In order to include a wide range of delinquent and risky behaviour, two classes of youth were recruited for the present study: (1) youth involved in the justice system (Justice Group) and (2) youth from the community who have not had contact with the justice system (Community Comparison Group). Participants for each group were drawn from two Canadian provinces: Ontario and Nova Scotia.

Youth involved in the justice system (Justice Group). Youth involved in the justice system were recruited through the Nova Scotia Department of Justice in the Halifax and surrounding areas and through two community organisations in Ontario - Eastern Ontario Young Offender Services and The Boys and Girls Club of Ottawa. The Nova Scotia Department of Justice services youth throughout the province who have engaged in delinquent and/or criminal activities and who are either awaiting trial or who have been

sentenced to a punishment. The Department of Justice provides a number of services including incarceration, rehabilitative day programming (i.e., the Halifax Youth Attendance Centre), community probation, and restorative justice programs. Eastern Ontario Young Offender Services and The Boys and Girls Club are situated in Ottawa and provide a variety of services (supervision of diversion orders and probation orders, anger management and drug use education classes, referral to mental health services, etc.) to youth who have had contact with law enforcement and/or the justice system. Under the Youth Criminal Justice Act, judicial system officials (such as police officers) have the authority to decide whether or not a youth who has committed a crime should be formally processed through the youth court system or alternatively face an extrajudicial measure. Youth who are 'diverted' from the court system may face any of the following extrajudicial measures: a) measures based on police discretion, such as warnings, cautions and referrals to community programs that are intended help the youth to avoid future offending, b) cautions by crown attorneys, and c) extrajudicial sanctions, such as community service and letters of apology to victims (Department of Justice Canada, 2002). Youth recruited through the Boy's and Girl's Club and Eastern Ontario Young Offender Services for the present study included both those who had been 'diverted' from the justice system and those who had been sentenced for a crime and been referred to these community programs for supervision of their probation order, community supervision order, and/or orders to complete rehabilitative programs. It was anticipated that sampling from two different systems in two provinces would increase the generalizability of results for the group of young offenders.

Care was taken during recruitment to ensure voluntary participation, informed consent, and confidentiality for the youth. Staff members of the Nova Scotia Department

of Justice, Eastern Ontario Young Offender Services, and The Boys and Girls Club of Ottawa approached youth aged 13-19 about participating in the study. For youth who were in secure custody at the Nova Scotia Youth Facility, staff members gave youth some basic information about the study (See Appendix A) and asked them if they were interested in learning more about the study and/or participating in the study while in secure custody. Youth were explicitly told that their decision to be contacted about the study and their decision to participate in the study would not affect their care within the facility. If the individual indicated that he or she would like to speak with a researcher about the study and/or participate in the study, the staff member informed the researcher that there was a youth in custody who wanted to hear more about the study. The researcher then visited the youth in custody; if after hearing more about the study the youth indicated that s/he wanted to participate, the researcher proceeded with the consent process, and administered the interview and questionnaires. If the youth indicated that they were not interested in participating in the study, they were thanked for their time. It should be noted that the staff member who referred the researcher to the youth was not told whether or not the youth participated in the study.

For youth who were not in secure custody, staff members gave the same basic information about the study and asked them if they were interested in being contacted by the researcher to learn more about being a participant. Again, youth were explicitly told that their decision to be contacted about the study and their decision to participate in the study would not affect their relationship with the referring organisation. If youth agreed to be contacted about the study, they signed a consent to contact form (Appendix B), which the staff member then gave to the researcher. The researcher telephoned the individual and gave him or her additional information about the study (See Appendix C). Due to differing

regulations regarding whether or not parental consent was necessary for participation in research in the two cities, slightly different processes occurred in the two provinces with regard to parental consent. For youth in Ontario, parental consent was generally necessary for participation in the study. Therefore, information packages and consent forms were sent home to any youth and his/her parents who indicated via telephone that they were interested in participating in the study. The youth was then contacted a second time to inquire if, after reading the information, the adolescent and parents agreed to allow participation in the study. Interested youth then brought the signed consent forms to the interview. However, parental consent for participation in the study was not necessary for emancipated youth who did not live with either of their parents and had no contact with them at the time of the interview. As these youth were routinely making important life decisions without their parents' help, it was agreed that they could consent on their own to participation in the study.

Under Nova Scotia provincial law, parental consent was not necessary unless the youth was deemed by the researcher to be incapable of consenting to participation alone as a result of cognitive limitations. If the youth indicated that he or she was interested in participating in the study, an appointment time was set with the youth. For youth in both provinces, the information about the study was reviewed with the researcher at the beginning of the data collection session, as were the consent forms and their right to withdraw from the study at any time.

Interviews with Ontario youth took place at the community organisation offices, in public areas such as the corner of an empty restaurant or a community centre, and in the researcher's university office. Although, the majority of youth interviewed lived in the city of Ottawa, a few individuals lived in Renfrew County, approximately 45 minutes from

Ottawa. In Nova Scotia, the majority of the justice group participants were interviewed at the Nova Scotia Youth Facility, a provincial detention centre located in Waterville, Nova Scotia (approximately 1.2 hours from Halifax). A few youth were interviewed at the Halifax Youth Attendance Centre, a day program for youth who are on probation. While the majority of the youth interviewed at the Detention Centre came from the Halifax Regional Municipality, some youth came from the Annapolis Valley and other areas of the province.

Community comparison group (Community Group). Community comparison participants were drawn from the National Capitol Region in Ontario (Ottawa and surrounding communities, including Renfrew) and the Halifax Regional Municipality in Nova Scotia (which includes Halifax, Dartmouth, and surrounding communities). In both areas, participants responded to poster advertisements describing the project placed throughout Ottawa and Halifax. In Ottawa, advertisements were posted in local community centres and ice rinks in the downtown area, as well as at the University of Ottawa. In Halifax, advertisements were posted in local community centres and at the IWK Health Centre (both print posters and on the Hospital's internal website). Youth and/or parents responding to the advertisements were given information about the study via telephone (See Appendix D). In Ontario, interested youth and parents were mailed information packages that contained consent forms (Appendix E). Again, a follow-up telephone call was made and if a youth indicated that he or she was interested in participating in the study, an interview was scheduled. In Nova Scotia, information was given via telephone (See Appendix D); if the youth expressed interest in participating in the study, an appointment was set. The researcher also offered to speak with the youth's parents, to answer any questions they had about the study. As with Justice Group youth, the information given via

telephone was reviewed with the youth at the beginning of the appointment, as was the information in the consent form.

Interviews with Community Comparison Group participants were held in the researcher's offices at the University of Ottawa (in Ottawa) and the IWK Health Centre (in Halifax). At the end of each interview, participants were given an information sheet with contact numbers for the primary researcher, the local 24-hour help hotline, and the Emergency Department of the local children's hospital. All participants were given \$15 as remuneration for their time. For those youth who were interviewed at the Nova Scotia Youth Facility, which does not allow youth to have money within the facility, \$15 was deposited in their account at the facility, so it could be used to buy items at the facility's "store" or could be given as cash when they were released from the facility.

Participants

102 youth aged 13 to 19 years of ages participated in the current study. Three youth were discarded from analyses: one due to a significant amount of missing data and two because they were siblings of other participants. Additionally, three youth who were recruited through advertisements for the Community Group were reassigned to the Justice Group as they reported having had contact with the Justice System (i.e., having been arrested and/or sentenced for a crime). The final sample consisted of 99 youth: 52 youth who had had contact with the justice system (31 males, 21 females) and 47 youth who served as the community comparison group (19 males, 28 females).

Measures

Demographic information including age, date of birth, ethnicity, whether or not the participant was attending school at the time of the interview, grade level, current living situation, and parent's/guardian's level of education was obtained at the start of the interview. Current living situation was coded as the number of people the youth was living with at the time of the interview (if the youth was in custody at the time of the interview, they were asked to report on their living situation prior to incarceration), as well as the type of guardian(s) the youth was living with (both parents, one parent, one parent and one step-parent, other adult relative, no adult, and other). Parent's/guardian's level of education was used as a general measure of socioeconomic status (SES; Scale of 1 (elementary school) to 6 (post-graduate degree)). SES was computed using the level of education of the parent(s) the youth was residing with, such that if the youth was residing with both parents, an average of their educational level was computed; if the youth was residing with one parent, that parent's educational level was used as the measure of socioeconomic status.

The National Youth Survey - Self-reported Delinquency and Drug Use Modules.

The National Youth Survey was originally developed for use in a longitudinal study of the co-occurrence of delinquent behaviour and adolescent alcohol, drug and mental health problems in the United States (Elliott, et al., 1989). The survey was designed to assess a wide range of delinquent behaviours and mental health problems and can be administered as either a questionnaire or in an interview format. The Self-Reported Delinquency module, the Drug Use module, the Peer Affiliation Module and a scale pertaining to antisocial attitudes (the versions from the eighth wave of data collection, which occurred in

1990) were used in the present study. In the present study, additional follow-up questions were added to the modules, as outlined in the following explanations of each module.

The Self-Reported Delinquency module (SRD) contains 36 questions which inquire about 40 offences that are representative of the full range of offences reported in the Uniform Crime Reports (Elliott et al., 1989). Items range from minor (e.g., stealing something worth less than 5 dollars) to severe (e.g., attacking someone with the idea of seriously hurting or killing them) in terms of their seriousness. Each item contains a preliminary stem question (i.e., How many times in the last year have you stolen or tried to steal a motor vehicle such as a car or motorcycle?), followed by a number of more specific questions about the number of times in the past year that they have committed the act, and whether or not they were under the influence of alcohol or drugs during the incident. The twelve-month recall period was anchored by salient dates, such as the start of the school year, the December holiday break or the end of the school year, to aid in the accuracy of recall (Elliott et al., 1989). For some acts, information about a specific event was collected as well (e.g., “The last time you did this, what did you steal?”, “How much was it worth?” etc). In the present study questions were added to each item to gain information about the number of times in their life that they had committed each act (Lifetime Frequency), the age at which they first committed the act (Age of Onset), and whom they were with when they committed the act the last time.

Three sets of summary scales exist for the SRD. The Offence-Specific scales group items according to similarity in terms of the type of crime committed and their prevalence and frequency rates. They include the following: Felony Assault, Minor Assault, Robbery, Felony-Theft, Minor Theft, and Vandalism. The second set of scales, the Offence Category scales, group items according to general crime categories and are more heterogeneous in

terms of the seriousness of offences they include. This set of scales includes the following: Illegal Services, Public Disorder, Status Offences, Crimes Against Persons, and General Theft. Finally, the Summary Scales are the most general set of scales and include the following: General Delinquency, Index Offences, Home Delinquency, and School Delinquency. The General Delinquency scale contains 35 items that range in level of seriousness and type of crime (e.g., crimes against persons, theft, etc) and is meant to be a broad measure of all types of criminal and prohibited acts for youth. Responses to the question about the number of times in the past year that the youth had committed each act for each item (behaviour) were summed for each scale to produce a Past Year Frequency score for each scale. Similarly, Lifetime Frequency scores for each scale were tabulated based on the participants' responses to the questions regarding the number of times in their lifetime they had committed each act. In addition to the frequency data obtained on the SRD, Variety scores (a count of the number of different activities engaged in by a particular subject) were calculated. Variety scores have the advantage of giving equal weight to all acts, are useful in studying individual differences, and have also been found to be highly correlated with frequency scores and future antisocial outcomes (Elliott et al., 1989; Moffitt et al., 2001; Robins, 1978).

The SRD has been shown to have adequate reliability for most of its scales with respect to Past Year Frequency scores. Huizinga and Elliott (1986) reported that the four week test-retest reliability of frequency scores for most scales was in the range of .66-.92, indicating adequate to good reliability. Similarly, test-retest reliability of variety scores is reported to be in the range of .75-.88 for most scales. However, the reliability of past year frequency scores were somewhat lower for three scales - Minor assault, Felony Theft and Status Offences - with Cronbach's alpha scores being .59, .52 and .49, respectively

(Huizinga & Elliott, 1986). Likewise, Cronbach's alpha values of variety scores for the Minor Assault and Property Damage scales are somewhat less than desirable, falling between .57 and .58. A complete list of items contained in each scale, as well as each scale's psychometric properties, can be found in Appendix G. Psychometric data of the scales for Lifetime Frequency and Lifetime Variety measures are not available, as the instrument has not been used in this way before.

The Drug Use Module of the National Youth Survey consists of 28 items that inquire about drug and alcohol use and its impact. Only the first 15 items were pertinent for the present study. These items ask respondents to estimate the number of times during the past year that they have used the following classes of drugs: alcohol, nicotine, cannabinoids, hallucinogens, heroin and other opioids, cocaine, amphetamines, depressants (including benzodiazepines and barbiturates), inhalants and dissociative anaesthetics (e.g., ketamine, PCP). Similar to questions in the SRD module, subjects were asked whether or not they had ever used each particular drug and the number of times in the past year that they had done so. Follow-up items inquired about their reasons for using the drug, where they obtained the drug, and whether they had ever tried to stop using the drug. Additional questions were added to the follow-up items to elicit information about the age at which they first tried the drug, the number of times in their lifetime they have used said drug, and who they were usually with when they used it. Psychometric data has not been published for the section of the drug use module pertaining to frequency of drug use.

Self-report measures of Delinquency and Drug and Alcohol use were chosen in light of past research which has found self-report data to be a more accurate reflection of an adolescent's delinquent behaviour than either parent reports or official criminal information (Graber et al., 1996; Moffitt et al., 2001). In terms of tests of validity, Elliott, Huizinga

and Menard (1989) found that 96% of participant responses were judged to be appropriate or valid for the question asked (suggesting that responses were about real, nontrivial, behaviours). They were also able to match official records of arrests with self-reported offenses in the same year in 80% of cases (Elliott et al., 1989). Moffitt and colleagues (1996) also report adequate validity of self-reported delinquency data, such that self-reported delinquency scores were significantly correlated with parent reports of behaviour, and official records of police contacts and court convictions ($r = .35-.44$, $p < .001$). The SRD was chosen over other self-report measures, such as the Self-Reported Delinquency Scale developed by Moffitt, Caspi and colleagues for use in the Dunedin Longitudinal Study (Caspi et al., 1993; Moffitt et al., 2001), because it includes both legal norm violations and illegal acts, and was developed for use with a North American sample and thus seemed to be the most appropriate for the current study. With respect to the peer affiliation module of the NYS, although the method presented here relies entirely on subjects' perceptions of their peers' behaviours, some have argued that this perception (not necessarily the same as reality) may be as important as their peers' actual behaviour, if not more, in understanding the effects of peer delinquency on adolescents' antisocial behaviour (Caspi et al., 1993).

National Youth Survey Peer and Romantic Partners Affiliation Module. In addition to inquiring about the presence of peer involvement in the SRD and Drug Use Modules, respondents were also asked about their friends and romantic partners through the Peer and Romantic Partner Affiliation Module. This module is actually two sets of questions, one pertaining to peers and one pertaining to romantic partners, that were presented together in the present study. It is thought that friendships and romantic/sexual involvement between

youth may overlap with one another, such that friends may become romantic/sexual partners over time and vice versa. The first item in the module asks respondents about the presence of a specific peer group. The second item was added to the module for the present study and asked respondents to list the names, ages and gender of the peers that they typically associated with. Participants were also asked to indicate how long they had been friends with each peer and how close they felt to each peer on a scale of 1 (not close at all) to 10 (as close as can be). It should be noted that code names or first initials were used in lieu of complete names in order to maintain as much anonymity of peers as possible. Likewise, participants were asked to list the initials, ages, and genders of recent romantic partners and to indicate the length of each relationship. These lists were then kept on the desk in front of the youth, so that they could refer to them during the rest of the Peer and Romantic Partner Affiliation module, as well as during the SRD and Drug Use modules. This was meant to facilitate the youth's answers on follow-up questions pertaining to whom youth engage in various activities with. The next set of items, the Peer Involvement and Romantic Partner Involvement subscales, inquired about the amount of time (after school, weekday evenings, and weekends) participants typically spent with their friends and with their romantic partner. On the Peer Delinquency and Peer Substance Use subscale, respondents were asked to indicate the proportion of their friends who had engaged in various delinquent acts during the past year. Responses were coded on a five-point Likert-type scale that ranges from "all of them" to "none of them." The Romantic Partner Delinquency and Drug Use subscale asks respondents to complete the same set of items with respect to their current partner. Responses for current romantic partner were coded dichotomously, as either yes or no.

Respondents were also asked about the quality of their friendships in the Quality of Peer Bond subscale. Specifically, they were asked to indicate how much they would like to be like their friends, how similar their interests and activities were, and how much warmth and affection, support and encouragement, and loyalty they felt they received within these relationships (Elliott et al., 1985). In addition, participants were asked about their satisfaction with their current group of friends and about how much stress and pressure they experienced in these relationships. All of the aforementioned questions were rated on a 5-point Likert-type scale. Next, in the Perceived Peer Labelling subscale, youth were asked to rate how they thought their friends would describe them. They were asked to state how much their friends would agree, on a 5-point Likert-type scale that ranges from "strongly agree" to "strongly disagree", that they: were well-liked, needed help, were a bad person, were often upset, were a good citizen, got along well with other people, were messed up, broke rules, had a lot of personal problems, got into trouble, were likely to succeed, and did things that are against the law (Elliott et al., 1985). On the Perceived Peer Sanctions and the Perceived Partner Sanctions subscales, participants were asked how their close friends and recent romantic partners would react if they engaged in various antisocial behaviours. The behaviours ranged from minor acts, such as cheating on a school test, using alcohol or stealing something worth less than five dollars, to fairly serious acts, including selling drugs and pressuring/forcing someone into sexual acts that they do not want to do. Answers were rated on a 5-point Likert-type scale, ranging from "strongly disapprove" to "strongly approve". In terms of psychometric properties, Elliott and colleagues (1989) reported that the scales within the Peer Affiliation and Romantic Partner Module had Cronbach's Alpha coefficients between .73 and .88, indicating adequate internal consistency.

Familiarity with members of the opposite sex. In addition to the questions about peers and romantic partners contained in the National Youth Survey, participants were administered the Relations with Peers of the Opposite Sex Scale as a measure of their familiarity and interaction with peers of the opposite sex (Rodriguez-Tome et al., 1993). The measure consists of eight questions aimed at assessing subjects' feelings about their relational experiences with opposite-sex peers (See Appendix F). Items are meant to tap the following aspects of relationships with the opposite sex: frequency of interaction with opposite sex peers (i.e., "I have less boys/girls as friends than other girls/boys"), agreement with these peers (i.e., "Generally speaking, boys/girls of my age and I see things the same way"), popularity/social status (i.e., "I have the feeling that my boy/girl companions like me"), social understanding (i.e., "I am often in conflict with boys of my age"), ease and quality of communication (i.e., "I am at ease when talking to boys/girls of my age"), and confidence in social support from opposite-sex companions (i.e., "When things are going badly, I can count on my boy/girl companions"). Subjects were asked to respond to each statement on a four-point scale ("Strongly Agree" to "Strongly Disagree"), with higher scores indicating a more positive perception of relations. Items scores were summed to produce a total score. This measure shows adequate reliability ($r = .46$, $p < .01$) and high internal consistency (Cronbach's $\alpha = .82$) (Rodriguez-Tome et al., 1993).

The National Youth Survey's Deviant Attitudes Scale. The final section of the National Youth Survey used in this study was that pertaining to the participant's own attitudes regarding deviant behaviour. The Deviant Attitudes Scale contains 9 items, all of which begin "How wrong is it for someone your age to....". The items range in seriousness from, "cheat on a school test" and "use alcohol" to "sell hard drugs such as heroin, cocaine

or LSD" and "break into a vehicle or building to steal something". Again, respondents were asked to rate each item on a 4-point Likert-type scale, ranging from "Very wrong" to "Not wrong at all". Item responses were summed to produce a Deviant Attitudes total scale score, with higher scores indicating more antisocial attitudes. Elliott and colleagues (1985) have reported high internal consistency for this scale (Cronbach's alpha coefficient = .84-.85).

The Pubertal Development Scale. Although pubertal development is a continuous process, many researchers have superimposed a 5-stage model onto the secondary sex characteristics of puberty in order to quantify development (Coleman & Coleman, 2002; Marshall & Tanner, 1969, 1970). Known as the Tanner Stages, a sequential sequence of observable events has been compiled (Marshall & Tanner, 1969, 1970). Appendix H illustrates the normal temporal sequence of pubertal events for males and females. The Pubertal Development Scale is a short self-report measure which asks respondents to indicate their current level of development on five observable aspects of puberty (Petersen et al, 1988). On a scale ranging from 1 (have not begun) to 4 (development completed), both males and females were asked to rate themselves with respect to their body hair growth, height growth spurt, and skin changes over the past twelve months. Males were asked to report on their facial hair growth and voice change as well, while females were asked to report on their breast development and the onset of menarche (which is coded dichotomously as 1= not yet occurred, or 4= has occurred). Appendix F contains copies of the male and female versions of the PDS. .

In terms of psychometric properties, the PDS exhibits good reliability and validity (Brooks-Gunn et al., 1987; Graber et al., 1996; Petersen et al., 1988; Robertson et al.,

1992). Previous studies have measured its internal consistency and reported alpha coefficients in the range of .66 to .83 for males and females, respectively (Petersen et al., 1988; Robertson et al., 1992). External validity of the PDS has also been shown to be high (Brooks-Gunn et al., 1987; Petersen et al., 1988; Robertson et al., 1992). It has been compared to physicians' ratings of pubertal development, to peak height velocity (a measure of rapid growth increase associated with pubertal development), and to Tanner's Sexual Maturation Scale, a self-report measure which asks subjects to compare their own stage of development to photos or drawings depicting Tanner's stages. Correlations ranged from -.40 – -.66 for peak height velocity to .72 - .82 for physicians' ratings.

In the current study, three items for each sex were summed to obtain an overall measure of pubertal development. Items included in the overall score were chosen based on what has been shown in prior research to be the most accurately reported and reliable measures of development (Dorn et al., 1988; Dorn et al., 2006; Robertson et al., 1992; Petersen et al., 1988) and on reliability analyses of the present data. For females, items pertaining to height growth spurt, skin changes, and breast development were chosen (Cronbach's $\alpha = .51$). For males, items pertaining to height growth spurt, body hair growth, and voice changes were chosen (Cronbach's $\alpha = .68$).

Pubertal Timing. As a measure of pubertal timing, participants were asked to rate the timing of their development in relation to that of their same-sex peers on a 5-point scale ranging from 1(Much earlier) to 5 (Much later). Pubertal timing scores were collapsed from five categories (very early, early, on-time, late and very late maturing) down to three categories (early, on-time and late maturing) to increase cell sizes.

Sexual Behaviour Questionnaire. After several literature searches yielded little in the way of an appropriate self-report sexual behaviour measure, a new measure was developed specifically for this project. The questionnaire, herein referred to as the Sexual Behaviour Questionnaire, included 13 questions, and was designed to yield scores of sexual behaviour variety and partner variety, as well as health safety practices. The male and female versions of the questions are found in Appendix F.

The first four items on the questionnaire asked the respondent whether or not they had ever had vaginal and anal intercourse and the age at which they first had this/these experience(s). Next, the youth was asked to report the number of times that they had engaged in a variety of sexual behaviours, both with members of the opposite sex and with members of their own sex (0=Never, 1=1 time, 2=2-5 times, 3=6-10 times, 4=11-20 times, 5= 21 or more times). Items included behaviours such as kissing, fondling breasts, playing with genitals, oral sex, vaginal sex and anal sex. They were then asked to report the number of different partners they had engaged in each of these activities with during their lifetime (0=No one, 1=1 person, 2=2 people, 3=3-5 people, 4=6-11 people, 5= 12 or more people). Youth were also asked whether or not they had ever been pregnant (females) or had a sexual partner become pregnant (males). The next three items asked respondents about pregnancy, contraceptive methods, and the use of drugs or alcohol prior to or during sexual activity. Finally, the respondent was asked to think back to the lists of friends and romantic partners that they created at the beginning of the Peer and Romantic Partner Affiliation Module and indicate which, if any, of these individuals they have engaged in oral, vaginal, or anal sexual intercourse with.

Children's Social Desirability Scale. The Children's Social Desirability Scale (Crandall, Crandall, & Katkovsky, 1965) is designed to assess social desirability, initially conceptualized as a respondent's need for approval. Later, Crandall reconceptualised the construct as a fear of disapproval (Crandall, 1966; Robinson, Shaver, & Wright, 1991). The purpose of including this questionnaire in the study was to assess each participant's level of socially desirable responding, or 'faking good' as a means of determining whether such a response bias might be accounting for a significant proportion of variance in responses to questions about delinquency, drug use, and sexual activity, all of which have strong societal taboos associated with them. The Children's Social Desirability Scale (CSD) consists of 48 statements (e.g., "I always listen to my parents", "I never get angry"), to which the participant is asked to answer True or False. Items are summed to yield an overall score, ranging from 0 to 48, with higher scores indicating greater fear of disapproval. Means from the original sample ranged from 11-31 ($SD = 7-11$), depending on the age and sex of sample, with older samples having lower mean scores than younger samples (Crandall et al., 1965 as reported in Crandall, 1966). Crandall et al. (1965) reported split-half reliabilities ranging from .82 to .95 for various subsamples, and one month test-retest reliabilities of .85 to .90. Also reported was strong evidence for convergent validity, with correlations of .78 and .90 with the Marlowe-Crown Social Desirability Scale and the Good Impressions scales, respectively (Robinson, Shaver, & Wrightman, 1991). A copy of the CSD can be found in Appendix F.

Results

Demographic Data. Table 1 presents descriptive information on the study sample for demographic variables by recruitment group and gender. The four groups differed with respect to age ($F(3,95) = 11.47, p < .001$). Bonferroni post-hoc analyses confirmed that Community Females were significantly younger than the other three groups. Significant group differences in grade level were noted as well ($F(3, 46.30) = 4.67, p < .01$): Community Females as a group reported a significantly lower grade level than both groups of male participants (Grade Level denotes grade currently attending or last grade attended prior to incarceration).

Given the aforementioned age differences, the group differences in grade level are not surprising. However, the differences in the proportion of the two recruitment groups that were enrolled in school at the time of the study were very large, such that a chi-square analysis revealed a significant difference among recruitment groups on school enrolment ($\chi^2(1) = 24.94, p < .001$; $\phi = 0.52$). Only 57 % of Justice Group participants were attending school at the time of the study, as compared to 100 % of Community Group participants.

Group differences in ethnicity and living situation were also noted. Being of Caucasian descent was the most common ethnicity identified across all four groups. However, while the majority of the Community Males and Females described themselves as being Caucasian, only about two-thirds of their Justice Group counterparts did likewise. The second most common ethnic category identified across all groups was being of mixed descent or multiple ethnicities (12.9% of the total sample), followed by being of Afro-Canadian descent (7.2% of the total sample). A chi-square analysis comparing the proportion of participants who identified themselves as being Caucasian versus non-

Caucasian revealed a significant effect of recruitment group on ethnicity ($\chi^2(1) = 12.51$, $p < .001$; $\phi = 0.36$).

With respect to living situation (recall that for those youth who were incarcerated at the time of the study this referred to their last living situation prior to incarceration), the majority of Community Group males and females reported living with both of their (presumably biological) parents at the time of the study. This was not the case for Justice Group participants. Less than 5% of Justice Females and less than 20% of Justice Males lived with both of their parents. A chi-square analysis comparing the two recruitment group on the proportion of participants living with two (again presumably biological) parents versus another adult configuration revealed a significant effect of recruitment group ($\chi^2(1) = 47.96$, $p < .001$, $\phi = -0.70$). The most common living situation for Justice Group participants was residing with one parent, most frequently their mothers. It should also be noted that Justice Group participants reported several other parent-related living situations that were not found in the Community group, including living with family members other than one's own parents such as grandparents, aunts and uncles, living at a group/foster home and living on one's own (no adults present). Also included in Table 1 is the proportion of each group living with an adult male other than the youth's biological father at the time of the study, as the absence of a biological father and/or the presence of another adult male in the home has been shown to be associated with earlier pubertal development in females (Bogaert, 2005; Mendle et al., 2006). A chi-squared analysis comparing the number of females living with a related adult male versus an unrelated adult male revealed a significant difference between the two recruitment groups ($\chi^2(1) = 14.05$, $p < .001$, $\phi = .673$). Only two Justice Females were living with a related male adult (one with her

biological father and one with her uncle), as compared to 86 % or 24 of the 28 Community Females.

In addition to family configuration, study participants were also asked to report the number of people they were living with. Although means were similar across the four groups, the most common number of cohabitants for the community group was 3, and no youth in this group reported living by themselves or with more than 4 other people. Justice Group participants showed a greater range of cohabitant numbers: 5 % of Justice Females and 3 % of Justice Males were living on their own, and 15 % of Justice Females and 16 % of Justice Males were living with five or more people (this category includes group homes). No Community Group participants fell into either of these categories.

The last socio-demographic indicator presented in Table 1 is parent education level. Recall that this indicator refers to the educational level of the parent(s) with whom the youth was living with at the time of the study (1 = elementary school – 6 = postgraduate degree). A 2 (Gender) x 2 (Recruitment Group) Univariate Analysis of Variance (ANOVA) revealed a significant group difference between the two recruitment groups with respect to this variable ($F(1,75) = 12.48, p < .01$), such that Community group participants ($M = 4.14, SD = 1.12$) report higher SES levels than do justice group participants ($M = 3.17, SD = 1.27$). It should be noted that 20 Justice Group youth (11 males and 9 females) were not included in this analysis, as they did not know their parents' education level.

Table 1

Demographic Data by Participant Gender and Recruitment Group

		Justice		Community	
		Females (n=21)	Males (n=31)	Females (n=28)	Males (n=19)
Mean Age*		16.26 (1.29)	17.15 (0.97)	15.32 (1.15)	16.37 (1.48)
Mean Grade Level*		9.56 (0.76)	9.97 (0.84)	9.14 (1.08)	10.37 (1.67)
% Attending School**		66.7	41.9	100	94.7
Ethnicity (%)**	Caucasian	57.1	58.1	96.3	83.3
	Afro-Canadian	9.5	16.1	0	0
	Aboriginal	9.5	3.2	0	0
	Hispanic/South American	0	6.5	3.7	0
	Mixed Ethnicity	23.8	12.9	0	16.7
	Other	0	3.2	0	0
Household Configuration (%)**	2 parents	4.8	19.4	82.1	84.2
	1 parent	33.3	38.7	10.7	5.3
	1 parent, 1 step- parent	4.8	6.5	3.6	10.6
	1 parent & parent's romantic partner	9.5	6.5	3.6	0
	Other family member (adult)	14.3	9.7	0	0
	Group/Foster Home	19.0	6.5	0	0
	No adults	14.3	6.5	0	0
% living with no Bio Father in home**		95.2	58.1	14.3	15.8
Mean Number of co-habitants*		2.22 (1.22)	2.76 (2.01)	2.79 (0.79)	3.00 (.88)
Parent Education Level*		3.25 (0.84)	3.12 (1.49)	4.01 (1.12)	4.34 (1.12)
CSD Scores		12.86 (5.12)	14.75 (8.36)	(15.92) (7.61)	(13.32) (8.13)

**Percentages

*Mean (Std. Dev.)

Given that participants were gathered in two different cities, independent samples t-tests were performed separately for each gender to determine whether differences between the samples collected in the two cities existed. Analyses indicated that there were no differences between Ottawa and Halifax participants in terms of age, socioeconomic status, grade level, whether or not there was an adult male living in the household, or the number of people living in the household. Thus, despite the differences in the ways that the samples were collected in the two cities, they appeared to be more similar than different.

Antisocial Acts, Drug Use and Sexual Behaviour

Means and standard deviations (untransformed) of both Past Year and Lifetime Frequencies were calculated for the Offense-Specific, Offense-Category and General Delinquency scales of the Self-Reported Delinquency module and are presented in Tables 2 and 3. Means and standard deviations for Lifetime Variety scores for each group are presented in Table 4. Table 5 presents the untransformed means and standard deviations of several drug use indices by recruitment group and gender.

As expected by the selection criteria, scores on both delinquency and drug use measures were generally elevated for the Justice groups relative to Community controls on both delinquency and drug abuse measures. In order to test for recruitment group and gender differences in delinquency and drug use, a series of Analyses of Covariance (ANCOVAs) was performed, with recruitment group and gender entered as fixed factors and age entered as the covariate. In order to meet the assumptions of normality and homoscedacity, data transformations were performed on the Delinquency Frequency scores (Log10 transformations) and the Drug Use Frequency Scores (square root transformations). With respect to Past Year Delinquency Frequency scores, the ANCOVA yielded a

significant effect for both recruitment group ($F(1,93) = 42.48, p < .001$) and the recruitment group x gender interaction term ($F(1,97) = 4.82, p < .05$). Tukey's post-hoc analyses revealed that all groups differed from one another with the exception of justice group males and females: these two groups did not differ significantly from one another. Estimated marginal means produced by the ANCOVA analysis reveal that Justice Group males ($M=2.11, SE= 0.15$, recall that the log10 transformation of scores were used in these analyses) and females ($M=2.22, SE=0.17$) reported the highest level of delinquent acts, followed by Community Group males ($M=1.37, SE = 0.17$) and last, Community Group females ($M= 0.79, SE = 0.16$). The ANCOVA investigating gender and recruitment group differences in Lifetime Delinquency Frequency scores revealed significant gender ($F(1,94) = 5.15, p < .05$) and recruitment group ($F(1,94) = 75.77, p < .001$) effects, but not their interaction term. A significant covariate (age) effect was also found ($F(1,94) = 4.11, p < .05$). As is evident from Table 3, Justice Group participants reported higher levels of delinquent behaviour than did their Community Group counterparts, and males reported higher levels of delinquent behaviour than did females. With respect to Lifetime Delinquency Variety scores, the ANCOVA produced significant main effects for both gender ($F(1,94) = 7.48, p < .01$) and recruitment group ($F(1,94) = 66.64, p < .001$). Estimated marginal means produced by the analysis indicated that males had greater Lifetime Variety scores ($M = 13.31, SE = 0.84$) than did females ($M = 9.95, SE = 0.84$) and Justice Group youth had greater scores ($M = 16.56, SE = 0.81$) than did Community Group youth. ($M = 6.70, SE = 0.85$). For the Age of Onset of Delinquent Behaviour measure, the ANCOVA yielded significant main effects for gender ($F(1,93) = 8.63, p < .01$). The estimated marginal means produced by the analysis indicated that males had an earlier age of onset ($M = 8.81, SE = 0.46$) than did females ($M = 10.85, SE = 0.47$).

An ANCOVA on the Past Year Drug Use Frequency yielded a significant main effect of recruitment group only ($F(1,94) = 60.27, p < .001$), such that Justice Group youth reported greater frequency of drug use ($M = 19.69, SE = 1.23$) than did Community Group youth ($M = 5.42, SE = 1.30$). Analysis of the Lifetime Drug Use Frequency scores yielded a significant main effect for recruitment group ($F(1,94) = 61.50, p < .001$), as well as a significant covariate (age) effect ($F(1,94) = 10.45, p < .01$). Similar to the Past Year Drug Use Frequency analysis, estimated marginal means of Lifetime Drug Use Frequency indicates that Justice group youth reported greater frequency of drug use ($M = 37.08, SE = 2.44$) than did Community group youth ($M = 8.47, SE = 2.57$). With respect to Lifetime Drug Use Variety scores, a significant main effect for recruitment group was found ($F(1, 94) = 26.48, p < .001$), as was a significant covariate (age) effect ($F(1,94) = 4.52, p < .05$). Estimated marginal means produced by the analyses reveal that Justice Group youth reported a greater variety of drug use ($M = 5.80, SE = 0.43$) than did Community Group youth ($M = 2.47, SE = 0.46$).

Table 2

Mean Delinquency Scores (and Standard Deviations), for the Past Year, by Recruitment

Group and Gender

	Justice		Community	
	Females	Males	Females	Males
Offense-Specific Scales				
Felony Assault	2.00 ¹ (3.97)	2.71 ¹ (7.35)	0.07 ² (0.26)	0.05 ² (0.23)
Minor Assault	26.57 (108.78)	4.52 (10.75)	0.93 (2.85)	1.26 (1.94)
Strong-arm/Robbery	4.57 (14.48)	4.27 (12.99)	0.04 (0.19)	0.32 (0.75)
Minor Theft	58.29 (149.21)	54.43 (192.79)	1.71 (5.93)	2.11 (3.91)
Felony Theft	63.33 ¹ (227.44)	63.03 ¹ (115.44)	0.36 ² (1.06)	0.47 ² (1.39)
Vandalism	3.38 (4.75)	14.69 (47.32)	0.71 (2.29)	1.26 (3.02)
Offence – Category Scales				
Illegal services	64.76 ¹ (179.45)	226.52 ¹ (474.58)	11.32 ² (58.94)	0.79 ² (3.44)
Public Disorder	45.14 (58.99)	52.50 (115.21)	7.18 (12.55)	29.11 (47.02)
Status offenses	37.48 ¹ (40.12)	41.00 ¹ (53.29)	4.79 ² (12.11)	9.84 ² (15.00)
Crimes Against Persons	33.14 (111.85)	11.35 (29.40)	1.034 (2.87)	1.63 (2.43)
General Theft	121.64 ¹ (300.05)	116.81 ¹ (259.45)	2.07 ² (6.90)	2.58 ² (5.10)
Summary Scales				
Index Offenses	18.86 ¹ (33.69)	28.78 ¹ (58.17)	0.29 ² (0.60)	0.58 ² (1.12)
General Delinquency	332.57 ¹ (403.20)	851.15 ¹ (2247.98)	27.58 ² (76.26)	49.84 ³ (51.01)

Note. Superscript numbers denote group differences based on Analyses of Covariance. Groups with the same superscript number did not differ from one another, while groups with different numbers did differ significantly at the $p < .05$ level.

Table 3

Mean Delinquency Scores (and Standard Deviations) for Lifetime Frequency by Recruitment Group and Gender

	<i>Justice</i>		<i>Community</i>	
	Females	Males	Females	Males
Offence-Specific Scales				
Felony Assault	7.67 (14.27)	22.58 (75.34)	0.07 (0.26)	0.16 (0.37)
Minor Assault	47.33 ¹ (114.45)	39.48 ¹ (84.65)	1.64 ² (4.58)	2.89 ² (4.16)
Strong-arm/Robbery	32.57 (130.64)	44.07 (181.96)	0.04 (0.19)	0.74 (1.76)
Minor Theft	206.52 (455.24)	580.31 (1904.53)	3.39 (10.68)	6.53 (12.02)
Felony Theft	137.40 ¹ (286.24)	280.80 ¹ (440.22)	0.37 ² (1.08)	0.84 ² (1.46)
Vandalism	37.81 (72.95)	98.10 (277.94)	4.11 (19.21)	3.32 (6.73)
Offence-Category Scales				
Illegal services	229.40 (501.06)	1233.32 (3635.41)	22.75 (117.85)	0.79 (3.44)
Public Disorder	164.67 (290.01)	210.87 (375.79)	16.79 (29.41)	80.37 (140.68)
Status offenses	204.24 ¹ (263.48)	230.23 ¹ (282.86)	6.32 ² (13.19)	14.05 ² (18.42)
Crimes Against Persons	87.57 (183.00)	104.71 (327.32)	1.75 (4.58)	3.79 (5.06)
General Theft	337.44 ¹ (714.68)	821.09 ¹ (2140.67)	3.75 ² (11.65)	7.37 ² (12.41)
Summary Scales				
Index Offenses	98.29 ¹ (271.21)	212.92 ¹ (494.98)	0.29 ² (0.60)	1.37 ² (2.06)
General Delinquency	1215.66 (1666.06)	3149.60 (6228.62)	56.73 (153.75)	121.47 (155.84)

Note. Superscript numbers denote group differences based on Analyses of Covariance. Groups with the same superscript number did not differ from one another, while groups with different numbers did differ significantly at the $p<.05$ level.

Table 4

Means (and Standard Deviations) of Lifetime Delinquency Variety Scores by Recruitment

Group x Gender

	<i>Justice</i>		<i>Community</i>	
	Females	Males	Females	Males
Offence-Specific Scales				
Felony Assault	0.86 ¹ (0.73)	0.84 ¹ (0.78)	0.07 ² (0.26)	0.16 ² (0.37)
Minor Assault	1.38 ¹ (0.74)	1.57 ¹ (0.90)	0.39 ² (0.63)	0.53 ² (0.51)
Strong-arm/Robbery	0.24 ^{1,3} (0.54)	0.70 ^{1,4} (0.88)	0.04 ^{2,3} (0.19)	0.16 ^{2,4} (0.37)
Minor Theft	1.76 ¹ (0.89)	2.00 ¹ (1.00)	0.50 ² (0.84)	1.05 ² (0.62)
Felony Theft	1.85 ^{1,3} (1.23)	2.71 ^{1,4} (1.49)	0.22 ^{2,3} (0.58)	0.42 ^{2,4} (0.61)
Vandalism	1.33 ^{1,3} (0.97)	1.94 ^{1,4} (1.03)	0.32 ^{2,3} (0.55)	0.63 ^{2,4} (0.83)
Offense-Category Scales				
Illegal services	0.85 ¹ (0.88)	1.26 ¹ (0.89)	0.11 ² (0.32)	0.05 ² (0.23)
Public Disorder	2.57 ¹ (1.60)	2.87 ¹ (1.23)	1.43 ² (1.07)	2.11 ² (0.94)
Status offenses	2.95 ¹ (0.86)	3.16 ¹ (0.69)	1.18 ² (0.94)	2.00 ² (1.15)
Crimes against persons	2.48 ¹ (1.36)	3.07 ¹ (2.04)	0.50 ² (0.75)	0.84 ² (1.01)
General Theft	3.54 ^{1,3} (1.88)	4.71 ^{1,4} (2.36)	0.71 ^{2,3} (1.27)	1.47 ^{2,4} (1.02)
Summary Scales				
Index Offenses	2.29 ¹ (2.00)	3.43 ¹ (2.31)	0.25 ² (0.52)	0.58 ² (0.84)
General Delinquency	14.64 ^{1,3} (5.56)	19.00 ^{1,4} (7.31)	4.62 ^{2,3} (3.95)	8.21 ^{2,4} (4.10)

Note. Superscript numbers denote group differences based on Analyses of Covariance. Groups with the same superscript number did not differ from one another, while groups with different numbers did differ significantly at the $p < .05$ level.

Table 5

Means (and Standard Deviations) of Drug Use Indices, by Recruitment Group and Gender

	Justice		Community	
	Females	Males	Females	Males
Drug Use Variety	5.52 ¹ (3.14)	6.52 ¹ (3.36)	2.36 ² (3.28)	2.11 ² (1.52)
Drug Use Frequency: Past Year	597.52 ¹ (517.55)	422.00 ¹ (340.63)	75.93 ² (210.18)	59.32 ² (106.22)
Drug Use Frequency: Lifetime	1891.76 ¹ (2086.16)	2141.16 ¹ (2015.40)	149.14 ² (382.04)	106.47 ² (237.78)
Age at First Cigarette Use	11.45 ¹ (2.87) N=20	11.07 ¹ (2.987) N=29	13.29 ² (1.496) N=7	15.33 ² (1.751) N=6
Age at first Alcohol Use	12.47 ¹ (2.010) N=19	12.04 ¹ (2.861) N=28	13.70 ² (1.559) N=20	13.25 ² (3.109) N=16
Age at First Drug Use	12.80 ¹ (1.20) N=20	12.38 ¹ (2.25) N=29	12.88 ² (0.84) N=8	14.40 ² (2.07) N=10

Note. Superscript numbers denote group differences based on Analyses of Covariance. Groups with the same superscript number did not differ from one another, while groups with different numbers did differ significantly at the $p<.05$ level.

Table 6 presents the means and standard deviations of the Sexual Behaviour indices for each of the four groups. Of the twenty-one females in the Justice group, only two reported never having had vaginal intercourse. Of the 19 females who had had vaginal intercourse, all had done so by the age of 15: 68% first experienced vaginal intercourse at or before the age of 13. In comparison, 18 of the 28 Community Females indicated that they had never engaged in vaginal intercourse. Of the ten who had engaged in intercourse, none had done so before the age of 13 and only 5 had done so before the age of 15. In looking at the two male groups, a similar yet less extreme pattern is observed. Twenty-eight of the 31 Justice Males had engaged in vaginal intercourse at the time of the study. Twenty-two of the 28 had first done so by the age of 14. In comparison, 11 of the 19 Community Males indicated that they had engaged in vaginal intercourse, only one of whom had done so before the age of 14. Chi-squared analyses investigating recruitment group differences and sex differences in engagement in vaginal intercourse separately revealed significant effects of both recruitment group ($\chi^2(1) = 22.99, p < .001, \phi = .484$) and gender ($\chi^2(1) = 4.80, p < .05, \phi = -.221$).

Similarly, two separate chi-square analyses were performed to determine whether or not the four groups differed from one another on history of pregnancy. The analysis revealed a significant effect of recruitment group ($\chi^2(1) = 17.91, p < .001, \phi = .444$). Review of the estimated marginal means produced by the analysis suggest that Justice group participants ($M = 1.38, SD = 0.06$) more likely to have a history of pregnancy than Community group youth ($M = 1.11, SD = 0.06$).

A 2x2 analysis of covariance (ANCOVA) was conducted on the sexual behaviour variety scores, with Recruitment Group and Gender entered as the independent variables and age entered as the covariate, in order to determine whether or not differences exist be

four groups of youth. The results indicate a significant main effect for recruitment group only ($F(1,92)=12.41, p\leq.001$). The estimated marginal means produced by the analysis indicate that Justice Group youth had significantly higher sexual variety scores ($M = 7.34, SD = 0.38$) than did the Community group youth ($M = 5.35, SD = 0.39$).

Table 6

Percentages and Mean Scores (and Standard Deviations) of Sexual Behaviour Indices by Group x Gender

	Justice		Community	
	Females	Males	Females	Males
% have had Vaginal Intercourse	90.5% ^{1,3}	90.3% ^{1,4}	35.7% ^{2,3}	57.9% ^{2,4}
Mean age at 1 st Vaginal Intercourse	13.2 ¹	13.1 ¹	14.6 ²	15.1 ²
% who have had Anal Intercourse	14.3% ¹	35.5% ¹	7.1% ²	10.5% ²
Mean Age at First Anal Intercourse	15.3 (n=3)	14.8 (n=11)	14.33 (n=2)	14.5 (n=2)
Mean Sexual Behaviour Variety Score	7.77 ¹ (2.24)	7.51 ¹ (1.13)	4.18 ² (3.39)	5.91 ² (3.47)
% who have been Pregnant*	42.9% ¹	35.5% ¹	3.6% ²	5.3% ²
% Sexually Active Youth who Engage in Sexual Intercourse while Intoxicated	57.9% ¹	78.6% ¹	36.4% ²	8.3% ²
% Sexually Active Youth who use no Birth Control/Protection, some or all of the time	26.3%	14.3%	20%	8.3%

Note. Superscript numbers denote group differences based on Analyses of Covariance. Groups or chi-square analyses with the same superscript number did not differ from one another, while groups with different numbers did differ significantly at the $p < .05$ level.

Peer and Romantic Partner Affiliations

Summary scores were tabulated for the following subscales from the NYS Peer and Romantic Partner Module: Peer Involvement (3 items), Peer Delinquency (8 items) and Peer Drug Use (3 items). As suggested by Elliott et al. (Elliott et al., 1985), a composite index, Involvement with Delinquent Peers, was calculated using the following formula: Involvement with Delinquent Peers (IDP) = Peer Involvement x Peer Delinquency.

Similarly, summary scores for Romantic Partner Involvement (3 items), Romantic Partner Delinquency, and Romantic Partner Drug Use were calculated; however, the latter two summary scores were only calculated if the participant indicated that they had a romantic partner at the time of the interview. Thus only a small percentage, 37% of the entire sample, of participants had scores for these two scales. Given that the scale for Romantic Partner Delinquency was not calculated for all participants, it was not possible to compute an Involvement with Delinquent Romantic Partners index score (the product of Romantic Partner Involvement x Romantic Partner Delinquency scores) for all participants. Therefore, the Involvement with Romantic Partners score was not used in further analyses.

Table 7 presents mean scores and standard deviations for the indices of friend and romantic partner involvement, as well as the indices of friend and romantic partner delinquent behaviour and drug use by recruitment group and gender.

Table 7

Means (and Standard Deviations) of Peer Involvement and Peer Delinquent and Drug Use

Scores

		Justice		Community	
		Females M (SD)	Males M (SD)	Females M (SD)	Male M (SD)
Friends	Involvement	11.48 ¹ (3.49)	12.65 ¹ (2.43)	8.57 ² (3.40)	9.11 ² (3.53)
	Delinquent Behaviour	20.64 ¹ (7.58)	22.16 ¹ (6.98)	11.80 ² (3.93)	13.87 ² (4.18)
	Drug Use	10.86 ¹ (3.32)	11.16 ¹ (2.31)	6.77 ² (3.29)	8.16 ² (2.48)
	Involvement with Delinquent Friends	248.38 ¹ (133.80)	281.07 ¹ (107.18)	108.11 ² (70.48)	131.37 ² (71.11)
	Antisocial Attitudes*	38.71 ¹ (6.12)	36.65 ¹ (5.73)	47.75 ² (5.07)	44.32 ² (6.11)
Romantic Partners	Involvement	12.19 ¹ (3.86)	11.34 (3.88)	7.91 (3.70)	7.30(3.79)

Note. *Lower scores denote more antisocial attitudes. Superscript numbers denote group differences based on Analyses of Covariance. Groups or chi-square analyses with the same superscript number did not differ from one another, while groups with different numbers did differ significantly at the $p < .05$ level.

Pubertal Development

Table 8 presents the mean scores and standard deviations of the Pubertal Development Scale indices. Recall that PDS Total scores are a summary of three items (different for each sex). PDS Total scores were divided by three in order to maintain the original metric of the questionnaire, from 1 (“Development has not yet begun”) to 4 (“Development seems complete”). Thus, the mean scores for all four participant groups suggest a level of development at the third stage; “Development is well underway”.

A series of Gender x Recruitment Group analyses of covariance (2 x 2 ANCOVA), with age entered as a covariate, was performed to compare the four groups of youth in terms on their levels of pubertal development and timing. Analysis of pubertal development scores (PDS Total scores) revealed a significant effect of recruitment group ($F(1, 94) = 7.25, p < .01$), such that the community group had a more advanced level of development ($M = 9.53, SD = 0.16$) in comparison to the justice group ($M = 8.92, SD = 0.15$). However, this finding may reflect the fact that there were more females in the community group, as females typically develop somewhat earlier than males (Dorn et al., 2006). With respect to Pubertal Timing, there were no significant differences between the four groups of youth. Additionally, an ANCOVA with age entered as a covariate that compared the two female groups revealed no recruitment group difference in the age at first menses.

Table 8

Means (and Standard Deviation)s of Pubertal Development Indices, by Participant Gender and Recruitment Group

	Justice		Community	
	Females	Males	Females	Males
	M (SD)	M (SD)	M (SD)	M (SD)
PDS score	3.10 (0.59)	3.29 (0.52)	3.35 (0.45)	3.33 (0.60)
Timing	2.05 (0.74)	2.00 (0.58)	1.82 (0.61)	1.95 (0.71)
Age at menses	12.47 (1.11)	-----	12.55 (1.13)	-----
Height (cm)	163.4 (5.8)	177.1 (6.4)	164.3 (5.8)	178.9 (8.8)
Weight (kg)	131.38 (17.75)	165.81 (26.51)	128.26 (21.84)	159.47 (26.25)

Note. PDS= Pubertal Development Scale Total Score (For females: height growth, skin changes & breast development. For males: height growth, body hair growth & voice change).

Correlations among Measures of Pubertal Development, Relationships with Peers and Romantic Partners, Delinquency, Drug Use, and Sexual Behaviour

Correlation matrices were created as a preliminary step in investigating the relationships among measures of pubertal status and timing, involvement with delinquent peers, romantic partner involvement, delinquency, drug use, and sexual behaviour. Because the purpose of sampling both youth involved in the justice system and youth who have not had contact with the justice system was to ensure that a broad range of antisocial behaviour was present in the sample, and since there is no theoretical reason to believe that peer affiliation or pubertal timing should affect antisocial and risk-taking behaviour differently due to contact with the justice system, the two groups of youth were combined. However, correlations for males and females were computed separately, based on past research regarding pubertal development and timing that suggests that the two sexes may be affected differently by these biological processes (Brooks-Gunn et al., 1985; Cota-Robles et al., 2002; Graber et al., 1996; Graber et al., 1997; Moffitt et al. 2001). Tables 9 and 10 present correlation matrices of measures of pubertal development and relationships with peers and romantic partners separately for females and males.

For females, the PDS score was significantly correlated with the gender ratio of identified friends, such that those who were more developed had more mixed gender peer groups or more opposite-sex peers than those who were less developed. Involvement with delinquent peers was negatively correlated with friends' antisocial attitudes (note that this scale is reverse scored such that lower scores denote more antisocial attitudes and therefore higher scores on the IDP index were associated with more antisocial attitudes in friends) and positively correlated with romantic partner involvement. Also significantly correlated with friends' antisocial attitudes were median length of friendship and median romantic

partner age difference (such that shorter friendships and larger age differences among participants and their romantic partners were associated with more antisocial attitudes in friends). Romantic Partner Involvement was also positively correlated with both Romantic Partner Age Difference and Friends' Age Difference.

Table 9

Correlation Matrix for Indices of Pubertal Development and Timing, and Friendship and Romantic Partner Indices for Females

	2	3	4	5	6	7	8	9	10	11	12	13
1. PDS Score	.36*	-.22	-.09	.09	.00	-.22	-.29*	.11	.08	.06	.00	.03
2. Age at Menses		-.18	.01	-.10	-.11	-.05	.08	.16	-.16	-.07	.08	.16
3. Pubertal Timing			-.22	-.14	.09	-.15	-.19	-.03	-.02	.22	-.16	.27
4. Relations with Peers of the Opposite Sex				.17	-.01	.15	-.14	-.02	-.06	-.22	.01	-.25
5. Involvement with Delinquent Peers					.05	-.19	.09	-.71**	.65**	.10	-.17	.19
6. Friend Age Difference						.06	-.11	-.12	.23	.82**	.08	.08
7. Median Friendship Length							-.14	.31*	-.23	-.15	.18	-.25
8. Friend Sex Ratio								.01	.08	-.10	-.10	.06
9. Friend Attitudes									-.61**	-.35*	.12	-.36*
10. Time with Romantic Partner										.42°	-.04	.28
11. RP age difference											.01	.40**
12. RP Relationship Length												-.24
13. One-night romantic relationships												

. Note. PDS = Pubertal Development Scale. RP = Romantic Partner. Friends' attitudes scale: lower scores indicate more antisocial attitudes. * $p \leq 0.05$. ** $p \leq 0.01$.

Table 10

Correlation Matrix for Indices of Puberty and Friendship and Romantic Partner Indices for Males

	2	3	4	5	6	7	8	9	10	11	12
1. PDS Score	-.16	.16	.02	-.04	.48**	.27	-.05	.13	-.02	.02	.29*
2. Pubertal Timing	1.00	.04	.04	-.09	-.18	.00	.07	.16	-.20	.12	-.10
3. Relations with Peers of the Opposite Sex		1.00	-.44**	-.13	.02	.09	.58**	-.14	.01	-.04	-.09
4. Involvement with Delinquent Peers			1.00	.35*	-.09	-.14	-.68**	.52**	.09	.02	.22
5. Friend Age Difference				1.00	-.17	-.06	-.26	.32*	.52**	.24	-.08
6. Median Friendship Length					1.00	.24	.07	.03	-.15	.09	.15
7. Friend Sex Ratio						1.00	.17	-.07	-.02	-.17	.53**
8. Friend Attitudes							1.00	-.24	-.09	-.05	-.16
9. Time with Romantic Partner								1.00	-.09	.33*	.05
10. RP age difference									1.00	.05	-.22
11. RP Relationship Length										1.00	-.40**
12. One-night romantic relationships											1.00

Note. PDS = Pubertal Development Scale. RP = Romantic Partner. Friends' attitudes scale: lower scores indicate more antisocial attitudes. Friend Sex Ratio: higher scores denote more same-sex friends than opposite sex friends. * $p \leq 0.05$. ** $p \leq 0.01$.

For males, neither PDS scores nor pubertal timing scores were correlated with any of the friend or romantic partner indicators. Involvement with delinquent peers scores were significantly and positively correlated with median friend age differences and romantic partner involvement scores and negatively correlated with friends' antisocial attitudes (recall that lower scores on this scale denote more antisocial attitudes). Given these associations, somewhat puzzling are the results for the Relations with Peers of the Opposite Sex scale: it was negatively correlated with Involvement with Delinquent Peers and positively correlated with Friend's Antisocial Attitudes (such that more positive relations with peers of the opposite sex were associated with less antisocial attitudes among friends). As was the case for females, Median Friend Age Difference was positively correlated with romantic partner age differences and with romantic partner relationship length in males.

Tables 11 and 12 present correlations among pubertal development and timing, involvement with antisocial peers and romantic partners, and several indices of delinquency, drug use, and sexual behaviour separately for males and females. For females, PDS scores were significantly and positively correlated with the age of onset of delinquent behaviour. Pubertal Timing, however, did not correlate significantly with any of the measures of delinquency, drug use, or sexual behaviour. Involvement with Delinquent Peers, on the other hand, was significantly correlated with all measures of delinquency, drug use, and sexual behaviour. The amount of time spent with romantic partners was also significantly correlated with measures of delinquency, drug use and sexual behaviour, with the exception of the age of onset of delinquent behaviour. All measures of delinquency, drug use, and sexual behaviour were significantly correlated with one another, with the exception of the age of onset of delinquent behaviour, which did not correlate with drug use scores or with sexual behaviour. For males, neither Pubertal Development scores nor

Pubertal Timing scores were correlated significantly with any of the measures of delinquent behaviour, drug use, or sexual behaviour. Again, Involvement with Delinquent Peers was significantly correlated with all measures of delinquent behaviour, with the exception of the age of onset of this behaviour, and was also significantly correlated with all indices of drug use and sexual behaviour. The amount of time spent with romantic partners was significantly correlated with delinquency and drug variety scores, as well as with lifetime drug use scores. As Relationships with Peers of the Opposite Sex scores did not correlate with any other measures, for either gender, this measure was not used in further analyses.

Table 11

Correlation Matrix for Measures of Puberty, Association with Peers and Romantic Partners, Delinquency, Drug Use, and Sexual

Behaviour for Females

	2	3	4	5	6	7	8	9	10	11	12	13
1. PDS Score	-.22	-.09	-.09	.08	-.21	-.23	-.10	.30*	-.05	-.10	.07	.01
2. Pubertal Timing	1.00	-.14	-.22	-.02	.05	.17	.14	-.04	-.09	.06	.08	-.08
3. Involvement with Delinquent Peers		1.00	.17	.65**	.77**	.64**	.71**	-.37**	.51**	.57**	.46**	.58**
4. Peer Total Score			1.00	-.06	.07	.16	.17	.03	.00	.03	-.06	.21
5. Romantic Partner Involvement				1.00	.65**	.54**	.58**	-.12	.55**	.55**	.54**	.71**
6. General Delinquency – Variety Score					1.00	.80**	.82**	-.38**	.68**	.79**	.66**	.66**
7. General Delinquency – Past Year Frequency						1.00	.90**	-.32*	.57**	.71**	.44**	.50**
8. General Delinquency – Lifetime Frequency							1.00	-.43**	.54**	.64**	.56**	.55**
9. General Delinquency – Age of Onset								1.00	-.18	-.22	-.27	-.08
10. Drug Use Variety									1.00	.81**	.65**	.68**
11. Drug Use – Past Year										1.00	.76**	.56**
12. Drug Use – Lifetime Frequency											1.00	.54**
13. Sexual Behaviour – Variety												1.00

Note. PDS = Pubertal Development Scale. RP = Romantic Partner. * $p \leq 0.05$. ** $p \leq 0.01$.

Table 12

Correlation Matrix for Measures of Puberty, Association with Peers and Romantic Partner, Delinquency, Drug Use, and Sexual

Behaviour for Males

	2	3	4	5	6	7	8	9	10	11	12	13	
1. PDS Score		-.16	.02	.16	.13	.02	.04	.05	.03	.23	-.02	.13	.09
2. Pubertal Timing		1.00	.04	.04	.16	-.09	-.09	-.06	-.03	.06	-.04	.16	-.09
3. Involvement with Delinquent Peers			1.00	-.44**	.52**	.66**	.58**	.67**	-.23	.69**	.60**	.68**	.40**
4. Peer Total Score				1.00	-.14	-.35*	-.19	-.16	-.05	-.26	-.46**	-.26	.01
5. Romantic Partner Involvement					1.00	.48**	.18	.27	.07	.49**	.23	.42**	.18
6. General Delinquency – Variety Score						1.00	.41**	.57**	-.24	.77**	.34*	.57**	.47**
7. General Delinquency – Past Year Frequency							1.00	.92**	-.15	.54**	.68**	.72**	.23
8. General Delinquency – Lifetime Frequency								1.00	-.22	.66**	.61**	.76**	.28
9. General Delinquency – Age of Onset									1.00	-.21	-.08	-.24	.05
10. Drug Use – Variety										1.00	.49**	.80**	.35*
11. Drug Use – Past Year											1.00	.70**	.22
12. Drug Use – Lifetime Frequency												1.00	.22
13. Sexual Behaviour - Variety													1.00

Note. PDS = Pubertal Development Scale. RP = Romantic Partner. * $p \leq 0.05$. ** $p \leq 0.01$.

Social Desirability Differences as a Function of Recruitment Group and Gender

A 2 (Recruitment Group) x 2 (Gender) ANOVA was performed on CSD scores to investigate whether or not there were differences in social desirability scores between the four participant groups. No significant main effect or interaction effect was found, indicating no differences in responding styles among the four groups of youth. Mean scores for each group were as follows: Justice Females ($X = 12.86$, $SD = 5.12$), Justice Males ($X = 14.75$, $SD = 8.36$), Community Females ($X = 15.92$, $SD = 7.61$), Community Males ($X = 13.32$, $SD = 8.13$). It should be noted that the mean scores for all four participant groups were within the normal limits as determined by Crandall and colleagues (Crandall et al., 1965, Crandall, 1966). Since there were no significant differences between groups as a function of social desirability, this measure was not included in any subsequent analyses.

Prediction of Delinquency, Drug Use, and Sexual Behaviour by Pubertal Timing and Peer Affiliation

To determine whether pubertal timing and affiliation with antisocial peers predicted delinquency, drug use, and sexual behaviour, a series of standard multiple regressions were undertaken. Although pubertal timing did not correlate significantly with any other measures, given its salience in the research literature and its importance in the present study's objectives, it was included in the regression analyses. Age was entered into the regression equations as a covariate, along with two dummy-coded variables that represented Pubertal Timing (early vs. non-early (late or on time) development, and late vs. non-late (early or on time) development), Involvement with Delinquent Peers, and the interaction between the Pubertal Timing dummy-coded variables and Involvement with Delinquent Peers. Separate analyses were conducted for each gender.

In order to meet the assumptions of normality and homoscedacity, data transformations were required for the Delinquency Frequency scores and the Drug Use Frequency Scores. Specifically, Log10 transformations were performed on the General Delinquency Past Year Frequency and Lifetime Frequency scores. Square root transformations were performed on Drug Use Past Year Frequency and Lifetime Frequency scores.

Tables 13-18 present the regression analyses for delinquent behaviour (lifetime variety, lifetime frequency, and past year frequency).

Table 13

Standard Multiple Regression: Lifetime Variety of Delinquent Activity in Females

Variables	DV	Age	Early	Late	IDP	Early x IDP	Late x IDP	B	β	Partial r	Part r	sr^2
Age	.46							1.45*	.27	.43	.26	.07
Early vs. non-early pubertal development	.04	-.07						-.54	-.04	-.03	-.02	
Late vs. non-late pubertal development	.13	.07	-.29					4.19	.24	.25	.14	
Involvement with Delinquent Peers (IDP)	.77	.23	.16	-.06				.04**	.75	.69	.51	.26
Early vs. non-early x IDP	.32	.09	.80	-.23	.46			.00	.01	.01	.01	
Late vs. non-late x IDP	.25	.03	-.21	.75	.24	-.17	Intercept= -21.15*	-.01	-.12	-.12	-.07	
Means	8.92	15.72	0.27	0.18	168.23	53.45	28.06		$R^2 =$	.70		
Standard Deviations	6.84	1.29	0.45	0.39	123.18	112.08	79.94	Adjusted	$R^2 =$	.66		
								R =	.84**			

Note. *p<.01. **p<.001.

Table 14

Standard Multiple Regression: Lifetime Variety of Delinquent Behaviour in Males

Variables	DV	Age	Early	Late	IDP	Early x IDP	Late x IDP	B	β	Partial r	Part r	sr^2
Age	.21							.95	.143	.19	.14	
Early vs. non-early pubertal development	.18	.01						2.44	.121	.07	.05	
Late vs. non-late pubertal development	.05	.09	-.23					-5.64	-.268	-.15	-.11	
Involvement with Delinquent Peers (IDP)	.66	.14	.00	.07				.04**	.568	.55	.47	.22
Early vs. non-early x IDP	.25	-.02	.91	-.21	.15			.01	.069	.04	.03	
Late vs. non-late x IDP	.19	.02	-.21	.90	.23	-.19		.03	.337	.18	.13	
Intercept= -10.63												
Means	14.90	16.86	0.20	0.18	224.18	44.94	43.40		R ² =	.49		
Standard Deviations	8.20	1.23	0.40	0.39	119.49	100.17	104.00	Adjusted	R ² =	.42		
									R =	.70**		

Note. **p<.001.

Table 15

Standard Multiple Regression: Lifetime Frequency of Delinquent Behaviour in Females

Variables	DV	Age	Early	Late	IDP	Early x IDP	Late x IDP	B	β	Partial r	Part r	sr ²
Age	.41							.20*	.23	.34	.22	.05
Early vs. non-early pubertal development	.00	-.07						.03	.01	.01	.01	
Late vs. non-late pubertal development	.14	.07	-.29					.74	.26	.24	.15	
Involvement with Delinquent Peers (IDP)	.73	.23	.16	-.06				.01**	.77	.66	.53	.28
Early vs. non-early x IDP	.25	.09	.80	-.23	.46			.00	-.10	-.08	-.05	
Late vs. non-late x IDP	.26	.03	-.21	.75	.24	-.17		.00	-.15	-.13	-.08	
Intercept= -2.56												
Means	1.74	15.72	0.27	0.18	168.23	53.45	28.06					R ² = .63
Standard Deviations	1.10	1.29	0.45	0.39	123.18	112.08	79.94	Adjusted				R ² = .58
								R =	.79**			

Note. *p<.05. ** p<.001.

Table 16

Standard Multiple Regression: Lifetime Frequency of Delinquent Behaviour in Males

Variables	DV	Age	Early	Late	IDP	Early x IDP	Late x IDP	B	β	Partial r	Part r	st ²
Age	.34							0.17*	.23	.33	.22	.05
Dummy 1: early vs. non-early pubertal development	.12	.01						0.80	.35	.21	.14	
Dummy 2: late vs. non-late pubertal development	.00	.09	-.23					-0.15	-.06	-.04	-.03	
Involvement with Delinquent Peers (IDP)	.72	.14	.00	.07				0.01**	.73	.69	.60	.36
Early vs. non-early x IDP	.17	-.02	.91	-.21	.15			.00	-.27	-.16	-.10	
Late vs. non-late x IDP	.11	.02	-.21	.90	.23	-.19		.00	.02	.01	.01	
Intercept= -1.73												
Means	2.48	16.86	0.20	0.18	224.18	44.94	43.40					R ² = .61
Standard Deviations	0.92	1.23	0.40	0.39	119.49	100.17	104.00	Adjusted				R ² = .55
								R =	.78**			

Note. *p<.05. **p<.001.

Table 17

Standard Multiple Regression: Past Year Frequency of Delinquent Behaviour in Females

Variables	DV	Age	Early	Late	IDP	Early x IDP	Late x IDP	B	β	Partial r	Part r	sr ²
Age	.36							.13	.18	.26	.17	
Dummy 1: early vs. non-early pubertal development	.02	-.07						.22	.10	.09	.05	
Dummy 2: late vs. non-late pubertal development	.17	.07	-.29					.76	.32	.28	.19	
Involvement with Delinquent Peers (IDP)	.71	.23	.15	-.07				.01**	.78	.64	.53	.28
Early vs. non-early x IDP	.24	.09	.80	-.23	.45			.00	-.16	-.12	-.08	
Late vs. non-late x IDP	.29	.03	-.22	.75	.24	-.18		.00	-.15	-.13	-.08	
Intercept= -1.79												
Means	1.42	15.73	0.27	0.19	170.56	54.56	28.65		R ² =			.59
Standard Deviations	0.95	1.30	0.45	0.39	123.38	113.00	80.68	Adjusted	R ² =			.54
								R =				.77**

Note. **p<.001.

Table 18

Standard Multiple Regression: Past Year Frequency of Delinquent Behaviour in Males

Variables	DV	Age	Early	Late	IDP	Early x IDP	Late x IDP	B	Partial r	Part r	sr ²
Age	.10										
Dummy 1: early vs. non-early pubertal development	.21	.01						.03 .78	.04 .34	.05 .17	.04 .13
Dummy 2: late vs. non-late pubertal development	-.16	.09	-.23					-.71 -.30	-.15		-.12
Involvement with Delinquent Peers (IDP)	.53	.14	.00	.07				.004*	.54	.49	.45
Early vs. non-early x IDP	.24	-.02	.91	-.21	.15			.00	-.19	-.09	-.07
Late vs. non-late x IDP	-.03	.02	-.21	.90	.23	-.19		.00	.15	.07	.06
							Intercept=	.33			
Means	1.82	16.86	0.20	0.18	224.18	44.94	43.40		R ² =	.36	
Standard Deviations	0.92	1.23	0.40	0.39	119.49	100.17	104.00	Adjusted	R ² =	.27	
								R =	.60**		

Note. *p<.001. **p<.005.

In reviewing the regression analysis tables (Tables 13, 15, 17) that deal with the delinquency indices for the female sample, one can see that involvement with delinquent peers was a significant predictor of lifetime variety, lifetime frequency, and past year frequency delinquency scores. Additionally, age was a significant predictor of both lifetime variety and lifetime frequency delinquency scores. From Tables 14, 16, and 18, which deal with delinquency indices in the male sample, one can see that involvement with delinquent peers was a significant predictor of all three delinquency scores for males as well. Age was a significant predictor of the lifetime frequency delinquency scores only. Neither pubertal timing, nor any of the interaction terms, was associated with delinquency scores for either gender.

Tables 19-24 present the regression analyses for drug use indices. Involvement with delinquent peers significantly predicted all three drug use indices in both males and females. Age was a significant predictor of lifetime frequency and past year frequency drug use scores in females and of lifetime variety and lifetime frequency drug use scores in males. Again, pubertal timing failed to contribute significantly to the equations.

For sexual behaviour variety scores a somewhat different pattern emerged. In Table 25, one can see that both involvement with delinquent peers and age were significant predictors of sexual variety scores in the female sample. In the male sample (Table 26), involvement with delinquent peers as well as one of the pubertal timing dummy variables were significant predictors of sexual variety scores. The equation for the relationship was $y = 0.24 + 0.22 \text{ Age} + 3.61 \text{ Early} + 4.23 \text{ Late} + 0.011 \text{ IDP} - 0.007 (\text{Early} \times \text{IDP}) - 0.01 (\text{Late} \times \text{IDP})$. Based on the way that the Dummy variables (Early and Late), were created, the equation would yield higher sexual variety scores for males who developed later than

their same-age peers, in comparison to those who developed earlier or at the same time as their same-age peers.

Table 19

Standard Multiple Regression: Lifetime Variety of Drug Use in Females

Variables	DV	Age	Early	Late	IDP	Early x IDP	Late x IDP	B	β	Partial r	Part r	sr ²
Age	.36							.71	.26	.29	.24	
Early vs. non-early pubertal development	.15	-.07						.50	.06	.04	.03	
Late vs. non-late pubertal development	.02	.07	-.29					.52	.06	.04	.03	
Involvement with Delinquent Peers (IDP)	.51	.23	.16	-.06				.01*	.41	.33	.28	.08
Early vs. non-early x IDP	.32	.09	.80	-.23	.46			.00	.08	.04	.04	
Late vs. non-late x IDP	.13	.03	-.21	.75	.24	-.17		.00	.01	.01	.01	
							Intercept=	-9.81				
Means	3.71	15.72	0.27	0.18	168.23	53.45	28.06		R ² =	.34		
Standard Deviations	3.56	1.29	0.45	0.39	123.18	112.08	79.94	Adjusted	R ² =	.24		
								R =	.58**			

Note. *p<.05. **p<.01.

Table 20

Standard Multiple Regression: Lifetime Variety of Drug Use in Males

Variables	DV	Age	Early	Late	IDP	Early x IDP	Late x IDP	B	β	Partial r	Part r	sf ²
Age	.33							0.84*	.29	.39	.28	.08
Early vs. non-early pubertal development	-.01	.01						-3.76	-.43	-.25	-.17	
Late vs. non-late pubertal development	.10	.09	-.23					-2.78	-.31	-.18	-.12	
Involvement with Delinquent Peers (IDP)	.69	.14	.00	.07				0.02**	.51	.54	.42	.18
Early vs. non-early x IDP	.15	-.02	.91	-.21	.15			0.02	.47	.27	.18	
Late vs. non-late x IDP	.22	.02	-.21	.90	.23	-.19	Intercept=	0.01	.38	.22	.15	
								-12.72*				
Means	4.84	16.86	0.20	0.18	224.18	44.94	43.40		R ² =	.58		
Standard Deviations	3.52	1.23	0.40	0.39	119.49	100.17	104.00	Adjusted	R ² =	.52		
								R =	.76**			

Note. *p<.05. **p<.001.

Table 21

Standard Multiple Regression: Lifetime Frequency of Drug Use in Females

Variables	DV	Age	Early	Late	IDP	Early x IDP	Late x IDP	B	β	Partial r	Part r	sr ²
Age	.57							8.31**	.46	.57	.44	.19
Early vs. non-early pubertal development	-.02	-.07						4.76	.09	.08	.05	
Late vs. non-late pubertal development	.03	.07	-.29					-3.92	-.07	-.06	-.04	
Involvement with Delinquent Peers (IDP)	.63	.23	.16	-.06				.11**	.57	.53	.40	.16
Early vs. non-early x IDP	.16	.09	.80	-.23	.46			-.04	-.21	-.16	-.10	
Late vs. non-late x IDP	.22	.03	-.21	.75	.24	-.17		.03	.10	.09	.06	
							Intercept=	-128.65**				
Means	19.19	15.72	0.27	0.18	168.23	53.45	28.06		R ² =	.60		
Standard Deviations	23.21	1.29	0.45	0.39	123.18	112.08	79.94	Adjusted	R ² =	.55		
									R =	.78**		

Note. **p<.001.

Table 22

Standard Multiple Regression: Lifetime Frequency of Drug Use in Males

Variables	DV	Age	Early	Late	IDP	Early x IDP	Late x IDP	B	β	Partial r	Part r	sr ²
Age	.33							4.91*	.25	.37	.24	.06
Early vs. non-early pubertal development	-.17	.01						-6.18	-.10	-.07	-.04	
Late vs. non-late pubertal development	.10	.09	-.23					-15.73	-.25	-.17	-.10	
Involvement with Delinquent Peers (IDP)	.75	.14	.00	.07				.14**	.68	.69	.56	.31
Early vs. non-early x IDP	-.07	-.02	.91	-.21	.15			-.02	-.08	-.05	-.03	
Late vs. non-late x IDP	.23	.02	-.21	.90	.23	-.19	Intercept=	.06	.27	.17	.10	
								-83.18				
Means	28.15	16.86	0.20	0.18	224.18	44.94	43.40		R ² =	.65		
Standard Deviations	24.24	1.23	0.40	0.39	119.49	100.17	104.00	Adjusted	R ² =	.60		
								R =	.81**			

Note. *p<.05. **p<.001.

Table 23

Standard Multiple Regression: Past Year Frequency of Drug Use in Females

Variables	DV	Age	Early	Late	IDP	Early x IDP	Late x IDP	B	β	Partial r	Part r	sr^2
Age	.43							2.95*	.30	.39	.28	.08
Early vs. non-early pubertal development	.08	-.07						0.92	.03	.03	.02	
Late vs. non-late pubertal development	.07	.07	-.29					0.47	.01	.01	.01	
Involvement with Delinquent Peers (IDP)	.69	.23	.16	-.06				0.06**	.59	.52	.40	.16
Early vs. non-early x IDP	.30	.09	.80	-.23	.46			0.00	.00	.00	.00	
Late vs. non-late x IDP	.26	.03	-.21	.75	.24	-.17	Intercept= -45.68*	0.02	.11	.09	.06	
Means	11.76	15.72	0.27	0.18	168.23	53.45	28.06		$R^2 =$	.56		
Standard Deviations	12.83	1.29	0.45	0.39	123.18	112.08	79.94	Adjusted	$R^2 =$	.50		
								R =	.75**			

Note. *p<.01. **p<.001.

Table 24

Standard Multiple Regression: Past Year Frequency of Drug Use in Males

Variables	DV	Age	Early	Late	IDP	Early x IDP	Late x IDP	B	β	Partial r	Part r	s_r^2
Age	.28							1.75	.22	.27	.21	
Early vs. non-early pubertal development	-.04	.01						-5.68	-.23	-.12	-.09	
Late vs. non-late pubertal development	-.07	.09	-.23					-4.92	-.19	-.10	-.08	
Involvement with Delinquent Peers (IDP)	.63	.14	.002	.07				.05**	.55	.54	.47	.22
Early vs. non-early x IDP	.08	-.02	.91	-.21	.15			.02	.17	.09	.07	
Late vs. non-late x IDP	.03	.02	-.21	.90	.23	-.19	Intercept=	.01 -25.52	.05	.03	.02	
Means	13.69	16.86	0.20	0.18	224.18	44.94	43.40		$R^2 =$	.46		
Standard Deviations	9.99	1.23	0.40	0.39	119.49	100.17	104.00	Adjusted	$R^2 =$	.38		
								R =	.68**			

Note. **p<.001.

Table 25

Standard Multiple Regression: Lifetime Variety of Sexual Behaviour of Females

Variables	DV	Age	Early	Late	IDP	Early x IDP	Late x IDP	B	β	Partial r	Part r	sr^2
Age	.54							1.13**	.42	.51	.40	.16
Early vs. non-early pubertal development	.13	-.07						2.05	.27	.20	.14	
Late vs. non-late pubertal development	.01	.07	-.29					2.01	.23	.19	.13	
Involvement with Delinquent Peers (IDP)	.58	.23	.16	-.06				.02**	.63	.54	.44	.19
Early vs. non-early x IDP	.28	.09	.80	-.23	.46			-.01	-.25	-.17	-.12	
Late vs. non-late x IDP	.06	.038	-.21	.75	.24	-.17		-.01	-.26	-.21	-.15	
						Intercept=		-15.21*				
Means	5.72	15.72	0.27	0.18	168.23	53.45	28.06		$R^2 =$	.54		
Standard Deviations	3.43	1.29	0.45	0.39	123.18	112.08	79.94	Adjusted	$R^2 =$	.48		
								R =	.74**			

Note. * $p < .01$. ** $p < .001$.

Table 26

Standard Multiple Regression: Lifetime Variety of Sexual Behaviour in Males

Variables	DV	Age	Early	Late	IDP	Early x IDP	Late x IDP	B	β	Partial r	Part r	st ²
Age	.23							0.22	.11	.13	.11	
Early vs. non-early pubertal development	.27	-.01						3.61	.58	.27	.23	
Late vs. non-late pubertal development	.13	.09	-.23					4.23*	.68	.32	.27	.07
Involvement with Delinquent Peers (IDP)	.40	.12	.01	.05				0.01**	.52	.47	.43	.18
Early vs. non-early x IDP	.27	-.04	.91	-.21	.16			-.01	-.30	-.14	-.12	
Late vs. non-late x IDP	.09	.01	-.21	.90	.22	-.19		-.01	-.57	-.27	-.22	
						Intercept=	.24					
Means	6.87	16.88	0.19	0.19	227.86	43.14	45.20		R ² =	.35		
Standard Deviations	2.45	1.24	0.39	0.39	120.31	100.25	105.80	Adjusted	R ² =	.25		
								R =	.59**			

Note. *p<.05. **p≤.005.

A note about the strength of the regression coefficient in the aforementioned analyses is warranted. All fourteen of the multiple regression analyses produced significant results with *R* values of 0.58 – 0.84, indicating moderate to strong relationships between the behaviours of interest and the predictor variables. Given that Involvement with Delinquent Peers was the only predictor variable found to be significant in the majority of the analyses conducted, one can conclude that Involvement with Delinquent Peers is moderately to strongly related to the behaviours of interest.

A standard multiple regression was chosen over other regression options so as to allow all variables (including pubertal timing) to be given credit for as much of their unique variance as possible. However, in view of the failure of pubertal timing to predict delinquent behaviour, a series of stepwise regression analyses (variable entry specified step by step) were also conducted on the data in order to determine whether or not inputting Pubertal Timing prior to Involvement with Delinquent Peers would affect the results of the analyses. The variables were entered as follows: Step 1 = Age, Step 2 = Pubertal Timing (coded as two dummy variables; Dummy 1 = early vs. on-time and late development and Dummy 2 = late vs. early and on-time development), Step 3= Involvement with Delinquent Peers (IDP), and Step 4 = Interaction 1 (IDP x Dummy 1) and Interaction 2 (IDP x Dummy 2). Pubertal timing was entered into the analysis before Involvement with Delinquent Peers so as to increase the probability that any overlapping or shared variance between the two variables of interest would be attributed the pubertal timing and because pubertal timing as a variable seemed logically to have a temporal precedence over relations with peers. The results of these analyses were similar to those of the standard multiple regressions discussed above. Again, with the exception of the sexual behaviour variety scores of males, involvement with delinquent peers was the only variable (besides age in some cases)

that significantly predicted dependent variable scores. In the case of sexual behaviour in males, similar to the results from the standard multiple regression, both the second pubertal timing dummy variable (late versus not-late timing) and involvement with delinquent peers were significantly related to sexual behaviour variety scores.

A set of standard regression analyses were also run using age at menses in lieu of the pubertal timing measure for females. Although menses is considered to be one of the last stages of pubertal development, it is a salient event in adolescent development. This set of analyses yielded results identical to those performed using pubertal timing with one exception. The standard multiple regression for lifetime variety drug use scores with age at menses entered in lieu of pubertal timing found age to be a significant factor in addition to involvement with delinquent peers. Similar to the results from analyses using pubertal timing variables, age at menses was not associated with any of the indices of delinquency, drug use, or sexual behaviour.

Tables for the stepwise multiple regressions and the standard multiple regressions with age at menses used in place of pubertal timing can be found in Appendix I.

Peer and Romantic Partner Relationships

Given the consistency of the findings that peer affiliation predicts antisocial and other risk-taking behaviours, additional investigations of the significance of various aspects of friendships and romantic relationships were conducted. With respect to friendships, the following variables were examined: number of peers identified, mean age of friends identified, gender ratio of friends identified (same-sex: opposite-sex), median length of friendships, and mean closeness rating. For romantic relationships, the importance of number of romantic partners identified, mean age of romantic partners, gender ratio of

romantic partners (opposite-sex: same-sex), and median length of romantic relationships was examined. A series of Analyses of Covariance (ANCOVAs) were conducted in order to determine whether statistically significant differences existed among the four groups of youth on the indices calculated. Gender and recruitment group were entered as fixed factors, and age was entered as a covariate.

Table 27 presents the means and standard deviations of the friendship and romantic partner indices for each of the four recruitment group x gender subsamples.

Table 27

Mean Scores (and Standard Deviations) for Friend and Romantic Partner Indices, by Participant Gender and Recruitment Group.

		Justice		Community	
		Female	Male	Female	Male
Friends	Number Listed	7.81 (3.33)	6.84 (3.51)	8.46 (2.76)	9.37 (2.83)
	Age Difference	2.36 (5.15)	0.84 (1.26)	0.25 (0.51)	-0.02 (0.63)
	Gender Ratio	0.54 (0.26)	0.82 (0.19)	0.73 (0.22)	0.61 (0.24)
	Relationship Length ^o	2.91 (2.26)	3.96 (2.28)	3.12 (2.11)	4.74 (3.70)
	Closeness Rating	7.27 (1.22)	7.32 (1.35)	7.31 (1.44)	7.31 (1.07)
	Involvement	11.48 ¹ (3.49)	12.65 ¹ (2.43)	8.57 ² (3.40)	9.11 ² (3.53)
	Delinquent Behaviour	20.64 ¹ (7.58)	22.16 ¹ (6.98)	11.80 ² (3.93)	13.87 ² (4.18)
	Drug Use	10.86 ¹ (3.32)	11.16 ¹ (2.31)	6.77 ² (3.29)	8.16 ² (2.48)
	Involvement with Delinquent Friends	248.38 ¹ (133.80)	281.07 ¹ (107.18)	108.11 ² (70.48)	131.37 ² (71.11)
	Antisocial Attitudes	38.71 ¹ (6.12)	36.65 ¹ (5.73)	47.75 ² (5.07)	44.32 ² (6.11)
	Peer Total score*	23.67 ¹ (2.97)	22.20 ¹ (2.07)	22.68 ¹ (2.48)	24.63 ² (2.89)
Romantic Partners	Number listed	4.43 (2.69)	4.58 (3.15)	2.89 (2.60)	4.16 (3.40)
	Age difference	2.43 ¹ (2.67)	0.44 ² (1.09)	0.44 ² (0.62)	0.20 ² (0.95)
	Relationship Length ^o	162.29 ¹ (156.76)	122.55 ² (111.48)	173.48 ¹ (300.27)	76.20 ² (52.01)
	Involvement	12.19 ¹ (3.86)	11.34 ¹ (3.88)	7.91 ² (3.70)	7.30 ² (3.79)
	Delinquent Behaviour	12.88 (2.51) (N=11)	11.46 (2.02) (N=12)	11.00 (1.00) (N=7)	11.00 (1.53) (N=7)
	Drug Use	5.20 (0.42)	4.82 (0.60)	4.14 (1.07)	4.00 (0.82)
	Involvement with Delinquent RPs**	176.41 (52.43)	136.18 (60.19)	105.57 (17.59)	71.29 (17.84)

Note. * Peer Total Score = Summary score on Relations with Peers of the Opposite Sex scale.

Lower scores denote more antisocial attitudes **RP = Romantic Partner.

^oRelationship Length = Median Length. Superscript numbers denote group differences based on Analyses of Covariance. Groups or chi-square analyses with the same superscript number did not differ from one another, while groups with different numbers did differ significantly at the $p < .05$ level.

Friends. The ANCOVA conducted on the mean age difference between youth and their friends (referred to as Friend Age Difference in Table 27) produced significant main effects for both gender ($F(1,94) = 5.28, p < .05$) and recruitment group ($F(1,94) = 4.67, p < .05$). However, the gender x recruitment group interaction term was not significant. A review of the estimated marginal means (adjusted for age) indicated that the mean age difference between Females and their friends was greater ($M = 1.50$ years, $SE = 0.37$) than the mean age difference between Males and their friends ($M = 0.24$ years, $SE = 0.37$). In reviewing the main effect for recruitment group, estimated marginal means indicated that the mean age difference between Justice Group participants and their friends was greater ($M = 1.45$ years, $SE = 0.38$) than that between Community group participants and their friends ($M = 0.29$ years, $SE = 0.36$).

For median length of friendships of study participants, the ANCOVA revealed no significant main effects for gender or recruitment group, and no significant interaction. However, there was a significant effect for the covariate variable, age ($F(1,94) = 8.74, p < .01$).

For Peer Involvement (the amount of time youth spent with their friends each week), the ANCOVA revealed a significant main effect for recruitment group only ($F(1,94) = 23.50, p < .001$). Estimated marginal means indicated that Justice Group participants spent more time with their friends ($M = 12.13, SD = 0.46$), than did their Community group counterparts ($M = 8.77, SD = 0.49$).

On Exposure to Delinquent Peers, the ANCOVA produced a significant effect for recruitment group only ($F(1,94) = 41.59, p < .001$). Estimated marginal means based on the ANCOVA indicated that the Justice Group participants reported that their friends engaged

in more delinquent behaviour ($M = 21.31$, $SD = 0.87$) than did the Community group participants ($M = 12.94$, $SD = 0.91$).

For Involvement with Delinquent Peers, the composite scale derived from the formula Peer Involvement x Exposure to Delinquent Peers, the ANCOVA produced a significant effect for recruitment group ($F(1,94) = 45.49$, $p < .001$) only. In looking at the main effect for recruitment group, the predicted mean values indicated that the community group ($M = 119.3$, $SD = 15.25$) had lower scores on the Involvement with Delinquent Peers index than did the justice group ($M = 265.2$, $SD = 14.46$), suggesting that community group members were exposed to lower levels of delinquent behaviour.

Using the Peer Drug Use subscale, the analysis of covariance yielded a main effect for recruitment group only ($F(1,94) = 23.35$, $p < .001$). The estimated marginal means indicated that Justice group participants ($M = 10.69$, $SE = 0.40$) reported that their friends used significantly more alcohol and drugs than did friends of the Community Group ($M = 7.82$, $SE = 0.42$).

On the Peer Antisocial Attitudes scale, the ANCOVA yielded a significant main effect for recruitment group only ($F(1,94) = 39.65$, $p < .001$). Review of the estimated marginal means revealed that Justice Group participants reported that their friends had more antisocial attitudes ($M = 37.94$, $SE = 0.83$; note that lower scores denote higher levels of antisocial attitudes) than did the Community Group ($M = 45.75$, $SD = 0.87$).

On the Relations with Peers of the Opposite Sex Scale, the ANCOVA produced a significant recruitment group x gender interaction ($F(1,94) = 10.42$, $p < .01$). Tukey's HSD post-hoc analyses revealed that the two groups of male participants differed significantly from one another ($Tukey's\ HSD = 1.94$, $p < .05$), with Community Males reporting the most positive relationships with members of the opposite sex out of all four participant groups

(estimated marginal mean = 24.63, $SE = 0.59$), and Justice Males reported the least positive relationships with members of the opposite sex of the four groups (estimated marginal mean = 22.14, $SE = 0.50$). No other group differences were significant.

No differences attributable to recruitment group, gender, or their interaction were found for the number of friends listed, gender ratio of friends listed, median length of friendship, or friend closeness rating.

Romantic Partners. Analysis of the Average Age Difference between youth and their romantic partners revealed significant main effects for both gender ($F(1,83) = 12.58$, $p < .001$) and recruitment group ($F(1,83) = 8.00$, $p < .01$), as well as for the interaction term ($F(1,83) = 6.36$, $p < .05$). Tukey's HSD post-hoc analyses indicated that Justice Females reported significantly greater average age differences between their romantic partners and themselves in comparison to the three other participant groups, who did not differ significantly from one another. The estimated marginal means revealed that Justice Group Females reported a mean average age difference between themselves and their romantic partners of 2.45 years. The interaction effect is presented in Figure 1.

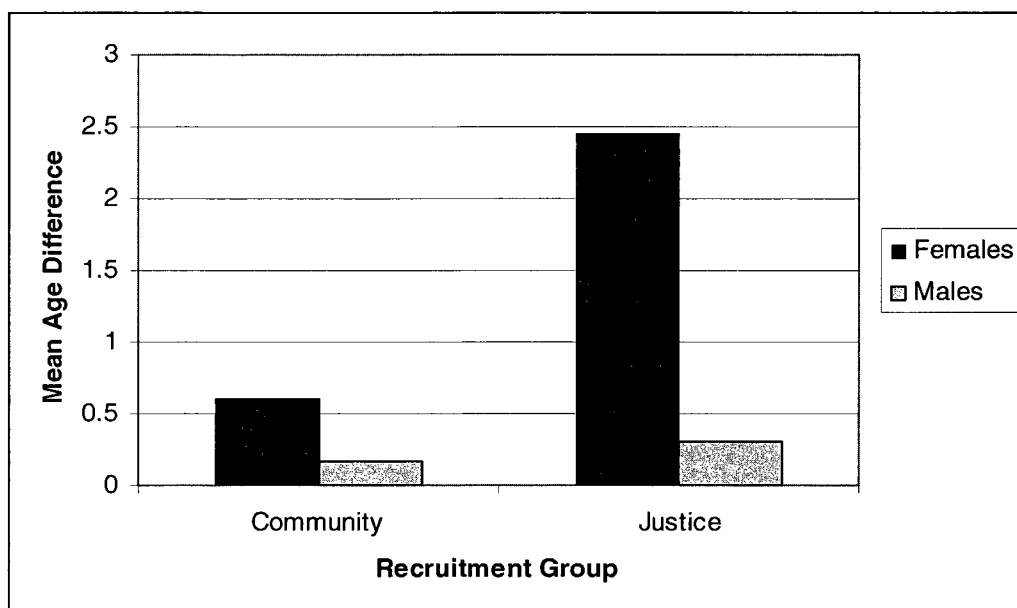


Figure 1. Mean Age Differences between Youth and their Romantic Partners

The ANCOVA for the median length of youths' relationships with their romantic partners produced a significant effect for the covariate, age ($F(1,83) = 6.20, p < .05$), as well as a significant main effect for Gender ($F(1,83) = 6.83, p < .05$), but not for recruitment group. Review of the estimated marginal means showed that Females ($M = 191.2$ days, $SE = 28.60$) reported having longer relationships than did Males ($M = 78.62$ days, $SE = 29.67$).

With respect to Romantic Partner Involvement (amount of time spent with romantic partners per week), there was a significant effect for recruitment group only ($F(1,94) = 24.23, p < .001$). Adjusted mean scores for the two recruitment groups indicated that the Justice Group ($M = 11.15, SE = 0.64$) reported spending more time with their romantic partners than did their Community Group counterparts ($M = 6.41, SD = 0.68$).

The ANCOVA on the number of romantic partners listed did not yield any significant main effects, or a significant interaction effect.

Discussion

Major Findings

In the present study I sought to clarify the relationships between pubertal development, peer affiliation, and antisocial and risk-taking behaviour in youth exhibiting a wide range of such behaviours. Perhaps the most surprising finding of the study was the lack of a demonstrated relationship between pubertal development and timing on the one hand, and antisocial and risk-taking behaviours on the other. In females, PDS scores were significantly correlated with age of onset of delinquent behaviour only, but in this case the relationship was opposite to what was predicted, such that higher pubertal development

scores were associated with later age of onset. Neither PDS scores, nor pubertal timing or age at menses, was associated with any other index of delinquency, drug use or sexual behaviour in females. For males, neither PDS scores nor pubertal timing was significantly correlated with any delinquency, drug use, or sexual behaviour score. Standard multiple regression analyses, conducted on males and females separately, similarly showed that pubertal timing did not account significantly for any of the variance in delinquency, drug use, or sexual behaviour scores with one minor exception. For males, pubertal timing accounted for a small amount of variance in sexual behaviour variety scores, suggesting that developing later than one's peers is associated with higher sexual variety scores, as compared to developing earlier or at the same time as one's same-age peers. Nevertheless, the overall picture that emerged from this study, in contrast to several previous studies (Cota-Robles et al., 2002; Lynne, Graber, Nichols, Brooks-Gunn, & Botvin, 2007), was that there was no evidence for the significance of pubertal timing as a determinant of delinquent and high risk behaviours for adolescents when the sample was weighted heavily towards a severely delinquent sample.

In terms of the possible reasons for this incongruity in findings, both the sample studied and the measures used warrant discussion. In looking at the sample of youth who participated in the current study, two factors need to be considered: the age of the sample and the recruitment of youth through the justice system. Several of the studies that have investigated that impact of pubertal development and timing on antisocial and risk-taking behaviour have employed younger samples and have recruited youth through schools (Costello et al., 2007; Graber et al., 1997; Graber et al., 2006; Lam et al., 2002; Lynne et al., 2007; Wilson et al., 1994). In their 2007 study, Lynne and colleagues followed a group of urban students from grade six through to grade eight, and found that early

maturing males and females reported higher levels of delinquent (and aggressive) behaviour than did their on-time and late-maturing counterparts at all grade levels. This study used an item similar to that used in the current study to assess pubertal timing, and the item was administered after much of pubertal development had likely occurred (the item was asked at a subsequent data collection point of the larger longitudinal study, when youth were in the ninth grade) as had been the case in the current study. However, the measurements of delinquent (and aggressive behaviour) were collected in the middle school years (earlier than in the present study), before normative data would suggest that the peak delinquency/risk-taking phase of adolescence would have occurred (Moffit et al., 2001). Moreover, the study was school-based, thereby excluding youth who did not attend school or did so sporadically. Given the current study's finding that only fifty-two percent of Justice Group youth were enrolled in school at the time of the study, school-based studies probably exclude many of the youth who engage in high levels of delinquent behaviour.

Likewise, in a study of males aged 11-17, Cota-Robles and colleagues (2002) found that early-maturing males were more likely than their on-time and late-maturing peers to engage in both violent and non-violent delinquent acts. While the study extended previous research by including a wide age range (one that encompassed the middle stages of pubertal development, through the peak of expression of delinquent behaviour, and further) and an ethnically diverse sample (it included African-American, Mexican American, and Anglo-American youth), the Adolescent Health Study surveyed youth in school, again excluding youth who might have been more likely to engage in delinquent and risk-taking behaviour.

The recently reported findings of Negri, Fung and Trickett (2008) may shed some light on the current study's lack of evidence for the importance of pubertal timing and help to explain some of the inconsistencies within the literature. In their cross-sectional study of

the relationship between pubertal development and depressive symptoms and delinquency which involved boys and girls aged nine to thirteen years, Negri and colleagues found differing results based on how they operationalized pubertal timing. When they used a categorical measure of pubertal timing (e.g., categorizing participants as being early, on-time or late in comparison to established population norms for ages within each gender), such as was used in the current study, their results were non-significant. However, when timing was represented as a continuous variable (e.g., the youth's report of his/her Tanner stage of pubertal development was standardized within his/her age and gender in the sample), a significant relationship emerged between early pubertal timing and higher levels of delinquent behaviour for both boys and girls. Thus, the categorical conceptualisation of puberty that is so prevalent in the literature may not be the best way to study the process.

Although the results of the current study are at odds with some previous research, it should be noted that the non-significant results are also in line with other studies, which failed to show a relationship between pubertal timing and indices of behaviour. For instance, in their study of Caucasian, private school girls, aged ten to fourteen years, Graber and colleagues (2006) did not find an association between pubertal timing and aggression (as measured by a 21-item scaled taken from the Achenbach Youth Self-Report). They did, however, find an association between aggression and two hormones associated with pubertal development; estradiol and dehydroepiandrosterone sulphate (DHEAS). Estradiol and DHEAS levels peak during puberty, and analyses revealed a pathway from both DHEAS and estradiol to aggression through a mediator variable of negative life events. From the findings of this study two important aspects of the relationships between these variables are suggested: 1) the impact of pubertal timing on behaviour is complex and is likely affected by other important social variables, and 2) the impact of pubertal timing on

behaviour may be time-limited, in that it may affect youth while they are in rapid stages of development but may not persist beyond this period of change.

As previously stated, the lack of significant effects of pubertal development and timing on antisocial and risk-taking behaviours is at odds with some previous research findings (Caspi & Moffitt, 1991; Cota-Robles et al., 2002; Lynne et al., 2007, Moffitt et al., 2001, Wilson et al, 1994), but not with others (Dick et al, 2001; Graber et al., 2006; Lam et al., 2002). Several reasons for the current findings are possible. First, the findings of the current study may be a true reflection of the nature of the relationship between these variables. Specifically, it may be that pubertal development, and particularly its timing, may affect only low levels of risk-taking behaviours, particularly in younger individuals who are relatively well adjusted. However, pubertal timing may not have a significant impact when one examines it in the context of more chronic levels of delinquency, drug use, and sexual behaviour with associated factors of low socioeconomic status, neighbourhood context, and household composition.

Alternatively, it may be the case that the role of pubertal development and timing; a) affects behaviour and socialization prior to the point when visible changes in the body are detectable, b) is time limited, or c) is masked by other, more influential variables that may also affect pubertal timing. In the case of the first explanation, pubertal development is a complex process that has been found to be affected by several factors, at least in females. Biological factors linked to pubertal timing include biological and genetic factors, including ethnicity, correlations between identical twins' pubertal timing (for females), correlations in timing between siblings, and earlier pubertal timing in females born small for gestational age (De Muinck-Keizer Schrama & Juul, 2006; Ellis & Garber, 2000; Herman-Giddens, M.E., 2006). Some environmental factors have also been found to be

associated with earlier pubertal timing, including in utero exposure to chemicals such as DDE and PCBs, the absence of a biological father within the home, the presence of an unrelated adult male (such as a stepfather) within the home, high levels of family conflict, lower socioeconomic status, higher Body Mass Index, and lower rates of physical exercise (Bogaert, 2005). Conversely, other environmental factors, including pubertal exposure to lead, high levels of exercise, and malnutrition/poor nutrition have been found to delay pubertal development (Ellis & Garber, 2000; Schoeters, Den Hond, Dhooze, van Larebeke & Leijns, 2008). Many of these environmental factors could have an impact on entire communities, such as low-income housing communities, where residents may not be able to afford proper nutrition or physical activity programs for their children and may be forced to find unique living situations to maintain accommodation. Thus, while youth from these neighbourhoods may report being “on-time” with their peers, the entire neighbourhood could be developing early. It may also be that youth are self-selecting to affiliate with those who are developing at the same time as they are prior to the onset of the visible signs of puberty. Thus, when the outwardly visible signs of pubertal development occur, youth may experience development as being simultaneous to their peers (“on-time”), when in actual fact the entire peer group may be early or late. If this were the case, then it would be possible for an entire group of youth to develop early or late in comparison to the average same-age peer, but to perceive themselves as developing “on-time” relative to the peers that they associate with.

An alternative explanation for the current findings, within the context of existing literature, is that the impact of pubertal timing on behaviour may be time-limited. Several of the studies that were cited in the introduction section of this paper as providing evidence for a relationship between pubertal timing and antisocial and risk-taking behaviour were

conducted with youth who were younger than those who participated in the present study (Costello et al., 2007; Dick et al., 2001; Graber et al., 2006; Lynne et al., 2007; Negri et al., 2008). It may be that pubertal development and timing has an effect on behaviour during a certain period of time in adolescence. In other words, it may be that for adolescents or preadolescents just entering puberty, there is a window of a year or so in which early-maturing youth may be at risk for delinquent behaviour on the basis of pubertal development. The youth in this study may have been too old for pubertal effects to have been detected and had a younger sample been used, one that captured youth in the earlier stages of development instead of at its tail end, the results may have been different. However, recruitment of younger youth in a sample focusing on adjudicated individuals is difficult due to the fact that children cannot be charged with crimes prior to the age of 12 in Canada and are seldom charged prior to the age of 13 or 14. Meanwhile, pubertal development can begin as early as eight or nine years of age. Thus, it would be difficult to find a consistent source of youth displaying severe antisocial and risk-taking behaviours at the age when youth are in the early stages of puberty. Given that antisocial and risk-taking behaviours peak in mid-late adolescence (Moffitt et al., 2001), it seems clear that a longitudinal study would perhaps better capture the impact of pubertal timing on such behaviours. In looking forward to future research, a longitudinal study that follows youth from age seven or eight, until the age of seventeen or eighteen would be optimal and would avoid some of the problems of cross-sectional research. In any case, if pubertal development truly does have an effect on behaviour during the early phases of development, the results of the present study can be taken as evidence that this effect may be time-limited.

Finally, it seems plausible that among the factors associated with delinquency - factors such as peer group and neighbourhood socioeconomic status (Cauffman et al., 2008, Elliott et al., 1985; Ge et al., 1996; Moffitt et al., 2001; Sellstrom & Bremberg, 2006, Silverthorn et al., 2001) – the effects of pubertal development may be negligible in comparison or are better explained by these other concomitant factors that are not necessarily related to the onset of puberty. It may be that when a youth is affected by risk factors for antisocial and risk taking behaviour such as family instability, impaired parenting, and the modelling of antisocial behaviour in the home (Ellis & Garber, 2000; Moffitt et al., 2001; Sellstrom & Bremberg, 2006), the relative impact of pubertal development is severely limited. Conversely, when youth present virtually no risk factors for externalizing disorders, as could be the case for the Community Group participants in the current study, it may be that the impact of pubertal timing on delinquency is also negligible. To summarize, the absence of significant findings on the pubertal timing measure may have been due to the particular sampling strategy chosen for the participants.

Involvement with delinquent peers, in contrast to pubertal development, accounted for a significant amount of the variance in scores on all indices of delinquency, drug use, and sexual behaviour for both males and females. Similarly, involvement with romantic partners was correlated with all indices of delinquency, drug use, and sexual behaviour (with the exception of age of onset of delinquent behaviour) in females and with all indices of delinquent behaviour, and with lifetime frequency and lifetime variety drug use scores in males. Thus, there is strong evidence here for the importance of peer associations with both friends and romantic partners as a correlate of delinquency and risky behaviours in adolescents.

In looking at other recent studies on the relationship between peer affiliation and antisocial and risk-taking behaviour, the results of the current study are in keeping with previous findings (Elliott et al., 1985; Haynie, 2002; Lynne et al., 2007; Moffitt et al., 2001; Thornberry & Krohn, 1997). For example, in the Dunedin Longitudinal study in New Zealand, several peer relationship factors were found to be associated with antisocial behaviour (Moffitt et al., 2001), including peer rejection during the primary school years, affiliation with delinquent peers, and peer attachment. As in the present study, males and females who affiliated with delinquent peers (at age 13) were more likely to engage in antisocial behaviour from age 13 through to age 18. Also of interest given the low level of school enrolment in the Justice Group in the present study, was the finding in the Dunedin Longitudinal Study that males who were less involved with school were more likely to be involved in antisocial behaviour (Moffitt et al., 2001). It seems plausible that low school involvement may precede dropping out of school, for individuals on a trajectory towards increasing levels of delinquent behaviour.

Perhaps not surprising given the complexity and multi-dimensional nature of our social environment, other studies, such as the 2007 study by Lynne and colleagues discussed earlier, have shown that the impact of peer affiliation on behaviour is not straightforward. The researchers found that while associating with delinquent peers played a mediating role in the relationship between early pubertal timing and delinquent behaviour when the participants were in Grade Six, a different picture emerged in Grades Seven and Eight. While association with delinquent peers in Grade Six predicted the participant's own delinquent behaviour at all time points, association with delinquent peers in the later grades was not associated with participant delinquent behaviour. Moreover, when sixth grade peer association was taken into account, the previously significant effects of pubertal

timing became non-significant (Lynne et al., 2007). Given these results it seems plausible that, in comparison to the strength of delinquent peer affiliation as a predictor, pubertal timing has relatively little impact on antisocial and risk-taking behaviour once youth have completed puberty.

With respect to the hypotheses regarding gender differences set out at the beginning of this study, several interesting findings emerged. The hypothesis that males would engage in more antisocial behaviour, drug use, and sexual behaviour than females of the same age was only partially supported. Analyses of covariance revealed that males reported engaging in a greater variety of delinquent behaviours across their lifetime than did females. Males also reported an earlier age of onset of delinquent behaviour, by approximately two years, than did females. Given the earlier age of onset found for males, it is not surprising that a gender effect was also found for lifetime frequency of delinquent behaviour, such that males reported a greater number of delinquent acts than did females. These results are in keeping with past research, which has found that females typically begin engaging in antisocial behaviour later than their male peers (Silverthorn & Frick, 1999). However, no gender differences in past year frequency of delinquent behaviour was found. Historically, research has shown that males exhibit more antisocial and risk-taking behaviour (Moffitt et al., 2001; Odgers & Moretti, 2002; OJJDP Statistical Briefing Book, 2000; Statistics Canada, 2001; Statistics Canada, 2003). Despite a recent rise in the number of violent acts committed by females, a gender gap in antisocial and risk-taking behaviour remains (Moffitt et al., 2001; Odgers & Moretti, 2002; OJJDP Statistical Briefing Book, 2000). The lack of gender differences in the current study may be a function of the age of the youth being studied. For example, in a recent paper on 12-15 year-old youth by Statistics Canada (2003), it was reported that males reported higher rates of violent acts and

property-related delinquent acts than did females, and that these rates of self-reported delinquency were consistent with police-report data. However, others have suggested that the gender gap is smallest at age 15, which is close to the average age of the youth in the current study (Moffitt et al., 2001; Odgers & Moretti, 2002). If the gender gap does diminish at this age, which is also close to the peak period of antisocial and risk-taking behaviour, then one would expect to see a relatively greater gender gap in the studies that investigate delinquent behaviour in younger or middle school-aged youth. Given the results of the current study, it may be that males and females with serious offending patterns engage in the same number of delinquent acts per year in adolescence but because males begin their careers earlier - in late childhood - they amass a greater number of delinquent acts over their lifetime.

One factor that may have made findings of the present study somewhat unique relates to the representativeness of the female participants in the Justice Group. Recently, there has been a backlash against youth crime in Canada and particular attention has focused on females who engage in violent acts. This may have created a severe response by law officials and, in turn, a sudden increase in incarceration rates for females. While males are incarcerated for a variety of reasons, including but not limited to violent acts, females may be more likely to avoid incarceration following non-violent crime due to social expectations based on gender. Thus, the females in this study, many of whom were incarcerated at the time of the study, may differ from females who engage in high levels of antisocial and risk-taking behaviour but who do not end up in correctional institutions. The female participants in the present study may be representative of only a small subset of these young women, namely those who engage in violent acts.

With respect to differences between males and females in drug use and sexual behaviour, no gender differences on any of these indices were found. These results are in keeping with results of the Dunedin Longitudinal Study, which found that males and females were similar in their drug and alcohol-related offending rates (Moffitt et al., 2001).

In looking at the relationship between friendships and romantic relationships on the one hand, and antisocial and risk-taking behaviour on the other, subsequent more fine-grained analyses provided further indications of how peer relationships might contribute to the socialization of some girls into highly deviant lifestyles. Females in the current study reported a greater mean age difference between themselves and their friends, with friends being older, than did males. This might lead to them looking up to and being influenced more by their older, more experienced friends, and to being exposed to more delinquent acts. Females also reported longer relationships with romantic partners than did their male counterparts, which again might contribute to the partner's greater ability to shape the attitudes of the girls. Additionally, youth in the Justice Group reported having peers that were older, who engaged in more antisocial behaviour and drug use, and who were more accepting of antisocial behaviour. Justice Group youth also spent significantly more time with their friends in comparison to Community Group youth. All of these factors may help to account for the movement of females in the Justice Group towards more antisocial behaviour.

Perhaps the most interesting finding with respect to friendships and romantic relationships was the significant interaction effect for the mean age difference between youth and their romantic partners. Justice Group females reported the greatest mean age difference between themselves and their romantic partners, as compared to Community Group females, Justice Group males, and Community Group males, who did not differ

significantly from one another. These findings support those theories that suggest a link between association with older males and antisocial behaviour in females (Cauffman et al., 2008; Guthrie, Hoey, Ravoira & Kinter, 2002; Moffitt et al, 2001), and point to the special importance here of romantic relationships rather than just peer relations in general. This interaction effect was not found for the mean age of friends, but both females and Justice Group youth reported greater age differences between themselves and their friends than did males and Community Group youth, respectively. It may be that with a larger sample size, and thus greater power, this interaction effect might also have reached statistical significance. However, it may also be the case that, because the peer group of females who engage in antisocial behaviour contains females of an age similar to the participant in addition to males who are older than the participant, the age difference between the female participant and her older male friends is not evident. Thus, the average age of a youth's friends may not look as old as it would if the genders were considered separately. In any event, it appears that females who are involved in the justice system (and thus can be assumed to be engaging in a significant amount of antisocial behaviour) are interacting with older males in a romantic fashion. What the importance of romantic relationships is relative to the importance of other peer relationships remains to be determined, and whether romantic partners exert a causal influence is still at issue because of the cross-sectional design of this study. However, the findings of the current study are in line with those of Cauffman and colleagues (2008), who looked at young offenders' relationships with parents and romantic partners. Of interest in the present context, the researchers found that female young offenders were more likely than their male counterparts to be romantically involved with someone older (2.4 vs. 0.3 years) than themselves. However, the age difference alone did not account for differences in offending rates. Instead, they found that

partners' encouragement of antisocial behaviour was important: females who reported higher levels of encouragement of antisocial behaviour from their boyfriends also reported engaging in more antisocial behaviour. Interestingly, there was no gender difference in perceived encouragement of antisocial behaviour by romantic partners.

The findings of the current study related to sexual behaviour and pregnancy merit special attention. Almost half of Justice Group females reported having had sexual intercourse before the age of 13, in comparison to none of the Community Group females having had intercourse at that age. These findings are consistent with findings from previous research, which have found a link between early sexual behaviour and delinquency and other risk-taking behaviours (Guthrie et al., 2002; Rowe et al., 1989). In their study of females involved with juvenile justice diversionary programs, Guthrie and colleagues (2002) reported the average age of sexual debut to be 13.9 years, which is similar to the current study's finding of a mean age of first vaginal intercourse of 13.1 years for Justice Group females. Taken together with the finding that Justice Group females' romantic partners were identified as being, on average, 2 years older than the female participants, a picture emerges of young females becoming sexually involved with older males at a very young age. With respect to Justice Group males, 22 of the 28 reported having had intercourse by age 14, in comparison to 1 Community Group male who reported having had a similar age of sexual debut. Thus, early involvement in sexual behaviour seems to be part of the unique trajectory of both males and females who come into contact with the law. However, it stands to reason that the consequences of early initiation may be more significant for females because of the risk of pregnancy.

Although not presented earlier due to the small sample size, findings from the subset of youth who reported on their current romantic partner merit some discussion here.

Within the subset of youth who had romantic partners at the time of the study, gender and recruitment group differences in Involvement with Delinquent Romantic Partners were found, such that females reported greater involvement with delinquent romantic partners than did males, and Justice Group youth reported more involvement with such romantic partners than did Community Group youth. The Justice Group also reported that their romantic partners used more alcohol and drugs, and were more approving of antisocial behaviour, in comparison to their Community Group counterparts.

Pregnancy rates within the Justice Group are also somewhat troubling, with 39% of the group reporting having been, or had a sexual partner become, pregnant. A further 8% were not sure if they had had a sexual partner become pregnant. While some of these reports may have involved the same pregnancy (i.e., both the male and female might both have been involved in the study), these results are still indicative of the need for greater sexual education and reproductive health care for this population. Catching these youth while they are involved in the justice system and providing them with health care services could be beneficial in reducing the incidence of pregnancy and sexually transmitted infections. This study's findings on the relationship between sexual behaviour and antisocial behaviour are in keeping with those of Woodward, Fergusson, and Horwood (2001): in the Christchurch Longitudinal Study, which tracked more than 500 women for 20 years, teenage pregnancy was associated with early pubertal timing, delinquent behaviour during adolescence, deviant peer involvement during adolescence, being born into a single-parent home, and family instability. It also appears that the impact of these relationships extends to the next generation as well. Research on the multigenerational transmission of health problems suggests that the impact of adolescent risk-taking behaviour by aggressive girls (including sexual intercourse and teenage pregnancy) for

their offspring's overall functioning is great (DeGenna, Stack, Serbin, Ledingham & Schwartzman, 2007; Serbin & Karp, 2004). In the Concordia Longitudinal Study, which began in 1976, researchers followed a group of youth from disadvantaged neighbourhoods from childhood into adulthood, measuring their childhood behaviour problems, adolescent risk-taking behaviour and adult health issues. The original participants are now parents, and their children have also been followed in terms of their own childhood behaviour and health. Almost seventy percent of female participants who scored in the highly aggressive range and the highly withdrawn range in childhood were at increased risk of engaging in health-risky behaviours during adolescence (i.e., regularly used cigarettes, alcohol and/or drugs or became pregnant in the adolescent years), which in turn was associated with more pediatric health problems in their offspring (DeGenna et al. 2007; Serbin & Karp, 2004). Given the results of the Christchurch study and the Concordia study, it appears that female antisocial and risk-taking behaviour during adolescence is followed by significant negative consequences, both for the adolescent girl herself, as well as for her offspring.

Another finding of the current study that is also worth noting is the absence of group differences with respect to friendship and romantic relationship factors. No gender or recruitment group differences were found for the number of friends identified, gender ratio of friends, median length of relationship, or mean peer closeness rating. These findings may be surprising to some, as many in the field assume that antisocial youth are not well attached to prosocial establishments such as schools or clubs, and thus assume that these youth are not well attached to their peers either. In their study of females incarcerated in a juvenile justice facility, Pleydon & Schnier (2001) also found no differences between females in the justice system and a community comparison group in their perceptions of their friendships with their best friend and their relationships with their peer group. While

some would argue that self-report data may not be the most accurate means of obtaining such information, the argument put forth by many regarding self-report data on peer variables seems relevant (Caspi et al., 1993; Moffitt et al., 2001) . This perspective argues that a youth's perception of their peers' behaviour is just as important, if not more so, than the peers' actual behaviour in terms of the impact it has on the youth (Caspi et al., 1993; Moffitt et al., 2001). It stands to reason that the youth's perception of relationship characteristics such as feeling supported, feeling accepted and feeling close to peers, are important facets of a relationship. All four subgroups of youth in the current study displayed mean scores in the normal range on the Children's Social Desirability Scale, suggesting that socially desirable responding was not different across the four groups and thus likely did not differentially affect scores related to relationships with peers.

Strengths and Weaknesses of the Present Study

One of the purposes of the current study was to include youth exhibiting a wide range of delinquent behaviour, including the extreme end of the spectrum – those often missed in school-based studies (Elliott et al., 1989; Moffitt et al., 2001). It was assumed that sampling this extreme group more fully might change the pattern of results found regarding the importance of pubertal development and peer relationships for delinquent and other risky behaviours. Additionally, the present study sought to include both males and females so that gender comparisons could be made. The present sample did include males and females reporting a wide range of antisocial and risk-taking behaviours, including status offences (consuming alcohol, running away from home, skipping school), minor offenses (stealing something worth less than five dollars, avoiding paying for food, bus rides or movies), drug-related offenses (selling marijuana and 'hard' drugs), relational

aggression (spreading secrets, gossip or lies about someone, giving someone the ‘silent treatment’), serious violent offenses (gang fights, attacking someone with the idea of seriously hurting or killing them) and theft (motor vehicle, greater than fifty dollars, breaking into a building or car with the intent to steal). Sexual assault and paying someone for sexual intercourse were the only two offences that were asked about that were not endorsed. The generalizability of the study was further increased because the Justice Group participants were drawn from two quite different jurisdictions in Canada with contrasting approaches to the identification and treatment of young offenders that included both diversion and incarceration. The study provided significant evidence for the importance of the relationship between involvement with delinquent peers and antisocial and risk-taking behaviours in this extreme sample and did so for both genders. Additionally, the fact that all of the behaviours of interest (delinquency, drug use and sexual behaviour) were measured using multi-item scales, most with strong psychometric properties, adds credence to the reliability of the results.

While one of the strengths of the study was its inclusion of youth reporting a wide range of antisocial and risk-taking behaviours, the study would have benefited from a greater sample size, one that included more youth who fell in the “middle ground” with respect to delinquency, drug use, and sexual behaviour. The youth recruited through their contact with the justice system, many of whom were incarcerated at the time of the study, likely represented the extreme end of the spectrum in terms of antisocial behaviour. In essence, this is quite probably a different group of youth than have been included in previous studies that employed schools as the contact place for participant recruitment. Recall that 58% of males and 35% of females in the justice group were not enrolled in school at the time of the study (or prior to incarceration if incarcerated at the time of their

participation). These youth would not have been candidates for participation in school based studies, and likely several other youth in the justice group who reported having sporadic school attendance during the interview would not have been included in these studies either. However, any attempt to match groups on percentage attending school would probably have made the groups less representative of their underlying populations on other important variables, such as their overall level of adjustment, and might have unmatched them on other variables (Meehl, 1971). The youth in the volunteer community group may represent the opposite end of the spectrum in terms of their higher prosocial attitudes and behaviour. Thus, there may be an important sector of the young population that is not represented in this study: youth who are intermediate in terms of their risk-taking and antisocial behaviour. It may be that pubertal timing may affect these youth more so than the extreme ends of the spectrum. In future studies, recruitment through a greater number of community agencies, including the Boys and Girls Club, both mainstream and alternative high schools, after-school programs, and summer camps for pre-teens and teenagers, might make the likelihood of including this intermediate group more likely.

While the issues of participant age and the representativeness of both the community and justice group samples have already been discussed, one other point concerning the issue of measurement of pubertal timing in the study should be addressed in future research on this topic. The Pubertal Development Scale, a well-researched and frequently used measure, relies on the youth's own perception of their level of development and timing in relation to their peers. Moreover, this measure was administered some time after many of the youth underwent the physical changes asked about in the questionnaire. Although the tool has been used with youth of similar ages in other research, and in general its psychometric properties has been found to be acceptable by psychosocial research

standards, more sophisticated methods of assessing pubertal development exist. One method of circumventing the issue of the youth's perception of their timing would be to have medical professionals trained in assessing the Tanner stages of development complete physical examinations of the participants. Alternatively, several assays, 'spit tests', and blood tests exist to measure levels of the hormones associated with puberty. If these examinations or tests were conducted with participants throughout the course of pubertal development, and the sample size was large enough, researchers could rate pubertal timing based on the study's sample norms, and thereby eliminate the need for youth to rate their own timing.

In conclusion, despite the limitations of this study, it included several strengths which allowed it to make an important contribution to the pre-existing literature on the subject. First, the study succeeded in its objective of including youth who were involved in the justice system, arguably some of the most involved in antisocial and risk-taking behaviour, and who are yet often absent from studies on the subject because of the logistical and ethical problems inherent in recruiting them and their occasional reluctance to release information about legal aspects of their experience. As the results indicated, several of the relationships among the variables of interest were different for this group of youth, as compared to the community comparison group. This suggests that social processes and relationships - particularly as they relate to behaviour - may be different for these youth. Although the present study does not answer the how or why of these differences, it does indicate that one cannot assume that what is known about mainstream youth and how they relate to their peers, romantic and otherwise, applies to youth who have been excluded from the mainstream. By not including these youth in studies that are often designed to inform the way we as a society treat and care for these individuals within the

school system, health care, social services and the justice system, we are surely wasting resources and servicing these youth in a less than optimal fashion.

Another strength of the current study was its inclusion of both males and females, which allowed for gender comparisons. Given that it has been only relatively recently that research has begun to include female participants in investigations of antisocial behaviour (Guthrie, et al., 2002; Office of Juvenile Justice and Delinquency Prevention, 1998), in combination with the recent societal interest in violent acts committed by females, this study's inclusion of both males and females allowed for a clearer understanding of the similarities and differences in behaviour and relationships between the two genders. Most striking was the finding that females recruited through the Justice system reported having the greatest age difference between themselves and their romantic partners, as compared to the three other participant groups. Second, based on the results of the current study, and others (Moffitt et al., 2001), it appears that males begin their foray into antisocial behaviour earlier than females, and then engage in a wider variety of delinquent acts than do females. Additionally, in looking at those youth who engage in a significant amount of delinquent behaviour (i.e., the Justice Group), no gender difference was found in the frequency of delinquent behaviour in the past year. Although gender differences were found in lifetime frequency of delinquent behaviour, this may be due to the gender difference in age of onset, such that males would accrue more behaviours or acts due to beginning such behaviour at an earlier age. Moreover, no gender differences in drug use and sexual behaviour were noted. Overall, it appears that males and females are similar in terms of the overall frequency of their antisocial and risk-taking behaviours as well as in their association with delinquent peers when one includes individuals at the extreme end of the delinquency spectrum. However, the age of delinquent peers for males and females seem to differ

somewhat and the nature of their relationship with such peers also appear to be somewhat different (i.e., sexual vs. nonsexual).

Another strength of this study that has not yet been discussed is the way in which the data was collected. Given the nature of the information being collected, particularly in the case of the youth who were incarcerated or otherwise involved in the justice system, it was particularly important to ensure that youth felt that their responses were completely confidential. Although the youth were referred to the study by Department of Justice Staff or others affiliated with their care within the Justice system, the interviews and data collection were conducted by someone not affiliated with the justice system. This distinction was made clear for all youth during the completion of the consent forms at the start of the data collection session. Moreover, the individual conducting the sessions was well trained in working with youth clinically and was able to make the youth feel at ease relatively quickly within the sessions. During the interview, several youth initially hesitated before giving their answer, but after assurance of confidentiality was given, reported their behaviour quite freely and joked openly with the interviewer during the session. Additionally, the youth often gave details of their behaviour that was unsolicited, but nevertheless added credibility to the truthfulness of the answers being provided. In short, the youth appeared to feel comfortable sharing their stories and describing their behaviour history to the interviewer. Also to be noted is the fact that the majority of the data was collected via individual interviews, as opposed to written self-report formats, which allowed the interviewer to ask clarifying questions and thus gain the most accurate information possible.

In terms of subsequent research to build on this research, future studies would do well to use a longitudinal design that follows youth from the ages of nine or ten until the age of

18, through the period of pubertal development and through the peak years of antisocial and risk-taking behaviour (Moffitt et al., 2001). Such a design would enable researchers to obtain answers regarding a) whether association with delinquent peers precedes engagement in antisocial and risk-taking behaviour or whether it is the result of such behaviour, and b) whether the effects of pubertal development and timing are important but perhaps time-limited or extend until the end of adolescence. A longitudinal design would also allow for the study of peer relationship stability across the teenage years.

In terms of measures used, it would be optimal to use physician- or nurse-rated assessments of Tanner staging of pubertal development, as it is the secondary, outwardly visible, characteristics of pubertal development that seem to be important for the social impact of pubertal changes. Alternatively, other objective measures, including hormone assays, measurement of testicular volume or areolar diameter, could also be used to determine stage of pubertal development. However, these methods are not without their problems as well, as standardized norms have not been agreed upon and overlap between stages exists in the norms that have been created (Dorn et al., 2006). It would also be interesting to compare a youth's own ratings of their pubertal timing with physician ratings in order to determine whether or not it was the actual timing or the youth's perception of their timing relative to that of their peers that was most closely related to delinquent acts. In looking at measures of antisocial behaviour and drug use, the National Youth Survey's modules on assessing these behaviours are excellent in the sense that they included a wide variety of behaviours and drugs, and included secondary information that could be used to further understand the nature of youths' engagement in such behaviours.

As previously noted, including youth who are moderate in terms of their antisocial and risk-taking behaviour would enhance the generalizability of the study's findings by

allowing for a sample that more closely resembles the Canadian population of youth. Optimally, one would have a sample that includes youth who are engaging in low, moderate, and high levels of each behaviour of interest, perhaps with oversampling of youth similar to those in the justice group in the current study. This would enable, given large enough sample sizes, for the development of different causal models for individuals at different points on the continuum. It would also be worthwhile to gain a better understanding of the youth's living situation, including the stability of the living situation, how long non-biological adults have been living in the home, family/home income, and neighbourhood socioeconomic status in order to assess their respective contributions in causal models.

Why children and youth choose to engage in delinquent behaviour is a complex question – one that likely has a multitude of complex answers and includes a large number of factors including both risk and protective factors. The pathways to drug use and sexual activity are likely equally complex. Moreover, the risk and protective factors that contribute to these pathways, many of which are also complex issues in and of themselves, are time-dependent and may change as youth develop. Although many researchers have been successful in identifying many of the important factors that have an impact on youth behaviour, our understanding of how all of these factors work together continues to be limited. There is little doubt that both peer affiliation and pubertal development are important aspects of adolescent development; nevertheless, it remains to be understood how these processes interact with one another, as well as with other important processes to impact behaviour.

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Appendix A

Recruitment Scripts for Staff of Cooperating Agencies

Recruitment Script (for IWK/Department of Justice staff)

Hi _____, I wanted to tell you about a study that the IWK is doing in conjunction with the University of Ottawa. The study is about friendships, romantic relationships, biological development and risk-taking. I want to tell you a bit about the study and then you can decide if you want the researcher to contact you about being part of the study.

- Your participation is completely optional – whether or not you decide to participate in the study will not affect how you are treated here at the IWK/Department of Justice
- The whole thing will take 1.5 to 2 hours and can be done all at once or in a few sessions
- Participation includes both an interview, where the researcher will ask you questions about your friends and romantic partners, past drug use and past illegal behaviors, and completing a few questionnaires about sexual experience, puberty and relationships with members of the opposite sex.
- This information will not be shared with anyone else, including your parents, the police and IWK/Department of Justice staff.
- Lastly, you will be paid \$15 for your time.

Do you have any questions? Does this sound like something that you might be interested in doing? If it is something you might like to participate in, I can have the researcher contact you with more information.

IF YES, staff member gives youth the consent to contact form

IF NO, staff member reiterates that their choice will not affect their relationship with the IWK/Department of Justice.

Recruitment Script (for PIP/EOYOS staff)

Hi _____, I wanted to tell you about a study that PIP/EOYOS is doing in conjunction with the University of Ottawa. The study is about friendships, romantic relationships, biological development and risk-taking. I want to tell you a bit about the study and then you can decide if you want the researcher to contact you about being part of the study.

- Your participation is completely optional – whether or not you decide to participate in the study will not affect how you are treated here at PIP/EOYOS
- The whole thing will take 1.5 to 2 hours and can be done all at once or in a few sessions
- Participation includes both an interview, where the researcher will ask you questions about your friends and romantic partners, past drug use and past illegal behaviors, and completing a few questionnaires about sexual experience, puberty and relationships with members of the opposite sex.
- This information will not be shared with anyone else, including the police and PIP/EOYOS staff.
- Lastly, you will be paid \$15 for your time.

Do you have any questions? Does this sound like something that you would be interested in doing?

IF YES, staff member gives youth the consent to contact form

IF NO, staff member reiterates that their choice will not affect their participation in PIP/EOYOS.

Appendix B

Consent to Contact Forms



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Consent to Contact

I (print name) _____, give permission for a researcher from the University of Ottawa, Laurie Clark, to contact me to tell me about a study that she is conducting. I understand that I am only giving consent to be contacted in order to be given information about the study and that I am not obliged to participate in the study. I also understand that my decision of whether or not to participate in the study will not affect my relationship with the Preventative Intervention Program (PIP), the Ottawa Police or the Boy's and Girl's Club of Ottawa.

Signature: _____ Date: _____

Telephone number: _____
(If cannot be reached by telephone, please provide your address below.)

Best time and/or day to reach me: _____
Parent/Guardian's Name (printed): _____

Thank you very much for agreeing to be contacted about this research study. Laurie will contact you within the next two weeks to give you some more information about the purpose of the study and what participation in the study involves.

Appendix C

Information Letters (including Consent Forms) for Youth Involved in the Justice System



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CONSENT FORM – EASTERN ONTARIO YOUNG OFFENDER SERVICES

Dear Parent or Guardian,

My name is Laurie Clark and I am a graduate student in psychology at the University of Ottawa. I am doing a research project on the risky behaviours of youth and their friends. The goal of this project is to better understand how biological development (puberty) and friendships are related to rule-breaking behaviours. Here are some answers to frequently asked questions about participating in my study.

What will the study involve?

The study involves participating in an interview that will last from 1.5 to 2 hours. During this time, your son/daughter will be asked to answer some questions about the following: 1) their friends and the time they spend with them, 2) their romantic partners and the time that they spend with them, 3) their participation in a variety of rule-breaking activities, and 4) their use of alcohol and drugs. They will also be asked to complete some questionnaires about their level of biological development (puberty), time spent with peers of the opposite sex and sexual behaviour. It has been my experience that, despite the types of questions I will be asking, youth are generally comfortable talking about their friends and romantic partners and what they do together.

Where will the interview take place?

As their time is valuable, I make every effort to meet with youth in places that are convenient for them. Interviews will take place at the University of Ottawa or at an Eastern Ontario Young Offender Services facility. Please note that your son/daughter's decision about whether or not to participate in the study *will not* affect any future contact they may have with the University of Ottawa or Eastern Ontario Young Offender Services (EOYOS). Participation in this study is voluntary.

Who will have access to the information my son/daughter tells you?

Only myself and my supervisor, Dr. Jane Ledingham, will have access to the information collected from this study – the information your son/daughter provides will not be shared with the police, EOYOS staff, or yourself. Every effort will be made to keep your son/daughter's responses to questions confidential. However, please note that confidentiality will be broken if any of the following circumstances arise: a) your son or daughter discloses that s/he is planning to harm herself or someone else, b) your son or daughter discloses that s/he or another child is being abused, c) your son or daughter indicates that s/he has been sexually abused by a health care professional, or d) the researcher and his/files are subpoenaed by the court. If any of these circumstances arise, the youth will be contacted to inform them of the situation.

Although the major results of the study will be made public, only summaries of how the entire group of participants responded will be used: no individual participant will be



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identified in the public reports. In addition, consent forms with your son/daughter's name and participant identification number will be stored separately from the rest of the information collected, which will only bear the participant's identification number. All forms and data will be stored at the University of Ottawa.

What will my son/daughter gain by participating in the study?

Youth will be compensated for their time with a small monetary gift (Note: actual monetary value will be inserted here as soon as funding is determined). This gift will be given to all participants who present for an interview, regardless of whether or not they complete the entire interview and the paper and pencil questionnaires.

Do you have ethics approval for your study?

This study has been reviewed and approved by the Research Ethics Board of the University of Ottawa.

We invite your son/daughter to participate in this study and would greatly appreciate your help. If you or your son/daughter have any questions about the study, please feel free to contact me at _____ or my supervisor, Dr. Jane Ledingham, at _____
Thank you very much for your time.

Please keep this letter and a copy of the consent form for your files.

Sincerely,

Laurie Clark, B.Sc.

Doctoral Candidate in Clinical Psychology, University of Ottawa



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PARENT/GUARDIAN CONSENT FORM

Jane Ledingham, Ph.D., C.Psych,
& Laurie Clark, B.Sc.
School of Psychology, University of Ottawa

I, _____ (Please print your name), agree for my son/daughter _____ (Please print son/daughter's name), to participate in the research conducted by Laurie Clark of the School of Psychology at the University of Ottawa. The project is under the supervision of Dr. Jane Ledingham. The purpose of the research is to gain a better understanding of the roles that biological development and friendships play in the risk-taking behaviour of youth. My son/daughter's participation will consist essentially of attending one 1.5-2 hour session, during which s/he will be asked to complete an interview and some paper-and-pencil questionnaires. I understand that since the interview and questionnaires deal with personal information, it may cause my child to feel some embarrassment. Every effort will be made by the researcher to minimise this.

I am free to withdraw my son/daughter from the project at any time, before or during the interview session. I understand that the information my son/daughter shares will remain strictly confidential and will not be shared with the Ottawa Police Department, EOYOS staff or myself.

Any questions about my son/daughter's rights as a research participant may be addressed to the Protocol Officer for Ethics in Research, 550 Cumberland Street, Room 159, (613) 562-5841 or ethics@uottawa.ca.

There are two copies of the consent form, one of which I keep. If I have any questions about the conduct of the research project, I may contact the researcher or her supervisor at

Parent/Guardian's signature: _____ Date: _____

Researcher's Signature: _____ Date: _____



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School of Psychology

PARTICIPANT CONSENT FORM

Jane Ledingham, Ph.D., C.Psych,
& Laurie Clark, B.Sc.
School of Psychology

I, _____ (Please print your name), agree to participate in the research conducted by Laurie Clark of the School of Psychology at the University of Ottawa. The project is under the supervision of Dr. Jane Ledingham. The purpose of the research is to gain a better understanding of the roles that biological development and friendships play in the risk-taking behaviour of youth. My participation will consist essentially of attending one 1.5-2 hour session, during which I will be asked to complete an interview and some paper-and-pencil questionnaires. I understand that since the interview and questionnaires deal with personal information, it may cause me to feel some embarrassment. Every effort will be made by the researcher to minimise this.

I am free to withdraw from the project at any time, before or during the interview. I understand that the information I give will be used only for research purposes and it will not be shared with the Ottawa Police Department, EOYOS staff or my parents/guardian.

Any questions my rights as a research participant may be addressed to Protocol Officer for Ethics in Research, 550 Cumberland Street, Room 159, (613) 562-5841 or ethics@uottawa.ca. There are two copies of the consent form, one of which I keep. If I have any questions about the conduct of the research project, I may contact the researcher or her supervisor at _____.

Participant's signature: _____ Date: _____

Researcher's signature: _____ Date: _____



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École de psychologie

University of Ottawa
School of Psychology

Participant Copy
PARENT/GUARDIAN CONSENT FORM

Jane Ledingham, Ph.D., C.Psych,
& Laurie Clark, B.Sc.
School of Psychology, University of Ottawa

I, _____ (Please print your name), agree for my son/daughter _____ (Please print son/daughter's name), to participate in the research conducted by Laurie Clark of the School of Psychology at the University of Ottawa. The project is under the supervision of Dr. Jane Ledingham. The purpose of the research is to gain a better understanding of the roles that biological development and friendships play in the risk-taking behaviour of youth. My son/daughter's participation will consist essentially of attending one 1.5-2 hour session, during which s/he will be asked to complete an interview and some paper-and-pencil questionnaires. I understand that since the interview and questionnaires deal with personal information, it may cause my child to feel some embarrassment. Every effort will be made by the researcher to minimise this.

I am free to withdraw my son/daughter from the project at any time, before or during the interview session. I understand that the information my son/daughter shares will remain strictly confidential and will not be shared with the Ottawa Police Department, EOYOS staff or myself.

Any questions about my son/daughter's rights as a research participant may be addressed to the Protocol Officer for Ethics in Research, 550 Cumberland Street, Room 159, (613) 562-5841 or ethics@uottawa.ca.

There are two copies of the consent form, one of which I keep. If I have any questions about the conduct of the research project, I may contact the researcher or her supervisor at (

Parent/Guardian's signature: _____ Date: _____

Researcher's Signature: _____ Date: _____

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📠 613 562-5147

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University of Ottawa
School of Psychology

Participant Copy
PARTICIPANT CONSENT FORM

Jane Ledingham, Ph.D., C.Psych,
& Laurie Clark, B.Sc.
School of Psychology

I, _____ (Please print your name), agree to participate in the research conducted by Laurie Clark of the School of Psychology at the University of Ottawa. The project is under the supervision of Dr. Jane Ledingham. The purpose of the research is to gain a better understanding of the roles that biological development and friendships play in the risk-taking behaviour of youth. My participation will consist essentially of attending one 1.5-2 hour session, during which I will be asked to complete an interview and some paper-and-pencil questionnaires. I understand that since the interview and questionnaires deal with personal information, it may cause me to feel some embarrassment. Every effort will be made by the researcher to minimise this.

I am free to withdraw from the project at any time, before or during the interview. I understand that the information I give will be used only for research purposes and it will not be shared with the Ottawa Police Department, EOYOS staff or my parents/guardian.

Any questions my rights as a research participant may be addressed to Protocol Officer for Ethics in Research, 550 Cumberland Street, Room 159, (613) 562-5841 or ethics@uottawa.ca. There are two copies of the consent form, one of which I keep. If I have any questions about the conduct of the research project, I may contact the researcher or her supervisor at

Participant's signature: _____ Date: _____

Researcher's signature: _____ Date: _____



Information and Consent Form

Study Title: Puberty, Peers and Risky Behaviour: An Examination of the Relationships between Pubertal Development, Peer Affiliation and Delinquency.

Partners:

University of Ottawa
Jane Ledingham, PhD
Psychologist
School of Psychology
Doctoral Supervisor

University of Ottawa
Laurie Clark
Doctoral Candidate
School of Psychology
&
Psychology Resident
IWK

IWK Health Centre
Sharon Clark, PhD
Psychologist
Adolescent Centre for
Treatment (ACT)

Nova Scotia Department of Justice
Janis Aitken
Provincial Program Officer
Dartmouth, Nova Scotia

Alyson Muzzerall
Superintendent,
Waterville Detention Centre

Ann Guinchard
Associate FOIPOP Coordinator
Information Management Branch
Waterville, Nova Scotia

Diana MacKinnon
Administrator

Introduction:

You are invited to participate in a research study entitled *Puberty, Peers and Risky Behaviour*. It is important that you understand the purpose of the study, how it may affect you, the risks and benefits of taking part and what you will be asked to do, before you decide if you want to take part in this project. This information and consent form is meant to help you decide if it is in your best interest to participate in this study. Participation is entirely voluntary (your choice). If you have any questions that this form does not answer, the person talking to you about the study will be happy to give you further information.

Purpose of the Study

We are collecting information about the activities of youth and are interested in knowing more about adolescent relationships and what youth do with and without their friends. We are also interested in learning more about biological development (puberty) in youth today. The goal of

this study is to better understand how biological development (puberty) and friendships are related to rule-breaking behaviours.

Study Design

The study involves participating in an interview that will last from 1.5 to 2 hours. During this time, you will be asked to answer some questions about the following: 1) your friends and the time that you spend with them, 2) your past and current romantic partners and the time that you spend with them, 3) your participation in a variety of rule-breaking activities, and 4) your use of alcohol and drugs. You will then be asked to complete some paper-and-pencil questionnaires about your level of biological development (puberty), time spent with peers of the opposite sex and sexual experience. If you have trouble with reading, the paper-and-pencil questionnaires can be read aloud to you. The interview and questionnaire completion will take place in a private area. In return for your time you will receive \$15.

Two groups of youth will be interviewed: those who are currently involved with the justice system and those who have not had contact with the justice system. One of the main purposes of the study is to determine whether or not there are differences between boys and girls, and between youth involved in the justice system and those who are not, in terms of their biological development, their relationships with peers and their activities.

Potential Risks and Benefits

There are no known physical or emotional risks associated with completing the interview or questionnaires. However, you may not like all of the questions that you are asked and it is possible that you may experience some distress while completing the interview and questionnaires. If you find any questions too distressing, you do not have to answer them. You are free to withdraw from the study at any time, or you can skip certain questions, take a break, or book another time to complete the interview and questionnaires. If you wish to get some help with any of the issues raised during the interview or while completing the questionnaires, the interviewer is a trained psychology resident and will be happy to assist you in making contact with services through the IWK.

Additionally, the interviewer will take some time at the end of the session to answer any questions you may have about the topics addressed in the study. You will also be provided with a list of youth-friendly mental health services available in the community in the event that you would like services to help you address difficulties that you are experiencing.

In terms of benefits, there is no guarantee that you will benefit personally from participating in this study. However, the information that you provide will help us to better understand youth and their relationships with their peers. Additionally, the information that you provide will help us to serve youth better, including those youth who are involved in "health-risky" behaviours (drug and alcohol use, sexual behaviour) and those who are involved in the justice system.

Withdrawal from Participation

Participation in the study is entirely voluntary (your choice). You may decide not to participate or you may withdraw from participation at any time. This will not affect your relationship(s) with the IWK Health Centre or the Department of Justice in any way.

All participants who show up for a session will be provided with compensation, regardless of whether they withdraw from the study during the session or not. Additionally, if you decide to withdraw from the study, you have the choice to withdraw the information that you have already given at any time, either during or after the interview.

Confidentiality

Your name will not appear on the interview sheets nor will it appear on any questionnaires that you complete. Instead, you will be assigned a research participant number that will allow the research team to keep your information together. But it will not be linked to your name. All information will be kept in a locked cabinet, first at the IWK, and then at the University of Ottawa. The consent form with your name on it will be kept separate from your interview and questionnaires. Study information will only be available to the researchers directly involved in this study, except under circumstances when the law requires that information be disclosed. Information may also be made available to the Research Services office at the IWK Health centre, should it be required for an audit. Any publications or presentations resulting from this research study will not identify you, or any other participant, personally. Study records will be kept for 5 years following the publication of the results of this project, and will then be destroyed.

This study deals with detailed information about the sexual experiences of young people. We are required by law to report incidents of sexual abuse involving youth to local child protection authorities. Sexual abuse that must be reported include situations where people agree to have sex but their relationship is against the law. For example, if a person is under 16 it is illegal for someone who has authority over them, like a teacher or coach, to have sex with them. If a person is under 14 it is illegal for someone more than 2 years older than them to have sex with them. If there is a need to make a child abuse report (i.e., if you gave us information that we need to report) we will let you know that are going to contact the authorities. If you have any questions about sexual abuse and the duty to report, we encourage you to ask the interviewer before you begin the questionnaire.

Contact Person

You have the right to ask questions about this study at any time. If you have any questions about this study or your participation, please contact Laurie Clark (Psychology Department, 470-7272) or the Research Services Office at the IWK Health Centre (902-470-8675).

Communication of Results

Results will be made available to you at the completion of the study. If you wish to have a copy of the results, please indicate so on the consent page. A copy of the results will be mailed to you as soon as they are available.

Study Title: **Puberty, Peers and Risky Behavior: An Examination of the Relationships between Pubertal Development, Peer Affiliation and Delinquency.**

Participant Consent

I have read or had read to me this Information and Consent Form and have had the chance to ask questions which have been answered to my satisfaction before signing my name. I understand the nature of the study and I understand the potential risks of my participation. I understand that I have the right to withdraw from the study at any time without affecting my care in any way. I have received a copy of the Information and Consent Form for future reference. I freely agree to participate in this research study.

Name of Participant (Please Print): _____

Participant Signature: _____

Date: _____ Time: _____

STATEMENT BY PERSON PROVIDING INFORMATION ON STUDY

I have explained the nature and demands of the research study and judge that the participant named above understands the nature and demands of the study.

Name (Please Print): _____

Signature: _____ Position: _____

Date: _____ Time: _____

STATEMENT BY PERSON OBTAINING CONSENT

I have explained the nature of the consent process to the participant and judge that they understand that participation is voluntary and that they may withdraw at any time from participating.

Name (Please Print): _____

Signature: _____ Position: _____

Date: _____ Time: _____

Would you like to obtain a copy of the results of this study, when it is complete?

No ☐ Yes ☐ if yes, please print your full mailing address

Street name & number: _____

City & Postal code: _____

Study Title: **Puberty, Peers and Risky Behavior: An Examination of the Relationships between Pubertal Development, Peer Affiliation and Delinquency.**

Participant Consent

I have read or had read to me this Information and Consent Form and have had the chance to ask questions which have been answered to my satisfaction before signing my name. I understand the nature of the study and I understand the potential risks of my participation. I understand that I have the right to withdraw from the study at any time without affecting my care in any way. I have received a copy of the Information and Consent Form for future reference. I freely agree to participate in this research study.

Name of Participant (Please Print): _____

Participant Signature: _____

Date: _____ Time: _____

STATEMENT BY PERSON PROVIDING INFORMATION ON STUDY

I have explained the nature and demands of the research study and judge that the participant named above understands the nature and demands of the study.

Name (Please Print): _____

Signature: _____ Position: _____

Date: _____ Time: _____

STATEMENT BY PERSON OBTAINING CONSENT

I have explained the nature of the consent process to the participant and judge that they understand that participation is voluntary and that they may withdraw at any time from participating.

Name (Please Print): _____

Signature: _____ Position: _____

Date: _____ Time: _____

Would you like to obtain a copy of the results of this study, when it is complete?

No ☐ Yes ☐ if yes, please print your full mailing address

Street name & number: _____

City & Postal code: _____

Appendix D

Telephone Recruitment Scripts

Telephone Script: Delinquency (PIP/EOYOS) group

Hi, my name is Laurie Clark and I am a researcher from the University of Ottawa. On _____ (day) of last week, you completed a form at PIP/EOYOS stating that you were interested in receiving information about a study that I am conducting about youth and their friends. Do you remember signing that form?

Are you still interested in learning more about the study and possibly participating in it?
If no,

Okay, thank you for your time. Have a good evening.

If yes,

Let me tell you a bit about the reason I am doing this study and about what your participation would involve. I am interested in learning more about what youth and their friends do together. I just want to get a picture of what kids today are doing and who they are doing it with. So, let me tell you what participation involves. There is an interview and some paper and pencil questionnaires. In the interview I will ask you questions about your friends and romantic partners and the amount of time you hang out together. I will also ask you questions about risk-taking behaviors that you might have done in the past. So there will be some questions about rule-breaking, such as skipping school and lying, questions about illegal behaviors, such as stealing, and drug and alcohol use.

There are also a few paper and pencil questionnaires that ask you about some more private things. These tasks focus on puberty and sexual experience. You do not put your name on these questionnaires and I will not be looking at them until I have collected information from many youth.

I should tell you that everything that you tell me will be kept private – it will not be shared with the police, your parents, nor PIP/EOYOS staff. This being said, I should tell you that there are a few exceptions to this privacy. These exceptions have to do with safety and harm to yourself and others. If you tell me that you are going to hurt yourself or others or that a child is being abused, then I would have to take the proper steps to ensure that everyone is safe. Do you have any questions about this?

So, if you decide to participate in the study, it would take approximately 2 hours and you will be paid \$15 for your time. Your participation is completely voluntary: no one at PIP/EOYOS will know whether or not you have agreed to participate and it will not affect your relationship with PIP/EOYOS.

Does this sound like something you would be interested in participating in? Because of your age, you need to have permission from a parent or guardian. Is there someone there now whom I could speak to about the study?

IF adolescent indicates interest and parent is home, review same information with parent/guardian. Then state that I will be sending an information package that includes consent forms to their house. State that I will call back in about a week to answer any further questions parents or youth may have about the study and set up an interview time if they are still interested in participating.

IF adolescent indicates interest but parent is not home, Well that's okay. What I will do is send an information package to your home if that is okay with you. The package will give your parent/guardian some information about the study and will also contain consent forms that need to be signed by you and a parent/guardian.

What I would like to do is call you back in about a week or so, when you have received the information package and that way I can answer any questions that your parent/guardian might have. We can also set an appointment at that time if you are still interested in participating.

Would that be okay with you?

Thanks a lot.

Telephone Script: Community/Comparison group

Hi, my name is Laurie Clark and I am a researcher from the University of Ottawa. On _____ (day) of last week, you left me a message regarding an advertisement posted in the community regarding a study that I am conducting about youth and their friends. Do you remember seeing the ad and/or leaving the message?

Are you still interested in learning more about the study and possibly participating in it?

If no,

Okay, thank you for your time. Have a good evening.

If yes,

Let me tell you a bit about the reason I am doing this study and about what your participation would involve. I am interested in learning more about what youth and their friends do together. I just want to get a picture of what kids today are doing and who they are doing it with. So, let me tell you what participation involves. There is an interview and some paper and pencil questionnaires. In the interview I will ask you questions about your friends and romantic partners and the amount of time you hang out together. I will also ask you questions about risk-taking behaviors that you might have done in the past. So there will be some questions about rule-breaking, such as skipping school and lying, questions about illegal behaviors, such as stealing, and drug and alcohol use.

There are also a few paper and pencil questionnaires that ask you about some more private things. These tasks focus on puberty and sexual experience. You do not put your name on these questionnaires and I will not be looking at them until I have collected information from many youth.

I should tell you that everything that you tell me will be kept private – it will not be shared with the police or your parents. This being said, I should tell you that there are a few exceptions to this privacy. These exceptions have to do with safety and harm to yourself and others. If you tell me that you are going to hurt yourself or others or that a child is being abused, then I would have to take the proper steps to ensure that everyone is safe. Do you have any questions about this?

So, if you decide to participate in the study, it would take approximately 2 hours and you will be paid \$15 for your time. Your participation is completely voluntary. Does this sound like something you would be interested in participating in? Because of your age, you need to have permission from a parent or guardian. Is there someone there now whom I could speak to about the study?

If the adolescent indicates interest and parent is home, review same information with parent/guardian. Then state that I will be sending an information package that includes

consent forms to their house. State that I will call back in about a week to answer any further questions parents or youth may have about the study and set up an interview time if they are still interested in participating.

If the adolescent indicates interest but parent is not home:

Well that's okay. What I will do is send an information package to your home if that is okay with you. The package will give your parent/guardian some information about the study and will also contain consent forms that need to be signed by you and a parent/guardian.

What I would like to do is call you back in about a week or so, when you have received the information package and that way I can answer any questions that your parent/guardian might have. We can also set an appointment at that time if you are still interested in participating.

Would that be okay with you?

Thanks a lot.

Telephone Script: Halifax

IWK/Department of Justice Group:

Hi, my name is Laurie Clark and I am both a psychology resident at the IWK hospital and a researcher from the University of Ottawa. On _____(day) of last week, you completed a form at the IWK/Department of Justice stating that you were interested in receiving information about a study that I am conducting about youth and their friends. Do you remember signing that form?

Are you still interested in learning more about the study and possibly participating in it?

Community/Comparison Group:

Hi, my name is Laurie Clark and I am a researcher from the University of Ottawa. On _____(day) of last week, you called this number regarding a study that I am conducting about youth and their friends. Do you remember seeing an ad for a study and calling this number?

Are you still interested in learning more about the study and possibly participating in it?

If no,

Okay, thank you for your time. Have a good evening.

If yes,

Let me tell you a bit about the reason I am doing this study and about what your participation would involve. I am interested in learning more about what youth and their friends do together. I just want to get a picture of what kids today are doing and who they are doing it with. So, let me tell you what participation involves. There is an interview and some paper and pencil questionnaires. In the interview I will ask you questions about your friends and romantic partners and the amount of time you hang out together. I will also ask you questions about risk-taking behaviors that you might have done in the past. So there will be some questions about rule-breaking, such as skipping school and lying, questions about illegal behaviors, such as stealing, and drug and alcohol use.

There are also a few paper and pencil questionnaires that ask you about some more private things. These tasks focus on puberty and sexual experience. You do not put your name on these questionnaires and I will not be looking at them until I have collected information from many youth.

I should tell you that everything that you tell me will be kept private – it will not be shared with the police, your parents, nor IWK/Department of Justice staff. This being said, I should tell you that there are a few exceptions to this privacy. These exceptions have to do with safety and harm to yourself and others. IF you tell me that you are going to hurt yourself or others or that a child is being abused, then I would have to take the proper steps to ensure that everyone is safe. Do you have any questions about this?

So, if you decide to participate in the study, it would take approximately 2 hours and you will be paid \$15 for your time. Your participation is completely voluntary: no one at IWK/Department of Justice will know whether or not you have agreed to participate and it will not affect your relationship with IWK/Department of Justice.

Does this sound like something you would be interested in participating in?

IF youth indicates that they are not interested in participating: “Okay, thank you for your time. Have a good evening.”

IF adolescent indicates interest, ask “ Would you like to talk to your parents about this before making an appointment?”

IF youth indicates that they would like to speak to their parents first, I will arrange a time to call them back, to inquire if they are still interested in participating.

IF the youth indicates that they would like to book an appointment, I will book the appointment with the youth.

Appendix E

Information Packages for Community Group Participants



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Dear Parent or Guardian,

My name is Laurie Clark and I am a graduate student in psychology at the University of Ottawa. I am doing a research project on the risky behaviours of youth and their friends. The goal of this project is to better understand how biological development (puberty) and friendships are related to rule-breaking behaviours. Here are some answers to frequently asked questions about participating in my study.

What will the study involve?

The study involves participating in an interview that will last from 1.5 to 2 hours. During this time, your son/daughter will be asked to answer some questions about the following: 1) their friends and the time they spend with them, 2) their romantic partners and the time that they spend with them, 3) their participation in a variety of rule-breaking activities, and 4) their use of alcohol and drugs. They will also be asked to complete some questionnaires about their level of biological development (puberty), time spent with peers of the opposite sex and sexual behaviour. It has been my experience that, despite the types of questions I will be asking, youth are generally comfortable talking about their friends and romantic partners and what they do together.

Where will the interview take place?

Interviews will take place at the University of Ottawa. Please note that your son/daughter's decision about whether or not to participate in the study *will not* affect any future contact they may have with the University of Ottawa. Participation in this study is voluntary.

Who will have access to the information my son/daughter tells you?

Only myself and my supervisor, Dr. Jane Ledingham, will have access to the information collected from this study – the information your son/daughter provides will not be shared with others, including yourself. Every effort will be made to keep your son/daughter's responses to questions confidential. However, please note that confidentiality will be broken if any of the following circumstances arise: a) your son or daughter discloses that s/he is planning to harm herself or someone else, b) your son or daughter discloses that s/he or another child is being abused, c) your son or daughter indicates that s/he has been sexually abused by a health care professional, or d) the researcher and his/files are subpoenaed by the court. If any of these circumstances arise, the youth will be contacted to inform them of the situation.

Although the major results of the study will be made public, only summaries of how the entire group of participants responded will be used: no individual participant will be identified in the public reports. In addition, consent forms with your son/daughter's name and participant identification number will be stored separately from the rest of the information collected, which will only bear the participant's identification number. All forms and data will be stored at the University of Ottawa.

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📠 613 562-5147

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What will my son/daughter gain by participating in the study?

Youth will be compensated for their time with \$15. This gift will be given to all participants who present for an interview, regardless of whether or not they complete the entire interview and the paper and pencil questionnaires.

Do you have ethics approval for your study?

This study has been reviewed and approved by the Research Ethics Board of the University of Ottawa.

We invite your son/daughter to participate in this study and would greatly appreciate your help. If you or your son/daughter have any questions about the study, please feel free to contact me at _____ my supervisor, Dr. Jane Ledingham, at

Thank you very much for your time.

Please keep this letter and a copy of the consent form for your files.

Sincerely,

Laurie Clark, B.Sc.

Doctoral Candidate in Clinical Psychology, University of Ottawa



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Université d'Ottawa
École de psychologie

University of Ottawa
School of Psychology

PARENT/GUARDIAN CONSENT FORM

Jane Ledingham, Ph.D., C.Psych,
& Laurie Clark, B.Sc.
School of Psychology, University of Ottawa

I, _____ (Please print your name), agree for my son/daughter
_____ (Please print son/daughter's name), to participate
in the research conducted by Laurie Clark of the School of Psychology at the University
of Ottawa. The project is under the supervision of Dr. Jane Ledingham. The purpose of
the research is to gain a better understanding of the roles that biological development and
friendships play in the risk-taking behaviour of youth. My son/daughter's participation
will consist essentially of attending one 1.5-2 hour session, during which s/he will be
asked to complete an interview and some paper-and-pencil questionnaires. I understand
that since the interview and questionnaires deal with personal information, it may cause
my child to feel some embarrassment. Every effort will be made by the researcher to
minimise this.

I am free to withdraw my son/daughter from the project at any time, before or during the
interview session. I understand that the information my son/daughter shares will remain
strictly confidential and will not be shared with anyone, including me.

Any questions about my son/daughter's rights as a research participant may be addressed
to the Protocol Officer for Ethics in Research, 550 Cumberland Street, Room 159, (613)
562-5841 or ethics@uottawa.ca.

There are two copies of the consent form, one of which I keep. If I have any questions
about the conduct of the research project, I may contact the researcher or her supervisor
at _____

Parent/Guardian's signature: _____ Date: _____

Researcher's Signature: _____ Date: _____



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University of Ottawa
School of Psychology

PARTICIPANT CONSENT FORM

Jane Ledingham, Ph.D., C.Psych,
& Laurie Clark, B.Sc.
School of Psychology

I, _____ (Please print your name), agree to participate in the research conducted by Laurie Clark of the School of Psychology at the University of Ottawa. The project is under the supervision of Dr. Jane Ledingham. The purpose of the research is to gain a better understanding of the roles that biological development and friendships play in the risk-taking behaviour of youth. My participation will consist essentially of attending one 1.5-2 hour session, during which I will be asked to complete an interview and some paper-and-pencil questionnaires. I understand that since the interview and questionnaires deal with personal information, it may cause me to feel some embarrassment. Every effort will be made by the researcher to minimise this.

I am free to withdraw from the project at any time, before or during the interview. I understand that the information I give will be used only for research purposes and it will not be shared with my parents/guardian.

Any questions my rights as a research participant may be addressed to Protocol Officer for Ethics in Research, 550 Cumberland Street, Room 159, (613) 562-5841 or ethics@uottawa.ca. There are two copies of the consent form, one of which I keep. If I have any questions about the conduct of the research project, I may contact the researcher or her supervisor at .

Participant's signature: _____ Date: _____

Researcher's signature: _____ Date: _____



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University of Ottawa
School of Psychology

PARENT/GUARDIAN CONSENT FORM – Parent/Guardian Copy

Jane Ledingham, Ph.D., C.Psych,
& Laurie Clark, B.Sc.
School of Psychology, University of Ottawa

I, _____ (Please print your name), agree for my son/daughter
_____ (Please print son/daughter's name), to participate
in the research conducted by Laurie Clark of the School of Psychology at the University
of Ottawa. The project is under the supervision of Dr. Jane Ledingham. The purpose of
the research is to gain a better understanding of the roles that biological development and
friendships play in the risk-taking behaviour of youth. My son/daughter's participation
will consist essentially of attending one 1.5-2 hour session, during which s/he will be
asked to complete an interview and some paper-and-pencil questionnaires. I understand
that since the interview and questionnaires deal with personal information, it may cause
my child to feel some embarrassment. Every effort will be made by the researcher to
minimise this.

I am free to withdraw my son/daughter from the project at any time, before or during the
interview session. I understand that the information my son/daughter shares will remain
strictly confidential and will not be shared with anyone, including me.

Any questions about my son/daughter's rights as a research participant may be addressed
to the Protocol Officer for Ethics in Research, 550 Cumberland Street, Room 159, (613)
562-5841 or ethics@uottawa.ca.

There are two copies of the consent form, one of which I keep. If I have any questions
about the conduct of the research project, I may contact the researcher or her supervisor
at _____

Parent/Guardian's signature: _____ Date: _____

Researcher's Signature: _____ Date: _____



uOttawa

Université d'Ottawa
École de psychologie

University of Ottawa
School of Psychology

PARTICIPANT CONSENT FORM – Parent/Guardian Copy

Jane Ledingham, Ph.D., C.Psych,
& Laurie Clark, B.Sc.
School of Psychology

I, _____ (Please print your name), agree to participate in the research conducted by Laurie Clark of the School of Psychology at the University of Ottawa. The project is under the supervision of Dr. Jane Ledingham. The purpose of the research is to gain a better understanding of the roles that biological development and friendships play in the risk-taking behaviour of youth. My participation will consist essentially of attending one 1.5-2 hour session, during which I will be asked to complete an interview and some paper-and-pencil questionnaires. I understand that since the interview and questionnaires deal with personal information, it may cause me to feel some embarrassment. Every effort will be made by the researcher to minimise this.

I am free to withdraw from the project at any time, before or during the interview. I understand that the information I give will be used only for research purposes and it will not be shared with my parents/guardian.

Any questions my rights as a research participant may be addressed to Protocol Officer for Ethics in Research, 550 Cumberland Street, Room 159, (613) 562-5841 or ethics@uottawa.ca. There are two copies of the consent form, one of which I keep. If I have any questions about the conduct of the research project, I may contact the researcher or her supervisor at :

Participant's signature: _____ Date: _____

Researcher's signature: _____ Date: _____



Information and Consent Form

Study Title: Puberty, Peers and Risky Behaviour: An Examination of the Relationships between Pubertal Development, Peer Affiliation and Delinquency.

Partners:

University of Ottawa
Jane Ledingham, PhD
Psychologist
School of Psychology
Doctoral Supervisor

University of Ottawa
Laurie Clark
Doctoral Candidate
School of Psychology
&
Psychology Resident
IWK

IWK Health Centre
Sharon Clark, PhD
Psychologist
Adolescent Centre for
Treatment (ACT)

Nova Scotia Department of Justice
Janis Aitken
Provincial Program Officer
Dartmouth, Nova Scotia

Alyson Muzzerall
Superintendent,
Waterville Detention Centre

Ann Guinchard
Associate FOIPOP Coordinator
Information Management Branch
Waterville, Nova Scotia

Diana MacKinnon
Administrator

Introduction:

You are invited to participate in a research study entitled *Puberty, Peers and Risky Behaviour*. It is important that you understand the purpose of the study, how it may affect you, the risks and benefits of taking part and what you will be asked to do, before you decide if you want to take part in this project. This information and consent form is meant to help you decide if it is in your best interest to participate in this study. Participation is entirely voluntary (your choice). If you have any questions that this form does not answer, the person talking to you about the study will be happy to give you further information.

Purpose of the Study

We are collecting information about the activities of youth and are interested in knowing more about adolescent relationships and what youth do with and without their friends. We are also interested in learning more about biological development (puberty) in youth today. The goal of

this study is to better understand how biological development (puberty) and friendships are related to rule-breaking behaviours.

Study Design

The study involves participating in an interview that will last from 1.5 to 2 hours. During this time, you will be asked to answer some questions about the following: 1) your friends and the time that you spend with them, 2) your past and current romantic partners and the time that you spend with them, 3) your participation in a variety of rule-breaking activities, and 4) your use of alcohol and drugs. You will then be asked to complete some paper-and-pencil questionnaires about your level of biological development (puberty), time spent with peers of the opposite sex and sexual experience. If you have trouble with reading, the paper-and-pencil questionnaires can be read aloud to you. The interview and questionnaire completion will take place in a private area. In return for your time you will receive \$15.

Two groups of youth will be interviewed: those who are currently involved with the justice system and those who have not had contact with the justice system. One of the main purposes of the study is to determine whether or not there are differences between boys and girls, and between youth involved in the justice system and those who are not, in terms of their biological development, their relationships with peers and their activities.

Potential Risks and Benefits

There are no known physical or emotional risks associated with completing the interview or questionnaires. However, you may not like all of the questions that you are asked and it is possible that you may experience some distress while completing the interview and questionnaires. If you find any questions too distressing, you do not have to answer them. You are free to withdraw from the study at any time, or you can skip certain questions, take a break, or book another time to complete the interview and questionnaires. If you wish to get some help with any of the issues raised during the interview or while completing the questionnaires, the interviewer is a trained psychology resident and will be happy to assist you in making contact with services through the IWK.

Additionally, the interviewer will take some time at the end of the session to answer any questions you may have about the topics addressed in the study. You will also be provided with a list of youth-friendly mental health services available in the community in the event that you would like services to help you address difficulties that you are experiencing.

In terms of benefits, there is no guarantee that you will benefit personally from participating in this study. However, the information that you provide will help us to better understand youth and their relationships with their peers. Additionally, the information that you provide will help us to serve youth better, including those youth who are involved in "health-risky" behaviours (drug and alcohol use, sexual behaviour) and those who are involved in the justice system.

Withdrawal from Participation

Participation in the study is entirely voluntary (your choice). You may decide not to participate or you may withdraw from participation at any time. This will not affect your relationship(s) with the IWK Health Centre or the Department of Justice in any way.

All participants who show up for a session will be provided with compensation, regardless of whether they withdraw from the study during the session or not. Additionally, if you decide to withdraw from the study, you have the choice to withdraw the information that you have already given at any time, either during or after the interview.

Confidentiality

Your name will not appear on the interview sheets nor will it appear on any questionnaires that you complete. Instead, you will be assigned a research participant number that will allow the research team to keep your information together. But it will not be linked to your name. All information will be kept in a locked cabinet, first at the IWK, and then at the University of Ottawa. The consent form with your name on it will be kept separate from your interview and questionnaires. Study information will only be available to the researchers directly involved in this study, except under circumstances when the law requires that information be disclosed. Information may also be made available to the Research Services office at the IWK Health centre, should it be required for an audit. Any publications or presentations resulting from this research study will not identify you, or any other participant, personally. Study records will be kept for 5 years following the publication of the results of this project, and will then be destroyed.

This study deals with detailed information about the sexual experiences of young people. We are required by law to report incidents of sexual abuse involving youth to local child protection authorities. Sexual abuse that must be reported include situations where people agree to have sex but their relationship is against the law. For example, if a person is under 16 it is illegal for someone who has authority over them, like a teacher or coach, to have sex with them. If a person is under 14 it is illegal for someone more than 2 years older than them to have sex with them. If there is a need to make a child abuse report (i.e., if you gave us information that we need to report) we will let you know that are going to contact the authorities. If you have any questions about sexual abuse and the duty to report, we encourage you to ask the interviewer before you begin the questionnaire.

Contact Person

You have the right to ask questions about this study at any time. If you have any questions about this study or your participation, please contact Laurie Clark (Psychology Department, 470-7272) or the Research Services Office at the IWK Health Centre (902-470-8675).

Communication of Results

Results will be made available to you at the completion of the study. If you wish to have a copy of the results, please indicate so on the consent page. A copy of the results will be mailed to you as soon as they are available.

Study Title: **Puberty, Peers and Risky Behavior: An Examination of the Relationships between Pubertal Development, Peer Affiliation and Delinquency.**

Participant Consent

I have read or had read to me this Information and Consent Form and have had the chance to ask questions which have been answered to my satisfaction before signing my name. I understand the nature of the study and I understand the potential risks of my participation. I understand that I have the right to withdraw from the study at any time without affecting my care in any way. I have received a copy of the Information and Consent Form for future reference. I freely agree to participate in this research study.

Name of Participant (Please Print): _____

Participant Signature: _____

Date: _____ Time: _____

STATEMENT BY PERSON PROVIDING INFORMATION ON STUDY

I have explained the nature and demands of the research study and judge that the participant named above understands the nature and demands of the study.

Name (Please Print): _____

Signature: _____ Position: _____

Date: _____ Time: _____

STATEMENT BY PERSON OBTAINING CONSENT

I have explained the nature of the consent process to the participant and judge that they understand that participation is voluntary and that they may withdraw at any time from participating.

Name (Please Print): _____

Signature: _____ Position: _____

Date: _____ Time: _____

Would you like to obtain a copy of the results of this study, when it is complete?

No ☐ Yes ☐ if yes, please print your full mailing address

Street name & number: _____

City & Postal code: _____

Appendix F

Measures

Relations with Peers of the Opposite Sex: Female Version

1. I have fewer boys as friends than other girls.

Strongly
Agree

Agree

Disagree

Strongly
Disagree

2. To amuse myself, I prefer to go out with a group where there are boys and girls.

Strongly
Agree

Agree

Disagree

Strongly
Disagree

3. Generally speaking, boys of my age and I see things in the same way.

Strongly
Agree

Agree

Disagree

Strongly
Disagree

4. I am often in conflict with boys of my age.

Strongly
Agree

Agree

Disagree

Strongly
Disagree

5. I have the feeling that my boy companions like me (in a friendly way, not in a sexual way).

Strongly
Agree

Agree

Disagree

Strongly
Disagree

6. I frequently discuss topics that interest us with boys of my age.

Strongly
Agree

Agree

Disagree

Strongly
Disagree

7. I am at ease when talking to boys of my age.

Strongly
Agree

Agree

Disagree

Strongly
Disagree

8. When things are going badly, I can count on my boy companions.

Strongly
Agree

Agree

Disagree

Strongly
Disagree

Relations with Peers of the Opposite Sex: Male Version

1. I have fewer girls as friends than other boys.

Strongly
Agree

Agree

Disagree

Strongly
Disagree

2. To amuse myself, I prefer to go out with a group where there are boys and girls.

Strongly
Agree

Agree

Disagree

Strongly
Disagree

3. Generally speaking, girls of my age and I see things in the same way.

Strongly
Agree

Agree

Disagree

Strongly
Disagree

4. I am often in conflict with girls of my age.

Strongly
Agree

Agree

Disagree

Strongly
Disagree

5. I have the feeling that my girl companions like me (in a friendly way, not in a sexual way).

Strongly
Agree

Agree

Disagree

Strongly
Disagree

6. I frequently discuss topics that interest us with girls of my age.

Strongly
Agree

Agree

Disagree

Strongly
Disagree

7. I am at ease when talking to girls of my age.

Strongly
Agree

Agree

Disagree

Strongly
Disagree

8. When things are going badly, I can count on my girl companions.

Strongly
Agree

Agree

Disagree

Strongly
Disagree

Physical Development Scale

Today's date: _____
Month Day Year

Your I.D. number: _____

Your birthdate: _____
Month Day YearSex: Male Female
(Circle one)

Grade: _____

All girls change and develop physically, mentally, and emotionally in the process of "growing up". During the teenage years, the growth and development of your body is an especially important part of this process of becoming a grown up. Since it is normal for different girls to go through these physical changes at different times, we are interested in learning about what changes are usually happening in girls when they are your age. We would like to ask you to help us get this information by answering some questions about how you are currently growing and developing.

When you are answering these questions, it is important that you remember that no one will see your answers other than the female researchers doing this study. No one else will know what you answered. Therefore, please be as honest as possible since your answers will help us learn about girls your age.

Please remember also to read the directions and each question carefully. If you have any questions, please let the interviewer know.

REMEMBER – ALL ANSWERS YOU GIVE WILL BE KEPT PRIVATE

HOW TO ANSWER THE QUESTIONS

G

Section I: To answer each question, please circle the number in front of the answer that best describes what is happening to you. Please choose only one answer for each question.

1. Would you say that your growth in height:
 1. has not yet begun to spurt ("spurt" means more growth than usual)
 2. has barely started
 3. is definitely underway
 4. seems completed
2. And how about the growth of body hair ("body hair" means underarm and pubic hair)? Would you say that your body hair has:
 1. not yet started growing
 2. has barely started growing
 3. is definitely underway
 4. seems completed
3. Have you noticed any skin changes, especially pimples?
 1. not yet started showing changes
 2. have barely started showing changes
 3. skin changes are definitely underway
 4. skin changes seem completed
4. Have your breasts begun to grow?
 1. not yet started growing
 2. has barely started changing
 3. breast growth is definitely underway
 4. breast growth seems completed
5. Do you think your development is any earlier or later than most other girls your age?
 1. much earlier
 2. somewhat earlier
 3. about the same
 4. somewhat later
 5. much later

Section II: To answer each question, fill in the blanks with the best answer you can give.

6. Have you begun to menstruate?

1. no
2. yes

If you answered "yes," how old were you when you first menstruated?

Age: I was _____ years and _____ months old when I began to menstruate.

7. How tall are you? Height: I am _____ feet and _____ inches tall.
8. How much do you weigh? Weight: I weigh _____ pounds.

Physical Development Scale

Today's date: _____
Month Day Year

Your Initials: _____

Your I.D. number: _____

Your birthdate: _____
Month Day Year

Sex: Male Female
(Circle one)

Grade: _____

All boys change and develop physically, mentally, and emotionally in the process of "growing up". During the teenage years, the growth and development of your body is an especially important part of this process of becoming a grown up. Since it is normal for different boys to go through these physical changes at different times, we are interested in learning about what changes are usually happening in boys when they are your age. We would like to ask you to help us get this information by answering some questions about how you are currently growing and developing.

When you are answering these questions, it is important that you remember that no one will see your answers other than the researchers doing this study. No one else will know what you answered. Therefore, please be as honest as possible since your answers will help us learn about boys your age.

Please remember also to read the directions and each question carefully. If you have any questions, please let the interviewer know.

REMEMBER – ALL ANSWERS YOU GIVE WILL BE KEPT PRIVATE

HOW TO ANSWER THE QUESTIONS

B

Section I: To answer each question, please circle the number in front of the answer that best describes what is happening to you. Please choose only one answer for each question.

1. Would you say that your growth in height:
 1. has not yet begun to spurt ("spurt" means more growth than usual)
 2. has barely started
 3. is definitely underway
 4. seems completed
2. And how about the growth of body hair ("body hair" means underarm and pubic hair)? Would you say that your body hair has:
 1. not yet started growing
 2. has barely started growing
 3. is definitely underway
 4. seems completed
3. Have you noticed any skin changes, especially pimples?
 1. not yet started showing changes
 2. have barely started showing changes
 3. skin changes are definitely underway
 4. skin changes seem completed
4. Have you noticed a deepening of your voice?
 1. not yet started changing
 2. has barely started changing
 3. voice change is definitely underway
 4. voice change seems completed
5. Have you begun to grow hair on your face?
 1. not yet started growing hair
 2. has barely started growing hair
 3. facial hair growth is definitely underway
 4. facial hair growth seems completed
6. Do you think your development is any earlier or later than most other boys your age?
 1. much earlier
 2. somewhat earlier
 3. about the same
 4. somewhat later
 5. much later

Section II: To answer each question, fill in the blanks with the best answer you can give.

7. How tall are you? Height: I am ____ feet and ____ inches tall.
8. How much do you weigh? Weight: I weigh ____ pounds.

Sexual Behaviour Questionnaire – Female

This survey contains questions about things that you may have done with a girl or boy. I understand that you may not have done any of them and may have no desire to do them now or in the future. I am asking these questions because they are important in understanding people's sexual activity.

Please remember that your answers will be kept confidential and that your name is not on this survey.

1. Have you ever had vaginal intercourse (a boy put his penis in your vagina)? *(Check one)*
☐ No ☐ Yes ☐ Not Sure

2. How old were you the FIRST TIME you had vaginal intercourse?

(Please check one)

- ☐ I have never had sexual intercourse
- ☐ Less than 10 years old
- ☐ 10 years old
- ☐ 11 years old
- ☐ 12 years old
- ☐ 13 years old
- ☐ 14 years old
- ☐ 15 years old
- ☐ 16 years olds
- ☐ 17 years old
- ☐ 18 years old or older

3. Have you ever had anal intercourse? (a boy put his penis in your anus/butt)? *(Check one)*
☐ No ☐ Yes ☐ Not Sure

4. How old were you the FIRST TIME you had anal intercourse?

(Please check one)

- ☐ I have never had sexual intercourse
- ☐ Less than 10 years old
- ☐ 10 years old
- ☐ 11 years old
- ☐ 12 years old
- ☐ 13 years old
- ☐ 14 years old
- ☐ 15 years old
- ☐ 16 years olds
- ☐ 17 years old
- ☐ 18 years old or older

5. How many different times IN YOUR LIFETIME have the following activities occurred? (If you can't remember please give your best estimate.)

	Never	1 time	2-5 times	6-10 times	11-20 times	21-50 times	51+ times
You kissed a boy.							
You kissed a girl.							
A boy touched/fondled your breasts.							
A girl touched/fondled your breasts.							
A boy played with your vagina/clitoris (hands only).							
A girl played with your vagina/clitoris or you played with a girl's vagina/clitoris (hands only).							
You played with a boy's penis (hands only).							
A boy put his mouth on your vagina/clitoris.							
A girl put her mouth on your vagina/clitoris or you put your mouth on a girl's vagina/clitoris.							
You put your mouth on a boy's penis.							
A boy put his penis in your vagina.							
A boy put his penis in your anus (butt).							

6. With how many different people in your lifetime have you done the following activities? If you have never done it, check the "No one" box. (If you can't remember please give your best estimate.)

	No One	1 person	2 people	3-5 people	6-11 people	12 + people
A boy played with your vagina/clitoris (hands only)						
A girl played with your vagina/clitoris or you played with another girl's vagina/clitoris (hands only).						
You played with a boy's penis (hands only).						
A boy put his mouth on your vagina/clitoris.						
A girl put her mouth on your vagina/clitoris or you put your mouth on a girl's vagina/clitoris.						
You put your mouth on a boy's penis.						
A boy put his penis in your vagina.						
A boy put his penis in your anus (butt).						

7. Have you ever been pregnant or are you pregnant now? (Check one)

____ No

____ Yes

____ Not Sure

8. When you have had intercourse (vaginal or anal), what method of protection do you use to prevent sexually transmitted diseases and pregnancy?

(Check all that apply)

- ☐ I have never had sexual intercourse
☐ No method of protection was used
☐ Condoms
☐ Birth Control Pills
☐ Depo-Provera
☐ Withdrawal
☐ Other (please specify): _____

9. Do you usually drink alcohol or use drugs before sexual intercourse (i.e., have you used these substances on occasions when you have engaged in oral, vaginal or anal sex?)

(Check all that apply)

- ☐ I have never had sexual intercourse
☐ No, neither drugs nor alcohol
☐ Yes, I often have been drinking
☐ Yes, I often have been using drugs (specify which drugs: _____)

10. Thinking back to the list of friends and romantic partners we made at the beginning of the interview, with whom have you given oral sex? (i.e., put your mouth on a boy's penis or put your mouth on a girl's clitoris/vagina)? (Please list all friends and romantic partners that you have done this with).

Boys

Girls

11. Thinking back to the list of friends and romantic partners we made at the beginning of the interview, with whom have you received oral sex from (they have put their mouth on your clitoris/vagina)?

Boys

Girls

12. Thinking back to the list of friends and romantic partners we made at the beginning of the interview, with whom have you had vaginal intercourse with (a boy put his penis in your vagina)?

Boys

13. Thinking back to the list of friends and romantic partners we made at the beginning of the interview, with whom have you had anal intercourse with (a boy put his penis in your anus/butt)?

Boys

Sexual Behaviour Questionnaire – Male

This survey contains questions about things that you may have done with a girl or boy. I understand that you may not have done any of them and may have no desire to do them now or in the future. I am asking these questions because they are important in understanding people's sexual activity.

Please remember that your answers will be kept confidential and that your name is not on this survey.

1. Have you ever had vaginal intercourse (put your penis in a girl's vagina)? *(Check one)*
_____ No _____ Yes _____ Not Sure

2. How old were you the FIRST TIME you had vaginal intercourse?

(Please check one)

- _____ I have never had sexual intercourse
- _____ Less than 10 years old
- _____ 10 years old
- _____ 11 years old
- _____ 12 years old
- _____ 13 years old
- _____ 14 years old
- _____ 15 years old
- _____ 16 years olds
- _____ 17 years old
- _____ 18 years old or older

3. Have you ever had anal intercourse? (put your penis in a girl's or boy's anus/butt)? *(Check one)*
_____ No _____ Yes _____ Not Sure

4. How old were you the FIRST TIME you had anal intercourse?

(Please check one)

- _____ I have never had sexual intercourse
- _____ Less than 10 years old
- _____ 10 years old
- _____ 11 years old
- _____ 12 years old
- _____ 13 years old
- _____ 14 years old
- _____ 15 years old
- _____ 16 years olds
- _____ 17 years old
- _____ 18 years old or older

5. How many different times IN YOUR LIFETIME have the following activities occurred? (If you can't remember please give your best estimate.)

	Never	1 time	2-5 times	6-10 times	11-20 times	21-50 times	51+ times
You kissed a girl.							
You kissed a boy.							
You touched/fondled with a girl's breasts.							
You played with a girl's vagina/clitoris (hands only).							
A girl played with your penis (hands only).							
A boy played with your penis or you played with a boy's penis (hands only).							
You put your mouth on a girl's vagina/clitoris (oral sex).							
A girl put her mouth on your penis (oral sex).							
A boy put his mouth on your penis or you put your mouth on another boy's penis (oral sex).							
You put your penis in a girl's vagina.							
You put your penis in a girl or boy's anus (butt).							

6. With how many different people in your lifetime have you done the following activities? If you have never done it, check the "No one" box. (If you can't remember please give your best estimate.)

	No One	1 person	2 people	3-5 people	6-11 people	12 + people
You played with a girl's vagina/clitoris (hands only)						
A girl played with your penis (hands only).						
A boy played with your penis or you played with another boy's penis (hands only).						
You put your mouth on a girl's vagina/clitoris (oral sex).						
A girl put her mouth on your penis (oral sex).						
A boy put his mouth on your penis or you put your mouth on a boy's penis (oral sex).						
You put your penis in a girl's vagina.						
You put your penis in a girl's or boy's anus (butt) or another boy put his penis in your anus.						

7. Have you ever gotten a girl pregnant? (Check one)

____ No

____ Yes

____ Not Sure

8. When you have had sexual intercourse (vaginal or anal), what method of protection do you use to prevent sexually transmitted diseases and pregnancy?

(Check all that apply)

- ☐ I have never had sexual intercourse
☐ No method of protection was used
☐ Condoms
☐ Birth Control Pills
☐ Depo-Provera
☐ Withdrawal
☐ Other (please specify): _____

9. Do you usually drink alcohol or use drugs before sexual intercourse (i.e., have you used these substances on occasions when you have engaged in oral, vaginal or anal sex?)

(Check all that apply)

- ☐ I have never had sexual intercourse
☐ No, neither drugs nor alcohol
☐ Yes, I often have been drinking
☐ Yes, I often have been using drugs (specify which drugs: _____)

10. Thinking back to the list of friends and romantic partners we made at the beginning of the interview, with whom have you given oral sex? (i.e., put your mouth on a boy's penis or put your mouth on a girl's clitoris/vagina)? (Please list all friends and romantic partners that you have done this with).

Girls

Boys

11. Thinking back to the list of friends and romantic partners we made at the beginning of the interview, with whom have you received oral sex from (they have put their mouth on your clitoris/vagina)?

Girls

Boys

12. Thinking back to the list of friends and romantic partners we made at the beginning of the interview, with whom have you had vaginal intercourse with (a boy put his penis in your vagina)?

Girls

13. Thinking back to the list of friends and romantic partners we made at the beginning of the interview, with whom have you had anal intercourse with (a boy put his penis in your anus/butt)?

Girls

Boys

THE CSD SCALE

Date

Grade

Birthdate

Sex (male or female)

This questionnaire lists a number of experiences that most youth have at one time or another. Read each of these carefully. After you have read one, decide whether it does or does not fit you. If it does, put a T (for true) in front of the statement; if it doesn't put an F (for false) in front of the statement.

If you have any questions at any time please ask.

- ___1. I always enjoy myself at a party.
- ___2. I tell a little lie sometimes.
- ___3. I never get angry if I have to stop in the middle of something I'm doing to eat dinner, or go to school.
- ___4. Sometimes I don't like to share my things with my friends.
- ___5. I am always respectful of older people.
- ___6. I would never hit a boy or girl who was smaller than me.
- ___7. Sometimes I do not feel like doing what my teachers want me to do.
- ___8. I never act "fresh" or "talk back" to my mother or father.
- ___9. When I make a mistake, I always admit I am wrong.
- ___10. I feel my parents do not always show good judgment.
- ___11. I have never felt like saying unkind things to a person.
- ___12. I always finish all of my homework on time.
- ___13. Sometimes I have felt like throwing or breaking things.
- ___14. I never let someone else get blamed for what I did wrong.
- ___15. Sometimes I say something just to impress my friends.
- ___16. I am always careful about keeping my clothing neat and my room picked up.
- ___17. I never shout when I feel angry.
- ___18. Sometimes I feel like staying home from school even if I am not sick.
- ___19. Sometimes I wish that my parents didn't check up on me so closely.
- ___20. I always help people who need help.

- ___21. Sometimes I argue with my mother to do something she doesn't want me to.
- ___22. I never say anything that would make a person feel bad.
- ___23. My teachers always know more about everything than I do.
- ___24. I am always polite even to people who are not very nice.
- ___25. Sometimes I do things I've been told not to do.
- ___26. I never get angry.
- ___27. I sometimes want to own things just because my friends have them.
- ___28. I always listen to my parents.
- ___29. I never forget to say "please" and "thank you."
- ___30. Sometimes I wish I could just "mess around" instead of having to go to school.
- ___31. I always wash my hands before every meal.
- ___32. Sometimes I dislike helping my parents even though I know they need my help around the house.
- ___33. I never find it hard to make friends.
- ___34. I have never been tempted to break a rule or a law.
- ___35. Sometimes I try to get even when someone does something to me I don't like.
- ___36. I sometimes feel angry when I don't get my way.
- ___37. I always help an injured animal.
- ___38. Sometimes I want to do things my parents think I am too young to do.
- ___39. I sometimes feel like making fun of other people.
- ___40. I have never borrowed anything without asking permission first.
- ___41. Sometimes I get annoyed when someone disturbs something I've been working on.
- ___42. I am always glad to cooperate with others.
- ___43. I never get annoyed when my best friend wants to do something I don't want to do.
- ___44. Sometimes I wish that the other kids would pay more attention to what I say.
- ___45. I always do the right things.
- ___46. Sometimes I don't like to obey my parents.
- ___47. Sometimes I don't like it when another person asks me to do things for him.
- ___48. Sometimes I get mad when people don't do what I want.

Name/Initials

[illegible]

1. *Journal of the American Medical Association*, 1997; 277: 1039-1043.

[illegible]

Demographic Information Form

Participant number: _____

Age: _____

Sex: M F T

Date of Birth: _____

Ethnicity: _____

What grade are you in? 5 6 7 8 9 10 11

Who do you live with? _____

Parents' education:

Mother (if applicable): _____

Father (if applicable): _____

Other (if applicable): _____

Other (if applicable): _____

NYS Friendship Module

Let's talk about your friends. Between _____ a year ago and the _____ just past.....

1)Was there a particular group of friends that you hung out with/spent most of your time with? (Not including boyfriend/girlfriend if living with them)

No (1)

Yes (2)

IF NO: Did you have any close friends?

No (1)

Yes (2)

2) Using the How Much Scale, do/did you feel any stress or pressure as a result of not having a group of friends?

A great deal	Quite a bit	Some	Not too much	Very little
5	4	3	2	1

IF YES TO #1:

3) Using the Importance Scale, how important is it for you to have a group of friends and be included in their activities?

V. imp	Pretty imp	Somewhat imp	Not too imp	Not imp at all
5	4	3	2	1

4) Could you please give me their first names or their initials so you can keep them in mind as we answer the next few sets of questions? (If respondent only lists one friend, go back to question 10. The following questions refer to more than one friend).

Name/Initials
(1-10)

Sex

Age

How long been friends

Closeness Rating
1(not)-10(very)

M/F

From now on when I use the term "friends", I am referring to these people.

5) What about romantic partners? Or people that you have been intimate with (fooled around with)? They may be the same people as above or different?

Name/Initials

Sex
M/F

Age

How long were you together?

Partner/Not a partner

Now when I ask you about some things that you have done, please keep in mind all of these people, both friends and romantic partners.

Between _____ a year ago and the _____ just past.....

6) On the average, how many weekday afternoons, Monday through Friday, from the end of school or work until dinner, have you spent

.....with your friends? 0 1 2 3 4 5
with a romantic partner? 0 1 2 3 4 5

7) On the average, how many weekday evenings, Monday through Friday, from dinnertime to bedtime, have you spent.....

.....with your friends? 0 1 2 3 4 5
with a romantic partner? 0 1 2 3 4 5

8).....(Using the How Much Scale) On the weekend, how much time have you generally spent.....

.....with your friends?

A great deal	Quite a bit	Some	Not too much	Very little
5	4	3	2	1

.....with a romantic partner?

A great deal	Quite a bit	Some	Not too much	Very little
5	4	3	2	1

9)..... On average, how many hours per week have you spent with your:

Friends? _____ hours.

Romantic partner? _____ hours.

10).....How much have your friends influenced what you've thought and done?

A great deal	Quite a bit	Some	Not too much	Very little
5	4	3	2	1

.....How much has your romantic partner influenced what you've thought and done?

A great deal	Quite a bit	Some	Not too much	Very little
5	4	3	2	1

11)..... Would you like to be the type of person that your closest friends are?

In all ways	In most ways	In some ways	In a few ways	Not at all
5	4	3	2	1

.....Would you like to be the type of person that your romantic partner is?

In all ways	In most ways	In some ways	In a few ways	Not at all
5	4	3	2	1

12).....How important is it for you to have a group of friends and be included in their activities?

V. imp	Pretty imp	Somewhat imp	Not too imp	Not imp at all
5	4	3	2	1

Between _____ a year ago and _____ just past.....

13)How many evenings in an average week, including weekends, have you gone on dates, to parties, or to other social activities?

0 1 2 3 4 5 6 7

14)How important has it been for you to have dates and go to parties and other social activities?

V. imp	Pretty imp	Somewhat imp	Not too imp	Not imp at all
5	4	3	2	1

15)All things considered, how satisfied have you been with your group of friends?

V. imp	Pretty imp	Somewhat imp	Not too imp	Not imp at all
5	4	3	2	1

16)To what extent have you and your friends shared the same interests and activities?

Share all interests/ activities	Share most interests/ activities	Share some interests/ activities	Share a few interests/ activities	Share no interests/ activities
5	4	3	2	1

17)How much stress or pressure has there been in your relationships with your friends?

A great deal	Quite a bit	Some	Not too much	Very little
5	4	3	2	1

18)..... How much warmth and affection have you received from your friends?

A great deal	Quite a bit	Some	Not too much	Very little
5	4	3	2	1

19)..... How much support and encouragement have you received from your friends?

A great deal	Quite a bit	Some	Not too much	Very little
5	4	3	2	1

20).....How much loyalty have you and your friends had for one another?

A great deal	Quite a bit	Some	Not too much	Very little
5	4	3	2	1

21) How would your friends describe you? Would they agree that you.....

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree	DK
a) Are well liked.						
b) Need help						
c) Are a bad person.						
d) Are often upset.						
e) Are a good citizen						
f) Get along well with other people.						
g) Are messed up.						
h) Break rules.						
i) Have a lot of personal problems.						
j) Get into trouble.						
k) Are likely to succeed.						
l) Do things that are against the law.						

22) How would your close friends react if you.....

	Strongly Dis-approve	Dis-approve	Neither approve nor disapprove	Approve	Strongly Approve	DK
a) Cheated on a school test?						
b) Stole something worth less than \$5?						
c) Sold hard drugs such as heroine, cocaine or LSD?						
d) Used marijuana or hashish?						
e) Stole something worth more than \$50?						
f) Hit or threatened to hit someone without any reason?						
g) Pressured or forced someone to do more sexually than s/he wanted to do?						
h) Purposely damaged or destroyed property that did not belong to you?						
i) Broke into a vehicle or building to steal something?						
j) Had sexual intercourse with someone of the opposite sex other than your boy/girlfriend?						
k) Deliberately injured your boy/girlfriend (e.g., hit, choked or cut him/her)?						

Now let's talk about your friends' behaviour during the period between _____ a year ago and _____ just past. I'd like to ask you how many of your friends have done each thing I will read to you.

Think of your close friends (**Ask these questions of all respondents unless they reiterate that they have no friends and cannot answer the questions**).

23) During the past year, how many of them have..... (REPEAT STEM SEVERAL TIMES)

	All of them	Most of them	Some of them	Very few of them	None of them	DK
a) Cheated on a school test?						
b) Purposely damaged or destroyed Property that did not belong to them?						
c) Used marijuana or hashish?						
d) Stole something worth less than \$5?						
e) Hit or threatened to hit someone without any reason?						
f) Used alcohol?						
g) Broke into a vehicle or building to steal something?						
h) Sold hard drugs such as heroine, cocaine or LSD?						
i) Stole something worth more than \$50?						
j) Suggested that you do something that is against the law?						
k) Used prescription drugs such as amphetamines or barbiturates when there was no medical need for them?						
l) <i>Used fake ID to buy alcohol (changed from: sold or given alcohol to kinds under 18)?</i>						
m) Pressured or forced someone to do more sexually than s/he wanted to do?						

Romantic Partner Module

24) Do you have a boyfriend or girlfriend? YES NO (IF NO SKIP NEXT SET OF QUESTIONS)

25a) How old is he/she? Birthdate: (Age difference:)

26) How long have you two been together?

27) How would your boyfriend/girlfriend react if you.....(REPEAT STEM SEVERAL TIMES)

	Strongly Disapprove	Dis-approve	Neither approve nor disapprove	Approve	Strongly Approve	DK
a) Cheated on a school test?						
b) Stole something worth less than \$5?						
c) Sold hard drugs such as heroine, cocaine or LSD?						
d) Used marijuana or hashish?						
e) Stole something worth more than \$50?						
f) Hit or threatened to hit someone without any reason?						
g) Used alcohol?						
h) Purposely damaged or destroyed property that did not belong to you?						
i) Broke into a vehicle or building to steal something?						
j) Deliberately injured him/her (e.g., hit, choked or cut him/her)?						

28) During the past year, has your boyfriend/girlfriend..... (REPEAT STEM SEVERAL TIMES)? Have they ever.....?

	Past Year	Ever	DK
a) Cheated on a school test?			
b) Purposely damaged or destroyed property that did not belong to them?			
c) Used marijuana or hashish?			
d) Stole something worth less than \$5?			
e) Hit or threatened to hit someone without any reason?			
f) Used alcohol?			
g) Broke into a vehicle or building to steal something?			
h) Sold hard drugs such as heroine, cocaine or LSD?			
i) Stole something worth more than \$50?			
j) Suggested that you do something that is against the law?			
k) Used prescription drugs such as amphetamines or barbiturates when there was no medical need for them?			
l) Used fake ID to buy alcohol?			
m) Pressured or forced someone to do more sexually than s/he wanted to do?			

National Youth Survey

Delinquency Module

(FIRST PASS: PAST YEAR)

(ASK PART A FOR ALL RESPONDENTS)

The next set of questions asks about things you may or may not have done in the past year. Please give me your best estimate of the exact number of times you have done each thing during the past year, that is, from Christmas a year ago to Christmas just past. If you have not done something at all in the past year, that number will be zero. (RECORD A SINGLE NUMBER, NOT A RANGE, AND ENTER "0" IF R NEVER ENGAGED IN A BEHAVIOR.)

(SECOND PASS: FOLLOWUP QUESTIONS)

(ASK PART B OF THESE QUESTIONS ONLY IF R SAID "YES" IN PART A.)

Now I would like to get a little more information about some of the things you said you had done in the past year.

-
- 85A. How many times in the past year have you purposely damaged property belonging to your parents or other family members? _____

Have you ever (READ ITEM)? YES _____ NO _____
If so, when? _____

Approximately how many times in your life have you (READ ITEM)? _____

Do you remember how old were you the first time you (READ ITEM)? _____

-
- 86A. How many times in the past year have you purposely damaged property belonging to a school? _____

Have you ever (READ ITEM)? YES _____ NO _____
If so, when? _____

Approximately how many times in your life have you (READ ITEM)? _____

Do you remember how old were you the first time you (READ ITEM)? _____

-
- 87A. How many times in the last year have you damaged or destroyed other property that did not belong to you? _____

Have you ever (READ ITEM)? YES _____ NO _____
If so, when? _____

Approximately how many times in your life have you (READ ITEM)? _____

Do you remember how old were you the first time you (READ ITEM)? _____

[Circle # of q you are following up on]

85-86-87 B (IF MORE THAN ZERO FOR ONE OR MORE OF 85A, 86A, 87A): You said that you had purposely damaged property that did not belong to you. Thinking of the last time you did this, ...

- a. What did you damage or destroy? (SPECIFY) _____
- b. What was the dollar value of the property you damaged or destroyed? \$ _____
- c. Were you alone or did others take part in this event? _____ 1 Alone
_____ 2 With Others → d. How many others? _____

If with others, who do you usually do this with? Are they any of the individuals on these lists (show participant friendship and romantic partner lists)?

If not, who were they?

Name	Age	Sex
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

- e. Had you been drinking or taking drugs before the incident?

No _____ 1 (Skip to g)

Yes _____ 2 → f. Had you been (READ CATEGORIES) _____ 1 drinking only?
_____ 2 using drugs only?
_____ 3 both drinking and using drugs?

- g. Were you arrested for this incident? No _____ 1 Yes _____ 2

[Circle # of q following up on]

85-86-87 B (IF MORE THAN ZERO FOR ONE OR MORE OF 85A, 86A, 87A): You said that you had purposely damaged property that did not belong to you. Thinking of the last time you did this, ...

- a. What did you damage or destroy? (SPECIFY) _____
- b. What was the dollar value of the property you damaged or destroyed? \$ _____
- c. Were you alone or did others take part in this event? _____ 1 Alone
_____ 2 With Others → d. How many others? _____

If with others, who do you usually do this with? Are they any of the individuals on these lists (show participant friendship and romantic partner lists)?

If not, who were they?

Name	Age	Sex
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

- e. Had you been drinking or taking drugs before the incident?

No _____ 1 (Skip to g)

Yes _____ 2 → f. Had you been (READ CATEGORIES) _____ 1 drinking only?
_____ 2 using drugs only?
_____ 3 both drinking and using drugs?

→ 88A. How many times in the last year have you purposely set fire to a building, a car, or other property or tried to do so? _____

Have you ever (READ ITEM).....? YES _____ NO _____
If so, when? _____

Approximately how many times in your life have you (READ ITEM)? _____

Do you remember how old were you the first time you (READ ITEM)? _____

88B. (IF MORE THAN ZERO FOR 88A): Thinking of the last time you purposely set fire or tried to set fire to something:

a. What did you set on fire or try to set on fire? (SPECIFY) _____

b. What was the dollar value of what you set on fire or tried to set on fire? \$ _____

c. Did you actually set it on fire? No ___1 Yes ___2

d. Were you alone or did others take part in this event? ___1 Alone
___2 With Others → e. How many others? ____

If with others, who do you usually do this with? Are they any of the individuals on these lists (show participant friendship and romantic partner lists)?

If not, who were they?

Name	Age	Sex
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

f. Had you been drinking or taking drugs before the incident?

No ___1 (Skip to h)

Yes ___2 → g. Had you been (READ CATEGORIES) ___1 drinking only?

___2 using drugs only?

___3 both drinking and using drugs?

h. Were you arrested for this incident? No ___1 Yes ___2

→ 89A. How many times in the last year have you stolen or tried to steal a motor vehicle such as a car or motorcycle? _____

Have you ever (READ ITEM)? YES _____ NO _____

If so, when? _____

Approximately how many times in your life have you (READ ITEM)? _____

Do you remember how old were you the first time you (READ ITEM)? _____

89B. (IF MORE THAN ZERO FOR 89A): You said that you had stolen or tried to steal a motor vehicle.

(REPEAT FOR EACH TIME) Thinking of the (last time/next to last time/time before that) you did this? ...

Last Time	Next to Last Time	Time Before That
-----------	-------------------	------------------

a. What kind of vehicle was it? (DO NOT READ CATEGORIES)

(1) Car	1	1	1
(2) Truck	2	2	2
(3) Motorcycle	3	3	3
(4) Other (SPECIFY):	4 _____	4 _____	4 _____

b. Did you actually steal it?

(1) No	1	1	1
(2) Yes	2	2	2

c. Who did the vehicle belong to?
(READ CATEGORIES ONLY IF UNCLEAR)

(1) Stranger	1	1	1
(2) Acquaintance	2	2	2
(3) Friend	3	3	3
(4) Family Member (SPECIFY):	4 _____	4 _____	4 _____
(5) Other (SPECIFY):	5 _____	5 _____	5 _____

d. How did you get the vehicle started?
(READ CATEGORIES ONLY IF UNCLEAR)

(1) Had the keys	1	1	1
(2) Hot wired the vehicle	2	2	2
(3) Keys in ignition	3	3	3
(4) Other (SPECIFY):	4 _____	4 _____	4 _____

e. What were you going to do with the vehicle?
(READ CATEGORIES ONLY IF UNCLEAR)

(1) Go riding	1	1	1
(2) Keep it	2	2	2
(3) Keep parts from it	3	3	3
(4) Sell it	4	4	4
(5) Sell parts from it	5	5	5
(6) Other (SPECIFY):	6 _____	6 _____	6 _____

89B. (continued)

Thinking of the (last time/next to the last time/time before that) you did this? . . .

	Next to Last Time	Time Before That
--	----------------------	---------------------

f. Were you alone or did others take part in this event?

(1) Alone	1	1	1
(2) With others	2	2	2

g. (IF WITH OTHERS, ASK): How many others? _____

(Last Time) If with others, who do you usually do this with? Are they any of the individuals on these lists (show participant friendship and romantic partner lists)?

If not, who were they?

Name	Age	Sex
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

(Next to Last time) If with others, who do you usually do this with? Are they any of the individuals on these lists (show participant friendship and romantic partner lists)?

If not, who were they?

Name	Age	Sex
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

h. Had you been drinking or taking drugs before the incident?

(1) No	1	1	1
(2) Yes	2	2	2

i. (IF YES, ASK): Had you been (READ CATEGORIES)

(1) drinking only	1	1	1
(2) using drugs only?	2	2	2
(3) both drinking and using drugs?	3	3	3

j. Were you arrested for this incident?

(1) No	1	1	1
(2) Yes	2	2	2

→ 90A. How many times in the past year have you taken a vehicle for a ride or drive without the owner's permission? _____

Have you ever (READ ITEM)? YES _____ NO _____

If so, when? _____

Approximately how many times in your life have you (READ ITEM)? _____

Do you remember how old were you the first time you (READ ITEM)? _____

90B. (IF MORE THAN ZERO FOR 90A): You said that you had taken a vehicle for a ride or drive without the owner's permission. Thinking of the last time you did this, ...

a. What kind of vehicle was it? (DO NOT READ CATEGORIES)

____ 1 Car ____ 2 Truck ____ 3 Motorcycle ____ 4 Other (SPECIFY) _____

b. Did you actually steal it, or just use it and return it? ____ 1 Steal ____ 2 Use and return

c. Who did the vehicle belong to? (READ CATEGORIES ONLY IF UNCLEAR)

____ 1 Stranger ____ 2 Acquaintance ____ 3 Friend
____ 4 Family member (SPECIFY) _____ ____ 5 Other (SPECIFY) _____

d. How did you get the vehicle started?

____ 1 Had the keys ____ 2 Hot wired the vehicle ____ 3 Keys in ignition
____ 4 Other (SPECIFY) _____

e. What were you going to do with the vehicle?

____ 1 Go riding ____ 2 Keep it ____ 3 Keep parts from it ____ 4 Sell it ____ 5 Sell parts from it
____ 6 Other (SPECIFY) _____

f. Were you alone or did others take part in this event? ____ 1 Alone

____ 2 With Others → g. How many others? ____

If with others, who do you usually do this with? Are they any of the individuals on these lists (show participant friendship and romantic partner lists)?

If not, who were they?

Name	Age	Sex
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

h. Had you been drinking or taking drugs before the incident?

No ____ 1 (Skip to j)

Yes ____ 2 → i. Had you been (READ CATEGORIES) ____ 1 drinking only?

____ 2 using drugs only?

____ 3 both drinking and using drugs?

i. Were you arrested for this incident? No ____ 1 Yes ____ 2

91A. How many times in the last year have you stolen or tried to steal something worth less than \$5? _____

Have you ever (READ ITEM).....? YES _____ NO _____

If so, when? _____

Approximately how many times in your life have you (READ ITEM)? _____

Do you remember how old were you the first time you (READ ITEM)? _____

Thinking of the last time you did this. . .

a. What did you steal or try to steal? (SPECIFY) _____

b. About how much do you think it was worth? (SPECIFY)\$ _____

c. Did you actually steal it?

No	Yes
1	2

d. Were you alone or did others take part in this event? _____(1) Alone _____(2) With Others

(IF WITH OTHERS:) How many other persons were involved?
(NUMBER) _____

If with others, who do you usually do this with? Are they any of the individuals on these lists
(show participant friendship and romantic partner lists)?

If not, who were they?

Name	Age	Sex
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

e. Had you been drinking or taking drugs before the incident?

No	Yes	(IF YES)	Had you been: (READ CATEGORIES)
1	2		_____ (1) Drinking only?

_____ (2) Using drugs only?

_____ (3) Both drinking and using drugs?

92A. How many times in the last year have you stolen or tried to steal something worth \$5 to \$50? _____

Have you ever (READ ITEM)? YES _____ NO _____

If so, when? _____

Approximately how many times in your life have you (READ ITEM)? _____

Do you remember how old were you the first time you (READ ITEM)? _____

Thinking of the last time you did this. . .

a. What did you steal or try to steal? (SPECIFY) _____

b. About how much do you think it was worth? (SPECIFY)\$ _____

c. Did you actually steal it?

No Yes

1 2

d. Were you alone or did others take part in this event? _____(1) Alone _____(2) With Others

(IF WITH OTHERS:) How many other persons were involved?
(NUMBER) _____

If with others, who do you usually do this with? Are they any of the individuals on these lists
(show participant friendship and romantic partner lists)?

If not, who were they?

Name	Age	Sex
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Were you arrested for this incident? No ___1 Yes ___2

Had you been drinking or taking drugs before the incident?

No ___1

Yes ___2 → Had you been (READ CATEGORIES) ___1 Drinking only?
___2 Using drugs only?
___3 Both drinking and using drugs?

Were you arrested for this incident? No ___1 Yes ___2

→ 94A. How many times in the last year have you stolen or tried to steal something worth more than \$50? _____

Have you ever (READ ITEM)? YES _____ NO _____
If so, when? _____

Approximately how many times in your life have you (READ ITEM)? _____

Do you remember how old were you the first time you (READ ITEM)? _____

94B. (IF MORE THAN ZERO FOR 93A): You said that you had stolen or tried to steal something worth \$50 to \$100.

(REPEAT FOR EACH TIME) Thinking of the (last time/next to last time/time before that) you did this ...

	Last Time	Next to Last Time	Time Before That
--	-----------	-------------------	------------------

a. What did you steal or try to steal? (SPECIFY): _____

b. (FOR MONEY IN a ABOVE) About how much money? (IF OTHER THAN MONEY IN a) About how much do you think it was worth? (SPECIFY \$): \$ _____ \$ _____ \$ _____

c. Did you actually steal it?

(1) No	1	1	1
(2) Yes	2	2	2

d. Where did you (steal/try to steal) it from?

(1) a retail store	(6) a grocery store	1 6	1 6	1 6
(2) a private home	(7) a college or school	2 7	2 7	2 7
(3) an automobile	(8) a construction site	3 8	3 8	3 8
(4) a work place	(9) a warehouse	4 9	4 9	4 9
(5) a restaurant	(10) a gym or health club	5 10	5 10	5 10
	(11) Other (SPECIFY):	11 _____	11 _____	11 _____

e. Were you alone or did others take part in this event?

(1) Alone	1	1	1
(2) With others	2	2	2

f. (IF WITH OTHERS, ASK): How many? _____

If with others, who do you usually do this with? Are they any of the individuals on these lists (show participant friendship and romantic partner lists)?

[Mark which time referring to]

If not, who were they?

Name	Age	Sex
_____	_____	_____
_____	_____	_____
_____	_____	_____

g. Had you been drinking or taking drugs before the incident?

(1) No	1	1	1
(2) Yes	2	2	2

h. (IF YES, ASK): Had you been

(1) drinking only?	1	1	1
(2) using drugs only?	2	2	2
(3) both drinking and using drugs?	3	3	3

i. Were you arrested for this incident?

(1) No	1	1	1
(2) Yes	2	2	2

→ 95A. How many times in the last year have you broken into a building or vehicle, or tried to break in, to steal something or just to look around? _____

Have you ever (READ ITEM)? YES _____ NO _____

If so, when? _____

Approximately how many times in your life have you (READ ITEM)? _____

Do you remember how old were you the first time you (READ ITEM)? _____

95B. (IF MORE THAN ZERO FOR 95A): You said that you had broken into a building or vehicle, or tried to break in, to steal something or just to look around.

(REPEAT FOR EACH ITEM) Thinking of the (last time/next to last time/time before that) you did this...

Last Time	Next to Last Time	Time Before That
-----------	-------------------	------------------

a. What did you break into or try to break into?

(CIRCLE MOST APPROPRIATE RESPONSE)

(1) building	1	1	1
(2) vehicle	2	2	2
(3) house or apartment	3	3	3
(4) other (SPECIFY):	4 _____	4 _____	4 _____

b. Did you actually break in or did you only try to?

(1) broke in	1	1	1
(2) only tried	2	2	2
(3) didn't have to; door was open	3	3	3
(4) didn't have to; window was open	4	4	4

c. Why were you breaking in?

(CIRCLE MOST APPROPRIATE RESPONSE)

(1) just to look around	1	1	1
(2) to take or steal something	2	2	2
(3) to mess things up	3	3	3
(4) other (SPECIFY):	4 _____	4 _____	4 _____

d. Were you alone, or did others take part in this incident? (1) Alone

1	1	1
2	2	2

(2) With others

e. (IF WITH OTHERS, ASK): How many? _____

If with others, who do you usually do this with? Are they any of the individuals on these lists (show participant friendship and romantic partner lists)?

If not, who were they?

Name	Age	Sex
------	-----	-----

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

	<u>Last Time</u>	<u>Next to Last Time</u>	<u>Time Before That</u>
f. Had you been drinking or taking drugs before the incident?			
(1) No	1	1	1
(2) Yes	2	2	2
g. (IF YES, ASK): Had you been (READ CATEGORIES)			
(1) drinking only?	1	1	1
(2) using drugs only?	2	2	2
(3) both drinking and using drugs?	3	3	3
h. Were you arrested for this incident?			
(1) No	1	1	1
(2) Yes	2	2	2

→ 96A. How many times in the last year have you found something like a wallet or some jewelry and returned it to the owner or the police? _____

Have you ever (READ ITEM)? YES _____ NO _____
If so, when? _____

Approximately how many times in your life have you (READ ITEM)? _____

Do you remember how old were you the first time you (READ ITEM)? _____

Do you usually do this alone or with others? Alone _____ With Others _____

If with others, who do you usually do this with? Are they any of the individuals on these lists (show participant friendship and romantic partner lists)?

If not, who were they?

Name	Age	Sex
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Had you been drinking or taking drugs before the incident?

No ___ 1

Yes ___ 2 → Had you been (READ CATEGORIES) ___ 1 Drinking only?
___ 2 Using drugs only?
___ 3 Both drinking and using drugs?

Were you arrested for this incident? No ___ 1 Yes ___ 2

→ 97A. How many times in the last year have you knowingly bought, sold, or held stolen goods
(or tried to do any of these things)? _____

Have you ever (READ ITEM)? YES _____ NO _____
If so, when? _____

Approximately how many times in your life have you (READ ITEM)? _____

Do you remember how old were you the first time you (READ ITEM)? _____

Thinking of the last time you did this. . .

a. What did you do? (CHECK ALL THAT APPLY)

- ____ (1) Try to buy stolen goods ____ (5) Sell stolen goods
____ (2) Try to sell stolen goods ____ (6) Held stolen goods
____ (3) Try to hold stolen goods ____ (7) Other (SPECIFY)
____ (4) Buy stolen goods _____

b. What were the stolen goods? (SPECIFY)

c. About how much do you think the goods were worth? (SPECIFY) \$ _____

d. Were you alone or did others take
part in this event? ____ (1) Alone ____ (2) With Others

(IF WITH OTHERS:) How many other persons were involved?
(NUMBER) _____

If with others, who do you usually do this with? Are they any of the individuals on these lists
(show participant friendship and romantic partner lists)?

If not, who were they?

Name	Age	Sex
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Had you been drinking or taking drugs before the incident?

No ____ 1

Yes ____ 2 → Had you been (READ CATEGORIES) ____ 1 Drinking only?

____ 2 Using drugs only?

____ 3 Both drinking and using drugs?

Were you arrested for this incident? No ____ 1 Yes ____ 2

➔ 98A. How many times in the last year have you run away
from home? _____

Have you ever (READ ITEM)? YES _____ NO _____
If so, when? _____

Approximately how many times in your life have you (READ ITEM)? _____

Do you remember how old were you the first time you (READ ITEM)? _____

Do you usually do this alone or with others? Alone _____ With Others _____

If with others, who do you usually do this with? Are they any of the individuals on these lists
(show participant friendship and romantic partner lists)?

If not, who were they?

Name	Age	Sex
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Had you been drinking or taking drugs before the incident?

No ___ 1

Yes ___ 2 → Had you been (READ CATEGORIES) ___ 1 Drinking only?
___ 2 Using drugs only?
___ 3 Both drinking and using drugs?

Were you arrested for this incident? No ___ 1 Yes ___ 2

➔ 99A. How many times in the last year have you lied about your age to gain entrance or to
purchase something? _____

Have you ever (READ ITEM)? YES _____ NO _____
If so, when? _____

Approximately how many times in your life have you (READ ITEM)? _____

Do you remember how old were you the first time you (READ ITEM)? _____

Do you usually do this alone or with others? Alone _____ With Others _____

If with others, who do you usually do this with? Are they any of the individuals on these lists
(show participant friendship and romantic partner lists)?

If not, who were they?

Name	Age	Sex
_____	_____	_____
_____	_____	_____
_____	_____	_____

998) Had you been drinking or taking drugs before the incident?

No 1

Yes 2 → Had you been (READ CATEGORIES) 1 Drinking only?
2 Using drugs only?
3 Both drinking and using drugs?

Were you arrested for this incident? No 1 Yes 2

→ 100A. How many times in the last year have you stolen money or other things from your parents
or other members of your family? _____

Have you ever (READ ITEM)? YES _____ NO _____
If so, when? _____

Approximately how many times in your life have you (READ ITEM)? _____

Do you remember how old were you the first time you (READ ITEM)? _____

Thinking of the last time you did this. . .

a. What did you steal?

1 (1) Money 2 (2) Other (SPECIFY) _____

(IF 1, ASK:) How much money did you steal? (SPECIFY) \$ _____

(IF 2, ASK:) How much do you think it was worth? (SPECIFY) \$ _____

What were you going to do with it?

- 1 (1) use it yourself
2 (2) give it to a friend/someone else
3 (3) sell it
4 (4) other (DESCRIBE) _____

b. Were you alone, or did others take
part in the theft?

1 (1) Alone
2 (2) With Others

(IF WITH OTHERS) How Many? _____

If with others, who do you usually do this with? Are they any of the individuals on these lists
(show participant friendship and romantic partner lists)?

If not, who were they?

Name	Age	Sex
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Had you been drinking or taking drugs before the incident?

No 1

Yes 2 → Had you been (READ CATEGORIES) 1 Drinking only?
2 Using drugs only?
3 Both drinking and using drugs?

Were you arrested for this incident? No 1 Yes 2

101A. How many times in the last year have you stolen or tried to steal something at school? _____

Have you ever (READ ITEM)? YES _____ NO _____
If so, when? _____

Approximately how many times in your life have you (READ ITEM)? _____

Do you remember how old were you the first time you (READ ITEM)? _____

Thinking of the last time you did this. . .

a. What did you steal?

_____ (1) Money _____ (2) Other (SPECIFY) _____

(IF 1, ASK:) How much money did you steal? (SPECIFY) \$ _____

(IF 2, ASK:) How much do you think it was worth? (SPECIFY) \$ _____

b. Were you alone, or did others take
part in the theft?

_____ (1) Alone

_____ (2) With Others

(IF WITH OTHERS) How Many? _____

If with others, who do you usually do this with? Are they any of the individuals on these lists
(show participant friendship and romantic partner lists)?

If not, who were they?

Name	Age	Sex
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

c. Had you been drinking or taking drugs before the incident?

No Yes (IF YES) Had you been: (READ CATEGORIES)

1 2 _____ (1) Drinking only?

_____ (2) Using drugs only?

_____ (3) Both drinking and using drugs?

Were you arrested for this incident? No ___1___ Yes ___2___

102A. How many times in the last year have you stolen or tried to steal something from work? _____

Have you ever (READ ITEM)? YES _____ NO _____
If so, when? _____

Approximately how many times in your life have you (READ ITEM)? _____

Do you remember how old were you the first time you (READ ITEM)? _____

Thinking of the last time you did this. . .

a. What did you steal?

_____ (1) Money _____ (2) Other (SPECIFY) _____

(IF 1, ASK:) How much money did you steal? (SPECIFY) \$ _____

(IF 2, ASK:) How much do you think it was worth? (SPECIFY) \$ _____

b. Were you alone, or did others take
part in the theft?

_____ (1) Alone

_____ (2) With Others

(IF WITH OTHERS) How Many? _____

If with others, who do you usually do this with? Are they any of the individuals on these lists
(show participant friendship and romantic partner lists)?

If not, who were they?

Name	Age	Sex
------	-----	-----

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

c. Had you been drinking or taking drugs before the incident?

No Yes (IF YES) Had you been: (READ CATEGORIES)

1 2 _____ (1) Drinking only?

_____ (2) Using drugs only?

_____ (3) Both drinking and using drugs?

Were you arrested for this incident? No ___1 Yes ___2

→ 103A. How many times in the last year have you used force to get money or things from a teacher or other adult at school? _____

Have you ever (READ ITEM)? YES _____ NO _____

If so, when? _____

Approximately how many times in your life have you (READ ITEM)? _____

Do you remember how old were you the first time you (READ ITEM)? _____

→ 104A. How many times in the last year have you used force to get money or things from other students? _____

Have you ever (READ ITEM)? YES _____ NO _____

If so, when? _____

Approximately how many times in your life have you (READ ITEM)? _____

Do you remember how old were you the first time you (READ ITEM)? _____

→ 105A. How many times in the last year have you used force to get money or things from other people (besides students or teachers)? _____

Have you ever (READ ITEM)? YES _____ NO _____

If so, when? _____

Approximately how many times in your life have you (READ ITEM)? _____

Do you remember how old were you the first time you (READ ITEM)? _____

(IF MORE THAN ZERO FOR ANY ONE [OR MORE] OF 103A, 104A, OR 105A):

ASK (SECOND PASS) 103-104-105B ON NEXT PAGE

Thinking of the (last time/next to last time/time before that) you did this...

Last Time Next to Last Time Time Before That

g. Who did you use force on? (CIRCLE MOST APPROPRIATE RESPONSE)

(1) a stranger	1	1	1
(2) an acquaintance	2	2	2
(3) a friend	3	3	3
(4) a date	4	4	4
(5) a boyfriend or girlfriend	5	5	5
(6) an ex-boyfriend or girlfriend	6	6	6
(7) a spouse or partner	7	7	7
(8) an ex-spouse or partner	8	8	8
(9) other family member or relative (SPECIFY):	9 _____	9 _____	9 _____
(10) employer	10 _____	10 _____	10 _____
(11) other (SPECIFY):	11 _____	11 _____	11 _____

h. Were you alone, or did others take part in this event?

(1) Alone

1 1 1

(2) With others

2 2 2

i. (IF WITH OTHERS, ASK): How many?

If with others, who do you usually do this with? Are they any of the individuals on these lists (show participant friendship and romantic partner lists)?

If not, who were they?

Name	Age	Sex
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

j. Had you been drinking or taking drugs before the incident?

(1) No

1 1 1

(2) Yes

2 2 2

k. (IF YES, ASK): Had you been (READ CATEGORIES)

(1) drinking only?

1 1 1

(2) using drugs only?

2 2 2

(3) both drinking and using drugs?

3 3 3

l. Were you arrested for this incident?

(1) No

1 1 1

(2) Yes

2 2 2

106A. How many times in the last year have you cheated on school tests? _____

Have you ever (READ ITEM)? YES _____ NO _____
If so, when? _____

Approximately how many times in your life have you (READ ITEM)? _____

Do you remember how old were you the first time you (READ ITEM)? _____

Do you usually do this alone or with others? Alone _____ With Others _____

If with others, who do you usually do this with? Are they any of the individuals on these lists (show participant friendship and romantic partner lists)?

If not, who were they?

Name	Age	Sex
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

107A. How many times in the last year have you skipped classes without an excuse? _____

Have you ever (READ ITEM)? YES _____ NO _____
If so, when? _____

Approximately how many times in your life have you (READ ITEM)? _____

Do you remember how old were you the first time you (READ ITEM)? _____

Do you usually do this alone or with others? Alone _____ With Others _____

If with others, who do you usually do this with? Are they any of the individuals on these lists (show participant friendship and romantic partner lists)?

If not, who were they?

Name	Age	Sex
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

→ 108A. How many times in the last year have you been suspended from school? _____

Have you ever (READ ITEM)? YES _____ NO _____
If so, when? _____

Approximately how many times in your life have you (READ ITEM)? _____

Do you remember how old were you the first time you (READ ITEM)? _____

Was was (were) the reasons for the last suspension? _____

Were others involved? Yes 1 No 2

→ Who was involved? Any individuals on these lists?

If not, who were they? NAME AGE SEX

→ 109A. How many times in the last year have you refused to participate when another student asked you to help him or her cheat on an exam? _____

Have you ever (READ ITEM)? YES _____ NO _____
If so, when? _____

Approximately how many times in your life have you (READ ITEM)? _____

Do you remember how old were you the first time you (READ ITEM)? _____

Was the other student any of those people on these lists? Yes _____ No _____

→ Who? _____

→ 110A. How many times in the last year have you thrown objects at cars or people? _____

Have you ever (READ ITEM)? YES _____ NO _____
If so, when? _____

Approximately how many times in your life have you (READ ITEM)? _____

Do you remember how old were you the first time you (READ ITEM)? _____

Do you usually do this alone or with others? Alone _____ With Others _____

1108. If with others, who do you usually do this with? Are they any of the individuals on these lists (show participant friendship and romantic partner lists)?

If not, who were they?

Name Age Sex

Had you been drinking or taking drugs before the incident?

No ___ 1

Yes ___ 2

→ Had you been (READ CATEGORIES) ___ 1 Drinking only?
___ 2 Using drugs only?
___ 3 Both drinking and using drugs?

Were you arrested for this incident? No ___ 1 Yes ___ 2

→ 111A. How many times in the last year have you carried a hidden weapon other than a plain pocket knife? _____

Have you ever (READ ITEM)? YES _____ NO _____

If so, when? _____

Approximately how many times in your life have you (READ ITEM)? _____

Do you remember how old were you the first time you (READ ITEM)? _____

111B. (IF MORE THAN ZERO TO 111A) You said that you had carried a hidden weapon other than a plain pocket knife.

Thinking of the last time you did this . . .

a. What kind of weapon was it? (DO NOT READ CATEGORIES; CHECK AS MANY AS APPLY.)

___ 1 Knife

___ 2 Handgun (IF GUN, ASK): (1) Did you have a current license for the gun? No ___ 1 Yes ___ 2

___ 3 Other Gun (SPECIFY): _____

(IF GUN, ASK): (1) Did you have a current license for the gun? No ___ 1 Yes ___ 2

___ 4 Other (SPECIFY): _____

b. Why were you carrying the weapon? (DO NOT READ CATEGORIES; CHECK ALL THAT APPLY.)

___ (1) Always carry it

___ (2) For self-protection

___ (3) To use in a fight

___ (4) To use in committing a crime

___ (5) Other (SPECIFY): _____

112A. How many times in the last year have you attacked someone with the idea of seriously hurting or killing them? _____

Have you ever (READ ITEM)? YES _____ NO _____

If so, when? _____

Approximately how many times in your life have you (READ ITEM)? _____

Do you remember how old were you the first time you (READ ITEM)? _____

112B. (IF MORE THAN ZERO FOR 112A) You said that you had attacked someone with the idea of seriously hurting or killing them. (THERE MAY BE MULTIPLE VICTIMS AND MULTIPLE RESPONSES TO SOME ITEMS. IF SO, ASK ABOUT THE MOST SERIOUS; I.E., THE MOST SERIOUSLY INJURED VICTIM, ETC.)

(REPEAT FOR EACH TIME) Thinking of the (last time/next to last time/time before that) you did this:

Last Time Next to Last Time Time Before That

a. In which of the following ways did you attack the person? (READ LIST; CIRCLE ALL THAT APPLY)

(1) Hit, slapped, punched the person once or twice	1	1	1
(2) Physically beat and/or choked the person	2	2	2
(3) Attacked the person with a weapon such as a gun, knife, club, or bottle	3	3	3
(4) Other (SPECIFY):	4 _____	4 _____	4 _____

b. Did you hurt the person? (1) No
(2) Yes

1	1	1
2	2	2

c. (IF YES, ASK): How badly did you hurt the person? (READ LIST AND CIRCLE YES FOR ALL THAT APPLY, NO FOR ALL OTHERS)

	No	Yes	No	Yes	No	Yes
(1) knocked down	1	2	1	2	1	2
(2) bruised	1	2	1	2	1	2
(3) cut or bleeding	1	2	1	2	1	2
(4) unconscious	1	2	1	2	1	2
(5) broken bones	1	2	1	2	1	2
(6) required medical treatment	1	2	1	2	1	2
(7) hospitalized	1	2	1	2	1	2
(8) Other (SPECIFY):	1	2 _____	1	2 _____	1	2 _____

d. Who was the person you attacked? (CIRCLE ANSWER; READ CATEGORIES ONLY IF UNCLEAR)

(1) a stranger	1	1	1
(2) an acquaintance	2	2	2
(3) a friend	3	3	3
(4) a date	4	4	4
(5) a boyfriend or girlfriend	5	5	5
(6) an ex-boyfriend or girlfriend	6	6	6
(7) a spouse or partner	7	7	7
(8) an ex-spouse or partner	8	8	8
(9) a child	9	9	9
(10) another family member (SPECIFY):	10 _____	10 _____	10 _____
(11) other (SPECIFY):	11 _____	11 _____	11 _____

112B (continued)

e. Why did you attack the person? (CIRCLE ALL THAT APPLY)

- (1) self-defense
- (2) defending another
- (3) gang fight
- (4) to take money or things
- (5) to punish them
- (6) to put them in their place
- (7) angry, out of control
- (8) in combat (military)
- (9) other

	Last Time	Next to Last Time	Time Before That
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

(SPECIFY):

f. Where did this incident take place? (DO NOT READ CATEGORIES; CIRCLE MOST APPROPRIATE RESPONSE)

- (1) victim's house or apt.
- (2) respondent's house or apt.
- (3) someone else's house or apt.
- (4) other building or enclosed structure, such as a stairwell
- (5) motel or hotel room
- (6) car, van, truck or other vehicle
- (7) street or alley
- (8) other outside area, such as a beach, field, hills or mountains
- (9) other (SPECIFY):

1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9

g. Were you alone or did others take part in this incident?

- (1) Alone
- (2) With others

1	1	1
2	2	2

h. (IF WITH OTHERS, ASK): How many other people were involved?

If with others, who do you usually do this with? Are they any of the individuals on these lists (show participant friendship and romantic partner lists)? **Indicate which incident names apply!**

If not, who were they? **Indicate which incident names apply to!**

Name	Age	Sex
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

i. Had you been drinking or taking drugs before the incident?

- (1) No
- (2) Yes

1	1	1
2	2	2

j. (IF YES): Had you been (READ CATEGORIES)

- (1) drinking only?
- (2) using drugs only?
- (3) both drinking and using drugs?

1	1	1
2	2	2
3	3	3

k. Were you arrested for this incident?

- (1) No
- (2) Yes

1	1	1
2	2	2

113A. How many times in the last year have you hit or beaten someone up so badly that they probably needed a doctor? _____

Have you ever (READ ITEM)? YES _____ NO _____
If so, when? _____

Approximately how many times in your life have you (READ ITEM)? _____

Do you remember how old were you the first time you (READ ITEM)? _____

113B. (IF MORE THAN ZERO FOR 113A) You said that you had hit or beat someone up so badly that they probably needed a doctor. (THERE MAY BE MULTIPLE VICTIMS AND MULTIPLE RESPONSES TO SOME ITEMS. IF SO, CHOOSE THE MOST SERIOUS; I.E., THE MOST SERIOUSLY INJURED VICTIM, ETC.)

(REPEAT FOR EACH TIME) Thinking of the (last time/next to last time/time before that) you did this...

	<u>Last Time</u>	<u>Next to Last Time</u>	<u>Time Before That</u>
a. Did you use a weapon?			
(1) No	1	1	1
(2) Yes	2	2	2
b. (IF YES, ASK): What weapon or weapons did you use? (CIRCLE MOST APPROPRIATE RESPONSE)			
(1) a handgun	1	1	1
(2) other type of gun	2	2	2
(3) knife	3	3	3
(4) club, pipe or bottle	4	4	4
(5) other (SPECIFY): _____	5	5	5
c. How badly did you hurt the person?			
(READ LIST; CIRCLE YES OR NO)	No Yes	No Yes	No Yes
(1) knocked down	1 2	1 2	1 2
(2) bruised	1 2	1 2	1 2
(3) cut or bleeding	1 2	1 2	1 2
(4) unconscious	1 2	1 2	1 2
(5) broken bones	1 2	1 2	1 2
(6) required medical treatment	1 2	1 2	1 2
(7) hospitalized	1 2	1 2	1 2
(8) other (SPECIFY): _____	1 2 _____	1 2 _____	1 2 _____
d. Who was the person you hit or beat up?			
(CIRCLE MOST APPROPRIATE RESPONSE)			
(1) a stranger	1	1	1
(2) an acquaintance	2	2	2
(3) a friend	3	3	3
(4) a date	4	4	4
(5) a boyfriend or girlfriend	5	5	5
(6) an ex-boyfriend or girlfriend	6	6	6
(7) a spouse or partner	7	7	7
(8) an ex-spouse or partner	8	8	8
(9) a child	9	9	9
(10) another family member (SPECIFY): _____	10 _____	10 _____	10 _____
(11) other (SPECIFY): _____	11 _____	11 _____	11 _____

113B. (continued)

e. Why did you hit the person? (CIRCLE YES FOR ALL THAT APPLY, NO FOR ALL OTHERS)

- (1) self-defense
- (2) defending another
- (3) gang fight
- (4) to take money or things
- (5) to punish them
- (6) to put them in their place
- (7) angry, out of control
- (8) other

(SPECIFY):

Last Time	Next to Last Time	Time Before That
No Yes	No Yes	No Yes
1 2	1 2	1 2
1 2	1 2	1 2
1 2	1 2	1 2
1 2	1 2	1 2
1 2	1 2	1 2
1 2	1 2	1 2
1 2	1 2	1 2

f. Where did this incident take place? (CIRCLE MOST APPROPRIATE RESPONSE)

- (1) victim's house or apt.
- (2) respondent's house or apt.
- (3) someone else's house or apt.
- (4) other building or enclosed structure, such as a stairwell
- (5) motel or hotel room
- (6) car, van, truck or other vehicle
- (7) street or alley
- (8) other outside area, such as a beach, field, hills or mountains
- (9) other (SPECIFY):

1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9

g. Were you alone or did others take part in this incident? (1) Alone (2) With others

h. (IF WITH OTHERS, ASK): How many other people were involved?

1	1	1
2	2	2

If with others, who do you usually do this with? Are they any of the individuals on these lists (show participant friendship and romantic partner lists)?

If not, who were they?

Name	Age	Sex
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

i. Had you been drinking or taking drugs before the incident? (1) No (2) Yes

1	1	1
2	2	2

j. (IF YES, ASK): Had you been (READ CATEGORIES)

- (1) drinking only?
- (2) using drugs only?
- (3) both drinking and using drugs?

1	1	1
2	2	2
3	3	3

k. Were you arrested for this incident?

- (1) No
- (2) Yes

1	1	1
2	2	2

→ 114. How many times in the last year have you been involved in gang fights? _____

Have you ever (READ ITEM).....? YES _____ NO _____

If so, when? _____

Approximately how many times in your life have you (READ ITEM)? _____

Do you remember how old were you the first time you (READ ITEM)? _____

114B. (IF MORE THAN ZERO TO 114A) You said that you had been involved in gang fights.

(REPEAT FOR EACH TIME) Thinking of the (last time/next to last time/time before that) you did this...

	<u>Last Time</u>	<u>Next to Last Time</u>	<u>Time Before That</u>
a. Counting yourself, how many were in your group?			
(1) 1-2 people	1	1	1
(2) 3-5 people	2	2	2
(3) more than 5 people	3	3	3
b. How many were in the other group?			
(1) 1-2 people	1	1	1
(2) 3-5 people	2	2	2
(3) more than 5 people	3	3	3

If with others, who do you usually do this with? Are they any of the individuals on these lists (show participant friendship and romantic partner lists)?

If not, who were they?

Name	Age	Sex
_____	_____	_____
_____	_____	_____

c. Did either group use weapons?	(1) No	1	1	1		
	(2) Yes	2	2	2		
d. (IF YES) What weapon was used?						
(1) a handgun		1	1	1		
(2) other type of gun		2	2	2		
(3) knife		3	3	3		
(4) club, pipe or bottle		4	4	4		
(5) other (SPECIFY): _____		5	5	5		
e. Was anyone hurt in the fight?	(1) No	1	1	1		
	(2) Yes	2	2	2		
f. How badly were they hurt?	No	Yes	No	Yes	No	Yes
(1) knocked down	1	2	1	2	1	2
(2) bruised	1	2	1	2	1	2
(3) cut or bleeding	1	2	1	2	1	2
(4) unconscious	1	2	1	2	1	2
(5) broken bones	1	2	1	2	1	2
(6) required medical treatment	1	2	1	2	1	2
(7) hospitalized	1	2	1	2	1	2
(8) other (SPECIFY): _____	1	2	1	2	1	2
g. Had you been drinking or taking drugs before the incident?	(1) No	1	1	1		
	(2) Yes	2	2	2		
h. (IF YES, ASK): Had you been (READ CATEGORIES)						
(1) drinking only?	1	1	1			
(2) using drugs only?	2	2	2			
(3) both drinking and using drugs?	3	3	3			
i. Were you arrested for this incident? (1) No	1	1	1			

115A. How many times in the last year have you had or tried to have sexual relations with someone against their will?

Have you ever (READ ITEM).....? YES _____ NO _____

If so, when? _____

Approximately how many times in your life have you (READ ITEM)? _____

Do you remember how old were you the first time you (READ ITEM)? _____

115B. (IF MORE THAN ZERO TO 115A): You said that you had or tried to have sexual relations with someone against their will.

(REPEAT FOR EACH TIME) Thinking of the last time/next to last time/time before that) you did this:

Last Time Next to Last Time Time Before That

a. Did you actually force someone to have sexual relations or only try?

(1) Actually forced	1	1	1
(2) Tried but didn't succeed	2	2	2

b. In which of the following ways did you force the person? (READ LIST AND CHECK YES FOR ALL THAT APPLY, NO FOR OTHERS)

	No	Yes	No	Yes	No	Yes
(1) General verbal persuasion	1	2	1	2	1	2
(2) Verbal threats of injury	1	2	1	2	1	2
(3) Drugging the person or getting them drunk	1	2	1	2	1	2
(4) Physical pressure, such as overpowering them with your size or strength	1	2	1	2	1	2
(5) Hitting, slapping and/or mild roughness	1	2	1	2	1	2
(6) Physical beating or choking	1	2	1	2	1	2
(7) Threatened to use a weapon such as a knife or other object	1	2	1	2	1	2
(8) Used a weapon such as a knife or other object	1	2	1	2	1	2
(9) other (SPECIFY):	1	2	1	2	1	2

c. Did you hurt the person?

1	2	1	2	1	2
---	---	---	---	---	---

d. (IF YES, ASK): How badly did you hurt the person? (READ LIST AND CHECK YES FOR ALL THAT APPLY, NO FOR OTHERS)

(1) knocked down	1	2	1	2	1	2
(2) bruised	1	2	1	2	1	2
(3) cut or bleeding	1	2	1	2	1	2
(4) unconscious	1	2	1	2	1	2
(5) broken bones	1	2	1	2	1	2
(6) required medical treatment	1	2	1	2	1	2
(7) hospitalized	1	2	1	2	1	2
(8) Other (SPECIFY):	1	2	1	2	1	2

e. Was anyone else besides yourself involved in pressuring or forcing the person?

1	2	1	2	1	2
---	---	---	---	---	---

f. (IF YES, ASK): Not counting yourself, how many others were there? (SPECIFY): _____

If with others, who do you usually do this with? Are they any of the individuals on these lists (show participant friendship and romantic partner lists)? **[Indicate which incident names apply to]**

If not, who were they? **[Indicate which incident names apply to]**

Name	Age	Sex
------	-----	-----

_____	_____	_____
_____	_____	_____

115B (continued)

- g. Who was the person you had or tried to have sex with?
(CIRCLE THE MOST APPROPRIATE RESPONSE)

	Last Time	Next to Last Time	Time Before That
(1) a stranger	1	1	1
(2) an acquaintance	2	2	2
(3) a friend	3	3	3
(4) a date	4	4	4
(5) a boyfriend or girlfriend	5	5	5
(6) an ex-boyfriend or girlfriend	6	6	6
(7) a spouse or partner	7	7	7
(8) an ex-spouse or partner	8	8	8
(9) a child	9	9	9
(10) other family member or relative (SPECIFY):	10	10	10
(11) other (SPECIFY):	11	11	11

Was this person you any of the individuals
on these lists?

Yes____ Yes____ Yes____
No____ No____ No____

→ if yes, Who?

- h. What gender was the person you forced to have sex? 1__ Male 1__ Male 1__ Male
2__ Female 2__ Female 2__ Female

- i. What was your age at the time? _____ years _____ years _____ years

- j. What was the age of the person you forced to have sex? _____ years _____ years _____ years

- k. How did you select this particular person?
(DESCRIBE)

- l. Where did this incident occur?
(CIRCLE MOST APPROPRIATE RESPONSE)

(1) victim's house or apt.	1	1	1
(2) respondent's house or apt.	2	2	2
(3) someone else's house or apt.	3	3	3
(4) other building or enclosed structure, such as a stairwell	4	4	4
(5) motel or hotel room	5	5	5
(6) car, van, truck or other vehicle	6	6	6
(7) street or alley	7	7	7
(8) other outside area, such as a beach, field, in the hills or mountains	8	8	8
(9) other (SPECIFY):	9	9	9

- m. Had you been drinking or taking drugs before
the incident?

(1) No 1 1 1
(2) Yes 2 2 2

- n. (IF YES, ASK): Had you been (READ CATEGORIES)

(1) drinking only? 1 1 1
(2) using drugs only? 2 2 2
(3) both drinking and using drugs? 3 3 3

115B (continued)

[illegible]

→ 116A. How many times in the last year have you hit or threatened to hit one of your parents? _____

Have you ever (READ ITEM).....? YES _____ NO _____

If so, when? _____

Approximately how many times in your life have you (READ ITEM)? _____

Do you remember how old were you the first time you (READ ITEM)? _____

Thinking of the last time you did this. . .

a. Did you actually hit them or just threaten to hit them?

____ (1) Actually hit ____ (2) Tried but didn't succeed
____ (3) Only threatened to hit

(IF ACTUALLY HIT, ASK:)

Did you hurt the person? Yes No
 2 1

(IF YES)

How badly did you hurt the person? (CHECK ALL THAT APPLY)

____ (1) pushed or slapped them ____ (5) cut/bleeding
____ (2) caused them to grab themselves in pain ____ (6) unconscious
____ (3) knocked them down ____ (7) hospitalized
____ (4) bruised ____ (8) Other (SPECIFY) _____

b. Were you alone, or did others take part in this event?

____ (1) Alone
____ (2) With Others

(IF WITH OTHERS) How Many? _____

If with others, who do you usually do this with? Are they any of the individuals on these lists (show participant friendship and romantic partner lists)?

If not, who were they?

Name	Age	Sex
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

c. Had you been drinking or taking drugs before the incident?

No Yes (IF YES) Had you been: (READ CATEGORIES)
1 2

____ (1) Drinking only?
____ (2) Using drugs only?
____ (3) Both drinking and using drugs?

1 2. (1) Drinking only?
 (2) Using drugs only?
 (3) Both drinking and using drugs?

1 2 (1) Drinking only?
 (2) Using drugs only?
 (3) Both drinking and using drugs?

(3) Both drinking and using drugs?

_____ (1) Drinking only?
 _____ (2) Using drugs only?
 _____ (3) Both drinking and using drugs?

→ 121A. How many times in the last year have you helped someone out who was badly hurt, such as someone who was beaten up, in an accident, or very sick? _____

Have you ever (READ ITEM)? YES _____ NO _____
If so, when? _____

Approximately how many times in your life have you (READ ITEM)? _____

Do you remember how old were you the first time you (READ ITEM)? _____

Who was this person? Was it any of the people on this list? Yes _____ No _____
→ if yes, who? _____

Why did you decide to help this person? _____

→ 122A. How many times in the last year have you sold marijuana or hashish? _____

Have you ever (READ ITEM)? YES _____ NO _____
If so, when? _____

Approximately how many times in your life have you (READ ITEM)? _____

Do you remember how old were you the first time you (READ ITEM)? _____

122B. (IF MORE THAN ZERO TO 122A) You said that you had sold marijuana or hashish. Thinking of the last time you did this:

- a. How much money was involved in the sale? \$ _____
- b. How much marijuana or hashish did you sell? (1) _____ oz. / (2) _____ lbs.
- c. Did you act alone or with others in the sale of the marijuana or hash?

_____ 1 Alone

_____ 2 With others (IF WITH OTHERS): d. How many others were involved?

(NUMBER)

If with others, who do you usually do this with? Are they any of the individuals on these lists (show participant friendship and romantic partner lists)?

If not, who were they?

Name Age Sex

Had you been drinking or taking drugs before the incident?

No _____ 1

Yes _____ 2 → Had you been (READ CATEGORIES) _____ 1 Drinking only?

_____ 2 Using drugs only?

_____ 3 Both drinking and using drugs?

Were you arrested for this incident? No _____ 1 Yes _____ 2

→ 123A. How many times in the last year have you sold hard drugs? _____

Have you ever (READ ITEM)? YES _____ NO _____

If so, when? _____

Approximately how many times in your life have you (READ ITEM)? _____

Do you remember how old were you the first time you (READ ITEM)? _____

123B. (IF MORE THAN ZERO TO 123A) You said that you had sold hard drugs. Thinking of the last time you did this:

a. What drug or drugs were included in the sale? (SPECIFY): _____

b. How much money was involved in the sale? (SPECIFY): (1) \$ _____

(2) (IF OTHER THAN MONEY, SPECIFY): _____

c. Were you alone, or did others take part in this event?

____ 1 Alone

____ 2 With others (IF WITH OTHERS, ASK): d. How many others were involved?

(NUMBER)

If with others, who do you usually do this with? Are they any of the individuals on these lists (show participant friendship and romantic partner lists)?

If not, who were they?

Name Age Sex

Had you been drinking or taking drugs before the incident?

No ____ 1

Yes ____ 2 → Had you been (READ CATEGORIES) ____ 1 Drinking only?

____ 2 Using drugs only?

____ 3 both drinking and using drugs?

Were you arrested for this incident? No ____ 1 Yes ____ 2

→ 124A. How many times in the last year have you bought or provided liquor for a minor? _____

Have you ever (READ ITEM)? YES _____ NO _____

If so, when? _____

Approximately how many times in your life have you (READ ITEM)? _____

Do you remember how old were you the first time you (READ ITEM)? _____

Do you usually do this alone or with others? Alone _____ With Others _____

If with others, who do you usually do this with? Are they any of the individuals on these lists (show participant friendship and romantic partner lists)?

If not, who were they?

Name Age Sex Were you arrested for this incident? No ___ 1 Yes ___ 2

→ 125A. How many times in the last year have you paid someone for having sexual relations with you? _____

Have you ever (READ ITEM)? YES _____ NO _____

If so, when? _____

Approximately how many times in your life have you (READ ITEM)? _____

Do you remember how old were you the first time you (READ ITEM)? _____

If with others, who do you usually do this with? Are they any of the individuals on these lists (show participant friendship and romantic partner lists)?

If not, who were they?

Name Age Sex

Had you been drinking or taking drugs before the incident?

No ___ 1

Yes ___ 2

→ Had you been (READ CATEGORIES) ___ 1 Drinking only?

___ 2 Using drugs only?

___ 3 Both drinking and using drugs?

Were you arrested for this incident? No ___ 1 Yes ___ 2

→ 126A. How many times in the last year have you been paid for having sexual relations with someone? _____

Have you ever (READ ITEM)? YES _____ NO _____

If so, when? _____

Approximately how many times in your life have you (READ ITEM)? _____

Do you remember how old were you the first time you (READ ITEM)? _____

Do you usually do this alone or with others? Alone _____ With Others _____

If with others, who do you usually do this with? Are they any of the individuals on these lists (show participant friendship and romantic partner lists)?

If not, who were they?

Name Age Sex

Had you been drinking or taking drugs before the incident?

No ___ 1

Yes ___ 2 → Had you been (READ CATEGORIES) ___ 1 Drinking only?
___ 2 Using drugs only?
___ 3 both drinking and using drugs?

Were you arrested for this incident? No ___ 1 Yes ___ 2

→ 127A. How many times in the last year have you had sexual relations (intercourse) with a person of the opposite sex, other than your ~~wife or husband~~ _____

partner (boyfriend/girlfriend)

Have you ever (READ ITEM)? YES _____ NO _____

If so, when? _____

Approximately how many times in your life have you (READ ITEM)? _____

Do you remember how old were you the first time you (READ ITEM)? _____

Do you usually do this alone or with others? Alone _____ With Others _____

If with others, who do you usually do this with? Are they any of the individuals on these lists (show participant friendship and romantic partner lists)?

If not, who were they?

Name Age Sex

Had you been drinking or taking drugs before the incident?

No ___ 1

Yes ___ 2 → Had you been (READ CATEGORIES) ___ 1 Drinking only?
___ 2 Using drugs only?
___ 3 both drinking and using drugs?

→ 128A. How many times in the last year have you made obscene telephone calls (such as calling someone and saying dirty things)? _____

Have you ever (READ ITEM).....? YES _____ NO _____
If so, when? _____

Approximately how many times in your life have you (READ ITEM)? _____

Do you remember how old were you the first time you (READ ITEM)? _____

Do you usually do this alone or with others? Alone _____ With Others _____

If with others, who do you usually do this with? Are they any of the individuals on these lists (show participant friendship and romantic partner lists)?

If not, who were they?

Name	Age	Sex
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Had you been drinking or taking drugs before the incident?

No 1

Yes 2 → Had you been (READ CATEGORIES)

1 Drinking only?

2 Using drugs only?

3 Both drinking and using drugs?

→ 129A. How many times in the last year have you purposely spread gossip, secrets, or lies about a person in order to damage their reputation, to get back at them, or to get something you wanted? _____

Have you ever (READ ITEM).....? YES _____ NO _____
If so, when? _____

Approximately how many times in your life have you (READ ITEM)? _____

Do you remember how old were you the first time you (READ ITEM)? _____

129B. (IF MORE THAN ZERO FOR 129A) You said that you had purposely spread gossip, secrets, or lies about a person in order to damage their reputation, to get back at them, or to get something you wanted.

(REPEAT FOR EACH TIME) Thinking of the (last time/next to last time) you did this:

	Last Time		Next to Last time	
a. About whom was the gossip? (READ CATEGORIES)	No	Yes	No	Yes
(1) a stranger	1	2	1	2
(2) an acquaintance of yours	1	2	1	2
(3) someone you don't know, but an acquaintance or friend of others you do know	1	2	1	2
(4) a friend	1	2	1	2
(5) a date	1	2	1	2
(6) a boyfriend or girlfriend	1	2	1	2
(7) an ex-boyfriend or ex-girlfriend	1	2	1	2
(8) a spouse or partner	1	2	1	2
(9) an ex-spouse or partner	1	2	1	2
(10) a child	1	2	1	2
(11) another family member	1	2	1	2
(12) someone from work	1	2	1	2
(13) another student/someone at school	1	2	1	2
(14) other	1	2	1	2

b. Was this person male or female?

1 male

1 male

c. Why did you do this? (READ CATEGORIES; CHECK AS MANY AS APPLY)

(1a) To get back at them?

 1 No
 2 Yes

 1 No
 2 Yes

(1b)(IF YES, ASK) What did they do to make you want to get back at them? (SPECIFY):

(2a) To get something you wanted?

 1 No
 2 Yes

 1 No
 2 Yes

(2b)(IF YES, ASK) What did you want from them?

(3a) For some other reason?

 1 No
 2 Yes

 1 No
 2 Yes

(3b)(IF YES, ASK) What was this reason?

d. Were you the main one who was interested in getting this gossip spread, or were others involved? (CIRCLE RESPONSE)

 Last Time

 Next to Last time

(1) Mostly me

 1

 1

(2) Others

 2

 2

e. (IF WITH OTHERS, ASK): How many other people were involved?

f. Did the person the gossip was about find out that you were spreading it?

No 1
Yes 2

No 1
Yes 2

g. (IF YES, ASK): What did they do in response? (READ CATEGORIES; CHECK AS MANY AS APPLY)

(1) Nothing

(2) Spread lies, secrets, or gossip about you

(3) Ignored you/gave you the silent treatment

(4) Threatened your reputation

(5) Yelled or screamed at you

(IF YELLED OR SCREAMED, ASK):
Was this response in public or private?

 1 Public
 2 Private

 1 Public
 2 Private

(6) Threatened you physically

(7) Attacked you physically

(IF ATTACKED PHYSICALLY, ASK):
Were you injured?

No 1
Yes 2

No 1
Yes 2

(8) Other (SPECIFY):

h. Did you succeed in getting what you wanted (getting back at them, making them feel bad, getting your way?)

No 1
Yes 2

No 1
Yes 2

Did you do this alone or with others?

 Alone
 With Others

 Alone
 With others

If with others, who do you usually do this with? Are they any of the individuals on these lists (show participant friendship and romantic partner lists)?

If not, who were they?

Name	Age	Sex
_____	_____	_____
_____	_____	_____
_____	_____	_____

c. Why did you do this? (READ CATEGORIES; CHECK AS MANY AS APPLY)

(1a) To get back at them?

___ 1 No
___ 2 Yes

___ 1 No
___ 2 Yes

(1b)(IF YES, ASK) What did they do to make you want to get back at them? (SPECIFY):

(2a) To get something you wanted?

___ 1 No
___ 2 Yes

___ 1 No
___ 2 Yes

(2b)(IF YES, ASK) What did you want from them?

(3a) For some other reason?

___ 1 No
___ 2 Yes

___ 1 No
___ 2 Yes

(3b)(IF YES, ASK) What was this reason?

Last Time Next to Last time

d. Were you the only one who was giving them the silent treatment or ignoring them, or were others involved? (CIRCLE RESPONSE)

- (1) Mostly me
(2) Others

1
2

1
2

e. (IF WITH OTHERS, ASK): How many other people were involved?

f. Did the person know you were ignoring them?

No ___ 1
Yes ___ 2

No ___ 1
Yes ___ 2

f. (IF YES, ASK): What did they do in response? (READ CATEGORIES; CHECK AS MANY AS APPLY)

- (1) Nothing
(2) Spread lies, secrets, or gossip about you
(3) Ignored you/gave you the silent treatment
(4) Threatened your reputation
(5) Yelled or screamed at you

(IF YELLED OR SCREAMED, ASK):
Was this response in public or private?

___ 1 Public
___ 2 Private

___ 1 Public
___ 2 Private

- (6) Threatened you physically
(7) Attacked you physically

(IF ATTACKED PHYSICALLY, ASK):
Were you injured?

No ___ 1
Yes ___ 2

No ___ 1
Yes ___ 2

(8) Other (SPECIFY):

g. Did you succeed in getting what you wanted (getting back at them, making them feel bad, getting your way?)

No ___ 1
Yes ___ 2

No ___ 1
Yes ___ 2

h. Had you been drinking or taking drugs before the incident?

No ___ 1
Yes ___ 2

No ___ 1
Yes ___ 2

i. (IF YES ASK): Had you been (READ CATEGORIES; CHECK NUMBER AT RIGHT)

- (1) drinking only
(2) using drugs only
(3) both drinking and using drugs

___ 1 drinking
___ 2 drugs
___ 3 both

___ 1 drinking
___ 2 drugs
___ 3 both

→ 131A. How many times in the last year have you tried to talk your friends out of doing something that was against the law? _____

Have you ever (READ ITEM).....? YES _____ NO _____
If so, when? _____

Approximately how many times in your life have you (READ ITEM)? _____

Do you remember how old were you the first time you (READ ITEM)? _____

Do you usually do this alone or with others? Alone _____ With Others _____

If with others, who do you usually do this with? Are they any of the individuals on these lists (show participant friendship and romantic partner lists)?

If not, who were they?

Name	Age	Sex
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

→ 132A. How many times in the last year have you hitchhiked where it was illegal to do so? _____

Have you ever (READ ITEM).....? YES _____ NO _____
If so, when? _____

Approximately how many times in your life have you (READ ITEM)? _____

Do you remember how old were you the first time you (READ ITEM)? _____

Do you usually do this alone or with others? Alone _____ With Others _____

If with others, who do you usually do this with? Are they any of the individuals on these lists (show participant friendship and romantic partner lists)?

If not, who were they?

Name	Age	Sex
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Had you been drinking or taking drugs before the incident?

No ___ 1

Yes ___ 2

→ Had you been (READ CATEGORIES) ___ 1 Drinking only?

___ 2 Using drugs only?

___ 3 Both drinking and using drugs?

Were you arrested for this incident? No 1 Yes 2

→ 133A. How many times in the last year have you been loud, rowdy, or unruly in a public place? _____

Have you ever (READ ITEM).....? YES _____ NO _____

If so, when? _____

Approximately how many times in your life have you (READ ITEM)? _____

Do you remember how old were you the first time you (READ ITEM)? _____

Do you usually do this alone or with others? Alone _____ With Others _____

If with others, who do you usually do this with? Are they any of the individuals on these lists (show participant friendship and romantic partner lists)?

If not, who were they?

Name	Age	Sex
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Had you been drinking or taking drugs before the incident?

No ___ 1

Yes ___ 2 → Had you been (READ CATEGORIES) ___ 1 Drinking only?
___ 2 Using drugs only?
___ 3 both drinking and using drugs?

Were you arrested for this incident? No ___ 1 Yes ___ 2

→ 134A. How many times in the last year have you been drunk in a public place? _____

Have you ever (READ ITEM).....? YES _____ NO _____

If so, when? _____

Approximately how many times in your life have you (READ ITEM)? _____

Do you remember how old were you the first time you (READ ITEM)? _____

Do you usually do this alone or with others? Alone _____ With Others _____

If with others, who do you usually do this with? Are they any of the individuals on these lists (show participant friendship and romantic partner lists)?

If not, who were they?

Name	Age	Sex
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

→ 135A. How many times in the last year have you begged for money or other things from strangers? _____

Have you ever (READ ITEM).....? YES _____ NO _____
If so, when? _____

Approximately how many times in your life have you (READ ITEM)? _____

Do you remember how old were you the first time you (READ ITEM)? _____

Do you usually do this alone or with others? Alone _____ With Others _____

If with others, who do you usually do this with? Are they any of the individuals on these lists (show participant friendship and romantic partner lists)?

If not, who were they?

Name	Age	Sex
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Had you been drinking or taking drugs before the incident?

No ___ 1

Yes ___ 2 → Had you been (READ CATEGORIES) ___ 1 Drinking only?
___ 2 Using drugs only?
___ 3 both drinking and using drugs?

Were you arrested for this incident? No ___ 1 Yes ___ 2

→ 136A. How many times in the last year have you avoided paying for such things as movies, bus or subway rides, or food? _____

Have you ever (READ ITEM).....? YES _____ NO _____
If so, when? _____

Approximately how many times in your life have you (READ ITEM)? _____

Do you remember how old were you the first time you (READ ITEM)? _____

Do you usually do this alone or with others? Alone _____ With Others _____

If with others, who do you usually do this with? Are they any of the individuals on these lists (show participant friendship and romantic partner lists)?

If not, who were they?

Name	Age	Sex
_____	_____	_____
_____	_____	_____
_____	_____	_____

Had you been drinking or taking drugs before the incident?

No ___ 1

Yes ___ 2 → Had you been (READ CATEGORIES) ___ 1 Drinking only?
___ 2 Using drugs only?
___ 3 both drinking and using drugs?

→ 137A. How many times in the last year have you failed to return extra change that a cashier gave you by mistake? _____

Have you ever (READ ITEM).....? YES _____ NO _____

If so, when? _____

Approximately how many times in your life have you (READ ITEM)? _____

Do you remember how old were you the first time you (READ ITEM)? _____

Do you usually do this alone or with others? Alone _____ With Others _____

If with others, who do you usually do this with? Are they any of the individuals on these lists (show participant friendship and romantic partner lists)?

If not, who were they?

Name	Age	Sex
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

→ 138A. How many times in the last year have you given money, food, or clothing to someone or some group who needed them very much? _____

Have you ever (READ ITEM).....? YES _____ NO _____

If so, when? _____

Approximately how many times in your life have you (READ ITEM)? _____

Do you remember how old were you the first time you (READ ITEM)? _____

Do you usually do this alone or with others? Alone _____ With Others _____

If with others, who do you usually do this with? Are they any of the individuals on these lists (show participant friendship and romantic partner lists)?

If not, who were they?

Name	Age	Sex
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

→ 139A. How many times in the last year have you used checks illegally or used phony money to pay for something? _____

Have you ever (READ ITEM).....? YES _____ NO _____

If so, when? _____

Approximately how many times in your life have you (READ ITEM)? _____

Do you remember how old were you the first time you (READ ITEM)? _____

You said that you had (READ ITEM).

Thinking of the last time you did this. . .

a. What did you do?

- ____ (1) overdraft on checking account
- ____ (2) wrote check on someone else's account
- ____ (3) cashed someone elses check
- ____ (4) used counterfeit money (including slugs and fake coins)
- ____ (5) Other (SPECIFY) _____

b. What was the dollar value involved in this incident? \$ _____

c. Were you alone or did others take part in this event? ____ (1) Alone ____ (2) With Others

(IF WITH OTHERS:) How many other persons were involved?
(NUMBER) _____

If with others, who do you usually do this with? Are they any of the individuals on these lists (show participant friendship and romantic partner lists)?

If not, who were they?

Name	Age	Sex
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Had you been drinking or taking drugs before the incident?

No ____ 1

Yes ____ 2 → Had you been (READ CATEGORIES) ____ 1 Drinking only?
____ 2 Using drugs only?
____ 3 Both drinking and using drugs?

Were you arrested for this incident? No ____ 1 Yes ____ 2

→ 140. How many times in the last year have you tried to cheat someone by selling them something that was worthless or not what you said it was? _____

Have you ever (READ ITEM)? YES _____ NO _____
If so, when? _____

Approximately how many times in your life have you (READ ITEM)? _____

Do you remember how old were you the first time you (READ ITEM)? _____

You said that you had (READ ITEM).

Thinking of the last time you did this. . .

a. What were you claiming to sell? (SPECIFY) _____

b. What were you actually selling? _____

c. Who were you trying to sell the _____ to? (SPECIFY)
_____(1) Stranger _____(3) Friend
_____(2) Family Member _____(4) Other (SPECIFY) _____

d. How much was the _____ really worth? (SPECIFY) \$ _____

e. How much did you try to sell it for? (SPECIFY) \$ _____

f. Did you actually sell _____ or just try to sell it?
_____(1) Actually sold it _____(2) Tried to sell it

g. Were you alone or did others take part in this event? _____(1) Alone _____(2) With Others
(IF WITH OTHERS) How many other persons were involved?
(NUMBER) _____

If with others, who do you usually do this with? Are they any of the individuals on these lists (show participant friendship and romantic partner lists)?

If not, who were they?

Name	Age	Sex
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Had you been drinking or taking drugs before the incident?

No _____ 1

Yes _____ 2 → Had you been (READ CATEGORIES) _____ 1 Drinking only?
_____ 2 Using drugs only?
_____ 3 both drinking and using drugs?

Were you arrested for this incident? No _____ 1 Yes _____ 2

→ 141A. How many times in the last year have you used or tried to use credit cards without the owner's permission? _____

Have you ever (READ ITEM)? YES _____ NO _____
If so, when? _____

Approximately how many times in your life have you (READ ITEM)? _____

Do you remember how old were you the first time you (READ ITEM)? _____

Thinking of the last time you did this. . .

a. Whose credit card was it?

____ (1) Stranger ____ (3) Friend
____ (2) Family member ____ (4) Other (SPECIFY) _____

b. How much did you charge or try to charge? (SPECIFY) _____

c. Were you alone or did others take
part in this event? ____ (1) Alone ____ (2) With Others

(IF WITH OTHERS:) How many other persons were involved?
(NUMBER) _____

*If with others, who do you usually do this with? Are they any of the individuals on these lists
(show participant friendship and romantic partner lists)?*

If not, who were they?

Name	Age	Sex
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Had you been drinking or taking drugs before the incident?

No ____ 1

Yes ____ 2 → Had you been (READ CATEGORIES) ____ 1 Drinking only?
____ 2 Using drugs only?
____ 3 Both drinking and using drugs?

Were you arrested for this incident? No ____ 1 Yes ____ 2



142A. How many times in the last year have you forged or copied someone else's signature on a check or legal document without their permission? _____

Have you ever (READ ITEM)? YES _____ NO _____
If so, when? _____

Approximately how many times in your life have you (READ ITEM)? _____

Do you remember how old were you the first time you (READ ITEM)? _____

Do you usually do this alone or with others? Alone _____ With Others _____

If with others, who do you usually do this with? Are they any of the individuals on these lists (show participant friendship and romantic partner lists)?

If not, who were they?

Name	Age	Sex
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____



143A. How many times in the last year have you been blamed for committing a crime that you did not actually commit? _____

143B. (IF MORE THAN ZERO FOR 143A)

What crime were you blamed for that you did not commit? (SPECIFY) _____

Have you ever (READ ITEM)? YES _____ NO _____
If so, when? _____

Crime blamed for: _____

Approximately how many times in your life have you (READ ITEM)? _____

Do you remember how old were you the first time you (READ ITEM)? _____

Do you usually do this alone or with others? Alone _____ With Others _____

If with others, who do you usually do this with? Are they any of the individuals on these lists (show participant friendship and romantic partner lists)?

If not, who were they?

Name	Age	Sex
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

The next set of questions ask about arrests and being questioned by the police. Please remember that all of our answers are confidential.

172. a. Have you ever been arrested?
1 ___ No (SKIP TO Q180) 2 ___ Yes → b. For what crime or crimes? (LIST)

173. Which if any of these crimes had you actually committed?
1 ___ None 2 ___ All 3 ___ Some (LIST) _____

174. For which if any of these crimes were you arrested in the past year?
1 ___ None 2 ___ All 3 ___ Some (LIST) _____
175. (a) In all, how many times have you ever been arrested? _____
(b) How many times in the past year? _____
- 176a. Were you sent to jail or prison or some other facility, or placed on probation or community service, for any of these crimes?
1 ___ No, None (SKIP TO PAGE Q180)
2 ___ Yes, Some or All → b. For which crimes? _____
177. Exactly what punishment did you get? (READ LIST ONLY TO PROBE; CHECK ALL THAT APPLY)
(a) ___ Probation (b) ___ Community Service (c) ___ Jail (d) ___ Prison (e) ___ Treatment Program
(f) ___ Other (SPECIFY) _____
178. For which crimes did you receive one or more of these punishments in the past year?
1 ___ None 2 ___ All 3 ___ Some (LIST) _____
179. (a) In all, how many times have you ever been sentenced to one of these punishments? _____
(b) How many times in the past year? _____
180. (a) Other than being arrested, have you ever been questioned by the police or a district attorney because they suspected you of committing a crime?
1 ___ No (SKIP TO Q182) 2 ___ Yes → (b) For what crime or crimes? (LIST)

181. Which of these crimes had you actually committed?
1 ___ None 2 ___ All 3 ___ Some (LIST) _____
182. (a) In all, other than being arrested, how many times have you ever been questioned by the police or a district attorney for any reason? _____ (b) How many times in the past year? _____

National Youth Survey Drug Use Module

[FOR Q144-155, IF R ANSWERS “NO” TO THE “HAVE YOU EVER...” QUESTION(S) – THERE MAY BE MORE THAN ONE – AT THE TOP OF THE PAGE, SKIP TO THE TOP OF THE NEXT PAGE (PART A OF NEXT Q). IF NO (ZERO) USE IN THE PAST YEAR, SKIP TO PART A OF THE NEXT Q.]

The next series of questions deals with some drugs and other substances you may have used in 2003 or before. Although this may be difficult, please give me your best estimate of the exact number of times you have used each substance during the last year, from Christmas a year ago to the Christmas just past.

Have you ever . . .

How many times in the
past year have you . . .

→ 144A. ...used any form of tobacco, including cigarettes, cigars, and smokeless tobacco (i.e., chewing tobacco or snuff)? No 1 Yes 2

144B. _____

→ IF YES: How old were you the first time you tried/used (ITEM)?

Approximately how many times in your life have you used (ITEM)?

144C. When using tobacco, how much do you usually use?

(a) _____ Cigarettes per day (Number) (b) _____ Cigars per day (Number) (c) _____ Cans of smokeless tobacco per month (Number)

144D. What has been your usual purpose or reason for using tobacco? (CIRCLE OR CHECK ONE)

- 1 Physical: To relieve physical pain, weight control, to have more energy
- 2 Emotional: To relieve feelings of boredom or loneliness
- 3 Stress: To relieve feelings of tension or anxiety
- 4 Enjoyment: For pleasure, fun, recreation, or taste, including just to get high
- 5 Self-assertion: To be different, rebellious, or special
- 6 Conformity: To be accepted or popular with friends
- 7 Social: To be relaxed and confident in social situations
- 8 Maturity: To appear more grown up
- 9 Enlightenment: To increase self-awareness, understanding, creativity
- 10 Dependence: Need it to get through the day
- 11 Habit: Just a habit, just always do
- 12 Other: (SPECIFY)

144E. Is tobacco effective for your purpose (READ SELECTED REASON)? 1 No 2 Yes

144F. Where do you get your tobacco? (CHECK YES OR NO FOR EACH; DO NOT READ)

- ☐ 1 No ☐ 2 Yes a. Stores, supermarkets, etc.
☐ 1 No ☐ 2 Yes b. Family
☐ 1 No ☐ 2 Yes c. Friends
☐ 1 No ☐ 2 Yes d. Other (SPECIFY) _____

Do you usually do this alone or with others? Alone _____ With Others _____

If with others, who do you usually do this with? Are they any of the individuals on these lists?

If not, who were they?

Name	Age	Sex	Name	Age	Sex
------	-----	-----	------	-----	-----

144G Have you ever quit using tobacco, either permanently or temporarily?

1 No (SKIP TO Q145A) _____ 2 Yes

144H. The last time you quit, what was the major reason you quit? (CIRCLE OR CHECK ONE)

- ☐ 1 Disliked the taste
- ☐ 2 Bad physical effects, such as headache, upset stomach, medical problems
- ☐ 3 Bad emotional effects, such as depression, anxiety
- ☐ 4 Felt it was wrong
- ☐ 5 Pressure from friends to stop using it
- ☐ 6 Trouble with parents, police, or others
- ☐ 7 Fearful of becoming dependent or addicted
- ☐ 8 Lost its effect

How many times in the past year have you . . .

145B _____

Approximately how many times in your life have you used (ITEM)? _____

145D. What has been your usual purpose or reason for using alcohol? (CIRCLE OR CHECK ONE)

- 145F. Where do you get your alcohol? (CHECK YES OR NO FOR EACH; DO NOT READ)

- ☐ 1 Disliked the taste
- ☐ 2 Bad physical effects, such as headache, upset stomach, medical problems
- ☐ 3 Bad emotional effects, such as depression, anxiety
- ☐ 4 Felt it was wrong
- ☐ 5 Pressure from friends to stop using it
- ☐ 6 Trouble with parents, police, or others
- ☐ 7 Fearful of becoming dependent or addicted
- ☐ 8 Lost its effect
- ☐ 9 Didn't need it anymore
- ☐ 10 Other (SPECIFY)

Have you ever ... How many times in the
past year have you ...

→ 146A. ...used marijuana or hashish?

No ___1 Yes ___2

146B _____

→ IF YES: How old were you the first time you tried/used (ITEM)? _____

Approximately how many times in your life have you used (ITEM)? _____

146C. When you have used marijuana, about how many joints or bowls have you smoked, or about how much have you taken by some other method? _____ Joints _____ Bowls _____ (Other) _____

146D. What has been your usual purpose or reason for using marijuana? (CIRCLE OR CHECK ONE)

- ___1 Physical: To relieve physical pain, weight control, to have more energy
- ___2 Emotional: To relieve feelings of boredom or loneliness
- ___3 Stress: To relieve feelings of tension or anxiety
- ___4 Enjoyment: For pleasure, fun, recreation, or taste, including just to get high
- ___5 Self-assertion: To be different, rebellious, or special
- ___6 Conformity: To be accepted or popular with friends
- ___7 Social: To be relaxed and confident in social situations
- ___8 Maturity: To appear more grown up
- ___9 Enlightenment: To increase self-awareness, understanding, creativity
- ___10 Dependence: Need it to get through the day
- ___11 Habit: Just a habit, just always do
- ___12 Other: (SPECIFY) _____

146E. Is marijuana effective for your purpose (READ SELECTED REASON)? ___1 No ___2 Yes

146F. Where do you get your marijuana? (CHECK YES OR NO FOR EACH; DO NOT READ)

- ___1 No ___2 Yes a. Stores, supermarkets, etc.
- ___1 No ___2 Yes b. Family
- ___1 No ___2 Yes c. Friends
- ___1 No ___2 Yes d. Grow it myself
- ___1 No ___2 Yes e. Dealer
- ___1 No ___2 Yes f. Other (SPECIFY) _____

Do you usually do this alone or with others? Alone _____ With Others _____

If with others, who do you usually do this with? Are they any of the individuals on these lists?

If not, who were they?

Name	Age	Sex	Name	Age	Sex
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

146G. Have you ever quit using marijuana, either permanently or temporarily?

___1 No (SKIP TO Q147A) ___2 Yes

146H. The last time you quit, what was the major reason you quit? (CIRCLE OR CHECK ONE)

- ___1 Disliked the taste
- ___2 Bad physical effects, such as headache, upset stomach, medical problems
- ___3 Bad emotional effects, such as depression, anxiety
- ___4 Felt it was wrong
- ___5 Pressure from friends to stop using it
- ___6 Trouble with parents, police, or others
- ___7 Fearful of becoming dependent or addicted
- ___8 Lost its effect
- ___9 Didn't need it anymore
- ___10 Other (SPECIFY) _____

- 148A. ... used barbiturates or downers, such as prescription sleeping pills, seconals, nembutal, or phenobarbital? Have you ever ... How many times in the past year have you ...
 No ___1 Yes ___2 148B _____
- 148C. ... used tranquilizers such as Valium, Librium, Quaaludes, Miltown, etc.? No ___1 Yes ___2 148D _____

→ IF YES: How old were you the first time you tried/used (ITEM)? _____

Approximately how many times in your life have you used (ITEM)? _____

148E. When you have used barbiturates or tranquilizers, have you ever done so without a doctor's prescription, or used more than the doctor prescribed? No ___1 Yes ___2

148F. What has been your usual purpose or reason for using barbiturates or tranquilizers? (CIRCLE OR CHECK ONE)

- ___1 Physical: To relieve physical pain, weight control, to have more energy
 ___2 Emotional: To relieve feelings of boredom or loneliness
 ___3 Stress: To relieve feelings of tension or anxiety
 ___4 Enjoyment: For pleasure, fun, recreation, or taste, including just to get high
 ___5 Self-assertion: To be different, rebellious, or special
 ___6 Conformity: To be accepted or popular with friends
 ___7 Social: To be relaxed and confident in social situations
 ___8 Maturity: To appear more grown up
 ___9 Enlightenment: To increase self-awareness, understanding, creativity
 ___10 Dependence: Need it to get through the day
 ___11 Habit: Just a habit, just always do
 ___12 Other: (SPECIFY) _____

148G. Are barbiturates or tranquilizers effective for your purpose (READ SELECTED REASON)?
 ___1 No ___2 Yes

148H. Where do you get your barbiturates or tranquilizers? (CHECK YES OR NO FOR EACH; DO NOT READ)

- ___1 No ___2 Yes a. Stores, supermarkets, etc.
 ___1 No ___2 Yes b. Family
 ___1 No ___2 Yes c. Friends
 ___1 No ___2 Yes d. Pharmacy, doctor, by prescription
 ___1 No ___2 Yes e. Dealer, other illegal source
 ___1 No ___2 Yes f. Other (SPECIFY) _____

Do you usually do this alone or with others? Alone _____ With Others _____

If with others, who do you usually do this with? Are they any of the individuals on these lists?

If not, who were they?

Name	Age	Sex	Name	Age	Sex
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

148I. Have you quit using barbiturates or tranquilizers, either permanently or temporarily?
 ___1 No (SKIP TO Q149A) ___2 Yes

148J. The last time you quit, what was the major reason you quit? (CIRCLE OR CHECK ONE)

- ___1 Disliked the taste
 ___2 Bad physical effects, such as headache, upset stomach, medical problems
 ___3 Bad emotional effects, such as depression, anxiety
 ___4 Felt it was wrong
 ___5 Pressure from friends to stop using it
 ___6 Trouble with parents, police, or others
 ___7 Fearful of becoming dependent or addicted
 ___8 Lost its effect
 ___9 Didn't need it anymore
 ___10 Other (SPECIFY) _____

- 149A. ... used amphetamines or uppers, speed, or pep pills such as dexedrine, benzedrine, whites, dexamy, diet pills, methamphetamines, or STP? Have you ever ... How many times in the past year have you ...
- No ___ 1 Yes ___ 2 149B _____
- 149C. ... used other stimulants such as Ritalin or Preludin? No ___ 1 Yes ___ 2 149D _____

→ IF YES: How old were you the first time you tried/used (ITEM)? _____

Approximately how many times in your life have you used (ITEM)? _____

149E. When you have used amphetamines or other stimulants, have you ever done so without a doctor's prescription, or used more than the doctor prescribed? No ___ 1 Yes ___ 2

149F. What has been your usual purpose or reason for using amphetamines or other stimulants? (CIRCLE OR CHECK ONE)

- ___ 1 Physical: To relieve physical pain, weight control, to have more energy
- ___ 2 Emotional: To relieve feelings of boredom or loneliness
- ___ 3 Stress: To relieve feelings of tension or anxiety
- ___ 4 Enjoyment: For pleasure, fun, recreation, or taste, including just to get high
- ___ 5 Self-assertion: To be different, rebellious, or special
- ___ 6 Conformity: To be accepted or popular with friends
- ___ 7 Social: To be relaxed and confident in social situations
- ___ 8 Maturity: To appear more grown up
- ___ 9 Enlightenment: To increase self-awareness, understanding, creativity
- ___ 10 Dependence: Need it to get through the day
- ___ 11 Habit: Just a habit, just always do
- ___ 12 Other: (SPECIFY) _____

149G. Are amphetamines or other stimulants effective for your purpose (READ SELECTED REASON)? ___ 1 No ___ 2 Yes

149H. Where do you get your amphetamines or other stimulants? (CHECK YES OR NO FOR EACH; DO NOT READ)

- ___ 1 No ___ 2 Yes a. Stores, supermarkets, etc.
- ___ 1 No ___ 2 Yes b. Family
- ___ 1 No ___ 2 Yes c. Friends
- ___ 1 No ___ 2 Yes d. Pharmacy, doctor, by prescription
- ___ 1 No ___ 2 Yes e. Dealer, other illegal source
- ___ 1 No ___ 2 Yes f. Other (SPECIFY) _____

Do you usually do this alone or with others? Alone _____ With Others _____

If with others, who do you usually do this with? Are they any of the individuals on these lists?

If not, who were they?

Name	Age	Sex	Name	Age	Sex
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

149I. Have you quit using amphetamines or other stimulants, either permanently or temporarily? ___ 1 No (SKIP TO Q150A) ___ 2 Yes

149J. The last time you quit, what was the major reason you quit? (CIRCLE OR CHECK ONE)

- ___ 1 Disliked the taste
- ___ 2 Bad physical effects, such as headache, upset stomach, medical problems
- ___ 3 Bad emotional effects, such as depression, anxiety
- ___ 4 Felt it was wrong
- ___ 5 Pressure from friends to stop using it
- ___ 6 Trouble with parents, police, or others
- ___ 7 Fearful of becoming dependent or addicted
- ___ 8 Lost its effect
- ___ 9 Didn't need it anymore

Have you ever ...

How many times in the past year have you ...

→ 150A. ... used crack cocaine?

No ___ 1 Yes ___ 2

150B. _____

150C. ... used powder cocaine, or any cocaine other than crack? No ___ 1 Yes ___ 2

150D. _____

→ IF YES: How old were you the first time you tried/used (ITEM)? _____

Approximately how many times in your life have you used (ITEM)? _____

150E. What has been your usual purpose or reason for using cocaine? (CIRCLE OR CHECK ONE)

- ___ 1 Physical: To relieve physical pain, weight control, to have more energy
- ___ 2 Emotional: To relieve feelings of boredom or loneliness
- ___ 3 Stress: To relieve feelings of tension or anxiety
- ___ 4 Enjoyment: For pleasure, fun, recreation, or taste, including just to get high
- ___ 5 Self-assertion: To be different, rebellious, or special
- ___ 6 Conformity: To be accepted or popular with friends
- ___ 7 Social: To be relaxed and confident in social situations
- ___ 8 Maturity: To appear more grown up
- ___ 9 Enlightenment: To increase self-awareness, understanding, creativity
- ___ 10 Dependence: Need it to get through the day
- ___ 11 Habit: Just a habit, just always do
- ___ 12 Other: (SPECIFY) _____

150F. Is cocaine effective for your purpose (READ SELECTED REASON)? ___ 1 No ___ 2 Yes

150G. Where do you get your cocaine? (CHECK YES OR NO FOR EACH; DO NOT READ)

- ___ 1 No ___ 2 Yes a. Stores, supermarkets, etc.
- ___ 1 No ___ 2 Yes b. Family
- ___ 1 No ___ 2 Yes c. Friends
- ___ 1 No ___ 2 Yes d. Pharmacy, doctor, by prescription
- ___ 1 No ___ 2 Yes e. Dealer, other illegal source
- ___ 1 No ___ 2 Yes f. Other (SPECIFY) _____

Do you usually do this alone or with others? Alone _____ With Others _____

If with others, who do you usually do this with? Are they any of the individuals on these lists?

If not, who were they?

Name	Age	Sex	Name	Age	Sex
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

150H. Have you quit using cocaine, either permanently or temporarily?

___ 1 No (SKIP TO Q151A) ___ 2 Yes

150I. The last time you quit, what was the major reason you quit? (CIRCLE OR CHECK ONE)

- ___ 1 Disliked the taste
- ___ 2 Bad physical effects, such as headache, upset stomach, medical problems
- ___ 3 Bad emotional effects, such as depression, anxiety
- ___ 4 Felt it was wrong
- ___ 5 Pressure from friends to stop using it
- ___ 6 Trouble with parents, police, or others
- ___ 7 Fearful of becoming dependent or addicted
- ___ 8 Lost its effect
- ___ 9 Didn't need it anymore
- ___ 10 Other (SPECIFY) _____

Have you ever ...

How many times in the past year have you ...

➔ 151A. ... used MDMA or ecstasy?

No ___1 Yes ___2

151B. _____

→ IF YES: How old were you the first time you tried/used (ITEM)? _____

Approximately how many times in your life have you used (ITEM)? _____

151C. What has been your usual purpose or reason for using ecstasy? (CIRCLE OR CHECK ONE)

- ___1 Physical: To relieve physical pain, weight control, to have more energy
- ___2 Emotional: To relieve feelings of boredom or loneliness
- ___3 Stress: To relieve feelings of tension or anxiety
- ___4 Enjoyment: For pleasure, fun, recreation, or taste, including just to get high
- ___5 Self-assertion: To be different, rebellious, or special
- ___6 Conformity: To be accepted or popular with friends
- ___7 Social: To be relaxed and confident in social situations
- ___8 Maturity: To appear more grown up
- ___9 Enlightenment: To increase self-awareness, understanding, creativity
- ___10 Dependence: Need it to get through the day
- ___11 Habit: Just a habit, just always do
- ___12 Other: (SPECIFY) _____

151D. Is ecstasy effective for your purpose (READ SELECTED REASON)? ___1 No ___2 Yes

151E. Where do you get your ecstasy? (CHECK YES OR NO FOR EACH; DO NOT READ)

- ___1 No ___2 Yes a. Stores, supermarkets, etc.
- ___1 No ___2 Yes b. Family
- ___1 No ___2 Yes c. Friends
- ___1 No ___2 Yes d. Pharmacy, doctor, by prescription
- ___1 No ___2 Yes e. Dealer, other illegal source
- ___1 No ___2 Yes f. Other (SPECIFY) _____

Do you usually do this alone or with others? Alone _____ With Others _____

If with others, who do you usually do this with? Are they any of the individuals on these lists?

If not, who were they?

Name	Age	Sex	Name	Age	Sex
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

151F. Have you quit using ecstasy, either permanently or temporarily?

___1 No (SKIP TO Q152A) ___2 Yes

151G. The last time you quit, what was the major reason you quit? (CIRCLE OR CHECK ONE)

- ___1 Disliked the taste
- ___2 Bad physical effects, such as headache, upset stomach, medical problems
- ___3 Bad emotional effects, such as depression, anxiety
- ___4 Felt it was wrong
- ___5 Pressure from friends to stop using it
- ___6 Trouble with parents, police, or others
- ___7 Fearful of becoming dependent or addicted
- ___8 Lost its effect
- ___9 Didn't need it anymore
- ___10 Other (SPECIFY) _____

How many times in the
past year have you . . .

152B _____

Approximately how many times in your life have you used (ITEM)? _____

- 1 Physical: To relieve physical pain, weight control, to have more energy
- 2 Emotional: To relieve feelings of boredom or loneliness
- 3 Stress: To relieve feelings of tension or anxiety
- 4 Enjoyment: For pleasure, fun, recreation, or taste, including just to get high
- 5 Self-assertion: To be different, rebellious, or special
- 6 Conformity: To be accepted or popular with friends
- 7 Social: To be relaxed and confident in social situations
- 8 Maturity: To appear more grown up
- 9 Enlightenment: To increase self-awareness, understanding, creativity
- 10 Dependence: Need it to get through the day
- 11 Habit: Just a habit, just always do
- 12 Other: (SPECIFY)

☐ 1 No	☐ 2 Yes	a. Stores, supermarkets, etc.
☐ 1 No	☐ 2 Yes	b. Family
☐ 1 No	☐ 2 Yes	c. Friends
☐ 1 No	☐ 2 Yes	d. Pharmacy, doctor, by prescription
☐ 1 No	☐ 2 Yes	e. Dealer, other illegal source
☐ 1 No	☐ 2 Yes	f. Other (SPECIFY) _____

Name	Age	Sex	Name	Age	Sex
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

- ☐ 1 Disliked the taste
- ☐ 2 Bad physical effects, such as headache, upset stomach, medical problems
- ☐ 3 Bad emotional effects, such as depression, anxiety
- ☐ 4 Felt it was wrong
- ☐ 5 Pressure from friends to stop using it
- ☐ 6 Trouble with parents, police, or others
- ☐ 7 Fearful of becoming dependent or addicted
- ☐ 8 Lost its effect
- ☐ 9 Didn't need it anymore
- ☐ 10 Other (SPECIFY)

Have you ever . . .

How many times in the past year have you . . .

→ 153A. . . used codeine?

No 1 Yes 2

153B _____

→ IF YES: How old were you the first time you tried/used (ITEM)? _____

Approximately how many times in your life have you used (ITEM)? _____

153C. When you have used codeine, have you ever done so without a doctor's prescription, or used more than the doctor prescribed? No 1 Yes 2

153D. What has been your usual purpose or reason for using codeine? (CIRCLE OR CHECK ONE)

- 1 Physical: To relieve physical pain, weight control, to have more energy
- 2 Emotional: To relieve feelings of boredom or loneliness
- 3 Stress: To relieve feelings of tension or anxiety
- 4 Enjoyment: For pleasure, fun, recreation, or taste, including just to get high
- 5 Self-assertion: To be different, rebellious, or special
- 6 Conformity: To be accepted or popular with friends
- 7 Social: To be relaxed and confident in social situations
- 8 Maturity: To appear more grown up
- 9 Enlightenment: To increase self-awareness, understanding, creativity
- 10 Dependence: Need it to get through the day
- 11 Habit: Just a habit, just always do
- 12 Other: (SPECIFY) _____

153E. Is codeine effective for your purpose (READ SELECTED REASON)? 1 No 2 Yes

153F. Where do you get your codeine? (CHECK YES OR NO FOR EACH; DO NOT READ)

- 1 No 2 Yes a. Stores, supermarkets, etc.
- 1 No 2 Yes b. Family
- 1 No 2 Yes c. Friends
- 1 No 2 Yes d. Pharmacy, doctor, by prescription
- 1 No 2 Yes e. Dealer, other illegal source
- 1 No 2 Yes f. Other (SPECIFY) _____

Do you usually do this alone or with others? Alone _____ With Others _____

If with others, who do you usually do this with? Are they any of the individuals on these lists?

If not, who were they?

Name	Age	Sex	Name	Age	Sex
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

153G. Have you quit using codeine, either permanently or temporarily?
1 No (SKIP TO Q154A) 2 Yes

153H. The last time you quit, what was the major reason you quit? (CIRCLE OR CHECK ONE)

- 1 Disliked the taste
- 2 Bad physical effects, such as headache, upset stomach, medical problems
- 3 Bad emotional effects, such as depression, anxiety
- 4 Felt it was wrong
- 5 Pressure from friends to stop using it
- 6 Trouble with parents, police, or others
- 7 Fearful of becoming dependent or addicted
- 8 Lost its effect
- 9 Didn't need it anymore
- 10 Other (SPECIFY) _____

Have you ever . . .

How many times in the
past year have you . . .

→ 154A. . . . used heroin?

No ___1 Yes ___2

154B _____

→ IF YES: How old were you the first time you tried/used (ITEM)? _____

Approximately how many times in your life have you used (ITEM)? _____

154C. What has been your usual purpose or reason for using heroin? (CIRCLE OR CHECK ONE)

- ___1 Physical: To relieve physical pain, weight control, to have more energy
- ___2 Emotional: To relieve feelings of boredom or loneliness
- ___3 Stress: To relieve feelings of tension or anxiety
- ___4 Enjoyment: For pleasure, fun, recreation, or taste
- ___5 Self-assertion: To be different, rebellious, or special
- ___6 Conformity: To be accepted or popular with friends
- ___7 Social: To be relaxed and confident in social situations
- ___8 Maturity: To appear more grown up
- ___9 Enlightenment: To increase self-awareness, understanding, creativity
- ___10 Dependence: Need it to get through the day
- ___11 Habit: Just a habit, just always do
- ___12 Other: (SPECIFY) _____

154D. Is heroin effective for your purpose (READ SELECTED REASON)? ___1 No ___2 Yes

154E. Where do you get your heroin? (CHECK YES OR NO FOR EACH; DO NOT READ)

- ___1 No ___2 Yes a. Stores, supermarkets, etc.
- ___1 No ___2 Yes b. Family
- ___1 No ___2 Yes c. Friends
- ___1 No ___2 Yes d. Pharmacy, doctor, by prescription
- ___1 No ___2 Yes e. Dealer, other illegal source
- ___1 No ___2 Yes f. Other (SPECIFY) _____

Do you usually do this alone or with others? Alone _____ With Others _____

If with others, who do you usually do this with? Are they any of the individuals on these lists?

If not, who were they?

Name	Age	Sex	Name	Age	Sex
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

154F. Have you quit using heroin, either permanently or temporarily?
___1 No (SKIP TO Q155A) ___2 Yes

154G. The last time you quit, what was the major reason you quit? (CIRCLE OR CHECK ONE)

- ___1 Disliked the taste
- ___2 Bad physical effects, such as headache, upset stomach, medical problems
- ___3 Bad emotional effects, such as depression, anxiety
- ___4 Felt it was wrong
- ___5 Pressure from friends to stop using it
- ___6 Trouble with parents, police, or others
- ___7 Fearful of becoming dependent or addicted
- ___8 Lost its effect
- ___9 Didn't need it anymore
- ___10 Other (SPECIFY) _____

Have you ever . . .

How many times in the past year have you . . .

→ 155A. ... used other opiates such as methadone, morphine, Percodan, Demerol, Dilaudid, or Talwin?

No 1 Yes 2

155B

→ IF YES: How old were you the first time you tried/used (ITEM)?

Approximately how many times in your life have you used (ITEM)?

155C. What other opiates besides codeine and heroin did you use? (NAMES)

155D. What has been your usual purpose or reason for using other opiates? (CIRCLE OR CHECK ONE)

- 1 Physical: To relieve physical pain, weight control, to have more energy
- 2 Emotional: To relieve feelings of boredom or loneliness
- 3 Stress: To relieve feelings of tension or anxiety
- 4 Enjoyment: For pleasure, fun, recreation, or taste, including just to get high
- 5 Self-assertion: To be different, rebellious, or special
- 6 Conformity: To be accepted or popular with friends
- 7 Social: To be relaxed and confident in social situations
- 8 Maturity: To appear more grown up
- 9 Enlightenment: To increase self-awareness, understanding, creativity
- 10 Dependence: Need it to get through the day
- 11 Habit: Just a habit, just always do
- 12 Other: (SPECIFY)

155E. Are other opiates effective for your purpose (READ SELECTED REASON)? 1 No 2 Yes

155F. Where do you get your other opiates? (CHECK YES OR NO FOR EACH; DO NOT READ)

- 1 No 2 Yes a. Stores, supermarkets, etc.
- 1 No 2 Yes b. Family
- 1 No 2 Yes c. Friends
- 1 No 2 Yes d. Pharmacy, doctor, by prescription
- 1 No 2 Yes e. Dealer, other illegal source
- 1 No 2 Yes f. Other (SPECIFY)

Do you usually do this alone or with others? Alone With Others

If with others, who do you usually do this with? Are they any of the individuals on these lists?

If not, who were they?

Name	Age	Sex	Name	Age	Sex
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>

155G. Have you quit using other opiates, either permanently or temporarily?

 1 No (SKIP TO Q156A) 2 Yes

155H. The last time you quit, what was the major reason you quit? (CIRCLE OR CHECK ONE)

- 1 Disliked the taste
- 2 Bad physical effects, such as headache, upset stomach, medical problems
- 3 Bad emotional effects, such as depression, anxiety
- 4 Felt it was wrong
- 5 Pressure from friends to stop using it
- 6 Trouble with parents, police, or others
- 7 Fearful of becoming dependent or addicted
- 8 Lost its effect
- 9 Didn't need it anymore
- 10 Other (SPECIFY)

How many times in the
past year have you . . .

156B

→ IF YES: How old were you the first time you tried/used (ITEM)?

Approximately how many times in your life have you used (ITEM)? _____

If with others, who do you usually do this with? Are they any of the individuals on these lists?

Name	Age	Sex	Name	Age	Sex
_____	_____	_____	_____	_____	_____

How many times in the
past year have you . . .

157B

→ IF YES: How old were you the first time you tried/used (ITEM)?

Approximately how many times in your life have you used (ITEM)?

If with others, who do you usually do this with? Are they any of the individuals on these lists?

Name	Age	Sex	Name	Age	Sex
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

How many times in the
past year have you . . .

➔ 158C. What illicit drugs have you injected through the skin or into a vein? (NAMES) _____

→ 159. In the past year, did you ever do anything illegal in order to get any of the following substances?

	No	Yes
a. Alcohol?	1	2
b. Marijuana?	1	2
c. Drugs?	1	2

(IF YES TO ANY OF THE ABOVE, ASK):

d. What did you do? (CHECK AS MANY AS APPLY; DO NOT READ LIST)

☐ (1) steal something
☐ (2) prostitution
☐ (3) gamble
☐ (4) sell drugs or alcohol
☐ (5) sell things that were not yours
☐ (6) beat someone up

☐ (7) bought the drug
☐ (8) use fake ID
☐ (9) steal alcohol or drugs
☐ (10) fake prescription
☐ (11) fake illness
☐ (12) Other (SPECIFY) _____

CHECK WHETHER IN THE PAST YEAR R HAS USED ALCOHOL (IF SO, CHECK BELOW AND ON PAGE B-42); MARIJUANA (IF SO, CHECK BELOW AND ON PAGE B-42); OR OTHER DRUGS (IF SO CHECK BELOW AND ON PAGE B-42);

CHECKLIST: ☐ Alcohol ☐ Marijuana ☐ Other Drugs

IF NO DRUG OR ALCOHOL USE IN THE PAST YEAR SKIP TO PAGE B-44 QUESTION 171; IF R USED ANY DRUGS IN THE PAST YEAR, ASK EACH OF THE FOLLOWING QUESTIONS WITH RESPECT TO ALCOHOL, MARIJUANA, AND OTHER DRUGS (WHICHEVER YOU HAVE CHECKED ABOVE).

→ 160. (IF RESPONDENT USED ANY ALCOHOL, ASK): In the past year ...

Have you ever...

a. How many times have you been drunk or pretty high on alcohol?
 _____ (ENTER EXACT NUMBER - IF NONE, SKIP TO QUESTION 161)

b. How many times have you driven a motor vehicle when you were drunk or high on alcohol?
 _____ (ENTER EXACT NUMBER)

(IF WORKING ASK):

c. How many times have you been drunk or pretty high on alcohol while you were at work?
 _____ (ENTER EXACT NUMBER)

→ 161. (IF RESPONDENT USED ANY MARIJUANA/HASHISH, ASK): In the past year ...

Have you ever...

a. How many times have you been high on marijuana?
 _____ (ENTER EXACT NUMBER- IF NONE, SKIP TO QUESTION 162)

b. How many times have you driven a motor vehicle when you were high on marijuana?
 _____ (ENTER EXACT NUMBER)

(IF WORKING, ASK):

c. How many times have you been high on marijuana while you were at work?
 _____ (ENTER EXACT NUMBER)

→ 162. (IF RESPONDENT USED ANY OTHER DRUGS, ASK): In the past year ...

Have you ever...

a. How many times have you been high on other drugs?
 _____ (ENTER EXACT NUMBER- IF NONE, SKIP TO NEXT PAGE, B-42)

b. How many times have you driven a motor vehicle when you were high on drugs other than marijuana?
 _____ (ENTER EXACT NUMBER)

(IF WORKING, ASK):

c. How many times have you been high on drugs other than marijuana while you were at work?
 _____ (ENTER EXACT NUMBER)

CHECKLIST: _____ Alcohol _____ Marijuana _____ Other Drugs

(ASK THE FOLLOWING QUESTIONS ONLY ABOUT THE SUBSTANCES YOU CHECKED ABOVE.)

Now I am going to ask you some questions about your use of alcohol (and drugs) and the effects it may have had on your relations with your family, friends, and others. Remember that your answers will be held strictly confidential and will not be revealed to anyone. Look at the responses on the Frequency Response Scale, #11, and select the one which best describes how often you have been involved in each behavior.

Once or Three or Five or More than
Never Twice Four Times Six Times Six Times

→ 163. (IF MARRIED OR LIVING WITH PARTNER, ASK):

How many times in the last year have you
gotten into trouble with your (spouse/partner)
because of your use of (FILL IN SUBSTANCE)
(PROMPT: that is, affected your relationship,
not trouble with police)

a. Alcohol?	1	2	3	4	5
b. Marijuana or Hashish?	1	2	3	4	5
c. Other Drugs?	1	2	3	4	5

→ 164. (IF WORKING, ASK):

During the past year how many
times have you missed ~~work~~ or had
to call in sick because of your use
of (FILL IN SUBSTANCE)

a. Alcohol?	1	2	3	4	5
b. Marijuana or Hashish?	1	2	3	4	5
c. Other Drugs?	1	2	3	4	5

→ 165. How many times in the last year have
you gotten into trouble with your
friends because of your use of
(FILL IN SUBSTANCE)

a. Alcohol?	1	2	3	4	5
b. Marijuana or Hashish?	1	2	3	4	5
c. Other Drugs?	1	2	3	4	5

	Once or Never	Two	Three or Four Times	Five or Six Times	More than Six Times
--	------------------	-----	------------------------	----------------------	------------------------

→ 166. How many times in the last year have you had problems with your family because of your use of (FILL IN SUBSTANCE)

a. Alcohol?	1	2	3	4	5
b. Marijuana or Hashish?	1	2	3	4	5
c. Other Drugs?	1	2	3	4	5

→ 167. How many times in the last year have you gotten into physical fights because of your use of (FILL IN SUBSTANCE)

a. Alcohol?	1	2	3	4	5
b. Marijuana or Hashish?	1	2	3	4	5
c. Other Drugs?	1	2	3	4	5

→ 168. How often in the last year have you had problems with your physical health because of your use of (FILL IN SUBSTANCE)

a. Alcohol?	1	2	3	4	5
b. Marijuana or Hashish?	1	2	3	4	5
c. Other Drugs?	1	2	3	4	5

→ 169. During the past year how many times have you gotten into trouble with the police or been arrested because of your use of (FILL IN SUBSTANCE)

a. Alcohol?	1	2	3	4	5
b. Marijuana or Hashish?	1	2	3	4	5
c. Other Drugs?	1	2	3	4	5

→ 170. During the past year how many times have you had any accidents while driving because of your use of (FILL IN SUBSTANCE)

a. Alcohol?	1	2	3	4	5
b. Marijuana or Hashish?	1	2	3	4	5
c. Other Drugs?	1	2	3	4	5

→ 171. a. In the past year, have you ever had your driver's license suspended or revoked for driving under the influence of alcohol or drugs?

No 1 (IF NO, SKIP TO TOP OF NEXT PAGE)

Yes 2 →

b. How long was the license

suspension or revocation period?

(1)
(YEARS)

(2)
(MONTHS)

c. Did you drive at any time during the period of suspension or revocation?

No 1 (SKIP TO INSTRUCTIONS PRECEDING Q 172 BELOW)

Yes 2

d. Please use Scale #10: How often?

Once a Month	Once Every 2-3 Weeks	Once a Week	2-3 Times A Week	Once a Day	2-3 Times A Day
1	2	3	4	5	6

National Youth Survey

Deviant Attitudes Module

For this next set of questions, please tell me how wrong you think each of the following things is for you or someone your age.

How wrong is it for someone your age to.....

	Very wrong	Wrong	A little bit wrong	Not wrong at all	Don't Know
1. cheat on school tests.					
2. purposely damage or destroy property that does not belong to him/her.					
3. use marijuana or hashish.					
4. steal something worth less than \$5.					
5. hit or threaten to hit someone without any reason.					
6. use alcohol.					
7. break into a vehicle or building to steal something					
8. sell hard drugs such as heroin, cocaine and LSD.					
9. steal something worth more than \$50.					

Appendix G

Psychometric Properties and Scale Content of the National Youth Survey's Self-Reported Delinquency Module

Table G1

Item Content and Reliability Values of NYS Self-Reported Delinquency Scales

	Scale	Item Content	Reliability Values: Frequency Score s	Reliability Values: Variety Scores
Offence Specific Scales	Felony assault	1) Aggravated assault 2) Sexual assault 3) Gang fights	.67	.76
	Minor assault	1) Hit teacher 2) Hit parent 3) Hit students	.58	.56
	Robbery	1) Strong-armed students 2) Strong-armed teachers 3) Strong-armed others	.84	.75
	Felony theft	1) Stole motor vehicle 2) Stole something > \$50 3) Broke into building/ vehicle 4) Bought stolen goods	.52	.88
	Minor theft	1) Stole something <\$5 2) Stole something \$5-\$50	.80	.76

		3) Joyriding		
	Vandalism	1) Damaged family property 2) Damaged school property 3) Damaged other property	.88	.58
Offence- category scales	Illegal services	1) Prostitution 2) Sold marijuana 3) Sold hard drugs	.93	.79
	Public disorder	1) Hitchhiked illegally 2) Disorderly conduct 3) Public drunkenness 4) Panhandled 5) Obscene phone calls	.92	.69
	Status offences	1) Runaway 2) Skipped classes 3) Lied about age 4) Sexual intercourse	.49	.80
	Crimes against persons	1) Aggravated assault 2) Gang fights 3) Hit teacher 4) Hit parents 5) Hit peer 6) Sexual assault 7) Strong-armed students		

		8) Strong-armed teachers 9) Strong-armed others		
	General theft	1) Stole motor vehicle 2) Stole something > \$50 3) Bought stolen goods 4) Stole something <\$5 5) Stole something \$5-\$50 6) Broke into building/vehicle 7) Joyriding		
Summary scales	Index offences	1) Aggravated assault 2) Sexual assault	.65	.87
	General delinquency A		.75	.84

Appendix H

The Temporal Sequencing of the Tanner Stages of Pubertal Development

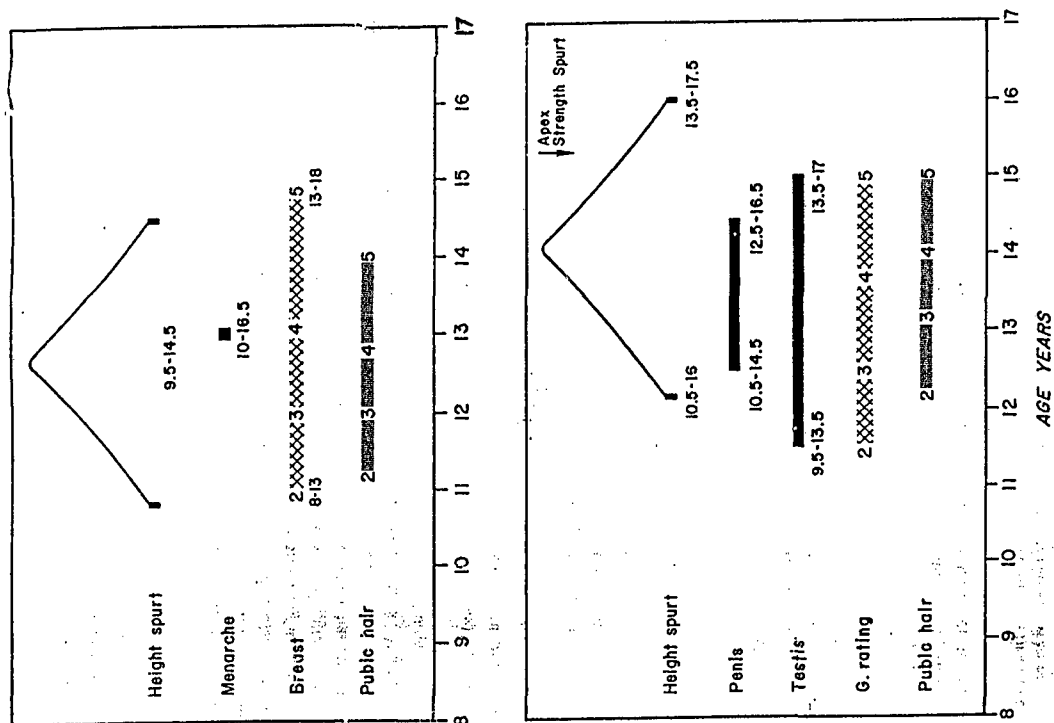
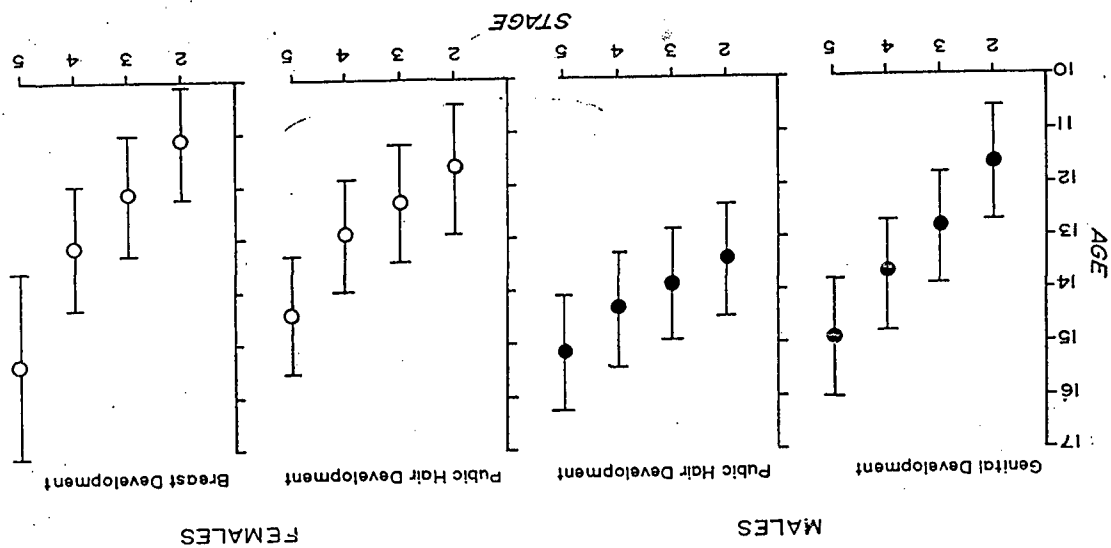


Figure H1

The Tanner Stages of Pubertal Development (Petersen et al., 1983, Originally from Tanner, 1974).

Appendix I

Alternate Regression Analyses

Table II
Sequential Multiple Regression: Lifetime Variety of Delinquent Activity in Females

Variables	DV	Age	Early	Late	IDP	Early x IDP	Late x IDP	B	β	sr ²
Age	.46**							1.45*	.27	.07
Dummy 1: early vs. non-early pubertal development	.04	-.07						-0.54	-.04	
Dummy 2: late vs. non-late pubertal development	.13	.07	-.29*					4.19	.24	
Involvement with Delinquent Peers (IDP)	.77**	.23	.16	-.06				0.04**	.75	.26
Early vs. non-early x IDP	.32*	.09	.80**	-.23	.46**			0.00	.01	
Late vs. non-late x IDP	.25*	.03	-.21	.75**	.24*	-.17	Intercept=	-0.01	-.12	
								-21.15*		
Means	8.92	15.72	0.27	0.18	168.23	53.45	28.06		R ² =	0.70**
Standard Deviations	6.84	1.29	0.45	0.39	123.18	112.10	79.94	Adjusted	R ² =	0.66
								R =		0.84

***p*<.001. **p*<.05

Table I2

Sequential Multiple Regression: Lifetime Variety of Delinquent Activity in Males

Variables	DV	Age	Early	Late	IDP	Early x IDP	Late x IDP	B	β	st ²
Age	.21							0.95	.14	
Dummy 1: early vs. non-early pubertal development	.18	.01						2.44	.12	
Dummy 2: late vs. non-late pubertal development	.05	.09	-.23					-5.64	-.27	
Involvement with Delinquent Peers (IDP)	.66**	.14	.00	.07				0.04**	.57	.22
Early vs. non-early x IDP	.25*	-.02	.91**	-.21	.15			0.01	.07	
Late vs. non-late x IDP	.19	.02	-.21	.90**	.23	-.19		0.03	.34	
						Intercept=		-10.63		
Means	14.90	16.86	0.20	0.18	224.18	44.94	43.40		R ² =	.49**
Standard Deviations	8.18	1.23	0.40	0.39	119.49	100.17	104.00	Adjusted	R ² =	.42
								R =		.70

Note. ** $p < .001$. * $p < .05$

Table I3

Sequential Multiple Regression: Lifetime Frequency of Delinquent Behaviour in Females

Variables	DV	Age	Early	Late	IDP	Early x IDP	Late x IDP	B	β	sr^2
Age	.41*							.20	.23	.17*
Dummy 1: early vs. non-early pubertal development	.00	-.07						.03	.01	.01
Dummy 2: late vs. non-late pubertal development	.14	.07	-.29*					.74	.26	
Involvement with Delinquent Peers (IDP)	.73**	.23	.16	-.06				.01	.77	.44**
Early vs. non-early x IDP	.25*	.09	.80**	-.23	.46**			.00	-.10	.01
Late vs. non-late x IDP	.26*	.03	-.21	.75**	.24*	-.17		.00	-.15	
							Intercept=	-2.56		
Means	1.74	15.72	0.27	0.18	168.23	53.45	28.06		R ² =	.63**
Standard Deviations	1.10	1.29	0.45	0.39	123.18	112.10	79.94		Adjusted R ² =	.58
									R =	.79

Note. ** $p < .001$. * $p < .05$.

Table 14
Sequential Multiple Regression: Lifetime Frequency of Delinquent Behavior in Males

Variables	DV	Age	Early	Late	IDP	Early x IDP	Late x IDP	B	β	sr ²
Age	.34*									
Dummy 1: early vs. non-early pubertal development	.12	.01						.17* .80	.23 .35	.05
Dummy 2: late vs. non-late pubertal development	.00	.09	-.23					-.15	-.06	
Involvement with Delinquent Peers (IDP)	.72**	.14	.00	.07				.01**	.73	.36
Early vs. non-early x IDP	.17	-.02	.91**	-.21	.15			.00	-.27	
Late vs. non-late x IDP	.11	.02	-.21	.90**	.23	-.19		.00	.02	
						Intercept=	-1.73			
Means	2.48	16.86	0.20	0.18	224.18	44.94	43.40		R ² =	.61**
Standard Deviations	0.92	1.23	0.40	0.39	119.49	100.17	104.00	Adjusted	R ² =	.55
								R =		.78

Note. * $p < .05$. ** $p < .001$.

Table I5

Sequential Multiple Regression: Past Year Frequency of Delinquent Behaviour in Females

Variables	DV	Age	Early	Late	IDP	Early x IDP	Late x IDP	B	β	Sr ²
Age	.36*							.13	.18	
Dummy 1: early vs. non-early pubertal development	.02	-.07						.22	.10	
Dummy 2: late vs. non-late pubertal development	.17	.07	-.29*					.76	.32	
Involvement with Delinquent Peers (IDP)	.71**	.23	.15	-.07				.01**	.78	.29
Early vs. non-early x IDP	.24	.09	.80**	-.23	.45*			.00	-.16	
Late vs. non-late x IDP	.29*	.03	-.22	.75**	.24	-.18		.00	-.15	
							Intercept=	-1.79		
Means	1.42	15.73	0.27	0.19	170.56	54.56	28.65		R ² =	.59**
Standard	0.95	1.30	0.45	0.39	123.38	113.00	80.68	Adjusted	R ² =	.54
Deviations									R =	.77

Note. ** $p < .001$. * $p < .05$.

Table 16
 Sequential Multiple Regression: Past Year Frequency of Delinquent Behavior in Males

Variables	DV	Age	Early	Late	IDP	Early x IDP	Late x IDP	B	β	sr ²
Age	.10							.03	.04	
Dummy 1: early vs. non-early pubertal development	.21	.01						.78	.34	
Dummy 2: late vs. non-late pubertal development	-.16	.09	-.23					-.71	-.30	
Involvement with Delinquent Peers (IDP)	.53**	.14	.00	.07				.00**	.54	.20
Early vs. non-early x IDP	.24*	-.02	.91**	-.21	.15			.00	-.19	
Late vs. non-late x IDP	-.03	.02	-.21	.90**	.23	-.19		.00	.15	
						Intercept=		0.33		
Means	1.82	16.86	0.20	0.18	224.18	44.94	43.40		R ² =	.36*
Standard Deviations	0.92	1.23	0.40	0.39	119.49	100.17	104.00	Adjusted	R ² =	.27
								R =		.60

Note. ** $p < .001$. * $p < .05$.

Table 17
 Sequential Multiple Regression: Lifetime Variety of Drug Use in Females

Variables	DV	Age	Early	Late	IDP	Early x IDP	Late x IDP	B	β	Sr^2
Age	.36*							0.71		.26
Early vs. non-early pubertal development	.15	-.07						0.50		.06
Late vs. non-late pubertal development	.02	.07	-.29*					0.52		.06
Involvement with Delinquent Peers (IDP)	.51**	.23	.16	-.06				0.01*	.41	.08
Early vs. non-early x IDP	.32*	.09	.80**	-.23	.46**			0.00	.08	
Late vs. non-late x IDP	.13	.03	-.21	.75**	.24*	-.17		0.00	.01	
							Intercept=	-9.81		
Means	3.71	15.72	0.27	0.18	168.23	53.45	28.06		$R^2 =$	.34*
Standard Deviations	3.56	1.29	0.45	0.39	123.18	112.10	79.94	Adjusted	$R^2 =$	.24
									$R =$	.58

** $p < .001$. * $p < .05$.

Table 18
Sequential Multiple Regression: Lifetime Variety of Drug Use in Males

Variables	DV	Age	Early	Late	IDP	Early x IDP	Late x IDP	B	β	Sr ²
Age	.33*							.84**	.29	.08
Early vs. non-early pubertal development	-.01	.01						-3.76	-.43	
Late vs. non-late pubertal development	.10	.09	-.23					-2.78	-.31	
Involvement with Delinquent Peers (IDP)	.69**	.14	.00	.07				.02**	.51	.18
Early vs. non-early x IDP	.15	-.02	.91**	-.21	.15			.02	.47	
Late vs. non-late x IDP	.22	.02	-.21	.90**	.23	-.19		.01	.38	
							Intercept=	-12.72*		
Means	4.84	16.86	0.20	0.18	224.18	44.94	43.40		R ² =	.58**
Standard Deviations	3.52	1.23	0.40	0.39	119.49	100.17	104.00	Adjusted	R ² =	.52
								R =		.76

Note. ** $p < .001$ * $p < .05$.

Table 19
Sequential Multiple Regression: Lifetime Frequency of Drug Use in Females

Variables	DV	Age	Early	Late	IDP	Early x IDP	Late x IDP	B	β	sr ²
Age	.57**							8.31**	.46	.19
Dummy 1: early vs. non-early pubertal development	-.02	-.07						4.76	.09	
Dummy 2: late vs. non-late pubertal development	.03	.07	-.29*					-3.92	-.07	
Involvement with Delinquent Peers (IDP)	.63**	.23	.16	-.06				0.11**	.57	.16
Early vs. non-early x IDP	.16	.09	.80**	-.23	.46**			-0.04	-.21	
Late vs. non-late x IDP	.22	.03	-.21	.75**	.24*	-.17		0.03	.10	
							Intercept=	-128.65		
Means	19.19	15.72	0.27	0.18	168.23	53.44	28.06		R ² =	.60**
Standard Deviations	23.21	1.29	0.45	0.39	123.18	112.08	79.94	Adjusted	R ² =	.55
								R =		.78

Note. ** $p < .001$. * $p < .05$.

Table 110
Sequential Multiple Regression: Lifetime Frequency of Drug Use in Males

Variables	DV	Age	Early	Late	IDP	Early x IDP	Late x IDP	B	β	sr ²
Age	.33*							4.91*	.25	.11
Dummy 1: early vs. non-early pubertal development	-.17	.01						-6.18	-.10	
Dummy 2: late vs. non-late pubertal development	.10	.09	-.23					-15.73	-.25	
Involvement with Delinquent Peers (IDP)	.75**	.14	.00	.07				.14**	.68	.31
Early vs. non-early x IDP	-.07	-.02	.91**	-.21	.15			-.02	-.08	
Late vs. non-late x IDP	.23	.02	-.21	.90**	.23	-.19		.06	.27	
							Intercept=	83.18*		
Means	28.15	16.86	0.20	0.18	224.18	44.94	43.40		R ² =	.65**
Standard Deviations	24.24	1.23	0.40	0.39	119.49	100.17	104.00	Adjusted	R ² =	.60
								R =		.81

Note. * $p < .05$. ** $p < .001$.

Table III

Sequential Multiple Regression: Past Year Frequency of Drug Use in Females

Variables	DV	Age	Early	Late	IDP	Early x IDP	Late x IDP	B	β	sr^2
Age	.43**							2.95*	.30	.08
Dummy 1: early vs. non-early pubertal development	.08	-.07						.92	.03	
Dummy 2: late vs. non-late pubertal development	.07	.07	-.29					.47	.01	
Involvement with Delinquent Peers (IDP)	.69**	.23	.16	-.06				.06**	.59	.16
Early vs. non-early x IDP	.30*	.09	.80**	0.23	.46**			.00	.00	
Late vs. non-late x IDP	.26*	.03	-.21	.75	.24*	-.17		.02	.11	
							Intercept=	-45.68*		
Means	11.76	15.72	0.27	0.18	168.23	53.45	28.06		$R^2 =$	.56**
Standard Deviations	12.83	1.29	0.45	0.39	123.18	112.08	79.94	Adjusted	$R^2 =$	.50
								R =		.75

Note. ** $p < .001$. * $p < .05$.

Table 112
Sequential Multiple Regression: Past Year Frequency of Drug Use in Males

Variables	DV	Age	Early	Late	IDP	Early x IDP	Late x IDP	B	β	Sr ²
Age	.28*							1.75	.22	
Dummy 1: early vs. non-early pubertal development	-.04	.01						-5.68	-.23	
Dummy 2: late vs. non-late pubertal development	-.07	.09	-.23					-4.92	-.19	
Involvement with Delinquent Peers (IDP)	.63**	.14	.00	.07				0.05**	.57	.2
Early vs. non-early x IDP	.07	-.08	.91**	-.21	.15			0.02	.17	
Late vs. non-late x IDP	.03	.02	-.21	.90**	.23	-.19		0.01	.05	
						Intercept=		-25.52		
Means	13.69	16.86	0.20	0.18	224.18	44.94	43.40		R ² =	.46**
Standard Deviations	9.94	1.23	0.40	0.39	119.17	100.17	104.00	Adjusted	R ² =	.38
								R =		.68

** $p < .001$. * $p < .05$.

Table 113

Sequential Multiple Regression: Lifetime Variety of Sexual Behavior in Females.

Variables	DV	Age	Early	Late	IDP	Early x IDP	Late x IDP	B	β	Sr ²
Age	.54**							1.13**	.42	.16
Dummy 1: early vs. non-early pubertal development	.13	-.07						2.05	.27	
Dummy 2: late vs. non-late pubertal development	.01	.07	-.29*					2.01	.23	
Involvement with Delinquent Peers (IDP)	.58**	.23	.16	-.06				0.02**	.63	.19
Early vs. non-early x IDP	.28*	.09	.80**	-.23	.46**			-0.01	-.25	
Late vs. non-late x IDP	.06	.03	-.21	.75**	.24*	-.17		-0.01	-.26	
							Intercept=	-15.21*		
Means	5.72	15.72	0.27	0.18	168.23	53.45	28.06		R ² =	.54**
Standard Deviations	3.43	1.29	0.45	0.39	123.18	112.10	79.94	Adjusted	R ² =	.48
								R =		.74

** $p < .001$. * $p < .05$.

Table I14

Sequential Multiple Regression: Lifetime Variety Sexual Behavior in Males

Variables	DV	Age	Early	Late	IDP	Early x IDP	Late x IDP	B	β	sr ²
Age	.29							0.22	.11	
Dummy 1: early vs. non-early pubertal development	.27*	-.01						3.61	.58	
Dummy 2: late vs. non-late pubertal development	.13	.09	-.23					4.23*	.68	.07
Involvement with Delinquent Peers (IDP)	.40*	.12	.01	.05				0.01*	.52	.18
Early vs. non-early x IDP	.27*	-.04	.91**	-.21	.16			-0.01	-.30	
Late vs. non-late x IDP	.09	.01	-.21	.90**	.22	-.19		-0.01	-.57	
							Intercept=	0.24		
Means	6.88	16.88	0.19	0.19	227.86	43.14	45.20		R ² =	.35*
Standard Deviations	2.45	1.24	0.39	0.39	120.31	100.25	105.80	Adjusted	R ² =	.25
									R =	.59

***p*<.001. **p*<.05.

Table I15

Standard Multiple Regression of Past Year Frequency Delinquency Scores in Females

Variables	DV	Age	Menses	IDP	B	β	sr^2
Age	.36*				1.35	.20	
Age at Menses	.07	.06			0.05	.01	
Involvement with Delinquent Peers (IDP)	.68**	.26*	.09		0.05**	.63	.37
					Intercept=	-21.23	
Means	8.15	15.79	12.52	165.59		$R^2 =$	.50
Standard Deviations	8.95	1.29	1.11	126.49	Adjusted	$R^2 =$	.46
					R =	$R =$	.71**

**p≤.001. *p<.05.

Table I16

Standard Multiple Regression Lifetime Frequency Delinquency Scores in Females

Variables	DV	Age	Menses	IDP	B	β	Sr^2
Age	.44**				3.96*	.28	.07
Age at Menses	.04	.06			-.52	-.03	
Involvement with Delinquent Peers (IDP)	.72**	.26*	.09		.10**	.65	.39
					Intercept=	-56.95	
Means	14.91	15.79	12.52	165.59		$R^2 =$	.59
Standard Deviations	18.60	1.29	1.11	126.49	Adjusted	$R^2 =$	.56
					R =	$R =$	.77**

**p≤.001. *p<.05.

Table I17

Standard Multiple Regression of Lifetime Variety Delinquency Scores in Females

Variables	DV	Age	Menses	IDP	B	β	sr^2
Age	.49				1.60**	.31	.09
Age at Menses	.09	.06			0.04	.01	
Involvement with Delinquent Peers (IDP)	.79	.26*	.09		0.04**	.71	.47
					Intercept= -23.25*		
Means	8.73	15.79	12.52	165.59		$R^2 =$	.72
Standard Deviations	6.70	1.29	1.11	126.49	Adjusted	$R^2 =$	.70
					R =		.85**

** $p \leq .001$. * $p < .05$.

Table 118
Standard Multiple Regression of Lifetime Drug Use Variety Scores in Females

Variables	DV	Age	Menses	IDP	B	β	St^2
Age	.44				.80*	.32	.09
Age at Menses	.11	.06			.14	.05	
Involvement with Delinquent Peers (IDP)	.54	.26*	.09		.01**	.46	.19
Intercept=					-12.79		
Means	3.48	15.79	12.52	165.59		$R^2 =$	.39
Standard Deviations	3.22	1.29	1.11	126.49	Adjusted	$R^2 =$	.35
					R =		.63**

** $p \leq .001$. * $p < .05$.

Table I20

Standard Multiple Regression of Lifetime Frequency of Drug Use in Females

Variables	DV	Age	Menses	IDP	B	β	Sr^2
Age	.62**				8.54**	0.48	.22
Age at Menses	.14	.06			1.46	0.07	
Involvement with Delinquent Peers (IDP)	.64**	.26*	.09		0.09**	0.50	.24
Intercept=							
					- 149.85**		
Means	18.37	15.79	12.52	165.59		$R^2 =$	.63
Standard Deviations	22.93	1.29	1.11	126.49	Adjusted	$R^2 =$	.60
					R =		.79**

**p<.001. *p<.05.

Table I21

Standard Multiple Regression of Past Year Frequency of Drug Use in Females

Variables	DV	Age	Menses	IDP	B	β	St ²
Age	.52**				3.22*	0.35	0.11
Age at Menses	.13	.06			0.54	0.05	
Involvement with Delinquent Peers (IDP)	.73**	.26	.09*		0.06**	0.64	0.38
					Intercept=	-56.40*	
Means	10.95	15.79	12.52	165.59		R ² =	.65
Standard Deviations	11.85	1.29	1.11	126.49	Adjusted	R ² =	.63
					R =		.81

**p<.001. *p<.05.

Table I22
Standard Multiple Regression of Sexual Behaviour Scores in Females

Variables	DV	Age	Menses	IDP	B	β	sr ²
Age	.55**				1.17**	0.44	0.18
Age at Menses	-.01	.06			-.025	-.008	
Involvement with Delinquent Peers (IDP)	.58**	.26*	.09	1.00	0.01**	0.48	0.21
				Intercept=	-11.90		
Means	5.72	15.79	12.52	165.59		R ² =	0.52
Standard Deviations	3.48	1.29	1.11	126.29	Adjusted	R ² =	0.49
					R =		0.72

* $p < .001$. ** $p < .05$