

Georgia State University

ScholarWorks @ Georgia State University

Criminal Justice and Criminology Theses

Spring 4-6-2011

The Youth Party-Subculture: A Prerequisite for Adulthood Success?

Mollie V. Mills
Georgia State University

Follow this and additional works at: https://scholarworks.gsu.edu/cj_theses

Recommended Citation

Mills, Mollie V., "The Youth Party-Subculture: A Prerequisite for Adulthood Success?." Thesis, Georgia State University, 2011.

doi: <https://doi.org/10.57709/1953820>

This Thesis is brought to you for free and open access by ScholarWorks @ Georgia State University. It has been accepted for inclusion in Criminal Justice and Criminology Theses by an authorized administrator of ScholarWorks @ Georgia State University. For more information, please contact scholarworks@gsu.edu.

MOLLIE VICTORIA MILLS

The Youth Party-Subculture: A Prerequisite for Adulthood Success?

(Under the direction of Brent Teasdale, Ph.D.)

Research has not yet examined the relationship between minor teenage deviance and later adulthood success. Building on previous research by Moffitt (1993) and Hagan's (1991) youth party-subculture, I will define and compare four adolescent groups based on offending type. I argue that minor deviance, rooted in the party-subculture, will enhance social and networking skills that will be beneficial in adulthood. College attainment, serving as a social control, is expected to moderate the effects of deviance, benefiting party-subculture youth. Using the National Longitudinal Study of Adolescent Health dataset, findings suggest that adolescents engaging in minor deviance are more extroverted in adulthood, with little difference in earnings when compared to party-subculture abstainers. However, adolescent deviants continue substance use and deviance into adulthood significantly more than party-subculture abstainers.

INDEX WORDS: party-subculture, delinquency, deviance, abstainers

THE YOUTH PARTY SUBCULTURE: A PREREQUISITE FOR
ADULTHOOD SUCCESS?

by

MOLLIE VICTORIA MILLS

B.S., WESTERN ILLINOIS UNIVERSITY

A Thesis Submitted to the Graduate Faculty
of Georgia State University in Partial Fulfillment

of the

Requirements for the Degree

MASTER OF SCIENCE

ATLANTA, GEORGIA

2011

THE YOUTH PARTY SUBCULTURE: A PREREQUISITE FOR
ADULTHOOD SUCCESS?

by

MOLLIE VICTORIA MILLS

Approved:

Committee Chair: Brent Teasdale, Ph.D.

Committee Member: Timothy Brezina, Ph.D.

Committee Member: Leah E. Daigle, Ph.D.

Date

Acknowledgements

First and foremost I would like to extend my gratitude to my thesis chair, Dr. Brent Teasdale, who has helped me through every step of the process. With his support and guidance during this project, I was able to develop and test my original ideas and provide a final project. I am also grateful to Dr. Timothy Brezina and Dr. Leah Daigle for serving on my thesis committee. With their unique expertise, they provided me with valuable feedback on my project. Dr. Brezina was able to provide feedback and guidance based on his extensive research and knowledge on this topic. With Dr. Daigle's familiarity with the dataset and the topic, she was also able to give useful advice on how to structure the research to the best of our ability.

I would also like to thank Dr. Guastaferrero for her guidance when I was trying to develop my ideas into a research project. I was able to conceptualize a researchable topic while completing a literature review required for her course. Her feedback during the course not only improved my writing skills but also prepared me to organize a literature review.

Finally, I would like to thank my parents for supporting me through my studies at Georgia State University and for the encouragement to continue my education.

Author's Statement Page

In presenting this thesis as a partial fulfillment of the requirements for an advanced degree from Georgia State University, I agree that the Library of the University shall make it available for inspection and circulation in accordance with its regulations governing materials of this type. I agree that permission to quote from, to copy from, or to publish this thesis may be granted by the author or, in his/her absence, by the professor under whose direction it was written, or in his/her presence, by the Associate Dean, College of Health and Human Sciences. Such quoting, copying, or publishing must be solely for scholarly purposes and will not involve potential financial gain. It is understood that any copying from or publication of this thesis which involves potential financial gain will not be allowed without written permission of the author.

Signature of Author

Notice to Borrower's Page

All these deposited in the Georgia State University Library must be used in accordance with the stipulations prescribed by the author in the preceding statement.

The author of this thesis is:

Student's Name: Mollie Victoria Mills

Street Address: 2400 Parkland Dr.

City, State, and Zip Code: Atlanta, GA, 30324

The Chair of the committee for this thesis is:

Professor's Name: Dr. Brent Teasdale

Department: Department of Criminal Justice

College: College of Health and Human Sciences

Georgia State University
P.O. BOX 4018
Atlanta, Georgia 30302-4018

Users of this thesis who not regularly enrolled as students at Georgia State University are required to attest acceptance of the preceding stipulation by signing below. Libraries borrowing this thesis for the use of their patrons are required to see that each user records here the information requested.

NAME OF USER	ADDRESS	DATE	TYPE OF USE (EXAMINATION ONLY OR COPYING)

Vita

MOLLIE V. MILLS

Spring 2011

Department of Criminal Justice
140 Decatur Street
1201 Urban Life Building
Georgia State University
Atlanta, GA 30303
Tel: (404) 413-1020

2400 Parkland Dr.
Atlanta, GA 30324
Tel: (630) 707-0765
Email: molliemills58@yahoo.com

EDUCATION

Master of Science, Criminal Justice, Georgia State University, Atlanta, GA. Master's Thesis: *The Youth Party-Subculture: A Prerequisite for Adulthood Success?* May, 2011.

Bachelor of Science, Law Enforcement and Justice Administration, Western Illinois University, Macomb, IL. May 2008.

PREVIOUS WORK EXPERIENCE

- 2011 **United States Probation Office: Intern.** Assisted probation officers in the pretrial, presentence, and supervision units. Prepared court reports, violation reports, and a presentence investigation for a multi-defendant case.
- 2008/09 **Kane County Court Services: Juvenile Probation Officer.** Supervised a caseload of juveniles placed on formal and informal supervision. Prepared investigations, violations, and supervision reports to the court to determine probation compliance.

TABLE OF CONTENTS

	Page
ACKNOWLEDGMENTS.....	iii
LIST OF TABLES.....	iv
CHAPTER	
I INTRODUCTION.....	1
II REVIEW OF LITERATURE.....	4
Moffitt’s Developmental Taxonomy.....	4
Empirical Results for Moffitt’s Taxonomy.....	7
Limitations of Research.....	11
Division of Adolescence-Limited Offending.....	12
Party-Subculture Deviance.....	14
Life-Course Perspective.....	18
CURRENT STUDY.....	25
HYPOTHESES.....	27
III METHODS.....	29
Data.....	29
Sample.....	30
Measures: Independent Variables.....	31
Measures: Key Moderating Variable.....	34
Measures: Dependent Variables.....	35
Measures: Controls.....	37

	Data Analysis.....	37
IV	RESULTS.....	39
V	DISCUSSION AND CONCLUSION.....	59
	Study Limitations.....	62
	Future Research.....	64
	REFERENCES.....	65

LIST OF TABLES

Table		Page
1	Descriptive statistics for sex and race (Total N = 14,589).....	39
2	Descriptive statistics for dependent variables (Total N = 14,589).....	40
3	Multiple regressions for personality characteristics.....	48
4	Multiple regressions for substance use and fighting.....	51
5	Multiple regressions for relationships, depression, and income.....	55

CHAPTER I

INTRODUCTION

Time may bring about different trends, fads and fashions, but general teenage culture sparks curiosity for drugs, alcohol, and sex, among other things. There is limited research that has addressed how certain deviance in adolescence can affect adult stratification (Hagan, 1991; Nagin, Farrington, & Moffitt, 1995; Piquero, Farrington, Nagin, & Moffitt, 2010; Sampson & Laub, 1990). This research typically encompasses the life-course perspective by considering how choices made in early life can alter pathways into adulthood. Building upon Moffitt's (1993) developmental taxonomy and Hagan's (1991) party-subculture identification, this study will specify adolescent offender types and compare the different groups to one another in adulthood.

Moffitt (1993) proposed a developmental taxonomy, characterizing adolescents as fitting into one of three categories: abstainer, adolescence-limited offenders, and life-course persistent offenders. The taxonomy grouped youth as either non-criminal (abstainer), deviant only during adolescence (adolescence-limited), and those who were deviant throughout the life-course (life-course persistent)(Moffitt, 1993). Longitudinal research has generally found that abstaining adolescents are better adjusted overall in adulthood when compared to all adolescent deviants (Moffitt, Caspi, Harrington & Milne, 2002; Piquero, Farrington, Nagin, & Moffitt, 2010). Limited research has suggested, although, that abstainers are not as socially developed as "mainstream" adolescent deviants (Bouchey, 2007; Hagan, 1991; Newcomb & Bentler, 1988; Shedler & Block, 1990). Such inconsistencies in research may be due to inappropriately grouping

adolescents based upon offending time frame rather than offender type. Work by Hagan and colleagues suggests that offender type is indeed consequential for adulthood success.

A youth party-subculture was identified by Hagan (1991); he argues that engaging in certain deviance as a means for “fun and pursuit of the opposite sex” (p.573) comprises the party-subculture. The youth party-subculture may experience different outcomes in adulthood due to minor deviance preferences compared with more serious AL offenders. According to research findings, minor deviance in adolescence can increase social and networking skills (Hagan, 1991; Newcomb & Bentler, 1988; Shedler & Block, 1990). Since AL offending includes all adolescents who are minor and serious offenders (as long as deviance is limited to youth); such a broad classification may over-generalize outcomes in adulthood.

It is estimated that 90% of all youth engage in adolescence-limited offending (Moffitt, 1993), which raises questions as to what, if any, effect this has on long-term development and transitioning into adult roles. Early forms of social and cultural activity produce “capital” that can either harm or benefit later transitions into school or employment (Tanner, Davies, O’Grady, 1999, p. 251). Because minor adolescent deviance (such as drinking, drug experimentation, and sexual relationships) has the potential to increase social skills and confidence, I theorize that party-subculture deviance will increase such “capital”, creating long-term advantages economically and socially (see also Hagan, 1991).

Combining the life-course perspective with empirical research on developmental typologies, it is theorized that party-subculture youth who establish social controls

through college attainment will not be harmed by past delinquencies. Rather, party-subculture youth will receive benefits from their deviance that will allow them to become better adjusted in adulthood when compared to other college-educated delinquents and abstainers. This project will use the National Longitudinal Study of Adolescent Health (Add Health, 2009) to test these ideas. I will define four groups of adolescents based on offending preferences and compare their outcomes in adulthood.

CHAPTER II

REVIEW OF THE LITERATURE

Significant changes occur in adolescence such as physical development, roles and statuses, peer groups, parental relationships, and romantic relationships (Fagan & Western, 2005). Therefore, it is not surprising that adolescence is often associated with identity exploration and deviant behaviors. The general pattern of offending during the life-course produces what has been termed the age-crime curve. The curve represents the increase of criminality among emerging adolescents. The curve peaks when adolescents are around 18 years of age, to slowly decline and nearly disappear by age 25 (Farrington, 2003). A review of the literature on Moffitt's (1993) developmental taxonomy will provide some insight into this teenage phenomenon.

Moffitt's Developmental Taxonomy

Moffitt (1993) introduced a taxonomy of adolescent offending types, based on the life-course/developmental perspective. Moffitt proposed that adolescents fall into three developmental classifications: life-course persistent offenders, adolescence-limited offenders, and abstainers (Moffitt, 1993). Each adolescent group has different identifiers and indicates different likely outcomes for subsequent development through the life-course. According to Moffitt (1993), the age-crime curve is representative of the typical offender pattern for the majority of adolescents (adolescence-limited offenders).

Adolescence-limited (AL) offenders are those who temporarily engage in deviance during adolescence and are representative of the majority of youth (Moffitt, 1993).

Unlike life-course persistent offenders, this group does not show signs of anti-social behavior until adolescence (Moffitt, 1993). This offender group is characterized by committing crimes or status offenses that demonstrate their desire for maturity such as: underage alcohol consumption, drug use, running away, or disorderly offenses (Moffitt, 1993). Moffitt theorizes that AL offenders begin deviance through “social mimicry” of the LCP offenders as a way to achieve a mature status (1993, p. 686). Through the mimicking of and reinforcement from life-course persistent offenders, AL offenders learn to achieve the desired mature status through deviance.

AL offenders desire adult privileges due to feelings of frustrations resulting from a “maturity gap”, often experienced by teenagers in our society. The maturity gap is defined as the “time warp between biological age and social age” (Moffitt, 1993, p. 687). Prolonging attainment of adult status from youth even though adolescents are biologically mature creates this gap. Frustration occurs because youth are physically capable of adult roles but prohibited due to biological age and states of dependence. As AL offenders enter young adulthood and gain legitimate access to adult roles, criminality is discontinued as legitimate access to adult privileges is gained. Thus, crime no longer is attractive to AL offenders once an adult status is acquired.

Life-course persistent (LCP) offenders are rare and defined by their continuous criminal involvement throughout the life-course (Moffitt, 1993). LCP offenders are estimated to represent only 5% of all males (Moffitt, 1993) and less than that for females (Moffitt & Caspi, 2001). This offender type can be identified in childhood, showing signs of aggressive behavior as young as four years old (Moffitt, 1993). Moffitt (1993)

describes the evolution of LCP offenders as beginning with the interaction of neuropsychological risks and environmental factors for antisocial behavior development in childhood. The interaction of poor neuropsychological variations (temperament, behavioral development, and cognitive abilities) with a criminogenic environment can cause long-term adjustment and psychological damage in childhood for LCP offenders that sets them on offending trajectories that continues into adulthood (Moffitt, 1993).

This antisocial behavior is theorized to continue because LCP offenders are unable to learn, “a behavioral repertoire of pro-social alternatives” (Moffitt, 1991, p. 11). Since LCP offenders fail to recognize that such behavior places them at a disadvantage, altering this behavior becomes problematic with age. Antisocial tendencies often limit their ability to overcome such obstacles as they become ensnared in a non-conformist lifestyle. Snares that harm achievement for LCP offenders often include early parenthood, addiction, dropping out of school, unstable employment histories, and periods of incarceration (Moffitt, 1993). Persistent offending throughout the life-course is enabled due to their lack of informal social controls. LCP offenders are known to commit a variety of crimes, offend alone, and engage in crimes that include a victim (Moffitt, 1993).

Finally, Moffitt (1993) identified abstainers, who refrain from all deviance across the life-course, as the third adolescent group. It is estimated that roughly 5% of males refrain from all deviance during adolescence (Moffitt, 1993). She theorized three contributors that lead to abstainers’ non-conformity from the larger teen culture. First, she suggests that some adolescents do not feel trapped in a maturity gap. These

adolescents do not feel the frustration from their restraint to attain adult privileges such as material possessions, relationships, and independence. Second, abstainers may not have access to influential delinquent peer groups, either through alienation or personal choice. Without opportunities to mimic LCP offenders, abstainers may lack desire or motivation to participate in deviance. Last, Moffitt (1993) theorizes this group may possess certain pathological personality traits that keep them isolated from bonding with the larger subculture of youth. This suggests that abstainers are alienated from mainstream peers that engage in deviance - not that abstaining is a personal or moral choice.

Empirical Results for Moffitt's Taxonomy

With estimates as high as 95% of males engaging in some type of deviance at least once during adolescence (Moffitt, 1993), researchers began to question abstainer's subsequent social and psychological development. Research has tested Moffitt's (1993) developmental taxonomy of abstaining adolescents and has provided mixed results regarding abstainer development in adolescence and further adjustment into adulthood. Shedler and Block (1990), providing support for Moffitt's taxonomy, described an abstainer within this group as, "relatively tense, over controlled, emotionally constricted individual who is somewhat socially isolated and lacking interpersonal skills" (p. 618). Such negative personality trait findings provide support for Moffitt's (1993) theory that abstainers are alienated from the mainstream culture of their peers.

Alternatively, Brezina and Piquero (2007), using self-reports from the Youths and Deterrence Survey, found that abstainers were significantly more likely than offenders to

hold strong moral beliefs. This goes against previous findings that abstainers are alienated from the mainstream culture and suggests rather that abstainers, due to strong morality, do not choose to associate with offenders. Finding revealed that although abstainers are less social than offenders, they are not socially isolated and report spending over six hours a week on average with friends (Brezina & Piquero, 2007).

Longitudinal research has provided similar findings for abstaining adolescents. Moffitt et al. (2002) conducted a follow up from the Dunedin Longitudinal Study that allowed for the comparison of LCP offenders, AL offenders, and abstainers at 26 years of age. The study evaluated 79 outcome variables regarding men's criminal offending, personality, psychopathology, personal life, and economic life. Abstainers were found to have the least problems in each domain compared to AL or LCP offenders. Abstainers were more likely to have healthy marriages, higher status careers, college degrees, and financial responsibility in their later 20's, when compared with both groups of deviants. Moffitt et al. (2002) state that abstainers are simply, "late bloomers...from adolescence they retained their personality profile of unusually strong self-constraint, but in adulthood this style seems to have become successful" (p. 196). Although AL offenders were less harmed than LCP offenders in their 20's, AL offenders reported difficulties in adulthood that extended beyond adolescence (Moffitt et al., 2002). The data revealed that most AL offenders did not obtain higher than a high school education, reported substance dependence issues, and reported symptoms of psychiatric disorders. Additionally, AL offenders accounted for a significant amount of property and drug convictions, with high self-report numbers of drug and property offenses committed in the past year.

Another study identified four offending trajectories, rather than the three Moffitt (1993) proposed, in a longitudinal sample of 403 British men (Nagin & Land, 1993). The four trajectories were those with no convictions (NC), adolescence-limiteds (AL), high-level chronics (HLC), and low-level chronics (LLC). Departing from Moffitt's (1993) LCP trajectory, Nagin and Land (1993) identified high and low-level chronic offenders within the LCP offender group. Support was found that HLCs were characteristically similar to that of Moffitt's (1993) LCP offenders. The LLCs were less violent and aggressive compared to HLCs, and crime was more likely a result of their characteristically low IQ (Nagin & Land, 1993).

A follow-up study was conducted on the four trajectory groups defined by Nagin and Land (1993) in order to further identify distinguishing characteristics of the four offender groups (NC, AL, HLC, LLC) (Nagin, Farrington & Moffitt, 1995). Results found that at age 32, ALs were just as successful in the labor market as those with no convictions, regardless of ALs early deviance (Nagin et al., 1995). Ironically, ALs showed a pattern of continuation of excessive drinking, illicit drug use, and getting into physical fights in adulthood, rather than complete desistance (Nagin et al., 1995). Regardless of the ALs continuation of deviance, it appears that they are able to maintain successful careers and families. Nagin et al. (1995) theorize that ALs (at 32 years of age) are less likely to participate in deviance that could result in official punishments, jeopardizing their work, relationships, and family ties. Findings go against Moffitt's (1993) claim to deviance discontinuation once adulthood is reached for ALs. Rather, ALs adjust into adulthood by avoiding serious deviance that could result in harm to their

established relationships and employment.

Piquero, Farrington, Nagin, and Moffitt (2010) extended Nagin et al. (1995) and Moffitt et al. (2002), by conducting longitudinal research on adolescence trajectories, measuring how offending trajectories are able to predict later life failure. This study followed subjects from the Cambridge Study in Delinquent Development from age 10 to 40 years of age to predict life failure at age 48 in numerous domains. Life failure was scaled according to level of problems with employment, cohabitation, substance abuse, mental health, fighting, and housing accommodations (Piquero et al., 2010). Conviction records from 10 years of age until 40 years of age created offender groups: non-offenders, low-adolescence peak offenders, very low rate chronic offenders, high adolescent peak offender, and high rate chronic offenders. Results show that at age 48, life failure was highest among high and low rate chronic offenders and lowest for non-offenders (Piquero et al., 2010). Low adolescence peak offenders did not score much higher on life failure than did non-offenders however, suggesting that minor deviance in adolescence is not predictive of later life failure.

Overall, longitudinal research thus far has found that abstaining adolescents are better adjusted in adulthood than adolescent deviants (Moffitt et al., 2002; Nagin, Farrington, & Moffitt, 1995). These longitudinal studies are not without limitations. Addressing such limitations may produce different results for AL offenders. A review of research limitations and findings has illustrated the potential for deviance to be beneficial. Such benefits will be discussed further to illustrate how minor deviance may be beneficial in adulthood.

Limitations of Research

Two significant limitations arose from prior research that may be incorrectly identifying the longitudinal effects of adolescent groups. First, Moffitt et al. (2002) concludes their findings may not be completely accurate due to the more recent extension of adolescence. The Dunedin Longitudinal Study was comprised of participants born in the 1970's who are subjected to longer maturity gaps (Moffitt et al., 2002). Therefore, they theorize that the standard age-crime curve model may no longer be applicable to this birth cohort and the follow up results may have been collected at too early of an age. In modernized nations, adolescents are not considered adults until after age 25 due to increasing demand for higher education and postponement of marriage and families (Moffitt et al., 2002). As a result, the follow up at age 26 may have provided premature and misleading results for AL offender types who are still trying to break through the maturity gap and have yet to establish an adult status.

Second, long-term consequences attached to AL offenders over-generalize a large population of temporarily deviant youth. The majority of adolescents are categorized as adolescence-limited offenders, ignoring the potential for subcultures to arise within the group based on offending preferences. It could also be argued that the AL offender group is too broad, not allowing for proper conclusions to be drawn on effects of delinquency on later life accomplishments. Alternative conclusions were drawn when the broad grouping of LCP offenders were divided into high and low-level chronic offenders (Nagin and Land, 1993), suggesting that offender grouping based on offending style is more appropriate than offending time frame. In order to properly measure long-term

effects of AL offenders, AL offenders should be separated into different categories based upon the types of crimes committed.

Division of Adolescence-Limited Offending

Early work by Matza (1964) identified a large group of young Americans who engage in what he termed a teenage-culture. He described the interest of this culture as, “frivolous and mindless pursuit of fun and thrill” (Matza, 1964, p. 64). He distinguished that delinquency has different levels of seriousness, and that some deviance is minor in nature. Matza (1964) acknowledged another subculture of deviance, which he described as a blend between the teenage-culture and delinquency. He describes this subgroup as partaking in minor crimes such as drinking and being reckless, as well as lying to authority figures and rebelling, typically that of the teenage-culture.

Hagan (1991) expanded on Matza’s blend of the teenage-culture and delinquency, terming this group as a party-subculture that is “primarily interested in the pursuit of fun and the opposite sex” (p. 573). The party-subculture is classifiable under AL offending and may be subject to different developmental pathways, risk factors, and adjustment in adolescence and adulthood than other offending adolescents. Because this group’s deviance is minor in nature and involves activities awarded to adults, it is theorized early experimentation will aid in a proper transition into adulthood. With limited research on party-subcultural effects, this group is deserving of more attention to determine if such deviance can be rewarding in adulthood.

Hagan (1991) conducted research on the cultural stratification of party-subculture

participants and found that upper-class boys benefited from deviance, while lower-class boys did not. Hagan's (1991) research found that when the negative effects of education on the party subculture were removed, non-working class boys experienced rewards from this type of deviance in terms of higher occupational prestige. Non-working-class boys benefited from the deviance because they were socialized into male sex roles (such as drinking and gambling) that are important for networking skills and consequently higher occupational prestige (Hagan, 1991).

Hagan and Foster (2006) further extended the idea of the party and privilege subculture. Using Add Health data, they find that there is "crime inequality in America" that directly harms African American youth (p. 66). More specifically, the consequence of party-subculture deviance varies between higher-socioeconomic status Caucasian youth and lower-socioeconomic status African American youth. Affluent Caucasian youth who engage in the party subculture often go undetected by police, which in turn has allowed for this upper-class "secret deviance" to go unnoticed. African American youth are more likely to be identified, punished, and harmed by delinquency such as drug involvement or other crimes (Hagan & Foster, 2006).

Tanner, Davies, and O'Grady (1999) used the National Longitudinal Survey of Youth to examine if delinquency affects later educational and employment outcomes. They hypothesized that different forms of delinquency (mild versus serious) could produce different life outcomes. Delinquency seriousness was measured through the rate of skipping school, drug use, property crimes, violence, and contact with the criminal justice system (Tanner et al., 1999). Results showed that all forms of delinquency had

negative effects on educational attainment for both males and females (Tanner et al., 1999). Delinquency was found to be more detrimental on labor market success for males than for similar females (Tanner et al., 1999). In contrast to Hagan's (1991) party-subculture findings, Tanner et al. (1999) did not find support that the engagement in minor delinquency is beneficial in adulthood. Concluding that delinquency may "foster poor work skills, limit social networks, or bring on the effects of labeling and stigmatizing" (Tanner et al., 1999, p. 270).

Overall, there is limited knowledge of the effects of the party-subculture. Hagan's (1991) study is limited in scope because it only includes party-subculture effects on high school students. Based on the findings, it could be theorized that socioeconomic status does not predict those who will benefit from deviance if college serves as a moderator (Hagan, 1991; Hagan & Foster, 2006). Although Tanner et al. (1999) found that minor deviance such as skipping school and drug use can impede educational and labor market success, it is unknown if education can serve as a moderator for deviance effects on adult stratification. Longitudinal research is needed on college-educated party-subculture youth to determine such outcomes.

Party-Subculture Deviance

Thus far, research done on the party-subculture has suggested that Caucasian, non-working class, party-subculture adolescents benefit by acquiring networking skills and higher job prestige (Hagan, 1991, Hagan & Foster, 2006). Hagan (1991) found "class specific" benefits from the party-subculture that "socialize non-working class

males to participate in the kind of pursuits that are later a part of male-bounded social networks” (p. 579-580). He lists networking, drinking, and gambling as benefits to non-working class males for future adjustment in employment. In addition to Hagan (1991), it is necessary to review research that has been conducted on the type of crime or deviance that define the party-subculture. Based upon Hagan’s (1991) conceptualization of the party-subculture, a review of research on adolescent alcohol use, drug use, and sexual relationships are needed to understand risks and benefits from such activities.

Alcohol use, whether in adolescence or adulthood, has provided some positive findings for those who use in moderation (Leifman et al., 1995, Moos et al., 1976; Newcomb & Bentler, 1988; Peters & Stringham, 2006; Wolf & Wolf, 2002). Peters and Stringham (2006) correlate adult social drinking with higher job prestige. Their research found that both male and female social drinkers earn significantly greater incomes than non-drinkers. They theorize that social drinking increases social capital (charisma and social skills) that allows moderate drinkers to have larger social networks with more access to career opportunities. The authors argue that abstainers earn less because they “...may prefer to interact with other abstainers or less social people. Alternately, abstainers might not be invited to social gatherings, work related or otherwise, because drinkers consider them dull” (p. 413). Although this study identifies effects of social drinking by adults, these results may be applicable similarly to abstaining adolescents. Abstainer adolescents may be alienated from mainstream culture, gatherings, and social opportunities that would allow them to properly transition into adulthood.

However, research cautions that early onset of alcohol use can be detrimental if

initiated in pre-adolescent years (Gruber, DiClemente, Anderson, Lodico, 1996). Pre-teen alcohol use is associated with subsequent alcohol abuse (DeWit, Adalf, Offord, Ogborne, 2000), alcohol-related violence, problem behaviors in adolescence, drinking and driving, and missing school (Gruber et al., 1996). Depending on the age of onset of use, however, alcohol use may improve adolescents' self esteem, family relationships, and partner relationships (Necomb & Bentler, 1988). Similar to what Peters and Stringham (2006) suggest about adult social drinkers, Newcomb and Bentler (1998) theorize that the effect of alcohol increases self-concept in adolescence because it allows teenagers to learn social skills and increases opportunities for relationships. The rewards of moderate alcohol use beginning in adolescence and continuing into adulthood could arguably produce healthier relationships and career opportunities for those who drink.

Unlike alcohol use, research on adolescent substance use has found more mixed results regarding the potential for benefits. Shedler and Block (1990) measured psychological health among 101 drug users and abstainers following them from preschool until 18 years of age. Consistent with Moffitt (1993), their research found that adolescents who experimented with drugs were more psychologically healthy than frequent drug users and abstaining adolescents. The abstainer profile consisted of individuals who were "not liked or accepted by people, unexpressive, prone to avoid close interpersonal relationships, predictable in attitude and behavior, anxious, not straightforward and forthright with others, not personally charming, and not socially at ease" (Shedler & Block, 1990, p. 618). Contrary to Brezina and Piquero (2007), Shelder and Block (1990) suggest that the avoidance of drugs is not a result of morals or proper

drug education but a result of “relative alienation from their peers and a characterological over-control of needs and impulses” (p. 627). If these social characteristics are representative of the abstainer profile, such characteristics would likely impede networking abilities, psychological health, occupational prestige, and relationships.

Tucker et al. (2006) found that non-drug users in young adulthood were more likely to have earned a degree, have successful relationships with friends and family, and no more likely to suffer from mental health problems when compared to frequent and experimenting drug users. Subjects were classified as abstainers (never tried any illicit drugs), experimenters (reported marijuana use less than three times in a month period, and could only report one other illicit drug use), and frequent users (used marijuana more than three times in a month and the use of one or more illicit drug use). Results found that abstainers reported similar mental and social development as experimenting drug users. Contrary to negative stereotypes (Moffitt, 1993; Shedler & Block, 1990), results did not find that abstainers suffered from loneliness, mental health issues, or lack of peer involvement or support due to drug avoidance (Tucker et al., 2006).

Youth sexual intercourse has been found to be a co-occurring behavior with substance use and delinquency (Huizinga, Loeber, & Thornberry, 1993). The health risks involved with teen sex are well documented (Boyer, Shafer, Wibbelsman, Seeberg, Teitle, & Lovell, 2000; Wechsler, Dowdall, Davenport, & Castiollo, 1995), while long-term social developments of early sexual relationships are lacking (Roisman, Masten, Coatsworth, Tellegen, 2004). However, there are several short-term studies that provide insight on the effects of adolescent relationships on young adulthood relationships. Meier

and Allen (2009) found that “adolescent relationship experience is more than trivial puppy love...having some romantic experience in adolescence is associated with the likelihood of cohabitation in early adulthood, and steady experience in adolescence is predictive of marriage in early adulthood” (p. 329). Additionally, college freshman revealed that the ability to maintain a healthy romantic relationship improved self-confidence and confidence in social situations (Bouchey, 2007). Longitudinal research is needed in order to conclude whether the age of onset for romantic relationships is predictive for successful adult relationships.

Combining the findings for the potential of the party-subculture (Hagan, 1991) and minor deviance to be beneficial (Bouchey, 2007; Leifman, Kuhlhorn, Allebeck, Andreasson, & Romelsjo, 1995; Newcomb & Bentler, 1988; Shedler & Block, 1990) it can be inferred that these benefits may extend into adulthood. As such, minor AL offenders, specifically the party-subculture, may be more socially and psychologically developed than abstaining adolescents or more serious AL offenders. Hagan (1991) identified that the potential for party-subculture deviance to be beneficial for occupational prestige was not only correlated to non-working class status, but also the removal of negative educational consequences. There is limited research evaluating the potential for education, post high school, to serve as a moderator for deviance impacts on adulthood outcomes.

Life-Course Perspective

The life-course perspective portrays individuals as “choice makers and agents of

their own lives” (Elder, 1994, p. 4) who are constrained by the social and historical atmospheres in which they develop. Trajectories and transitions are two central concepts that describe the type of phases individuals experience during the life-course (Elder, 1994). Trajectories are paths in which individuals enter as they progress through the life-course such as marriage, parenthood, and retirement. Transitions are short-term, representing the beginning or the end of an event during the life-course such as graduating high school, entering college, or obtaining employment (Newman & Newman, 2008).

Life-course development was significantly different for those raised in the nineteenth-century compared to those raised in the twentieth-century. Nineteenth-century youth typically completed school by twelve years of age and were expected to get married and enter parenthood during teenage years. As society has evolved, marriage is delayed while job specialization has increased requiring youth to attend school and remain dependent on their parents longer than ever before (Felson, 2002). This change has affected the life-course development of twentieth-century adolescents as far as criminal involvement and maturation. Indeed, the absence of independence and the creation of laws delaying adult privileges may be to blame for the high volume of delinquency.

According to Elder (1998), early transitions have long lasting effects on trajectories through what he calls “behavior consequences” that can either produce “cumulative disadvantages or advantages” (p. 7). In other words, choices made during youth will determine positive or negative experiences in later life. He further adds that social

institutions can moderate the cumulative effects of past behavioral consequences. Generally, research has found that military, marriage, and employment serve as important turning points in the life-course (Elder, 1986; Laub, Nagin, & Sampson, 1998; Sampson & Laub, 1993; 2003). These turning points often increase informal social controls that promote the desistance process. Transitional events, such as higher educational attainment, could alter trajectories by changing an individual's perception or goals (Sampson & Laub, 1992).

There is limited research on how educational attainment serves as a turning point in the life-course. According to The National Center for Educational Statistics (2009), it is estimated that in 2008, 68% of all United States high school graduates immediately enrolled in college during the fall proceeding graduation. The percentage of high school graduates enrolling in college has increased over 20% since 1960 (NCES, 2009), suggesting that more youth are entering college during an important transitional phase in the life-course. With heightened college enrollment, research is needed to determine if education plays a pivotal role in the desistance process.

The period between late adolescence and the early twenties is a unique transitional phase in the life-course. This is the time when most individuals are making important decisions that lay the foundation for future success. "Independent exploration of life's possibilities is greater for most people [18-25 years of age] than it will be at any other period of the life course" (Arnett, 2000, p. 469). Arnett (2000) theorizes the period between 18-25 years of age as unique from that of adolescence and young adulthood, and termed it emerging adulthood. Many individuals during this developmental period choose

to continue their education and attend college. With this phase being influential for later life outcomes, what role does college play, if any, in social and moral development of deviant adolescents?

College is an environment accepting of risky behavior such as substance use, binge drinking, and promiscuity. Full-time college students aged 18-22 years old are more likely than those not enrolled in college to use alcohol in the past month and binge drink (U.S Department of Health and Human Services, 2005), with 44% of all college students reporting drinking alcohol at the binge level or higher (Weschler & Nelson, 2008). Underage drinking is also associated with high-risk sexual behavior and physical fighting (CDC, 2010). The social conditions of college therefore may facilitate the continuation of lines of deviant action. However, because a college degree is valued in our society, deviance during this phase may be overlooked or excused while transitioning into adult roles.

Arnett (2000), theorizes that college is a transitional phase that is a "distinct period demographically, subjectively, and in terms of identity exploration" (p. 469). During this time, society has lowered expectations for strict role requirements, due to this age group engaging in self-exploration and experimentation (Arnett, 2000). Additionally, this group is actively pursuing self-improvement through gaining education and job related skills. Deviance during this time may be a result of sensation seeking behavior in an attempt to explore identity before settling down into adult life and responsibilities (Arnett, 2000).

If college serves as an influential transitional period, the college culture combined

with the timing in life-course development could impact mental and social development. Personality is found to develop through the different stages of the life-course to remain static around 30 years of age (Caspi & Roberts, 2001). Freedman (1967) illustrates the importance of personality development during college years by stating:

Development in this period [college years] is not simply a matter of progression along lines laid down in early adolescence or in infancy. Late adolescence, if we may bestow this label on the college years, is a period deserving attention in its own right, not simply a screen through which prior and more potent forces are filtered. It is a developmental phase with certain characteristic problems or conflicts and certain systematic ways of meeting them. Late adolescence may well prove to be as important for the adult personality as the developmental phases of infancy and early adolescence. (p. 30)

I argue that college is not only a transition, but it also becomes an informal social control. Indeed, “Educational attainment has become the primary route to occupational attainment in modern societies” (DiMaggio & Mohr, 1985, p. 1233). As a result, college may open up career and networking opportunities, create social bonds and ties to society, resulting in the desistance process. Therefore, the effect of adolescent delinquency on career status can be moderated through education (Hagan, 1991; Tanner, Davies, O’Grady, 1999). That is, delinquents who go to college may desist from crime and maintain conventional social ties; whereas, delinquents who do not go to college may lack conventional social ties to persuade them to desist. Employment and marriage typically are found to be significant informal social controls that encourage the desistance process (Sampson & Laub, 1990; 2003); however, college may be an initial informal social control that allows for achievement in later employment and marriage.

College is a transitional period in which adolescents are exiting current social

roles, testing out new ones, and preparing to enter social roles of adulthood (Hagan & Wheaton, 1993) making deviance likely to continue through this experimental phase. Laub, Nagin, and Sampson (1998) found that marriage operates as a delayed informal social control for some offenders. “The effect of a good marriage takes time to appear, and it grows slowly over time until it inhibits crime” (Laub, Nagin, & Sampson, 1998, p. 237). College, like marriage, may serve as a gradual informal social control on the desistance process. It is argued that as students proceed through college, they become more engrained in conformity as they prepare for upcoming adult roles and responsibilities.

Rosiman, Masten, Coatsworth, and Tellegen’s (2004) study provides preliminary support that social and educational achievement is related to later life success in employment and romance. Rosiman et al. (2004) measured the predictability of developmental tasks (friendships, education, law-abidingness, work, and relationships) in emerging adulthood and the correlations with success in work and romance in later life. Their results showed a significant relationship between friendship and academic attainment in emerging adulthood with success in work and romance in young adulthood. This study illustrates how education and socialization can impact adulthood in its numerous domains.

Sampson and Laub (1990) also found those with educational and occupational aspirations were less likely to engage in deviance in later adulthood. Educational achievement has direct results for future employment success, thus increasing bonds to society. In line with supporting research on occupations as positive turning points,

college may be the important transitional phase needed in order for this effect to occur. In contrast, adolescent deviants who do not further their education may be less likely to enter the desistance process. They may lack motivation for successful employment or obtain low income and mundane work. Sampson and Laub (1991) identified through an analysis of the Gluecks' study data (1950) that college attainment may be an important turning point in desistance, through persistent offender narratives:

“I don't know, I feel that I could have made something out of myself real big, if I got the education. I know that, I always said that. If I ever had a chance to finish schooling, maybe go to college, I could have made something of myself. I always got involved in reading things that I didn't even understand. I was interested in it, but I didn't understand. So I know it was the education part. And then I kind of realized...well you ain't got the education, you are what you are” (p. 176).

Personality development and career opportunities linked to the college experience may provide those who attend an advantage over those who do not. High school graduates who decide to pursue work rather than school may miss the unique opportunities provided to college students. College students also have access to internships, seminars, speakers, and clubs that are beneficial for self and professional development. Deviants who do not attend college go straight into adulthood with limited opportunities for development and career advancement. Those who complete college will be expected to receive benefits, but not everyone will be impacted to the same degree from the experience.

CURRENT STUDY

For this project, I will analyze data from the National Longitudinal Study of Adolescent Health (Add Health, 2009) to measure adult functioning in numerous domains. I will analyze college attainment effects on adult outcomes for party-subculture youth, limited party-subculture youth, serious delinquents, and party-subculture abstainers. Party-subculture youth are defined by drinking alcohol, marijuana use or experimentation, and sexual intercourse. Limited party-subculture youth are similar to the party-subculture; however they do not participate in all the deviance as is required for membership in the party-subculture youth category. Serious delinquent youth will be categorized as such if they engage in serious physical fights or offenses with weapons. Lastly, Party-subculture abstainers are defined as youth that refrain from any party-subculture and serious delinquent activities. Through this project, I will be extending initial research by Moffitt (1993) and Hagan (1991) by comparing college-educated offender subcultures with abstainers on adult outcomes. As noted previously, with the extension of the age-crime curve and the longer maturity gap in modern societies (Moffitt et al., 2002), results will be more accurate if data is collected in later adulthood. Consequently, I will utilize the fourth wave of Add Health to measure adulthood outcomes, when subjects are 24-32 years of age.

The party-subculture is under studied and provides an explanation for variability in adult attainment based upon race or socioeconomic status (Hagan, 1991; Hagan & Foster, 2006). Party-subculture participation was found to benefit occupational prestige for those who were male, Caucasian, and from a non-working class background (Hagan,

1991). The party-subculture has yet to be linked with adolescence taxonomies. Moffitt (1993) theorizes that three adolescent groups exist, with 90% of adolescents falling within the AL offender group. The group is loosely defined as temporarily engaging in deviance during adolescence and aging out of crime in adulthood. I argue that research on AL offenders over-generalizes a diverse group of deviant adolescents, providing inaccurate predictions of long-term consequences. That is, the AL group may contain both serious delinquents and those who engage in the party-subculture.

My study will build upon past research to analyze different adolescent groups in adulthood based upon offending preferences in adolescence. For this project I identified two unique offender types not previously identified through research: limited party-subculture youth and party-subculture abstainers. The party-subculture abstainer group was created as a control to test whether refraining from party-subculture and serious deviance was beneficial in adulthood. The limited party-subculture group catches the remaining adolescents who do not quite fit the party-subculture profile, but nevertheless engage in limited party-subculture activities. It is hypothesized that college moderates the relationship between adolescent deviance and adulthood outcomes. Because of the potential for party-subculture deviance to become beneficial for development when education is held constant (Hagan, 1991), college is expected to benefit party-subculture youth more than serious delinquents or limited party-subculture youth.

Through the use of the Add Health dataset, I will be focusing on the early effects of youthful deviance on later adulthood stratification when moderated by college attainment. My research will contribute to the literature by evaluating adult outcomes of

adolescent groups based on college achievement. Specifically, college is hypothesized to act as a moderator for the impact of the amount and type of deviance in adolescence on success in adulthood.

HYPOTHESES

The review of literature has highlighted some limitations in our understanding of AL offending and party-subculture influences. Two hypotheses have been developed to further our knowledge of the long-term effects of subgroups defined by offending characteristics within the AL offender category.

Hypothesis 1: Party-subculture abstainers will fare better in observed adulthood domains when compared with party-subculture youth, serious delinquents, and the limited party-subculture group.

I hypothesize that the party-subculture abstainers will mirror past findings on abstainers and fare better in adulthood outcomes compared to the deviant adolescent groups. Due to their reduced vulnerability to snares (teenage pregnancy, dropping out of school, addiction)(Moffitt, 1993) as associated with deviance, party-subculture abstainers have an advantage over adolescent deviants. Overall, party-subculture abstainers are hypothesized to fare better in adulthood domains when compared to deviant adolescents in adulthood.

Hypothesis 2: The effect of deviance in adolescence on adult outcomes will be moderated by college attendance. Therefore, deviance will be beneficial for the party-subculture youth allowing this group to fare better in adulthood domains when compared to party-subculture abstainers, serious delinquents, and the limited party-subculture participants group.

That is, college-educated party-subculture youth are hypothesized to fare better than all other college-educated adolescents. Due to the ability of minor deviance to improve social skills, self-confidence, and networking skills, it is theorized that if education is held constant, party-subculture adolescents will be better adjusted in adulthood. Although party-subculture abstainers are not predicted to experience significant harm from non-engagement in deviance, they may be less likely to possess certain personality traits and social abilities that allow for success in adulthood. Similar to abstainers, serious delinquents may suffer from negative personality traits and social deficiencies harming their ability for success. Serious delinquents will still be expected to achieve the least success in adulthood, but it is hypothesized that non-college-educated serious delinquents will be less successful in adult domains than college-educated serious delinquents. While the limited party-subculture youth may engage in some party-subculture activities, since it is not all, they are not expected to fare as well in adulthood when compared to party-subculture youth. The moderator effect of college is hypothesized to eliminate or lessen snares that deviants may experience as a result of less education.

CHAPTER III

METHODS

DATA

The data for this project will be drawn from Waves I and IV of the National Longitudinal Study of Adolescent Health (Add Health, 2009). The surveys for Wave I and Wave II are almost identical and collected within one year of each other. Therefore, data will only need to be collected from Wave 1 to identify adolescent groups. Wave IV will be used to identify adulthood outcomes, and was collected when the participants were 24 to 32 years of age. Data was collected regarding the participant's social environments and behaviors in both adolescence and adulthood allowing me to test the study's hypotheses. Through the Add Health data, I will test whether college-educated party-subculture youth will fare better in observed adulthood domains and if the effect of delinquency on adult outcomes will be moderated by college attendance. In-home and in-school questionnaires were used to collect data on mental health, romantic partnerships, substance use, and criminal activities.

Wave I of Add Health used a clustered sampling design, with study respondents nested within 132 middle and high school clusters located throughout the United States in 1994-1995. Eligible high schools were required to offer an 11th grade and enroll more than 30 students, while middle schools were required to offer a 7th grade and graduate at least 5 students who attended the complimentary high schools in the study. Wave I of data collection included an in-school questionnaire and an in-home interview of the adolescents, as well as an interview with the primary parent of the adolescent, typically

the mother. Data was collected in Wave IV from the participants through in-home questionnaires when they were 24 to 32 years of age. Around 80% of the original cohort from Wave I was re-interviewed for the final wave of data.

SAMPLING

The sample consisted of a stratified, random sample of middle and high schools in the United States. High schools were stratified into 80 clusters based on region (northwest, midwest, south, west), urbanity (urban, rural, suburban), school size (125 or fewer, 126-350, 351-775, 776 or more), school type (public, private, parochial), percentage Caucasian (0, 1-66, 67-93, 94-100), percentage African American (0, 1-6, 7-33, 34-100), grade span (K-12, 7-12, 9-12, 10-12), and curriculum (general, vocational/technical, alternative, special education). Seventeen students were randomly chosen from each strata based on gender and year in school from each high school. There were also special over-samples created for ethnic groups such as African Americans from well-educated families, Chinese, Cubans, and Puerto Ricans. After selecting out participants outside the desired age-range (15-18), the total sample size used for analysis is 12,944.

According to the age-crime curve, deviance typically escalates at age 15 and peaks at age 18 (Farrington, 2003). Therefore, for this study, adolescents were defined as those high school aged, 15 to 18 years of age. This age group allowed for me to properly identify subculture preferences since adolescents in this age range should be actively engaging in subculture deviance. Adolescent groups defined in Wave I were compared to

Wave IV, when the youth were then in their later 20's and early 30's. With the theorized extension of the maturity gap and age-crime curve (Moffitt et al., 2002), adulthood outcomes may be more representative in later adulthood rather than young or early adulthood. Unlike past research on Moffitt's (1993) developmental taxonomy, this project does not differentiate between AL and LCP offenders. My study categorizes adolescents based only on their offending preferences and not on their offending time frame. Because LCP offenders are known to engage in more violent crimes (Moffitt, 1993), it is theorized that most LCP offenders will fall into the serious delinquent group. However, because this is uncertain, I do not discuss the groups based on AL or LCP offending, rather I identified group success based on offending that occurred during adolescence and subsequent success in adulthood domains.

MEASURES: INDEPENDENT VARIABLES

Party-Subculture Adolescents

The party-subculture adolescents are identified by their participation in these three activities: the use of marijuana at least once, having a non-virgin status, and drinking alcohol in the past twelve months. Due to potential for alcohol to play an important role in self-confidence in social situations (Leifman et al., 1995; Moos et al., 1976; Newcomb & Bentler, 1988; Peters & Stringham, 2006; Wolf & Wolf, 2002), this activity must be current and on going. Therefore, party-subculture youth report more than just experimentation unlike what is required for sexual relationships and marijuana use.

Alcohol use is measured by the amount of times the adolescent reports getting

drunk in the past twelve months. Response categories for getting drunk in the past twelve months include: every day/almost every day, 3-5 times a week, 1-2 times a week, 2-3 times a month, once a month or less, 1-2 days in the past twelve months, and never. To be identified with the party-subculture, the participant must report getting drunk 1-2 times a week, 2-3 times a month, or once a month or less. Because the party-subculture is a group that is preoccupied with having a good time, alcohol use must be consistent. Adolescents who report getting drunk 3 to 5 times a week or every day/almost every day are excluded from the party-subculture due to excessive use. Excessive alcohol use would no longer be pursuing fun but heading down the road of dependency.

Party-subculture alcohol use represents those who drink often enough to be included in a party-subculture, as well as eliminating those who drink too infrequently or excessively. In sum, party-subculture adolescent group membership will be defined by having a non-virgin status, occasional to moderate alcohol use, and having used marijuana at least once. Youth who engage in forms of violent delinquency will be excluded from this group

Serious Delinquents

Serious delinquents will be defined as those who engage in violent crimes. Serious delinquents will be identified as those who engage in serious physical fights that caused harm to the victim that required hospital attention more than twice; or, ever pulling a knife or a gun on someone; or, ever shooting or stabbing someone. The response scale for reporting physical fights is: never, 1 to 2 times, 3-4 times, and five or

more times. Engaging in a physical fight and inflicting harm more than two times shows a pattern of violence and will be considered serious. The scale for pulling a knife or gun or shooting or stabbing someone is: never, once, and more than once. Respondents who have ever threatened use or used a weapon will be considered serious delinquents due to the violent nature of the delinquency.

Party-Subculture Abstainers

In past research, abstaining adolescents were identified as youth who refrain from all deviance. However, for this project, I created a group of adolescents who refrain from party-subculture and serious delinquent activities. These adolescents report never doing any of the following activities: getting drunk in the past year, marijuana use, sexual intercourse, physical fighting, threatening to use a knife or a gun, or shooting or stabbing someone. The same questions and scales that are used to identify the party-subculture and serious delinquents will be used to identify the party-subculture abstainers. Party-subculture abstainers will represent adolescents who refrain from not only minor deviance of the party-subculture but also that of the serious delinquents.

Limited Party-Subculture Adolescents

The final group of adolescents is a combination of all the adolescents who did not fit within the three above groups. I will term this group the limited-party subculture youth and they will be identified by not engaging in all the requirements of the party-subculture youth and refraining from serious delinquencies. Party-subculture youth must

report getting drunk anywhere from 1-2 times a week or once or less per month, having had sexual intercourse, and having tried marijuana. An adolescent that engages in some party-subculture activities, but not all, will fall into this group. This could include not drinking as frequently as the party-subculture youth, refraining from marijuana use, or not having sexual intercourse. Lacking at least one of the defining characteristics of the party-subculture youth but participating in at least one of their activities will result in categorizing an adolescent as limited party-subculture participation.

Key Moderating Variable: Education

College attainment is theorized to have a moderating effect on adult outcomes for party-subculture adolescents. College-educated party-subculture participants are expected to fare better than college-educated serious delinquents, limited-party subculture youth, and party-subculture abstainers in adulthood. For this project, the moderator will have an effect when college-educated participants have earned at least a bachelor degree. In Wave IV, the variable used to define education asks participants to identify the highest level of education currently achieved. Responses range from an 8th grade education or less to a doctorate degree. Those who report receiving a bachelor degree or higher are considered college educated for this project. I will dichotomize the variable as either college educated or not. Those who are college-educated will at least have a bachelor's degree (if not more), and those who are not considered college-educated range from having a middle school education to having completed some college, but not receiving a bachelor degree.

MEASURES: DEPENDENT VARIABLES

Relationships

Those who are currently involved in a relationship were evaluated based upon the respondent's level of happiness (very happy, fairly happy, not too happy) and commitment within the relationship (completely committed, very committed, somewhat committed, not at all committed). If the subject has more than one romantic partner, reporting priority is: spouse, cohabitation partner, pregnancy partner, and dating partner. If there are numerous partners, the respondents were instructed to identify the longest relationship partner.

Mental Health

The depression scale included in Waves I and IV has ten items to measure depression. The depression scale measures the respondent's feelings during the past week on the following items: 1) you were bothered by things that usually don't bother you; 2) you could not shake off the blues, even with the help from your family and your friends; 3) you did not feel you were as good as other people; 4) you had trouble keeping your mind on what you were doing; 5) you felt depressed; 6) you felt that you were too tired to do things; 7) you were not happy; 8) you did not enjoy life; 9) you felt sad; and 10) you felt people disliked you. The above items all utilized the following response scale: never or rarely, sometimes, a lot of them time, and most of the time. The ten items were summed to create the depression scale.

Economics

Economic circumstances in adulthood are measured by the respondent's reported income. The questionnaire asks the subjects to include their income made in the past year before taxes were taken out. Income measured in pre-tax dollars was collected for each participant to determine if adolescent group participation has any effect on financial success in adulthood.

Personality

Findings have been mixed regarding abstainer's ability to be social and open-minded. Such personality deficits could significantly impact achievement with romance and job success. Three items were combined to measure if the participant is an introvert: "I don't talk a lot", "I talk to many people at parties", and "I keep in the background" (Add Health, 2009, Wave I). Item two was reverse coded. Additional personality variables were included to measure whether the participant reports: optimism about their future, if they are stressed out easily, and if they like to take risks. All of the personality variables are measured on a scale of strongly agree, agree, neither agree nor disagree, disagree, and strongly disagree.

Adult Substance Use and Deviance

Due to data limitations, substance use is defined as use within the last twelve months. Substance use variables measured the number of times the participant has been drunk on alcohol, used marijuana, and used other illicit drugs in the past twelve months.

The items measured substance use based on the following scale: none, 1-2 times in 12 months, 1 or less times in 12 months, 2-3 times a month, 1-2 times a week, 3-5 times a week, and every day or almost every day. Physical fighting in the last twelve months was used to determine if adolescent deviants are continuing to engage in violence beyond the adolescent years. The variable is the same as in Wave I, asking participants how many times in the past twelve months they have engaged in a serious physical fight. The question is coded as: never, 1-2 times, 3-4 times, and 5 or more times.

MEASURES: CONTROLS

In addition to the substantive variables of interest, education and adolescent deviance, I also control for a series of variables that will help to rule out spuriousness. Specifically, the multivariate models include controls for respondent's gender, age at Wave I, and race/ethnicity.

DATA ANALYSIS

I utilized descriptive statistics (percentages, means, and standard deviations) to represent the sample. I also represented bivariate associations between the adolescent groups and adulthood outcomes using one-way analysis of variance (anova). Finally, I reported multivariate results based on OLS regressions, which took into account the complex sampling design of the Add Health study. In order to correct for the design of the Add Health dataset and ensure the results were representative, analyses were conducted using STATA version 10.1. Analyses must correct for design effects of the

Add Health sampling plan. Specifically, the analyses corrected for weights placed on disabled, educated ethnic minorities, and genetic samples by the sample's design (Chantala & Tabor, 2010), nesting of adolescents within study schools, and stratification in the sampling design.

CHAPTER IV

RESULTS

Table 1 presents the descriptive statistics from Wave I for each of the four groups. The four groups of adolescents are party-subculture youth, serious delinquents, party-subculture abstainers, and the limited party-subculture group. The party-subculture abstainer group did not engage in any of the activities of the party-subculture group (alcohol use, marijuana use, and sexual intercourse) or serious delinquency (threats or acts of violence). The limited party-subculture is adolescents who engaged in some party-subculture deviance but not all of the deviance required to be in the party-subculture. Sex of all the groups, except the serious delinquents, is evenly divided, with slightly more females reporting party-subculture, party-subculture abstainer, and limited party-subculture involvement. The majority of serious delinquents are male, with slightly more than 20% of females comprising this group. The party-subculture group is mainly composed of White adolescents, although White youth make up around 50% of the party-subculture abstainers and the limited party-subculture group. More Black and Hispanic

TABLE 1
Descriptive statistics for sex and race

Variable	PS (n=1,016)			SD (1,114)			PSA (n=5,240)			LPS (n=7,219)			Anova	
	%	SD	Range	%	SD	Range	%	SD	Range	%	SD	Range	F	P
Male _{a,d,e}	47.7	0.5	0-1	79.4	0.4	0-1	46.8	0.5	0-1	48.7	0.5	0-1	142.03	0.000
White _{a,b,c,d,e}	69.2	0.46	0-1	38.5	0.49	0-1	50.4	0.5	0-1	51	0.5	0-1	69.19	0.000
Black _{a,b,c,d,e,f}	11.4	0.32	0-1	31.2	0.46	0-1	17.3	0.38	0-1	23.9	0.43	0-1	68.6	0.000
Hispanic _{a,b}	9.4	0.29	0-1	13.1	0.33	0-1	12.2	0.33	0-1	11.4	0.32	0-1	3.05	0.027
Other _{a,b,c,e,f}	10	0.3	0-1	17.2	0.38	0-1	20.1	0.4	0-1	13.7	0.35	0-1	41.34	0.000

TABLE 2
Descriptive statistics for dependent variables based on adolescent group

Variable	PS (n = 1,106)			SD (n = 1,114)			PSA (n= 5,240)			LPS (n=7,219)			Anova	
	M	SD	Range	M	SD	Range	M	SD	Range	M	SD	Range	F	P
Depression 1 _{b,c,d,e,f}	8.33	5.26	.00-28	8.8	5.12	.00-30	6.25	4.36	.00-27.00	7.43	4.88	.00-30.00	135.99	0.000
Depression 4 _{a,d,e,f}	6.18	4.81	.00-28	6.94	5.06	.00-30	5.77	4.46	.00-29.00	6.17	4.7	.00-30.00	15.74	0.000
Introvert _{a,b,c,f}	7.5	2.37	3.00-15.00	7.93	2.56	3.00-15.00	8.07	2.5	3.00-15.00	7.87	2.44	3.00-15.00	13.17	0.000
Optimistic _{a,b,e}	2.29	0.9	1-5	2.1	0.81	1-5	2.17	0.86	1-5	2.2	0.86	1-5	6.52	0.000
Easily Stressed _b	2.86	1.03	1-5	2.77	1.03	1-5	2.72	1.03	1-5	2.76	1.03	1-5	4.08	0.007
Take Risks _{a,d,e,f}	3	0.96	1-5	2.76	1	1-5	3.1	1	1-5	3.01	0.99	1-5	27.05	0.000
Income _d	38,950	51,072	0-800,000	33,522	31,793	0-300,000	38,929	50,126	0-999,995	36,370	47,784	0-999,995	3.98	0.008
R. Happiness _{a,b,d,e,f}	1.41	0.62	1-3	1.5	0.65	1-3	1.33	0.58	1-3	1.41	0.63	1-3	18.19	0.000
R. Commitment _{a,d,e,f}	1.55	0.89	1-4	1.76	1.03	1-4	1.46	0.83	1-4	1.56	0.9	1-4	23	0.000
Physical Fight _{a,b,c,d,e,f}	0.08	0.31	0-3	0.17	0.46	0-3	0.03	0.18	0-3	0.05	0.24	0-3	70.15	0.000
Getting Drunk _{a,b,c,d,e,f}	1.3	1.46	0-6	1.09	1.46	0-6	0.73	1.14	0-6	0.96	1.29	0-6	60.12	0.000
Marijuana Use _{b,c,d,e,f}	1.1	1.92	0-6	1.21	2.14	0-6	0.42	1.29	0-6	0.76	1.69	0-6	84.89	0.000
Other Drug Use _{b,c,d,e,f}	0.45	1.22	0-6	0.46	1.25	0-6	0.13	0.67	0-6	0.27	0.97	0-6	49.16	0.000

a=Party-subculture is significantly different than serious delinquents

b=Party-subculture is significantly different than party-subculture abstainers

c= Party-subculture is significantly different than limited party-subculture

d=Serious delinquents are significantly different than party-subculture abstainers

e=Serious delinquents are significantly different than limited party-subculture

f=Party-subculture abstainers are significantly different than the limited party-subculture

adolescents are categorized as serious delinquents than any other group at 31.2% and 13.1% respectively. While “other races” (primarily Asian and Native Americans) are highest in the party-subculture abstainer group at 20.1%.

In order to test the first hypothesis, I utilize a one-way between subjects anova to compare differences between the adolescent groups in adulthood domains (personality, income, mental health, relationships, substance use, and deviance). Results of the one-way anova are presented in Table 1. There was a significant difference between adolescent groups on all measures of personality, income earned, relationship happiness and commitment, mental health, substance use, and physical fighting in adulthood, indicated by the significant F-tests. Results from the anova suggest that every domain in adulthood is significantly affected by adolescent group status. In order to determine which adolescent groups are significantly different from one another for each dependant variable, I used the Tukey HSD post hoc test.

Personality

Adult personality was measured by an introvert scale as well as the degree the participant is willing to take risks, is optimistic about the future, and how easily they are stressed out. The introvert scale measured social willingness and abilities through a set of questions. Post hoc comparisons using the Tukey HSD test indicated that party-subculture youth are significantly less introverted than serious delinquents ($p = .004$), party-subculture abstainers ($p = .000$), and the limited party-subculture ($p = .001$). In addition, the limited party-subculture youth are less introverted than party-subculture

abstainers ($p = .000$).

Results from the anova demonstrated that the adolescent groups are significantly different on all three of the additional personality questions. Regarding the participant's likelihood to get stressed out easily, Tukey's HSD post hoc test indicated that the party-subculture group is more easily stressed compared to party-subculture abstainers ($p = .004$). Party-subculture youth are less likely to be optimistic about the future than serious delinquents ($p = .000$) and party-subculture abstainers ($p = .010$); while serious delinquents are more optimistic than the limited party-subculture ($p = .009$) when comparing optimism about one's future. Lastly, serious delinquents are the most willing to take risks than all the other groups (all $p = .000$). Party-subculture abstainers are less likely to take risks than the limited party-subculture ($p = .000$).

Taken together, these results suggest that adolescent group identification may affect future adult personality characteristics. The results show that the party-subculture group is significantly more extroverted than the other three groups. However, such results for personality in adulthood may be reflective of childhood personality types that have carried into later years, rather than a product of adolescent group identification. Therefore, party-subculture youth may naturally be more extroverted which led to the type of deviance in which they engaged during adolescence, in the first place. Supportive of serious delinquent's offending preferences, findings suggest that they are more willing to take risks when compared to the other groups.

Income

Income was measured by the respondent's personal income earned during the prior year before taxes were taken out (wages or salary) including tips, bonuses, overtime, and income from self-employment. The Tukey's test shows that serious delinquent's income is on average \$5,406 less than party-subculture abstainer's income ($p = .023$). Although not significant, serious delinquents also earn 2,800 and 5,400 less than both the limited party-subculture and party-subculture groups. This finding supports the first hypothesis because serious delinquents were expected to make significantly less income than the rest of the adolescent groups. However, the hypothesis is not fully supported because there is only a statistical significance in income earned by party-subculture abstainers when compared to the serious delinquents.

Relationships

Relationship success in adulthood was measured by participants who reported being in a relationship (either spouse or significant other) and the level of happiness and commitment reported. Romantic relationships were evaluated based upon the respondent's level of happiness (very happy, fairly happy, and not too happy) and commitment within the relationship (completely committed, very committed, somewhat committed, not at all committed). Results from the post hoc test found that serious delinquents are less happy in their relationships compared with party-subculture ($p = .042$), party-subculture abstainers ($p = .000$), and the limited party-subculture ($p = .002$). Additionally, party-subculture abstainers are happier in their relationships than party-

subculture ($p = .013$) and the limited party-subculture ($p = .000$).

Not only are party-subculture abstainers the happiest in their relationships, they are also significantly more committed to their relationships than serious delinquents and limited party-subculture youth ($p = .000$). Again, serious delinquents report the least commitment in relationships compared with all the other groups ($p = .000$). However, party-subculture abstainers do not report significantly more commitment than do party-subculture youth.

Supportive of my first hypothesis, party-subculture abstainers are the happiest in their relationships. Serious delinquents were hypothesized to fare the worst in relationship happiness and commitment than the other groups and they did. Although party-subculture abstainers were happier than all the other groups, they were no more committed than the party-subculture group.

Mental Health

According to the post hoc tests: serious delinquents are more depressed than the party-subculture ($p = .006$), the party-subculture abstainers ($p = .000$), and the limited party-subculture ($p = .000$). Additionally, the party-subculture abstainers are less depressed than the limited party-subculture youth ($p = .000$). The hypothesis is supported because serious delinquents are significantly more depressed than the rest of the adolescent groups. Party-subculture abstainers are only significantly less depressed than serious delinquents and limited party-subculture youth, while not significantly different from party-subculture youth.

When compared on Wave I depression, party-subculture youth were significantly more depressed than party-subculture abstainers and limited party-subculture youth ($p = .000$). While party-subculture and serious delinquents were not significantly different on the depression scale in Wave I, upon adulthood, party-subculture youth report significantly less depression than serious delinquents. Additionally, now in adulthood, the party-subculture group is no longer significantly more depressed than party-subculture abstainers or limited party-subculture groups as they were in adolescence.

Adult Substance Use/Deviance

Adult deviance was measured through reporting of physical fights that have occurred in the past twelve months. The party-subculture group has engaged in significantly more physical fights than the party-subculture abstainers ($p = .000$) and the limited party-subculture ($p = .018$), and fewer fights than serious delinquents ($p = .000$). As predicted, serious delinquents reported significantly more physical fights than all of the groups (all $p = .000$). The limited party-subculture also reported more physical fights than the party-subculture abstainers ($p = .001$).

Substance use in Wave IV was collected to determine if substance use is continued and problematic in adulthood. The number of times getting drunk, using marijuana, and other illicit drugs is recorded in adulthood for the previous twelve months. As expected, the party-subculture abstainers are drunk significantly less than all three of the groups (all $p = .000$). The party-subculture group drinks significantly more than the serious delinquents ($p = .008$), party-subculture abstainers ($p = .000$), and the limited

party-subculture ($p = .000$). Additionally, the serious delinquents get drunk more than the party-subculture abstainers ($p = .000$) and the limited party-subculture ($p = .022$).

The party-subculture and serious delinquent groups smoked more marijuana in adulthood than the party-subculture abstainers ($p = .000$) and the limited party-subculture ($p = .000$), with no significant difference of marijuana use between the party-subculture and serious delinquent groups. The limited party-subculture group reports more marijuana use than the party-subculture abstainers ($p = .000$). The results for other illicit drug use between groups are the same as marijuana use. The party-subculture abstainers report significantly less illicit drug use than all the other groups ($p = .000$), with party-subculture and serious delinquent groups reporting no significant difference in the amount of illicit drug use.

The results for adulthood substance use and deviance fully support my first hypothesis. Party-subculture abstainers are significantly less likely than all the adolescent deviant groups to engage in physical fighting, substance use, and getting drunk. Surprisingly, the party-subculture group reported getting drunk in adulthood significantly more than all of the groups and had no significant difference in marijuana and other illicit drug use with serious delinquents.

For the second hypothesis, I used multiple regressions to test whether college serves as a moderator for the effect of adolescent deviance on the dependent variables. Table 3 reports the results for the multiple regressions on Wave IV adult domains (personality, relationships, adult substance use, deviance, depression, relationship status, and income). Model 1 shows the main effects of the variables holding constant the other

variables in the Model. Model 2 shows the interactions between the adolescent groups and college completion on the dependent variables.

Personality

In Model 1, approximately 3% of the variability of being introverted is accounted for by the included variables. Party-subculture abstainers score on average a predicted .28 points higher on introversion than do party-subculture youth. This difference is statistically significant ($p = .000$). The limited party-subculture group is also significantly more introverted than party-subculture youth by .28 points ($p = .005$), on average. Black youth score a predicted .94 points higher than White adolescents on introversion ($p = .000$). Additionally sex and age significantly predict introversion. Males are more introverted by .36 points than females ($p = .000$). Lastly, with every year increase in age, introversion increases by .07 points. This predicted increase is statistically significant ($p = .000$).

According to Model 2, there are some significant interactions between college education and adolescent group membership predicting introversion. Both college-educated serious delinquents and limited party-subculture groups are significantly more introverted in adulthood than the college-educated party-subculture adolescents. Serious delinquents scored .91 points higher ($p = .035$) and the limited party-subculture youth scored .58 points higher ($p = .017$) on introversion than the party-subculture adolescents. Party-subculture youth are significantly less introverted in adulthood by .97 points when college-educated ($p = .000$), compared with non-educated party-subculture youth.

TABLE 3

Multiple regression analysis for personality characteristics in adulthood based on adolescent group

Variable	Introvert (n = 13,558)				Optimism (n = 13,568)				Stress Out Easy (n = 13,586)				Like Taking Risks (n = 13,585)			
	Model 1		Model 2		Model 1		Model 2		Model 1		Model 2		Model 1		Model 2	
	<i>b</i>	SE	<i>b</i>	SE	<i>b</i>	SE	<i>b</i>	SE	<i>b</i>	SE	<i>b</i>	SE	<i>b</i>	SE	<i>b</i>	SE
LPS	0.28**	0.1	0.1	0.131	-0.03	0.039	-0.07	0.048	-.11*	0.048	-.11*	0.051	-0.06	0.05	-0.1	0.056
PSA	0.28***	0.06	0.3**	0.084	-0.05*	0.022	-0.03	0.026	-0.04	0.035	-0.02	0.042	.13***	0.027	.11**	0.033
SD	0.28*	0.13	0.02	0.16	-0.07	0.043	-.12*	0.054	0.04	0.06	0.06	0.064	-.19**	0.063	-.22**	0.07
Age	0.07***	0.02	0.08***	0.018	0.00	0.006	0.00	0.006	-.02*	0.008	-0.02	0.008	.06***	0.007	.06***	0.007
Black	0.94***	0.08	0.91***	0.08	-0.26***	0.026	-.25*	0.026	-.21***	0.04	-.22***	0.04	-0.01	0.032	0.00	0.033
Hispanic	0.13	0.13	0.1	0.126	-0.2***	0.034	-.21*	0.036	-0.04	0.056	-0.05	0.055	-0.04	0.042	-0.04	0.042
Other	0.18	0.09	0.16	0.092	-0.08**	0.035	-.09*	0.036	-0.04	0.045	-0.04	0.045	-0.07	0.043	-0.07	0.043
Sex	0.36***	0.06	0.34***	0.061	-0.09***	0.019	-0.07	0.021	-.43***	0.024	.43***	0.024	-.33***	0.024	-.33***	0.024
College			-.97***	0.226			-.23**	0.077			-.09	0.099			.05	0.084
CollegeSD			.91*	0.428			0.09	0.101			-.19	0.149			0.12	0.145
CollegeLPS			.58*	0.24			0.14	0.083			-.01	0.106			0.12	0.089
CollegePSA			0.09	0.148			0.01	0.041			-.01	0.062			0.02	0.059

*** p<.001 ** p<.01 * p<.05

Approximately 3% of the variability in optimism is accounted for by the variables in Model 1. Party-subculture abstainers score on average a predicted .5 points higher on optimism than do party-subculture youth. This difference is statistically significant ($p = .035$). Black adolescents score a predicted .26 points higher than White adolescents on optimism ($p = .000$). Other race adolescents (those who are Asian, Native American, or Middle Eastern descent) score a predicted .08 points higher on optimism than do White adolescents. This difference is statistically significant ($p = .007$). In addition to race, males score on average a predicted .09 points higher on optimism than females ($p = .000$). In Model 2, college-educated party-subculture adolescents are found to be more optimistic in adulthood by .23 points compared to non-college-educated party-subculture youth ($p = .004$).

Approximately 5% of the variability in Model 1 in becoming stressed out easily is accounted for by the variables in the model. The limited party-subculture youth score on average a predicted .11 points lower on becoming stressed easily compared with party-subculture youth. This difference is statistically significant ($p = .024$). Black adolescents score a predicted .21 points lower than White adolescents on becoming stressed easily ($p = .000$). Females become more easily stressed than males by a predicted .43 points ($p = .000$).

Approximately 4% of the variability for the desire to take risks is accounted for by the variables in Model 1. Party-subculture abstainers score on average a predicted .13 points lower than party-subculture youth on enjoying to take risks. This difference is statistically significant ($p = .000$). Serious delinquents score a predicted average of .19

points higher on risk taking than party-subculture youth ($p = .003$). Males like to take more risks than females ($p = .000$). With each year increase in age, risk-taking decreases by .06 points. This result is statistically significant ($p = .000$).

In support of my second hypothesis, college-educated party-subculture youth are more extroverted than party-subculture youth who are not college-educated.

Additionally, college-educated party-subculture youth remain significantly more extroverted than similar educated serious delinquents and limited party-subculture youth. College-educated party-subculture youth were also found to be significantly more optimistic than party-subculture abstainers, limited party-subculture, and party-subculture youth who are not college-educated. Education does not significantly moderate the effects of group membership on getting stressed out easily, risk taking, or optimism.

Income

Approximately 3% of the variability in the amount of income earned in adulthood is accounted for by the variables in Model 1. Serious delinquents on average make \$7,322 less than party-subculture youth in adulthood. This result is statistically significant ($p = .008$). Black adolescents earn on average a predicted \$6,431 less than White adolescents. This difference is statistically significant ($p = .000$). With every year increase in age, income is predicted to significantly increase by \$1,878 ($p = .000$). Additionally, males earn \$10,925 more than females, on average. This prediction is statistically significant ($p = .000$).

Based on results from Model 2, college-educated party-subculture youth in

TABLE 4

Multiple regression analysis for relationships, depression, and income in adulthood based on adolescent group

Variable	Relationship Happiness _a (n = 10,753)				Relationship Commitment _b (n = 10,752)				Income (n = 12,944)				Depression (n = 13,536)			
	Model 1		Model 2		Model 1		Model 2		Model 1		Model 2		Model 1		Model 2	
	b	SE	b	SE	b	SE	b	SE	b	SE	b	SE	b	SE	b	SE
LPS	-0.02	0.037	-0.04	0.045	-0.05	0.054	-0.07	0.063	-2,632	2,303	-139	1,553	-.05	0.233	-.17	0.3
PSA	-.09***	0.023	-.09*	0.023	-.14***	0.035	-.14***	0.035	2,045	1,177	1,216	1,210	-.02	0.139	0.07	0.18
SD	0.06	0.043	0.04	0.051	0.07	0.064	0.05	0.069	-7,322**	2,712	-1,593	1,987	.78**	0.275	.73*	0.36
Age	-0.01	0.005	-0.01	0.005	-.03**	0.008	-.02**	0.008	1,878***	388	1,645***	311	-.03	0.041	-.01	0.04
Black	.20***	0.024	.19***	0.024	.36***	0.03	.36***	0.03	-8,228***	1,511	-6,431***	1,242	.85***	0.166	.73***	0.15
Hispanic	0.05	0.032	0.04	0.033	.11**	0.044	.11*	0.044	-1,436	1,414	381	1,416	-.04	0.253	-.18	0.26
Other	.06**	0.023	.06**	0.023	.12***	0.032	.12***	0.032	-597	2,252	140	2,031	.40*	0.178	.37*	0.18
Sex	-.04*	0.017	-.04**	0.017	.08***	0.021	.08***	0.021	10,925***	1,064	11,959***	983	-.76***	0.116	-.76***	0.16
College			-.18**	0.068			-0.13	0.101			28,474**	7,994			-1.70***	0.41
CollegeSD			-0.03	0.101			0.03	0.154			-15,703	8,884			-.92	0.72
CollegeLPS			0.06	0.071			0.03	0.114			-7,329	7,254			0.27	0.46
CollegePSA			0.03	0.029			0.04	0.053			-4,986*	2,428			0.23	0.22
Depression													.24***	0.013	.23***	0.01

*** p<.001 ** p< .01 * p< .05

a = Lower scores on relationship happiness represent happier relationships

b = Lower scores on commitment represent more commitment

adulthood make on average \$28,474 more than non-college-educated party-subculture youth. This result is statistically significant ($p = .001$). Additionally, college-educated party-subculture abstainers make an estimated \$4,986 less than college-educated party-subculture youth in adulthood ($p = .042$). Party-subculture youth were found to earn more income than the other three groups, although only significantly so for party-subculture abstainers, supporting my second hypothesis.

Relationships

Approximately 2% of the variability in the amount of the happiness reported in relationships is accounted for by the variables in Model 1. Party-subculture abstainers score a predicted .09 points higher on level of happiness in relationships than party-subculture youth. This difference is statistically significant ($p = .000$). Black respondents score a predicted .20 points lower than White respondents on degree of relationship happiness ($p = .000$). Other race respondents (Asian, Native American, or Middle Eastern descent) score a predicted .06 points lower on happiness in relationships than White respondents ($p = .008$). Males in adulthood are less likely to be happy in their relationships by .04 points compared with females ($p = .027$). Results presented in Model 2 suggest that college-educated party-subculture youth are significantly more happy in their relationships than non-college-educated party-subculture youth ($p = .008$).

Approximately 4% of the variability for reported level of relationship commitment is accounted for by the variables in Model 1. Party-subculture abstainers score a predicted .14 points higher on relationship commitment than party-subculture

youth ($p = .000$). White respondents score significantly higher on relationship commitment than do Black respondents (.36, $p = .000$), Hispanic respondents (.11, $p = .010$), and other race respondents (.12, $p = .000$). With every year increase in age, relationship commitment increases by .02 points ($p = .002$). Although females were less happy in relationships, females are more committed in their relationships by .08 points than males ($p = .000$).

Adulthood relationship results for the adolescent groups found that party-subculture abstainers were more happy and committed than the party-subculture youth therefore, not providing support for my second hypothesis. But, party-subculture abstainers without a college education report less commitment and happiness in relationships when compared to similar party-subculture youth. Additionally, party-subculture youth are significantly happier in their relationships when they are college-educated. Results show some support that college-educated youth may be more likely to have successful relationships and that early relationship experience of the party-subculture may be beneficial.

Mental Health

When controlling for depression in Wave I, approximately 9% of the variability for depression in Wave IV is accounted for by the variables in Model 1. For every one unit increase in depression in Wave I, the depression score in Wave IV is predicted to increase by .24 points ($p = .000$). Serious delinquent youth on average had a predicted .77 points higher on depression than party-subculture youth. This difference is

statistically significant ($p = .006$). Black youth had a predicted score of .84 higher ($p = .000$) and other race youth had a predicted score of .40 ($p = .027$) higher than White youth on depression in adulthood. Females are significantly more likely to report feelings of depression by .67 points more on average compared with males ($p = .000$).

According to Model 2, college-educated party-subculture youth are significantly less depressed in adulthood by 1.70 points than non-college-educated party-subculture youth in adulthood ($p = .000$). For every one unit increase in depression in Wave I, the depression score in Wave IV is predicted to increase by .22 points when education is held constant ($p = .000$). Providing support to my second hypothesis, serious delinquents are more depressed in adulthood than party subculture youth. In addition, when party-subculture youth attend college, they are significantly less likely to report feelings of depression.

Adult Substance Use/Deviance

Approximately 3% of the variability for engaging in physical fights in the last twelve months is accounted for by the variables in the model. Party-subculture abstainers score on average a predicted .02 points lower on physical fighting than party-subculture youth ($p = .009$). Also, serious delinquents score a predicted .09 points higher on physical fighting in the past twelve months than party-subculture youth. This difference is statistically significant ($p = .003$). Black adolescents on average score a predicted .02 points higher for physical fighting than White youth ($p = .032$). Males engaged in significantly more physical fights than females, on average by .05 points ($p = .000$).

TABLE 5

Multiple regression analysis for substance use and fighting in adulthood based on adolescent group

Variable	Physical Fighting (n = 13,574)				Drunkenness (n = 13,565)				Marijuana Use (n = 13,591)				Other Illicit Drug Use (n = 13,601)			
	Model 1		Model 2		Model 1		Model 2		Model 1		Model 2		Model 1		Model 2	
	<i>b</i>	SE	<i>b</i>	SE	<i>b</i>	SE	<i>b</i>	SE	<i>b</i>	SE	<i>b</i>	SE	<i>b</i>	SE	<i>b</i>	SE
LPS	-.03	0.02	-.03	0.022	-.32***	0.075	-.39***	0.081	-.38***	0.073	-.51***	0.088	-.18***	0.044	-.22***	0.054
PSA	-.03***	0.01	.02**	0.009	-.27***	0.037	-.26***	0.044	-.43***	0.041	-.38***	0.053	-.19***	0.024	-.18***	0.029
SD	.07**	0.03	.09**	0.029	-.26***	0.092	-.27**	0.099	-.03	0.126	-.15	0.145	-.01	0.068	-.04	0.082
Age	.01***	0	-.01***	0.002	-.11***	0.011	-.11***	0.011	-.13***	0.013	-.12***	0.013	-.05***	0.008	-.05***	0.008
Black	.03*	0.01	.02*	0.01	-.54***	0.047	-.52***	0.046	0.07	0.077	0.05	0.077	-.22***	0.025	-.24***	0.027
Hispanic	0.01	0.01	.10*	0.044	.46***	0.052	-.43***	0.052	-.15*	0.071	-.18*	0.072	-.12**	0.038	-.13**	0.039
Other	0	0.01	.12***	0.032	-.24***	0.059	-.23***	0.059	-.09	0.067	-.10	0.069	-.08	0.044	-.08	0.043
Sex	.05***	0.01	.08***	0.021	.47***	0.037	.48***	0.036	.33***	0.044	.32***	0.043	.09***	0.023	.09***	0.023
College			-.13	0.101			0.06	0.18			-.65***	0.164			-.31**	0.088
CollegeSD			-.13**	0.042			0.12	0.282			.019	0.314			-.06	0.112
CollegeLPS			0	0.028			0.25	0.189			.43*	0.18			0.13	0.091
CollegePSA			-.00	0.013			-.14*	0.066			-.06	0.088			0.04	0.042

*** p<.001 ** p<.01 * p<.05

Physical fighting was found to decrease by .01 points with every year older ($p = .000$). According to Model 2, college-educated serious delinquents in adulthood engage in significantly less fights than non-college-educated party-subculture youth in adulthood ($b = .13$, $p = .003$).

Approximately 9% of the variability in reported drunkenness in the past twelve months is accounted for by the variables in the model. Limited party-subculture ($b = .39$, $p = .000$), party-subculture abstainers ($b = .26$, $p = .000$), and serious delinquents ($b = .27$, $p = .006$) score significantly less on average for being drunk in the past month compared to the party-subculture. Additionally, White participants report more drunkenness in the past twelve months than do Black ($b = .52$, $p = .000$), Hispanic ($b = .42$, $p = .000$), and other race participants ($b = .23$, $p = .000$). Males reported on average .47 points higher than females regarding occurrences of getting drunk ($p = .000$). Additionally, with every year increase in age, drunkenness decreased by .11 points ($p = .000$). Model 2 tells us that college-educated party-subculture abstainers are drunk significantly less than the college-educated party-subculture group ($b = .14$, $p = .035$).

Approximately 5% of the variability in marijuana use in the last twelve months is accounted for by the variables in the model. The limited party-subculture group score on average .51 points less on adult marijuana use in the last twelve months than the party-subculture. This difference is statistically significant ($p = .000$). Not surprising, party-subculture abstainers also score on average .38 points less on marijuana use in adulthood than the party-subculture ($p = .000$). Hispanic participants score .18 points on average less than White participants on marijuana use ($p = .013$). Males on average report .33

points higher on marijuana use than females. This finding is statistically significant ($p = .000$). Age is also significant in predicting marijuana use, as every year increase in age, marijuana use declines .13 points ($p = .000$). Results from Model 2 tell us that the college-educated party-subculture ($b = .65, p = .000$) and limited party subculture ($.43, p = .018$) groups report significantly less marijuana use than the non-college-educated party-subculture.

Approximately 3% of the variability in reported other illicit drug use (other than marijuana use) in the past twelve months was accounted for by the variables in the model. The limited party-subculture group scored on average .22 points lower than the party-subculture on reported illicit drug use in adulthood ($p = .000$). The party-subculture abstainers also scored on average .18 points less than the party-subculture on illicit drug use. This difference is statistically significant ($p = .000$). White participants reported the most illicit drug use in the past twelve months. When compared to White participants, Black ($b = .24, p = .000$), Hispanic ($b = .13, p = .001$), and other race participants ($b = .08, p = .052$) reported less illicit drug use in adulthood. Males use other illicit drugs significantly more than females by .09 ($p = .000$). Illicit drug use, as does marijuana use, decreases with every year increase in age ($b = .05, p = .008$). Model 2 tells us that the college-educated party-subculture group use illicit drugs less than the non-college-educated party-subculture group in adulthood by .31 points ($p = .001$).

Deviance and substance abuse findings suggest that party-subculture abstainers are less likely to engage in such activities, which is not surprising due to abstaining in their youth. The findings suggest although that education may have an effect on level of

involvement of such deviance on past delinquent behavior. Serious delinquents who do not attend college report more physical fights in adulthood than the similarly educated party-subculture group, in adulthood. When college is held constant, for serious delinquents, physical fighting occurs less when compared to the party-subculture group. Drunkenness reported by the non-college-educated party-subculture is higher than any other deviant group that is also non-college educated. When the party-subculture group is college-educated, they report significantly less illicit drug use than the similar non-educated party-subculture group.

CHAPTER V

CONCLUSIONS AND DISCUSSION

My findings are supportive of past research regarding characteristics of youth who engage in minor delinquency, serious delinquency, and those who abstain. My findings do present significant differences on income and personalities based on different offending subcultures and educational achievement. Consistent with past research males engage in more deviance than females and deviance declines with age. My research also finds that deviant youth who earn a college degree fare better in adulthood domains than those who do not graduate.

I first hypothesize that party-subculture abstainers will fare better in observed adulthood domains when compared with party-subculture youth, serious delinquents, and the limited party-subculture youth, which is semi-supported by the findings. Party-subculture abstainers are significantly less likely to engage in drug use, fighting, and drinking in adulthood. Although this result is not surprising, it supports my hypothesis that the party-subculture abstainers are more successful in those adulthood domains than deviant adolescent groups. However, party-subculture abstainers only make significantly more money than serious delinquents. Illustrating that deviance continued into adulthood by the limited party-subculture and party-subculture youth does not impact the ability to earn similar income as the abstainers.

The party-subculture abstainer personality profile revealed mixed results. Party-subculture abstainers were significantly more introverted than the party-subculture and limited party-subculture adults. Party-subculture abstainers are no different than the

party-subculture group regarding optimism for the future and becoming stressed out easily. Lastly, reporting significantly less feelings of depression than both the limited party-subculture and serious delinquent groups. Concluding that the party-subculture group is more extroverted and no different regarding optimism, becoming stressed out easily, and feelings of depression than the party-subculture abstainers. Although the personality profiles are significantly different amongst the groups, the adolescent groups have a limited ability to predict adult personality outcomes. Therefore, adolescent deviance does not increase desirable personality traits as suggested in some deviance literature, but rather personality types who are extroverted are naturally more attracted to deviance than those who are introverted.

Party-subculture abstainers were found to be the most committed and happy in their relationships. Party-subculture abstainers are significantly happier in their current relationships when compared to all the other deviant groups. Regarding relationship commitment, party-subculture abstainers are significantly more committed in their relationships when compared to the serious delinquent and limited party-subculture group. This tells us that adolescent experience in sexual relationships may not predict future ability to maintain healthy romantic relationships in adulthood (Bouchey, 2007; Meier & Allen, 2009). These findings lend support to Moffitt et al. (2002) findings that abstainers are more likely to have healthier marriages when compared to deviants.

I last hypothesized that the effect of deviance in adolescence on adult outcomes will be moderated by college attendance. As such, party-subculture youth who engage in marijuana experimentation, drinking, and sexual relationships will benefit in numerous

adult domains from deviance if college education is attained. The findings generally support this hypothesis and results are more favorable for the college-educated party-subculture group in adulthood domains. I found that identification with the party-subculture has positive outcomes in adulthood when those adolescents attain a college degree. Indeed, these youth report being more extroverted, more optimistic about the future, had higher salaries, and were less depressed. Interestingly, party-subculture abstainers who are college-educated report earnings lower than party-subculture youth who are college-educated. This finding lends support to research that suggests party-subculture activities may increase social skills and self-confidence providing past deviants an advantage economically (Turner et al., 1999). Thus, this project extends Hagan's (1991) and Newcomb and Bentler's (1998) findings that adolescent drinking has potential benefits for future employment.

Overall, party-subculture youth appear to be well adjusted in adulthood regarding personality, mental health, romantic relationships, and economically. The minor deviance that party-subculture youth engaged in does not appear to have harmed subsequent adulthood outcomes. Findings do suggest that party-subculture youth and serious delinquents report significantly more alcohol, marijuana, and other illicit drug use than the other groups. However, similar to Nagin et al. (1995) findings on adolescence-limited offenders, it appears that party-subculture offenders are similar in their likelihood to continue alcohol and substance use into adulthood and are able to maintain successful careers and relationships, in spite of this minor deviance.

Implications from this research do not suggest that drinking, using marijuana, and

having sexual relationships in adolescents should be condoned or promoted. Rather, minor adolescence crime and deviance does not predict negative outcomes in adulthood. The limited ability for the variables to predict adulthood outcomes based on adolescent groups illustrates that deviance does not increase romantic, social, or mental outcomes later in life. Based upon the findings, those who engage in party-subculture activities are more likely to possess extroverted traits in adolescence that provokes rebellion and deviance. As a result, adult domains are predictive based upon traits established early in life rather than traits developed through certain deviance or activities in adolescence.

The ability for college attendance to moderate some of the adult outcomes based on adolescent group illustrates that college may serve as an important turning point similar to that of marriage, employment, and the military. Although attendance did not eliminate deviance altogether in adulthood for deviant groups, college improved other domains in adulthood such as income. Federal financial aid and college admissions should be tolerant to past criminal charges in adolescence due to the high rate of offending that occurs during youth. Based on the findings, denial for funding or admission into universities for adolescents with records would limit future opportunities for deviant youth.

STUDY LIMITATIONS

This research provides some insight into adolescent groups and educational effects, but includes some limitations. The first limitation is the inability to collect youth violence data beyond the last twelve months in Wave I. Violence in the data was

collected based on the participant's involvement in the past twelve months. Therefore, adolescents who did not act violently in the last year could have been misidentified.

Depending on the number of youth who did not act violently in the previous year when the survey was conducted, it could have reduced the validity of the findings.

A second limitation of this study is the Add Health data set has only collected data into the participant's late 20's and early 30's. The ability to conduct research on long-term effects of deviance may provide different results as suggested by Moffit et al. (2002), if long-term follow-ups were utilized. Third, the control group was created of adolescents who did not have sex, never tried illicit substances, never drank alcohol, and refrained from physical fights. Although this group may be comparable to previous studies on adolescent abstainers, this is not for certain. Therefore, results regarding party-subculture abstainers when compared to deviants may not be comparable to past research on abstainers and party-subculture youth.

Lastly, adolescents who binge drink (those who reported getting drunk 3 times a week to every day) were placed in the limited party-subculture group. Labeling binge drinkers as serious delinquents rather than limited party-subculture youth would have been more appropriate. Due to the limited party-subculture group's "limited" engagement in the party-subculture activities, this group was considered less deviant than the party-subculture group. However, if enough adolescents engaged in binge drinking, binge drinkers may have affected adulthood outcomes for the limited party-subculture group due to their abuse of alcohol in adolescence.

FUTURE RESEARCH

More research is needed on adolescent groups and deviance beyond the broad grouping of adolescence-limited offenders, life-course persistent offenders, and abstainers. Limited research done thus far on groups further defined by rate of offending (Nagin & Land, 1993; Nagin et al., 1995) has provided support that broadly grouping offenders by offending time frame may provide inaccurate results. Additionally, there is a need for qualitative research on this topic. Surveys may be unable to capture benefits or harms experienced by those who abstain and engage in deviance that would be captured by in-depth interviewing techniques.

REFERENCES

- Arnett, J.J. (2000). A theory of development from the late teens through the twenties. *American Psychologist*, 55(5), 469-480).
- Bouchey, H.A. (2007). Perceived romantic competence, importance of romantic domains, and psychosocial adjustment. *Journal of Clinical Child and Adolescent Psychology*, 36(4), 503-514.
- Boyer, C., Shafer, M., Wibbelsman C., Seeberg, D., Teitle, E., & Lovell, N. (2000). Associations of sociodemographic, psychosocial, and behavioral factors with sexual risk and sexually transmitted diseases in teen clinic patients. *Journal of Adolescent Health*, 27(2), 102-111.
- Brezina, T., & Piquero, A.R. (2007). Moral beliefs, isolation from peers, and abstention from delinquency. *Deviant Behavior*, 28(5), 433-465.
- Caspi, A., & Roberts, B.W. (2001). Personality development across the life course: The argument for change and continuity. *Psychological Inquiry*, 12(2), 49-66.
- Chantala, K. & Tabor, J. (2010). Strategies to perform a design-based analysis using the Add Health data. Chapel Hill: Carolina Population Center, Univeristy of North Carolina.
- Constantinople, A. (1969). An Eriksonian measure of personality development in college students. *Developmental Psychology*, 1(4), 357-372.
- Department of Health and Human Services. (2010). Centers for Disease Control and Prevention. College health and safety. Retrieved from <http://www.cdc.gov/family/college/>
- DeWit, D.J., Adlaf, E.M, Offord, D.R., & Ogborne, A.C. (2000). Age at first alcohol use: A risk factor for the development of alcohol disorders. *American Journal of Psychiatry*, 157, 745-750.
- DiMaggio, P., & Mohr, J. (1985). Cultural capitol, education attainment, and marital selection. *The American Journal of Sociology*, 90(6), 1231-1261.
- Elder, G.H. (1986). Military times and turning points in men's lives. *Developmental Psychology*, 22(2), 233-245.
- Elder, G.H. (1994). Time, human agency, and social change: Perspectives on the life course. *Social Psychology Quarterly*, 57(1), 4-15.

- Fagan, A.A., & Western, J. (2005). Escalation and deceleration of offending behaviors from adolescence to early adulthood. *The Australian and New Zealand Journal of Criminology*, 38, 59-76.
- Freedman, M.B. (1967). *The college experience*. York, PA: York Composition Company, Inc.
- Gruber, E., DiClemente, R.J., Anderson, M.M., & Lodico M. (1996). Early onset drinking and its association with alcohol use and problem behavior in late adolescence. *Preventative Medicine*, 25, 293-300.
- Hagan, J. (1991). Destiny and drift: Subcultural preferences, status attainment, and the risks and rewards of youth. *American Sociological Review*, 56(5), 567-582.
- Hagan, J., & Wheaton, B. (1993). The search for adolescent role exits and the transition to adulthood. *Social Forces*, 71(4), 955-980.
- Hagan, J., & Foster, H. (2006). Profiles of punishment and privilege: Secret and disputed deviance during the racialized transition to American adulthood. *Crime, Law and Social Change*, 46(1), 65-85.
- Harris, K.M., Halpern, C.T., Whitsel, E., Hussey, J., Tabor, J., Entzel, P. & Udry, J.R. (2009). The National Longitudinal Study of Adolescent Health: Research Design [Data File]. URL: <http://www.cpc.unc.edu/projects/addhealth/design>.
- Huizinga, D., Loeber, R., & Thornberry, T.P. (1993). Longitudinal study of delinquency, drug use, sexual activity, and pregnancy among children and youth in three cities. Public Health Reports. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1403313/pdf/pubhealthrep00063-0092.pdf>
- Jessor, S.L. & Jessor, R. (1975). Transition from virginity to nonvirginity among youth: A social-psychological study over time. *Developmental Psychology*, 11(4), 473-484.
- Laub, J., Nagin, D.S., & Sampson, R. (1998). Trajectories of change in criminal offending: Good marriages and the desistance process. *American Sociological Review*, 63, 225-238.
- Laub, J.H., & Sampson, R.J. (1993). Turning points in the life course: Why change matters to the study of crime. *Criminology*, 31(3), 301-325.
- Laub, J., & Sampson, R. (2003). *Shared beginnings, divergent lives*. Cambridge, MA: Harvard University Press (pp. 150-195).

- Leifman, H., Kuhlhorn, E., Allebeck, P., Andreasson, S., & Romelsjo, A. (1995). Abstinence in late adolescence-Antecedents to and covariates of a sober lifestyle and its consequences. *Social Science & Medicine*, *41*(1), 113-121.
- Luthar, S.S., & Ansary, N.S. (2005). Dimensions of adolescent rebellion: Risks for academic failure among high-and low-income youth. *Development and Psychopathology*, *17*, 231-250.
- Matza, D. (1964). *Delinquency & drift*. New Brunswick, N.J: Transaction Publishers.
- Meier, A. & Allen, G. (2009). Romantic relationships from adolescence to young adulthood: Evidence from the national longitudinal study of adolescent health. *Sociology Quarterly*, *50*(2), 308-335).
- Moffitt, T.E. (1993). Adolescent-limited and life-course persistent antisocial behavior: A developmental taxonomy. *Psychological Review*, *100*, 674-701.
- Moffitt, T.E. & Caspi, A. (2001). Childhood predictors differentiate life-course persistent and adolescence-limited antisocial pathways among males and females. *Development and Psychopathology*, *12*, 355-375.
- Moos, R.H., Moos, B.S., & Kulik, J.A. (1976). College-student abstainers, moderate drinkers, and heavy drinkers: A comparative analysis. *Journal of Youth and Adolescence*, *5*(4), 349-360.
- Nagin, D.S, Farrington, D.P, & Moffitt, T.E. (1995). Life-course trajectories of different types of offenders. *Criminology*, *33*(1), 111-139.
- Newcomb, M.D., & Bentler, P.M. (1988). Impact of adolescent drug use and social support on problems of young adults: A longitudinal study. *Journal of Abnormal Psychology*, *97*(1), 64-75.
- Newman, B.M., & Newman, P.R. (2008). *Development through life: A psychosocial approach*. (10th ed). Belmont, C.A: Wadsworth Cengage Learning.
- Peters, B.L., & Stringham, E. (2006). No booze? You may lose: Why drinkers earn more money than nondrinkers. *Journal of Labor Research*, *27*(3), 411-421.
- Piquero, A.R., Daigle, L.E., Gibson, C., Piquero, N.L., & Tibbetts, S.G. (2007). Research note: Are life-course-persistent offenders at risk for adverse health outcomes? *Journal of Research in Crime and Delinquency*, *44*(2), 185-207.

- Piquero, A.R., Farrington, D.P., Nagin, D.S., & Moffitt, T.E. (2010). Trajectories of offending and their relation to life failure in late middle age: Findings from the Cambridge Study in Delinquent Development. *Journal of Research in Crime and Delinquency*, 47(2), 151-173.
- Roisman, G.I., Masten, A.S., Coatsworth, J.D., & Tellegen, A. (2004). Salient and emerging developmental tasks in the transition to adulthood. *Child Development*, 75(1), 123-133.
- Sampson, R.J., & Laub, J.H. (1990). Crime and deviance over the life course: The salience of adult social bonds. *American Sociological Review*, 55(5), 609-627.
- Sampson, R.J., & Laub, J.H. (1992). Crime and deviance in the life course. *Annual Review of Sociology*, 18, 63-84.
- Sampson, R.J., & Laub, J.H. (2003). Life-course desisters? Trajectories of crime among delinquent boys followed to age 70. *Criminology*, 41(3), 301-340.
- Shedler, J., & Block, J. (1990). Adolescent drug use and psychological health. *American Psychologist*, 45(5), 612-630.
- Staton, M., Leukefeld, C., Logan, T.K., Zimmerman, R., Lynam, D., Milich, R., Martin, C., McClanahan, K., & Clayton, R. (1999). Risky sex behavior and substance use among young adults. *Health & Social Work*, 24(2), 147-154.
- Tanner, J., Davies, S., & O'Grady, B. (1999). Whatever happened to yesterday's rebels? Longitudinal effects of youth delinquency on education and employment. *Social Problems*, 46(2), 250-274.
- Tucker, J.S., Ellickson, P.L., Collins, R.L., & Klein, D.J. (2006). Are drug experimenters better adjusted than abstainers and users?: A longitudinal study of adolescent marijuana use. *Journal of Adolescent Health*, 39(4), 488-494.
- Wechsler, H., Dowdall, G.W., Davenport, A., & Castillo, S. (1995). Correlates of college student binge drinking. *American Journal of Public Health*, 85(7), 921-926.
- Weschler, H. & Nelson, T.F. (2008). What we have learned from the Harvard School of Public Health College alcohol study: Focusing attention on college student alcohol consumption and the environmental conditions that promote it. *Journal of Studies on Alcohol and Drugs*, 69, 481-490.
- Wolff, M.W., & Wolff, K.A. (2002). Personality characteristics as a function of frequency and type of substance use. *Adolescence*, 37, 705-716.

U.S. Department of Education Institute of Education Sciences. (2009). The National Center for Educational Statistics (Digest of Educational Statistics). Retrieved at http://nces.ed.gov/programs/digest/d09/tables/dt09_200.asp?referrer=list.

U.S Department of Health and Human Services, SAMHSA. Office of Applied Studies. 2005 National Survey on Drug Use and Health: National Results. <http://www.drugabusestatistics.samhsa.gov/NSDUH/2k5NSDUH/2k5results.htm>