STRUCTURAL DISADVANTAGE, HETEROSEXUAL RELATIONSHIPS AND CRIME: LIFE COURSE CONSEQUENCES OF ENVIRONMENTAL UNCERTAINTY

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Dissertation

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ABSTRACT

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Recent research has explored connections between heterosexual involvement and crime, but these prior studies are limited by focusing primarily on marriage and more traditional notions of dating courtship and also by not often considering the structural/economic conditions that influence the nature and development of these relationships. The current study draws on four waves of panel data from the Toledo Adolescent Relationships Study (n = 930) to investigate the linkages between social class, heterosexual relationships, crime, and drug use. I hypothesize that environments characterized by high levels of uncertainty (family instability and economic disadvantage) are likely to encourage the development of unconventional styles of heterosexual involvement, that are in turn associated with crime and drug use. I explore these dynamics in adolescence as well as in early adulthood with specific emphasis on the character and quality of young adult unions and the roles that these relationships play in the criminal desistance process. Furthermore, I examine the degree to which heterosexual influences vary according to gender, and the extent to which they mediate male-female gaps in criminal risk-taking.

Results indicate that risky/unconventional heterosexual attitudes and behaviors are reported more frequently by youths from disadvantaged communities. These attitudes and behaviors are found to significantly influence adolescent levels of criminal involvement and drug use (wave 1), net of a broad array of traditional delinquency predictors. Longitudinal analyses suggest that these dynamics continue through to adulthood, affecting not only subsequent levels of crime and drug use, but also the characteristics of adult unions. Analyses that focused on a specific heterosexual

relationship in wave 4 revealed that earlier permissive attitudes and unconventional behaviors (wave 1) are related to relatively high levels of conflict, infidelity, and concurrent drug use within these later unions. Among these union characteristics, a high risk of infidelity emerged as a robust and significant influence on adult levels of crime, drug use, and risky routine activities (i.e. going out to bars/nightclubs). Complications regarding gender and the role of emotional attachment as a criminal deterrent are also discussed.

Findings are largely consistent with the notion that unconventional patterns of heterosexual involvement forge an intermediate link between social class and criminal behavior. This study calls for more research on these interpersonal dynamics as they may relate to the general levels of crime and disorder within low-income communities and youthful peer-networks.

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CHAPTER 1

INTRODUCTION

Family instability and economic uncertainty are among some of the original variables examined by sociologists in early studies of crime and delinquency (Merton, 1938; Shaw & McKay, 1942; Thrasher, 1927), yet more modern research continues to find weak or non-existent connections between social class and criminal risk-taking (e.g., Dunaway et al., 2000; Hagan, 1989, 1992; Tittle et al., 1990, 1978, 1977). Some of the disparity between class-based theories of crime and the findings of contemporary research stem from the unreliable nature of self-reporting delinquency instruments (Hindelang, Hirschi, & Weiss, 1979). However many scholars argue that much of the effect of structural disadvantage on crime is truly indirect, operating through the development of network ties and worldviews that connect more directly to life-course patterns of crime and drug use (e.g., Wright et al., 1999). The struggles associated with poverty and family instability, for instance, have previously been theorized to influence gang formation and the adoption of a criminal or "street code" of ethics (e.g., Anderson, 1999; Black, 1983; Chesney-Lind & Hagedorn, 1999; Cohen, 1955; Katz, 1988; Klein, 1995; Melde, Taylor, & Esbensen, 2009; Stewart, Schreck, & Simons, 2006; Macleod, 1987; Hagan 1991, 1997; Hagan & McCarthy, 1997; Wolfgang & Ferracuit, 1967; Topalli, 2005). Since gang involvement is so closely tied to delinquent behavior itself, however, it is also important to explore other more distal factors associated with variations in social class position that potentially influence risk for criminal involvement. As Anderson (1999)

and other scholars have argued, street codes may be thought of as encompassing a much broader collection of attitudes and behavioral scripts for navigating peer interactions and interpersonal relationships, including those that are romantic or sexual in nature. The current study investigates the indirect and long-term effects of structural disadvantage on crime and delinquency by examining the risky and unconventional aspects of heterosexual relationships as potentially important intermediate mechanisms.

STRUCTURAL AND DEVELPOMENTAL CHALLENGES TO INTERPERSONAL RELATIONSHIPS

Previous research suggests that heterosexual relationships are potentially transformative as the life-course unfolds, as they may alter routine behaviors and views of self, which may in turn shape the contours of crime involvement (Giordano, Cernkovich, & Rudolph, 2002; Laub & Sampson, 2003; Simons, Johnston, Conger, & Elder, 1998). Marriage and cohabitation, for example, have been linked to criminal desistance, decreased use of drugs and alcohol, and fewer occasions for delinquent peer interactions (Bachman et al., 1997; Blokland, & Nieuwbeerta, 2005; Duncan, Wilkerson, & England, 2006; Farrington & West, 1995; Horney, Osgood, & Marshall 1995; Laub, Nagin, & Sampson, 1998; Sampson, Laub, & Wimer, 2006; Warr, 1998; see also Giordano et al., 2002 and Leverentz, 2006 for exceptions). Leading scholars in this area of research, Laub and Sampson (2003), theorized that one's likelihood of entering a "good marriage" (i.e. one that offers a pro-social benefit) may simply be a matter of chance or luck (see also Sampson, Laub, & Wimer 2007), but other researchers have highlighted that structural forces potentially influence levels of interest and involvement in interpersonal

relationships and the character of heterosexual unions (Cavanagh, Crissey, & Raley, 2008; Meier & Allen, 2009; McLanahan 2004; McLoyd et al., 1990, 2000; McAnulty & Brineman, 2007; Oppenheimer, 1994; Rindfuss, 1991; Raley, Crissey, & Muller, 2007; Sweeney, 2002; Treas & Giesen, 2000).

While most teens develop an interest in heterosexual socializing early on, establishing a conventional monogamous relationship with a member of the opposite sex often requires the acquisition of "a respectable package of assets" (Giordano, Cernkovich, & Rudolph, 2002); including, but not limited to: stable employment (traditionally more pivotal for men), education beyond primary school, religious attendance, and a biography that includes exposure to and examples of successful and long-term heterosexual unions (e.g., Amato, Jacob, & Cheadle, 2005; Amato & DeBoer, 2001; Amato & Sobolewski, 2001; Atkins & Kessel, 2008; Carlson & Frustengberg, 2006; Raley et al., 2007; Simons et al., 1999; Teachman et al., 2000, 2003; Thorton & Yong-DeMacro, 2001). Obtaining this respectable adult profile is believed to make one "marriageable," or marketable within a local network of similarly situated individuals who are also seeking long-term and monogamous relationships. Under conditions of economic and structural disadvantage, the prospects for obtaining this respectability package are, however, frequently compromised, and for some, perhaps even unreachable given the associated high levels of unemployment, school failure, divorce, and single-parent homes (Lichter et al., 1992; McLoyd et al., 2000; Wilson, 1987, 1996).

Historically disadvantaged groups in the U.S., including ethnic minorities, have struggled for centuries against poverty and various forms of oppression to maintain a traditional family structure (Coontz, 2000; Ruggles, 1994). However, in recent decades,

transformations in the labor market (McLanahan, 2004; Oppenheimer, 1994; Wilson, 1996) and the increasing punitiveness of the criminal justice system have compounded the challenges facing poor and working class families (Traivs & Waul, 2003). The out-sourcing of manufacturing jobs and outward urban migration of middle-income families is partly responsible for the diminishing levels of economic and social capital currently available to disadvantaged groups (Wilson, 1996). Incarceration and related criminal justice penalties add further to the list of possible derailments that may thwart those who are attempting to achieve the traditional adult respectability package, despite the levels of crime and poverty that persist in poor communities (Lynch & Sabol, 2004; Kurbin & Weitzer, 2003). This socially stratified picture has negative implications not only for the longevity of heterosexual partnerships among the poor, but also on the potential for these relationships to become effective 'hooks' for making behavioral changes (i.e. moving away from crime and drug use).

Structural and economic disadvantages may also influence interpersonal relationships by informing the development of worldviews and general attitudes associated with romantic partner experiences (Meier & Allen, 2009). Despite the disadvantages that accompany poverty and family instability, youth from impoverished backgrounds may be capable of developing a broad array of skills associated with peer socializing, and likewise, go on to lead conventional heterosexual lifestyles; yet a sense of openness and trust in these interpersonal relationships may nevertheless be significantly influenced by previous family instabilities and violence in these disadvantaged communities. In light of these experiences, youths may develop a more defensive posture in their social interactions with peers and authority figures (e.g.,

Anderson, 1999; Black, 1983; Katz, 1988; Kreager, 2007; Hagan & McCarthy, 1997; Macleod, 1987; Majors & Billson, 1992; Messerschmidt, 1993; Stewart et al., 2006; Topalli, 2005). This may entail what Anderson (1999) and other scholars have referred to as a "street code" of conduct that opposes legal proscriptions on the individual's liberty to use of violence, intimidation, and other aggressive tactics for gaining respect among peers and for handling interpersonal conflicts. While these "codes" or recalcitrant attitudes are no doubt linked with crime and delinquency (e.g., Stewart et al., 2006), they may also influence the form and quality of interpersonal relationships in adolescence (e.g., DeMaris et al., 2003; Frias & Angel, 2005; Giordano et al., 2005; Laursen, Finkelstein, & Betts 2001). Children reared in communities distressed by poverty, crime, low educational attainment, and family instability are at risk for becoming involved in not only delinquency, but also relationships that progress toward sex and pregnancy at a relatively accelerated rate (Baumer & South, 2001; Brooks-Gunn, Duncan, Kato, & Sealand, 1993; Burton, 1990, 2007; Crowder & Teachman, 2004; Manning et al., 2005; Santelli et al., 2000, Small & Luster, 1994; Sucoff & Upchurch, 1998). Well acknowledged are the immediate health consequences of early sexual involvement (Zimmer-Gembeck & Helfand, 2008), but the more long-term implications for crime that are linked with these behaviors are less known and not widely discussed in the literature. Moreover, even though youths may be aware of the consequences associated with these behaviors, the drawbacks do not appear to be an effective deterrent among those at risk of becoming involved in precocious and risky sexual activity. As suggested by some scholars, the precarious nature of poverty and family instability may motivate the actor to become sexually involved early on, as the more ideal versions of these experiences may

be perceived as unrealistic or simply out of reach (Burton, 2007; Foster, Hagan, & Brooks-Gunn, 2008; Gibson & Davis et al., 2005; Wilson & Daly, 1997).

Prior theorizing suggests that this bypass of traditional heterosexual pathways (i.e. courtship before intercourse) is simply a reflection of low-self control (Gosttfredson & Hirschi, 1990) and can be categorized alongside crime and other such instantly gratifying behaviors (Wilson & Herrnstein, 1985). Yet these patterns of involvement may also be understood as emerging from external sources, which nevertheless influence the perceptions of the general utility and long-term prospects of interpersonal relationships. As Burton (1990, 2007) and others scholars have noted, youth within disadvantaged communities may themselves grow doubtful of heterosexual unions as dependable and mutually beneficial (Gibson-Davis, Edin, & McLanahan, 2005; Mcloyd et al., 1990, 2000), settling instead on alternative and less traditional pathways toward sex and family formation. However, research suggests that these alternatives pathways do not afford the same 'conventionalizing' effects found in traditional dating courtships and marriage—that is in terms of the potential for derailing individuals from risky lifestyles and criminal involvement (Horney, Osgood, & Marshal, 1995; McCarthy & Casey, 2008; Wait & Gallagher, 2000). The levels of conflict, infidelity, and drug use that may accompany these less than conventional unions may in fact motivate risky and illegal conduct beyond the crime-peak years (Giordano et al., 1999; 2002, 2003; Simons et al., 2002).

CHAPTER 2

STUDY OVERVIEW

While criminologists continue to emphasize the quality of parent-child relationships, neighborhood and school environments, low-self control, and same-sex peer networks as the most relevant factors for explaining delinquent behavior (Akers & Sellers, 2004), heterosexual relationships have emerged in recent studies as additional influences on the life course of crime and drug use (Capaldi, Kim, & Owen, 2008; Lonardo, Giordano, Longmore, & Manning, 2009; Haynie et al., 2005; Laub, Nagin, Sampson, 1998; Simons et al., 2002). Much of this prior work has focused on marriage as a conventionalizing influence (Laub & Sampson, 2003; Warr, 1998), however, other studies have found that precocious and risky heterosexual behavior may increases one's involvement in delinquency, potentially through contact with deviant peers and exposure to social contexts that facilitate these risky activities (Cleveland, 2003; Haynie, 2003; Haynie et al., 2005; Rebellon & Manasee, 2004; McCarthy & Hagan, 2008; Seffrin et al., 2009). These bodies of work, when analyzed together, seem to suggest that unconventional styles of heterosexual involvement may become entangled with criminal offending, however, the risk for this may be minimized if only the actor can manage to desist from these lifestyles by securing a more stable and monogamous union.

Although the above argument has been popularized in recent criminological work, research in the areas of family demography and social ecology suggest that the style of heterosexual involvement that individuals develop is likely to be influenced by earlier family and community conditions (e.g., South & Baumer, 2000; Longmore et al., 2001).

There is a large literature that suggests geographical concentrations of single-mothered households, unemployed men, and undereducated adults coalesce to create a social environment that is highly unstable, or uncertain (e.g., Kurbin & Weitzer, 2003; Massey & Denton, 1993; Sampson et al., 2002; Wilson, 1987, 1996). This research further suggests that early experiences within these environments increase risk for a number of precocious role exits (i.e. teen pregnancy, juvenile arrest, and an untimely death). Moreover, the general levels of crime and disorder present in one's school and community are found throughout numerous studies to predict individual involvement in illegal behavior and other risky activities.

Past research shows that youths located in disadvantaged communities are more likely to report heterosexual experiences that are somewhat less than conventional or traditional when compared to the relationship experiences of youths from more stable backgrounds (Burton, 2007; Manning et al., 2005; Meier & Allen, 2009; Zimmer-Gembeck & Helfand, 2008). By less than conventional, this study refers to attitudes and behaviors that depart from traditional conceptions of dating courtship, and according to some research, also play an indirect role in shaping the characteristics and overall quality of later adult unions (Raley et al., 2007). For example, sex at relatively early ages, while presenting an obvious risk for teen pregnancy, is also linked with later patterns of relationship instability and early exits into adult living circumstances (i.e. cohabitation), all of which are more prevalent among youths from disadvantaged backgrounds. The current study also considers infidelity and sex outside of romantic relationships as indicators of unconventional patterns of involvement as these behaviors are often viewed as deviating from traditional norms of heterosexual comportment (e.g., Buss, 2004;

Diamond, 1997; Foucault, 1980; Laumann et al., 1994; Ridely, 1993). Permissive attitudes towards intercourse and a mistrust of the opposite sex are also more frequently reported by adolescents and young adults who have been exposed to environments characterized by uncertainty (unstable family and economic conditions) (e.g., Anderson, 1999; Browning & Burrington, 2003; Jemmott & Jemmott, 1990).

These attitudes and behaviors are well documented as influencing the risk of teen pregnancy, STD's, and the timing and stability of later adult unions (Raley et al., 2007; Zimmer-Gembeck & Helfand, 2008). However, the consequences of these experiences may extend beyond the heterosexual realm by influencing a wider range of routine activities, social contacts, and interpersonal relationships—some of which may lead to criminal involvement and drug use. While past literature offers a host of theoretical frameworks for studying these linkages, the criminological research is limited in scope by failing to recognize heterosexual involvement as a complex set of interpersonal dynamics that are tied to social class structures and therefore potentially important for understanding life course patterns of criminal involvement and drug use.

CONTRIBUTIONS OF THE CURRENT STUDY

The current study expands prior research on heterosexual relationships and crime in five major respects. First, to date few studies explore how heterosexual relationships influence crime and drug use in adolescence and early adulthood. The existing literature on heterosexual relationships and crime raises the notion that unconventional or less traditional patterns of involvement are not uncommon experiences among individuals who also report criminal behavior and illicit drug use. However, few criminological

studies have confronted this issue directly, perhaps because of the belief that promiscuous behavior, for example, is simply an extension of one's criminality or preference for risky and instantly gratifying experiences (Gottfredson & Hirschi, 1990). While this hypothesis is not unreasonable given evidence that stable traits, such as low-self control, predict multiple forms of risk-taking (Pratt & Cullen, 2000), it fails to capture the complex interplay between heterosexual relationships, crime, and social class. Disadvantaged youth, for instance, may not only be more likely to pursue sex at relatively early ages, but they may do so in an environment in which violence is sometimes used as a legitimate means of resolving conflicts, including those that arise in the course of heterosexual socializing (e.g. the pursuit of dating and sexual encounters). Furthermore, while numerous studies have theorized on the connections between crime and social class, many of which emphasize the roles of peers, family processes, and neighborhood organization, there has not yet been a noticeable effort among criminologists to examine heterosexual attitudes and behaviors as a potentially important interpersonal dynamic that may link structural disadvantage with delinquent behavior.

In the current study I move beyond past work by examining adolescent patterns of heterosexual involvement as an intermediate link between structural disadvantage and delinquent behavior. I examine these relationships in adolescence while controlling for an extensive roster of other traditional delinquency risks. Moreover, the few criminological studies that have examined the influences of adolescent heterosexual relationships have done so within the context of dating. Although this approach makes sense given that most youth enter into relationships with non-familial members of the opposite sex via a dating or romantic context (e.g., Carver, Joyner, Udry, 2003), the

development of heterosexual attitudes are, in part, ontological and not necessarily dependent on actual dating experiences even though these attitudes may, nevertheless, influence one's style or strategy for navigating the heterosexual world. Further, with its focus on dating, the past research has imputed a degree of conventionality on youthful heterosexual relationships that may be somewhat inaccurate, especially among those who are at a high risk for delinquent behavior. The current research builds upon these prior studies by examining attitudes and behaviors that are unconventional with respects to traditional notions of dating courtship.

Second, although it is important to establish a cross-sectional picture of heterosexual relationships, delinquency, and social class, this single snapshot does not speak to the vicissitudes in lifestyle and changes in peer networks that shape the contours of criminal behavior. Heterosexual socializing may indeed increase one's exposure to delinquent peers and involvement in unstructured activities (i.e. hanging-out). However it is also likely these social routines and deviant contacts may, in turn, influence styles and strategies for interacting with the opposite sex. This expectation is in general agreement with previous findings that document a reciprocal relationship between friends' delinquency and one's own behavior (Akers & Sellers, 1994; Haynie, 2001; Haynie & Osgood, 2005; Krohn et al., 1996; Matsueda & Anderson, 1998). A recent longitudinal study of adolescent youth further corroborates this notion by finding similar patterns of reciprocity between socializing with delinquent peers and extensive involvement in dating relationships (Seffrin et al., 2009; see also Wong, 2005). Although some variation of these interpersonal dynamics will surely be played out at least once in the life course of most all adolescents (e.g., Piqureo et al., 2005), the intersections at which crime and

heterosexual relationships meet are likely to be influenced by earlier experiences in the family and the community. As documented in prior work, variations in social class position do not appear to have a direct impact on initial levels of delinquent involvement (e.g., Tittle et al., 1977, 1990). Rather, as some scholars have argued, the consequences of structural disadvantage may not be realized immediately but through the gradual accumulation of attitudes and experiences (Hagan, 1991); some of which are at odds with criminal desistance because they diminish the likelihood of establishing a stable and monogamous union in early adulthood.

The current study adds to the research on within-individual variations in risky behavior by examining the longitudinal effects of structural disadvantage, unconventional styles of heterosexual involvement, and peer deviance on aged-graded patterns of crime and drugs use. While levels of contact with delinquent friends and romantic partners may certainly undergo modifications over the course of adolescence, there are at least two reasons why it is also important to consider age-graded changes in heterosexual attitudes and behaviors. One, analyzing heterosexual attitudes and behaviors in early adolescence as predictors of later crime may result in a limited ability to make inferences about the nature of these relationships because, at the ages of fourteen or fifteen for example, some youth may simply not have had the opportunity to pursue the opposite sex in a style or manner that may place them at risk for illegal behavior. Two, adolescent heterosexual attitudes and behaviors, for reasons related to both physical and social development, are highly subject to change, potentially in ways that may influence the risk for drug use and criminal involvement. The current study addresses these complexities by analyzing simultaneous changes in crime, deviant peer contacts, unstructured socializing, and risky

heterosexual attitudes and behaviors. Although this approach does not resolve the much more complicated problem of establishing causal relationships within longitudinal data, it does, however, allow the researcher to tease apart the effects of between-person differences from that of within-person changes. The current study uses this multi-faceted approach to analyze not only overall between-person differences in crime and drug use, but also the respective changes in these behaviors.

Third, rather than focusing just on how risky heterosexual attitudes and behaviors influence crime and drug use, I examine how these earlier patterns of unconventional involvement may limit one's ability to form and maintain a long-term union. The adolescent youth, for instance, who developed heterosexual relationships, but did so largely outside the context of traditional dating courtships, may be at an increased risk for later relationship conflict and discord. While previous research suggests that these unconventional and sometimes risky adolescent behaviors may influence the timing and stability of marriage and cohabitation (e.g., Raley et al, 2007; Teachman, 2003), few studies have examined the impact of these experiences on the characteristics and overall quality of later adult unions. Specifically, permissive sex attitudes, mistrust of the opposite sex, and unconventional patterns of heterosexual involvement during adolescence may decrease the likelihood of forming monogamous and non-conflictual adult unions. Moreover, as an extension of one's routine activities in adolescence, romantic partnerships may begin to develop with individuals who have a history of delinquent behavior and drug use (Haynie et al., 2005; McPherson, Smith-Lovin, & Cook, 2001; Seffrin et al., 2009). Consequently, these relationships may be somewhat

less than ideal in terms of having a "conventionalizing" effect as partners may jointly engage in drug use and other risky and illegal activities.

In the current study, I examine the long-reach of structural disadvantage by exploring the impact of environments of uncertainty on adolescent heterosexual attitudes and behaviors, and in turn, the influence of these earlier experiences on the character or quality of later adult unions. In addition to examining the attitudes and behaviors of adolescence, this study considers a variety of contingencies that are often linked with the quality of heterosexual dyads. Socially desirable assets such as a college education, a well paying job, and ties to community members through church attendance, for example, are fairly reliable predictors of a stable and monogamous marriage (Atkins & Kessel, 2008). However, the level of systemic risk created by family instability and economic uncertainty may severely hinder the chances that such a stylized package of assets may ever come to fruition. We add to the literature by investigating how variations in these social assets influence the quality and character of married, dating, and cohabiting couples while at the same time controlling for the heterosexual attitudes and behaviors of adolescence.

Fourth, this study examines the influence of these union characteristics on the levels of crime and drug use in the early adult years. Prior studies that have examined connections between heterosexual relationships and criminal desistance focus primarily on marriage and the supposed conventionalizing influence of emotional attachments developed within these unions. Although there is strong evidence to suggest that marriage is associated with criminal desistance, the reasons for this apparent transformation remains a topic of much debate (Giordano et al., 2002; Sampson et al.,

2007; Warr, 1998, 2002). Emotional attachment to one's spouse or romantic partner, for example, may deter some individuals from criminal activity for fear that these behaviors may jeopardize the stability of the relationship. However, additional complications may arise in the forms of conflict, infidelity, and concurrent drug use, all of which may diminish the relationship's capacity to act as an effective 'hook' for pro-social change.

The current study builds on past work by considering a wider range of characteristics associated with adult heterosexual unions that may have an influence on criminal desistance. Despite the scope of previous theorizing and its attention to multiple domains of influence, the past research has not taken into consideration the detrimental impact of conflict and infidelity on the stability of these unions, nor has the research examined the more specific case in which partners may actively support each other's patterns of criminal behavior through the concurrent use of illicit substances. Although prior work suggests that romantic partners have an influence risky behaviors (Capaldi et al., 2008; Laub & Sampson, 2003; Simons et al., 2002), the specific mechanisms through which these influences operate are not often clarified, nor do these studies provide definitive evidence that the criminal history of a romantic partner matters in terms of the rate a which individuals desist from risky activities. For example, the fact that romantic partner delinquency is often found to be correlated with self-reported illegal behavior may, in some cases, simply reflect self-selection processes among those with a history of risk-taking (e.g., Kandel, 1996; 1978; Krueger et al., 1998). However this tendency, itself, may pose little direct threat to the chances of criminal desistance. The past criminal behaviors of a romantic partner may be just that, memories of situations and events that are unlikely to arise again due to a specific nexus of transient social factors, such as a

group of school friends, who may have been strongly associated with prior risk-taking, but are no longer consequential influences on the present routine activities of the actor (i.e., consistent with previous notions of state dependency and criminal behavior; see Cernkovich & Giordano, 2001; Giordano, Cernkovich, & Holland, 2003; Nagin & Paternoster, 1991). A competing hypothesis is that concurrent drug use within heterosexual unions may present a particularly risky situation in which partners actively support one another's criminal involvement, thereby directly undermining the potential of romantic relationships to act as a conventionalizing force (Schroeder, Giordano, & Cernkovich, 2007).

In these less than optimal unions, the interplay of conflict, infidelity, and drug use may create a situation in which the relationship does not serve as a force for pro-social change as suggested in prior work, but may in fact be an aggravating circumstance in the life course of crime. The current study explores these union characteristics as potentially important, although largely ignored, influences on the prevalence of crime, drug use, and risky routine activities in early adulthood. In addition to controlling for the type of relationship (i.e. dating, cohabiting, or married) its length, and levels of emotional attachment, this study includes attention to social assets that may have been acquired over the course of the early adult years. Individuals who are employed, highly educated, and attend church regularly may be less likely to participate in crime, regardless the quality of their heterosexual relationships. These social assets often indicate a commitment to conventional adult lifestyles that may buffer the negative influences of a less than optimal heterosexual union (Giordano et al., 2002; Laub & Sampson, 2003).

Fifth, this study adds to the current literature on gender and crime by highlighting male-female differences in heterosexual attitudes and behaviors as potentially important for explaining genders gaps in criminal risk-taking. Gender, which itself is often defined in terms of heterosexual attitudes and behaviors, is arguably one of the strongest predictors of crime, next to delinquent peers and past behaviors (e.g., Piquero, Brame, & Moffitt, 2005; Steffensmeier & Streifel, 1991). Crime disparities between men and women rests at the very core of criminological study, and while the research on this subject is fairly well developed (e.g., Giordano et al., 2002; Heimer & DeCoster, 1999; Lauritsen, Heimer, & Lynch, 2009; Steffensmeier & Allen, 1996), only a small number of scholars have explored linkages between heterosexual involvement and the gendered patterning of crime (Haynie, 2003, 2005; Simons et al., 2002). This study advances the research on gender and crime by examining male-female differences regarding the effects of risky heterosexual attitudes and behaviors on crime, drug use, and other risky activities.

CHAPTER 3: STRUCTURAL DISADVANTAGE AND HETEROSEXUAL INVOLVEMENT

A great deal of prior work suggests that risk-taking behaviors of all forms (criminal and sexual) share many of the same antecedents. The research shows that crime, domestic violence, teenage pregnancy, and drug addiction, for example, co-occur in a non-random manner--and not just at the individual level, but also at aggregated levels of social context, such as in schools and neighborhoods (Kurbin & Weitzer, 2003; Sampson et al., 2002). Key dimensions that distinguish these social contexts, as well as link them to

risky behavior, are those of family instability and economic uncertainty. I review the literature on family and community influences with regard to risk-taking behaviors. I argue that there is much conceptual overlap between criminologist's interest in neighborhoods and families and what the research shows on youth, heterosexual involvement, and family formation. Further, by illustrating the connections between heterosexual involvement and social class, we position the interpersonal relationships of adolescence as intermediate social forces that may link early structural locations with later crime and risk-taking.

In this chapter, I review three areas of previous research. First, I review literature that utilizes a 'social control' approach in understanding adolescent heterosexual involvement. This research looks at the supervision of youths, both at the family and community levels. In the second area, learning and subcultural arguments are explored as potentially important factors for explaining the motivations underlying risky-behavior. While control theories are often faulted for not addressing questions related to motivation, learning/cultural theories rely somewhat too heavily on the assumption that social actors are passive learners, which leaves little room for personal agency, or choice (Giordano et al., 2007). In the final section of this review, we discuss the 'accelerated life-course' as a potentially important concept for understanding the shared links between social class, heterosexual involvement, and crime. Although the accelerated life-course has been explored from multiple theoretical vantage points (Wilson and Daly, 1997 Burton, 1990, 2007), the research commonly points to high levels of environmental uncertainty (poverty; single-mother households) as a factor in the development of 'unconventional strategies' for heterosexual involvement. This work acknowledges the

influence of cultural scripts and social control mechanisms, but suggests that early heterosexual engagements may also be viewed as a response that emerges in a more deliberate way; that is as an interpersonal stance which "makes sense" given environments characterized by uncertainty.

Family and Community Control

The social control of children's heterosexual behaviors has probably received the greatest amount of attention in past literature when compared to that of learning theories and subcultural perspectives. Whether the subject of study is delinquency or adolescent heterosexual involvement, the social control perspective assumes that youths will engage in risky behavior if not corrected by some other countervailing force. This research has identified parental behaviors, family processes, and neighborhood factors as central in the creation of pro-social controls. Moreover, the research indicates that under circumstances of family instability and economic disadvantage, these social control mechanisms may be compromised in their ability to deter risky behavior.

In a nationwide study of adolescents, parental monitoring was found to significantly delay the timing of first sexual intercourse, as well as the timing of sex after a first date (Longmore, Manning, & Giordano, 2001). This study focused specifically on preadolescent parenting strategies, which asked parents questions such as how often their child was permitted to spend time away from home. While the study also queried parents as to their involvement in child-supportive behaviors (e.g., spending quality time together; talking to the child), the results suggest that children who are supervised less are at a greater risk of precocious sexual activity, regardless of other qualities that

characterize the parent-child relationship. Similar findings emerged in a study of delinquent friends (Warr, 2005). In this national probability sample of parents and children, findings indicate that parental restrictions on the amount of time their children spend away from home and in unsupervised locations significantly reduced the degree of contact that a child may have with youths who engage in illegal activities. While the dependent variables in these two studies are quite distinct, they share similar parental antecedents that predict a variety of risky behaviors and interpersonal associations during the adolescent period.

There are, of course, many other studies that reveal similar parent-child trends regarding these adolescent risk factors (e.g., Vander Ven et al., 2001) however, some researchers insist that the immediate family is far too narrow of a focus as the local community is also instrumental in regulating child behaviors (e.g., Baumer & South, 2001). This research suggests that the role of supervising youth behavior may extend into community networks. Youths are not usually isolated, but increasingly explore the social worlds around them. In short, parents cannot reasonably monitor their own children at all times. The behavior of non-familial community members may therefore be critical for the control and regulation of adolescent heterosexual involvement. Expanding on the notion that supervision is key in the restriction of adolescent risk-taking, much research has included neighborhood-level indicators of social control. The concept of collective efficacy (Sampson et al., 1997), which was initially developed to study the relationship between individual attitudes, community organization, and crime, has since been applied to a much broader set of behaviors, including adolescent heterosexual involvement (Browning et al., 2005). Collective efficacy is represented by the shared

goals and common interests of community members who desire a safe and healthy environment for children. The theory suggests that when community members have a vested interest in collective safety, they are more efficacious in keeping children from congregating in households and localities that may not be well supervised. Yet high levels of family instability, joblessness, and divorce may undermine a community's ability to develop high levels of collective efficacy. Indeed, research suggests that the creation of collective efficacy is dependent on family-level factors and the overall economic livelihood of the local community as demonstrated in several past studies (Sampson et al, 2002). Thus, low levels of collective efficacy within communities may be viewed as the product or confluence of structural disadvantages that gradually undermine the development of bonds between non-familial community members.

Recognizing the interdependent nature of families and communities, researchers have employed techniques that integrate these factors into a single conceptual model. These studies involve complex multilevel analyses, simultaneous measurement of family and community-level indicators, and interactions between these levels of measurement. Findings from this research generally show that families and communities work in concert to influence youth behaviors. In a study of Chicago area neighborhoods, parents were surveyed as to how closely they monitored their own children as well as the degree to which they feel that community members can be trusted to act in the interest of pro-social control (i.e., collective efficacy) (Browning, Leventhal, Brooks-Grunn, 2005). Findings from this study indicate that early sexual initiation is significantly limited by high levels of collective efficacy, but only when parents report relatively low levels of child supervision. In a related study, collective efficacy is found to be negatively related

to growth in the number of sexual partners over the course of adolescence (Browning, Burrington, & Leventhal, 2008).

Similar findings are revealed when the dependent variables of the study are juvenile delinquency, drug use, and delinquent peer contacts (Knoester, Haynie & Stephens 2006; Simons et al., 2005). This research suggests that youths left unsupervised are at risk for a variety of unhealthy, unsafe, and often illegal behaviors. Particularly with respects to the heterosexual realm, weakened social control translates into non-traditional forms of dating courtship and early physical involvement, sometimes resulting in long-term consequences (i.e., pregnancy). While these unconventional heterosexual behaviors may be undesirable for children, sex among adolescents is in most cases legal, and to a certain extent, anticipated given the hormonal changes associated with puberty. Thus, the social control mechanisms of the family and the community may be vital in suppressing an otherwise natural tendency of youths to pursue heterosexual relationships.

It is important to note, however, that the social control perspective, in addition to emphasizing external factors such as supervision, also stresses that the emotional bonds developed between parent and child (Bowlby; 1973; Hirschi, 1969), or in the case of collective efficacy, between the individual and his or her community (Kasarda & Janowitz, 1974) are vital for deterring risky behaviors among youths (see also Sampson, Morenoff, & Earls, 1999). Being watched by a responsible guardian is likely to divert some youth from engaging in risky behaviors some of the time, yet as previous scholars have argued, these external control factors may be effective insofar that they are reinforced by an internal or psychological control mechanism. The literature on parental attachment, for example, clearly indicates that youths who are emotionally bonded to

their parents are less likely to engage in crime and other risky behaviors (e.g., Simons, Gordon, & Simons, 2004), including early sexual intercourse (e.g, Zimmer-Gimbeck & Helfand, 2008). However, individual variations in heterosexual socializing, even when subject to these internal and external control mechanisms, are often characterized by a variety of styles and strategies. As other works suggest, there may be cultural elements of ones' social environment that provide guidelines or scripts as to how a young man or woman should approach relationships with the opposite sex.

Learning and Subcultural Explanations

Although the social control approach may be correct in its assumption that youths act according to their own (heterosexual) interests if not countered by some other regulatory force; the question as to why some are more motivated towards risky and unconventional styles of involvement than others remains largely unanswered by social control theories. There have been many studies illustrating the power of cultural contexts in relation to heterosexual attitudes and behaviors. I review several studies that illustrate the scope of cultural influences (see Dimaggio, 1997 and Nagel, 2000 for more in depth reviews).

Wilson's (1987), in his analysis of "the truly disadvantaged," found that segments of the Chicago population that were struggling economically throughout much of the 1970s and 1980s were also found to be lacking in various other forms of social and cultural capital. Focusing primarily on the conditions of the inner-city, Wilson's study discusses the cultural isolation of urban-dwelling African Americans from that of white and affluent communities. According to Wilson, the cultural/geographical isolation of youths from adults who are educated, employed, and married is one of the principle

causes of social ills among the poor (see also Wilson, 1996). In these isolated and often highly unstable environments, social controls may indeed be lacking, however, social observation and other learning mechanisms also play an important role in the development of specific attitudes and behaviors. Father absence and teenage motherhood, which is more common in many economically depressed areas, have direct implications for the social control of youths. Yet these social conditions may also provide a behavioral blueprint as to how an adolescent may adapt to environmental uncertainties.

Anderson's (1999) ethnography of inner-city black youths builds on the work of Wilson and other scholars in discussions of the concept of the "street code." Street codes are subcultural scripts that entail attitudes and behaviors in opposition to those associated with conventional lifestyles and traditional norms of comportment. The code of the street teaches, among many things, that interpersonal violence is necessary for gaining respect and defending one's honor (see also Stewart et al. 2006). Norms and attitudes associated with heterosexual relationships are also part of this code. Anderson describes a situation in which some adolescents approach heterosexual relationships with an air of cynicism, viewing stable and monogamous relationships as ideal, but not likely achievable. In response, however, most of these youths continue to push forward in developing cross-sex relationships, albeit with far fewer conventional role models to guide them than what may be available to youths living in middle-class communities. Consequently, not only are disadvantaged youths more free to act on their impulses because of weakened family and community controls, but are also routinely exposed to teenage motherhood and male promiscuity/permissiveness as normative aspects of emerging adulthood (Burton, 1990).

The research on cultural influences is not limited to Anderson's notion of street codes, nor do all cultural arguments necessarily resonate with the idea of an oppositional subculture (Kornhauser 1978; McLeod, 1987; Stark 1987). There is, however, strong support in the literature for the idea that structural disadvantage produces attitudes in youth that may place them at risk for early and unconventional involvement in heterosexual relationships (Browning & Burrington, 2003; Jemmont & Jemmont, 1990; South & Baumer, 2000). The sexual attitudes of youths from broken homes and impoverished neighborhoods tend be less conventional than those of more socially advantaged male and female adolescents. According to the self-reports of some youths, sex and pregnancy are experiences that can occur outside of committed relationships (Harding, 2007). A collection of such attitudes and experiences may also bring about the development of cultural identities, which are consequential in shaping social behavior. In a recent longitudinal study of adolescent boys, respondents were asked how much they agree that others would describe them as a 'player'—an identity component most often associated with young men who chose to pursue uncommitted sexual relationships (Giordano, Longmore, Manning, & Northcutt, 2008). Results from this study indicate that while a majority of the players were not disadvantaged minority youths, minority status and neighborhood disadvantage were nevertheless significant predictors of endorsement of this identity.

The paucity of conventional heterosexual role models in some disadvantaged communities may also have a direct influence on youth behavior. The research on human sexuality suggests that monogamy, itself, may have cultural/learning basis in addition to the biological underpinnings that regulate these behaviors (Buss, 2004, Diamond, 1997;

Ridley, 1994; Udry, 1988). This is not to suggest that human beings are inherently polygamous, only that a fair degree of socialization is required to achieve the level of monogamy characteristic of most marriages and other long-term relationships. Youths who fail to witness adult participation in these stable monogamous unions may be less likely to pursue conventional dating courtships. The general idea that conventional behaviors may be learned through the observation of adult role models was further highlighted in a recent study on youth violence (Parker et al., 2008). In this study, researchers found that the number of older and employed men in a community area was negatively related to levels of youth violence, net of controls for other relevant factors. While the learning processes surrounding violent behavior may differ from that of heterosexual involvement, the study demonstrates the general importance of conventional roles models in the prevention of risky behaviors among youths. Similar conclusions may be drawn from the research that finds divorce as a consistent predictor of homicide and teenage pregnancy; at the neighborhood-level and at higher degrees of aggregation (Land et al., 1990; Maume & Lee, 2003; South & Messner, 2000).

Models of conventional heterosexual involvement are not necessarily absent in disadvantaged communities, as Anderson (1999) and other researchers have pointed out. There is merely a greater likelihood of competing influences in these environments, some of which may encourage youths to depart from traditional dating courtships (Harding, 2007; Shaw & McKay, 1942). Further support for this notion is found in a recent study of peer networks and delinquency. Harding (2009) argues that, due to high levels of unemployment and high school drop-out, youths from disadvantaged communities are more likely to socialize in mixed-age peer groups within which they may develop

informal relationships with young adults. While these adult associations may offer youth a degree of protection and status (e.g., Melde, Taylor, & Esbensen, 2009) they may also be a gateway into precocious heterosexual activity (e.g., Browning & Laumann, 1997). Indeed, some of these relationships may involve coercion on the part of the older partner, resulting in a premature introduction into sexual relationships that, in turn, may have long-term consequences for the quality of later heterosexual unions (e.g., Raley et al., 2007; Teachman, 2003). Moreover, even in light of evidence that disadvantaged youths are more sexually risky than their middle-class peers, it is over-simplistic and arguably incorrect to conclude that socially disadvantaged subgroups value promiscuity and dismiss marriage. On the contrary, research suggests that parents who live in poverty do not actively encourage liberal sexuality, but are often more conservative in their values and place greater restrictions on unsupervised time with friends than do parents in middle to upper- income communities (McLoyd et al., 2000). Disadvantaged youths also report marital expectations and behave as if they would like to pursue more conventional and longstanding heterosexual unions (Gibson-Davis, Edin, & McLanahan, 2005; Lichter et al., 2004). The early movement into cohabitation seems to be evidence that a stable relationship is desired among individuals from disadvantaged backgrounds. However, research also shows that family instability and economic disadvantage are strongly linked to this early exit out of adolescence. Most of these early cohabiting unions will not develop into marriages, and those that do are at an elevated risk for divorce (Brown, 2006, 2005). Furthermore, contrary to the idea put forward by some research that individuals from disadvantaged backgrounds avoid marriage for fear of divorce (Edin et al., 2005), a recent study of low-income women found no support for this claim (Cherlin

et al., 2008). This research suggests that while fear of divorce may be prevalent among individuals from disadvantaged backgrounds, the expectations of failing in a conventional union may be insufficient to explain the relatively high rates of relationship dissolutionment. As the past literature indicates, early heterosexual experiences may have a significant impact on later union stability.

The idea of modeling behavior and learning of subcultural values has much utility in explaining the variety of heterosexual styles that develop, as well as involvement in other risky behaviors that may emerge in adolescence. Yet the mechanisms are not straightforward (South & Baumer, 2000). As I noted earlier, parents who are raising children in impoverished communities do not normally express liberal sexual attitudes and are often more restrictive over their children's free time. This would appear at odds with the basic tenets of a social learning approach for understanding the levels of risky behavior in disadvantage communities. However more subtle learning may occur through observation of typical patterns found in disadvantage communities (e.g., single-parent families and the separation of pregnancy from marriage), and more subtle messages may emerge from interactions within the family and local community networks (e.g., contact with older peers). Patterns of early involvement in heterosexual relationships may also be tied to interpersonal experiences that are non-sexual in nature but are nonetheless significant in their influence on sexual attitudes and behaviors. The levels of physical conflict between parents and their children, for example, are often found to be more severe in low income communities (Coulton, Korrbin, Sun, & Chow 1995). These negative parent-child experiences may have long-term deleterious effects on youths' later interpersonal relationships (Cicchetti, & Toth, 2005). Children who are

physically abused and or engage in violent altercations with their parents are more likely to report precocious heterosexual involvement as well as delinquent behavior than are youths who have minimal experience with these family interactions (Foster, Hagan, Brooks-Gunn, 2008; Haynie, Petts, Maimon, & Piquero, 2009; Swinford, DeMaris, Cernkovich, & Giordnao, 2000). As argued in previous works (e.g, Hirschi, 1969; Gottfredson & Hirschi, 1990), harsh and erratic parenting styles may compromise the development of self-control and ties to other conventional institutions, such the school, church, and traditional dating courtships which often entail monogamous behavior and relatively low levels of conflict. Further, the view of the current study is in line with that of much prior work which theorizes that social norms are themselves shaped by exogenous factors influencing the character of these micro-level indicators.

Many scholars who have relied on cultural frameworks for understanding risky behavior are often quick to point out the macro-level influences that set the stage for the development of unconventional frames and scripts. The instability of neighborhoods and the low availability of employment, for example, are influenced by broad forces in the global economic market place, which reach well beyond the control of most poor and working-class individuals. The out-sourcing of manufacturing jobs to third-world countries, for example, is frequently cited as a negative macro-level influence on the stability of African American communities (Massey & Denton, 1993; Rindfuss, 1991; Wilson, 1996). Other studies point to the influence that these economic factors have on the sex-ratio (proportion of males to females) in localized areas, which in turn is thought have a significant influence on the norms of heterosexual comportment (Guttentag & Secord, 1983; Lichter et al., 1992; South & Lloyd, 1992, 1995). Nevertheless, even if

these macro-levels influences are accommodated for in cultural/learning frameworks, the very emergence of cultural scripts, identities, and behavioral models requires some additional explanation.[1]

The Accelerated Life Course

Early and unconventional heterosexual involvement may become a part of an adolescent's social repertoire for reasons other than an absence of social control mechanisms or cultural scripts. Some scholars characterize the accelerated timing of heterosexual behaviors as a more deliberate and reasoned style of involvement than what is commonly portrayed in the literature. According to the theory of 'adultification' (Burton, 2007; Burton & Jarrett, 2000), the contingencies facing poor and working-class families may require adolescent children to act as premature adults by attending to the care of younger siblings and taking-on financial responsibilities. As adolescents engage in these 'adult' behaviors, there may be social identity implications for heterosexual involvement. Adolescents may begin to see themselves as adults and accordingly feel that they have the right to engage the opposite-sex in ways that are traditionally reserved for adults. In households where the adolescent cares for a parent as they might care for a child or same-aged peer, the effects of adultification may be especially pronounced. Taking care of a parent that has had too much to drink, or acting as an intermediary in the

[1] While the sex ratio remains relatively balanced throughout most human societies (Guttentag & Secord, 1983; Ridley, 1994), there are documented departures from this balance that appear to have negative effects on interpersonal relationships. Divorce, for instance, is found to be more common in communities where the sex-ratio is imbalanced (South & Lloyd, 1992, 1995). Moreover, the sex-ratio in some African American communities is considerably lower (i.e. higher percent of females) than that of the relatively even sex-ratio of most white communities. The over or under-abundance of a particular sex, according to these past works, may afford some individuals with the liberty of pursing multiple heterosexual interests (that is if they happen to be in the minority sex category) while leaving others with limited options (Lichter et al., 1992). A low sex-ratio has also been implicated in homicides studies (Messner & Sampson, 1991), which suggests that this imbalance is detrimental to not only conventional styles of heterosexual involvement, but also the general level of organization in a community.

relationship squabbles of adults are potential examples of what Burton refers to as 'parentification,' where the role-reversal of parent and child may be empowering to the adolescent's sense of autonomy and sexual entitlement.

Burton and other scholars have also conceptualized the precocious heterosexual involvement of disadvantaged youths as a deliberate attempt to overcome the high levels of uncertainty present in their social environments. While getting (someone) pregnant may seem counter-productive in a conventional sense, for a teen who has been witness to the difficulties associated with the traditional male-female union in providing a secure future, this experience may simply reflect the basic desire of human beings to exert control over their environments and destinies (e.g., Ehrlich, 2000). Early pregnancy, for example, has been argued to be an experience that provides young, disadvantaged, women with a sense that they have created certainty out of chaos by having a child that requires their care and affection (Friedman, Hechter &. Kanazawa 1994). Early cohabitation with a romantic partner may offer young couples a similar sense of accomplishment in that they were able to solidify, what is hoped to be, a stable union amidst a social environment that is fraught with uncertainties (see also Geronimus, 1994).

The literature on the accelerated life course also takes note that the prospect of a truncated life-span looms over youths from disadvantaged backgrounds. Early and violent death is more prevalent among adolescents living in poverty (Geronimus et al., 1996; Krivo & Peterson, 1996; Parker & Reckdenwald, 2008; Peterson & Krivo, 2005). The possibility of dying at a relatively early age may rearrange one's priorities, resulting in a bypass of traditional adolescent roles and fostering advanced movement into adult oriented behaviors and relationships (Hagan & Foster, 2001; Haynie, Petts, Maimon, &

Piquero, 2009). In a study of Chicago area neighborhoods, researchers found that the homicide rate positively predicted the number of teen pregnancies, even after other highly relevant factors were controlled for in the analyses (Wilson & Daly 1997). This previous study, along with other research suggests that high unemployment, divorce, and neighborhood violence coalesce to create an environment of uncertainty, which may in turn influence youths to discount the value of future rewards and to act on present information to guide decision-making (Flinn, 2007; Hill et al., 2008; Nagin & Pogarsky, 2004).

Social learning perspectives are also useful for understanding the dynamics of the accelerated life course. While teen pregnancy and STIs may be the immediate consequences of precocious heterosexual involvement, more gradual complications may develop as conventional dating courtships are bypassed, or are de-emphasized. That is, by not delaying sex and avoiding a pattern of exclusive involvement with one partner, interpersonal styles useful for managing long-term and monogamous unions may not be developed and solidified. But like the other aspects of the accelerated life course, it is important to recognize the degree to which these complications are initially fostered by the shifting and unstable social environments in which youths live. For example, actors are likely to draw upon experiences at home and in community to guide their own styles of heterosexual involvement, however, as a consequence of living in environments of uncertainty, the time and opportunities that youths have to develop and manage these relationships may be limited (Laursen et al., 2001). Friendships with same and opposite sex peers may be more difficult to maintain if a family's housing situation is unstable or if the neighborhood in which that family is located is not safe for children to meet and

play due to the levels of crime and violence in the area. Similarly, traditional dating courtships may also be difficult to pursue, and even more challenging to maintain, in these distressed conditions (Giordano et al., 2005). Furthermore, while social bonds to parents and other family members may stay intact or perhaps become strengthened in light of these external threats, despite internal strife (i.e. parent-child conflict), family life in general may remain insular and disconnected from other community members (Granovetter, 1977; Kasarda & Janowitz; 1979; Sampson & Groves 1989). These living circumstances may curtail the opportunities for adolescents to socialize in ways that foster conventional dating repertories. These experiences in adolescence, in turn may influence not only the character of later heterosexual unions, but also the dynamics within them (i.e. less stable, more conflictual; see Swinford et al., 2000).

In summary, the emergence of risky heterosexual attitudes and behaviors in adolescence can be viewed from a variety of theoretical vantage points. Social control, social learning, and the accelerated life course add uniquely to our understanding of how these unconventional patterns of involvement are tied to structural disadvantage and the relatively high rates of teen pregnancy and STI's that are associated with environments characterized by uncertainty. However, in order to connect risky heterosexual attitudes and behaviors to crime and drug use, this study examines the conditions under which these less than conventional patterns of heterosexual involvement may increase the likelihood of participating in illegal behavior and other risky activities.

CHAPTER 4: HETEROSEXUAL INVOLVMENT, CRIME, AND DRUG USE

In this chapter, I explore criminology's history of interest in the heterosexual world. Although the research on marriage and criminal desistance is fairly well-known (Laub & Sampson, 2003) heterosexual relationships have been within the purview of criminology since its inception. I discuss the previous research from the early observations of Goring (1913), to Hirschi (1969), to Jessor & Jessor (1977), and on to more contemporary bodies of work (Gottfredson and Hirschi 1990; Laub and Sampson 2003; Haynie, Giordano, Manning, & Longmore, 2005; McCarthy & Casey, 2008; Rebellon & Manassee, 2004). Popular criminological perspectives are of primary interest for the current study. However, contributions from related lines of scholarship are also included in the review.

The literature reviewed above indicates that unconventional styles of heterosexual involvement are more likely to develop within social environments that are uncertain, as defined by high levels of economic and family instability. Closely associated with these environments of uncertainty are behaviors that violate legal boundaries which may ultimately limit youths' ability to achieve the ideal respectability package of a conventionally situated adult (Giordano et al., 2002). In the next section of the review, I link unconventional heterosexual involvement with crime, drug use, and other risky-behaviors. Discussions on peer-network influences and crime have been largely dominated in prior work by same-sex friendships (e.g., Warr, 2002). Although this literature has provided numerous insights on the social nature of delinquency and other forms of risk-taking, the role of heterosexual interest and involvement has received far less attention, even though these relationships are central in the social routines of most adolescents (Collins, 2003; Giordano, 2003).

First, I address what may be one of the most common interpretations for the relationship between unconventional heterosexual behavior and criminal risk-taking—that is individual 'criminality,' or a single underlying trait/dimension of one's personality that gives rise to multiple forms of risky taking (Horney, 2006). Specially, I note that while individuals may certainly vary in their propensity for risk-taking, trait-based theories are somewhat incomplete by failing to consider the range of behaviors and attitudes that might bring actors into contact with the opportunities for crime. In connection with these limitations, I argue in the second section of this review that an individual's interest in heterosexual socializing may be a significant link between the propensity to engage in crime and the social contexts in which these behaviors often occur. Unconventional styles of heterosexual involvement may be particularly effective in directing persons towards social contexts and deviant peer contacts that are associated with crime and drug use. Third, I argue that as an extension of one' routine involvement in these risky contexts, individuals may be more likely to meet and develop relationships with partners who have a history of unconventional heterosexual behavior, delinquency, and drug use. I note that while these relationships may have the potential for developing into the types of unions that foster desistance from crime and drug use, prior dating history and the tendency for individuals to date partners who reflect their own lifestyles may complicate and limit their "conventionalizing" potential. Fourth, I consider the heterosexual experiences of adolescence as a key socializing influence in the development of interpersonal styles of rapport. A close relationship with a romantic partner may indeed knife-off contact with delinquent peers and rearrange routine activities such that one's behavior at night and on weekends is more restricted.

Conversely, a lack of experience in conventional dating courtships may result in a greater likelihood of conflict and infidelity within these relationships, making them all the less likely as a pro-social influence.

Criminality, Low-Self Control, and other Trait-Based Explanations

Criminality is a concept widely used throughout the literature to describe an individual's underlying propensity to not only break the law, but to engage in all sorts of behaviors that are either reckless or show disregard for the welfare of others (Horney, 2006). Unconventional heterosexual behaviors, for example, have been characterized in past research as a part of a syndrome or general tendency towards risky behavior (Jessor & Jessor, 1977). Although the factors that constitute criminality have varied throughout past works, Gottfredson and Hirschi's (1990) theory of low-self control has, in recent years, been particularly influential. They theorize that self-control is a product of early socialization; it is established by late-childhood and is immutable over time. Individuals with low-self control are impulsive and prefer behaviors that reward them with the instant gratification that crime and sex may provide. However, prior to the inception of Gottfredson and Hirschi's general theory, others had observed and theorized on the correlations between sexual behavior and criminal offending. In Goring's (1913) study of English convicts, he noted the unconventional tendencies of the men that he interviewed. Describing the respondents as "sexual profligates," Goring theorized that these sexual tendencies were generated by the same mental defect that produced the men's criminality. Goring, similar to Gottfredson and Hirschi, attribute the correlation between crime and sexual promiscuity to a single underlying factor. This is not to

suggest that these researchers, separated by nearly a century, are equivalent in their theorizing, only that they share the same assumption that most all risky behaviors are essentially analogous because they all provide immediate gratification, and also that the correlation between these behaviors is spurious; both are caused by the same mental characteristics or defects.

Gottfredson and Hirschi's theory of low self-control is obviously distinct from the earlier ideas of Goring by emphasizing socialization during childhood over notions of biological or innate differences with respect to risk-taking. Yet more modern research on abnormal psychologies shares a likeness to both of these theories by emphasizing personality and other internal factors for explaining a wide variety of risky and antisocial behavior (O'Gorman & Baxter, 2002; see however Muraven & Baumeister, 2000). For example, the psychopathic personality, which is well documented as a risk factor for crime, drug addiction, and unsafe sexual practices, is thought to give rise to multiple forms of risk-taking behaviors and may have some biological basis (Harris et al., 2007; Rowe, 2002). The antisocial personality, a close variant to that of psychopathy, has also been identified in the literature as a personality trait that may be responsible for patterns of reckless and potentially dangerous behavior.

Given the research on neurological functioning that has shown physical evidence of individual differences regarding the potential to take risks (e.g., DiLalla, 2002), and the now relatively large collection of studies on the effects of low-self control (Gramsmick et al., 1993; Pratt & Cullen, 2000), there can be little doubt that individual-traits are consequential in contributing to all forms of risky behavior. However, these findings do not displace the importance of the social contexts in which risky behaviors

often occur. Gottfredson and Hirschi's theory of low-self-control, for example, rests on the assumption that the opportunities for crime and the propensity to do crime (i.e., low self-control) are separate, but related entities. Drawing on a routine activities approach (Cohen & Felson, 1979), Gottfredson and Hirschi argue that there needs to be an available target or victim, as well as the lack of suitable guardians in order for low-self control to be effective in producing criminal behavior. While the opportunities for crime may emerge anywhere and at anytime, we know from much prior work that criminal offenses occur in somewhat predictable locations and at relatively predictable hours of the day (e.g., Ratcliffe, 2006; Sampson & Wooldredge, 1987; Sampson & Lauritsen, 1990). Crimes committed in public spaces, for example, are especially common in or around areas that cater to young single people, such as bars and nightclubs. Furthermore, juvenile offending occurs most often when parents and other guardians are not present; after school and in unsupervised locations (Osgood et al., 1996, Warr, 2005). A common aspect of these social contexts is that while they may present opportunities for crime, they also are ideal for socializing with members of the opposite sex (Laumann, Gagnon, Michaels & Michaels, 1994). While Gottfredson and Hirschi's theory states that persons with low self-control prefer activities that provide instant gratification, I argue that one's interest in heterosexual socializing may, itself, influence the routines and lifestyles that place people at risk for crime and drug use. This perspective is somewhat more in line with Osgood and colleagues' (1996) conceptualization of routine activities theory by emphasizing individual lifestyle choices, however it augments prior theory by including attention to the developmental significance of heterosexual socializing. From childhood to adolescence, perspectives on dating and sex begin to take shape, providing influence

over one's routine activities, network contacts, and developing self-views (e.g., Arnett, 2000; Cairns & Cairns, 1994; Giordano, 1995, 2003). While parents, same-sex friends, and individual traits such as low-self control may continue to act as key influences, one's interest and involvement in heterosexual relationships may take priority in influencing the daily routines within which crime and drug use unfold.

Heterosexual Socializing and Routine Activities

Theories of routine activities are useful vantage points for understanding the linkages between crime, drug use, and heterosexual involvement as they remind us that most crime is not premeditated, nor does it typically require any specialized skills. Even among those who are involved in gang activity, research suggests that crime, itself, occupies only small and scattered segments of social life (Klein, 1995). Crime more typically emerges as part of an individual's routine behaviors and social encounters which are, themselves, not often imbued with criminal or antisocial intentions (Agnew & Petersen, 1989; Haynie & Osgood, 2005; Osgood et al., 1996; Osgood & Anderson, 2004; Vazsonyi et al., 2002; Wrong, 2005); albeit there are some noted exceptions. Under-aged drinking and drug use, for example, may be premeditated to a much larger degree than property offending and especially violence, however, these behaviors frequently occur in the social contexts of heterosexual socializing.

The levels of unsupervised and unstructured socializing that occurs in and around youth hang-outs, parties, bars, and nightclubs is often motivated by the desire to mingle and interact with members of the opposite sex; yet these localities are themselves often associated with criminal behavior. The pursuit of sexual and romantic interests may

involve these risky contexts, and as a consequence, increase the opportunities for crime and drug use. Hence, if unconventional dating strategies involve social contexts in which risky behavior is relatively common, then one may be exposed to crime even though intentions were oriented toward heterosexual socializing rather than illegal behavior. In prior work (Seffrin et al., 2009) we found that high levels of interest and involvement in heterosexual relationships predicted a high degree of unstructured socializing among friends, net of parental attachments and other social control variables. This study also found that, in addition to increasing unstructured socializing with friends, high levels of heterosexual interest and involvement were associated with high levels deviant peer contact, which in turn elevated one's own involvement in crime and drug use. While it is difficult to argue these deviant peer associations are antecedents to crime and drug use and not merely a reflection of self-selection or personal preference among youths who are already delinquent, unconventional patterns of heterosexual involvement may, nevertheless, strengthen these network preferences (e.g., Matsueda & Anderson, 1998). Moreover, because this research suggests that unconventional patterns of heterosexual involvement may help to facilitate the reciprocal nature of friends' delinquency and one's own risky behaviors, actors who pursue risky heterosexual lifestyles may, in effect, limit their capacity to desist from crime and drug use in the early adult years. This research supports the idea that heterosexual interest may be an important motivator in the creation of social contexts often associated with crime and drug use and in the forging of network ties associated with these behaviors.

While the generally unstructured and uninhibited atmosphere of parties, bars nightclubs, and other youthful hang-outs may allow for higher levels of risk-taking when

compared to more controlled environments, there may also be reasons more specific to heterosexual socializing that make these social contexts particularly risky for illegal behavior. Drug and alcohol use, for example, often accompanies heterosexual socializing, however, the pairing of the two is frequently citied as a major factor in sexual assaults (Testa, 2002). Generally though, mood altering drugs are found to be a contributing factor in a wide variety of crimes, with alcohol use as the most predominant antecedent, especially when the referent is violent crime (Parker & Auerhahn, 1998). Although there is much debate over the degree to which intoxicated states are responsible for criminal offending (e.g., Felson et al., 2008) the research clearly demonstrates that risky behaviors are more likely to occur if individuals have been drinking or using drugs (e.g., Huang et al., 2001; National Institute of Justice, 2001). Furthermore, because drugs and alcohol are also generally believed to lower inhibitions and reduce social anxiety, the use of these substances is especially common in the contexts of heterosexual socializing (Laumann et al., 1994). These associations not only have the potential for raising the risk of property offending and violence within the contexts of heterosexual socializing, but may also be viewed as a more general factor that influences age-graded trends in offense prevalence (Schroeder, Giordano, & Cernkovich, 2007). Thus, heterosexual socializing may weaken the chances of criminal desistance in early adulthood by increasing opportunities for substance use.

The idea of heterosexual socializing as context for crime is further supported by data from experimental research on sexual arousal and risk-taking. This research finds that young men may be more likely to engage in criminal acts when they are sexually aroused (Lowenstein, Nagin, & Paternoster, 1997). Although this previous study focused

on the expectations of sexual offending, the theory behind this research suggests that sexual arousal may interfere with an individual's ability to mange impulses and delay gratification. According to these findings, the mere presence of the opposite sex may alter judgment and decision-making in ways that place adolescents at risk for delinquency.

Coupled with this notion is the literature on thrill-seeking and the phenomenon of juvenile delinquency as a group activity (e.g., Baldwin, 1985; Katz, 1988; Klein, 1995; McGloin et al., 2008; Wright et al., 1999; Warr, 2002). While certainly there are negative emotional aspects to criminal offending (e.g., anger and depression), much of which are experienced largely without the solidarity of one's peers (Agnew, 2001; Giordano, Schroeder, Cernkovich, 2007; Hagan & Foster, 2003), the group dynamics of juvenile offending implies alternative cognitive factors. Antisocial behaviors may also be motivated by the excitement that comes from the camaraderie of pursing the opposite sex as a group activity. For example, a group of young males in their quest to rendezvous with a group of young females may be excited about the prospect of a casual sexual encounter. However, these heightened emotions, in combination with a lack of suitable guardians, may increase general risk-taking tendencies, and as a result, indirectly facilitate the production of disorganized criminal events, such as the vandalism of property and violent encounters with other groups of young males. Group-offending may therefore emerge among adolescents not only as a pre-planned attack, but in some instances as a by-product of shared interests for the pursuit heterosexual partners and the emotional experiences associated with these interests. Although the consumption of drugs and alcohol may aggravate these criminal tendencies, it is important to recognize

that the impetus for group-level offending may be, at least in part, romantic or sexual in origin and not necessarily driven by antisocial tendencies or negative emotions.

While sexual arousal and excitement may be, in and of itself, insufficient for producing delinquency, the pursuit of romantic and sexual interests may include additional incentives for risky and possibly criminal behavior. Rebellon & Manasee (2004), for example, drawing on the literatures concerned with mate competition and sexual selection (e.g. Buss, 2004), recently argued that youths may have incentives to act delinquent or place themselves at risk in order to attract members of the opposite sex. This study suggests that young women may be attracted to men who are willing to take criminal risks as these behaviors may communicate bravado, confidence, and an ability to secure resources. The argument advanced by Rebellon & Manasee (2004) also finds support in a recent study on youth dating and sexual intercourse in which females are more apt to become physically involved with delinquent boys than with males who report fewer risk-taking behaviors (Cleveland, 2003). Although the previous studies focused primarily on male behaviors and female preferences, the observations made in Anderson's (1999) discussion of the "mating game" suggest that both young men and women may use violence and other aggressive tactics to guard their mates against potential competitors. Moreover, while heterosexual-related violence may emerge in any number of socioeconomic settings (Daly & Wilson, 1988) the odds of this happening may be significantly higher among youths who are living in disadvantaged communities in which aggressive behavior is often viewed as a necessary and sometimes unavoidable fact of life (Melde et al., 2009; Stewart et al., 2006).

Certainly, not all social contexts associated with heterosexual involvement provide the kinds of opportunity structures that are conducive to criminal activity. Conventional activities, such as going to the movies, or spending time alone with a partner may actually reduce the opportunity for criminal behavior. As suggested in a recent longitudinal study of adolescents and their dating partners, young, sexually active couples who engage in conventional dating activities may lower their chances of participating in delinquency (McCarthy & Casey, 2008). Although this study framed the protective benefits of conventional dating courtships as a result of the intimate bonds that are developed between partners, a routine activities perspective may explain these results just as effectively as a social control argument (Hirschi, 1969). Individuals in a committed relationship may be less likely to pursue routines or lifestyles that place them at risk for criminal opportunities. Love and intimacy may offer some incentive to avoid risky contexts, but ultimately the actor would assure the protective benefit of a romantic relationship by no longer pursuing a 'singles' lifestyle that provides the opportunities for crime. The decision, however, to desist from the 'single-life' is influenced to significant degree by the actor's prior dating and heterosexual experience. If unconventional patterns of heterosexual involvement are established in adolescence, they may be difficult to change in early adulthood. These past experiences may make it more challenging to undergo the necessary lifestyle changes that ensure a "good relationship effect".

Heterosexual Relationships, Homophily, and Risk-Taking

As an extension one's routine activities in the heterosexual world, involvement with a delinquent or drug using partner represents yet another dimension of crime's life-course.

In this section of the review, I discuss the social phenomenon of homophily as it applies to heterosexual relationships, crime, and drug use. Much like the ways in which unconventional patterns of heterosexual involvement may strengthen ties with deviant peers (as was discussed above), similar self-selection process (i.e. homophily) may be at play regarding romantic and sexual partners. Homophily, broadly defined, is the tendency of individuals to form relationships with those who share many of the same demographic characteristics and reflect similar attitudes and behaviors (Kandel, 1978; McPherson et al., 2001, 1987). While some research argues that the strong presence of homophily in human relationships obviates the need to examine peer influences (Gottfredson & Hirschi, 1990; Hirschi, 1969), others scholars recognize that self-selection is not mutually exclusive from the phenomenon of social causation (Cairns & Cairns, 1994; McGloin, 2009; Wright et al., 1999; Warr, 2002). The social relationships that individuals select into, nevertheless, have an influence over attitudes and behaviors (e.g., Emirbayer, 1994). While studies on crime and drug use have incorporated these dynamics into the research on peer-networks (Haynie 2001, 2002; Krohn et al., 1996), the heterosexual realm has received far less attention.

Styles of heterosexual involvement may limit the choice of partners to those who compliment one's own habits and lifestyles. Unconventional pathways or styles of involvement may increase the likelihood of "delinquent partnering", or the development of a heterosexual union in which both partners have a history of unlawful behavior and drug use (Martino, Collins, & Eleickson, 2004; Merline et al., 2008). Although this suggests that youths self-select into delinquent relationships (Matsueda & Anderson, 1998), the attitudes and behaviors of the partner may reinforce the individual's own

involvement in risky behaviors (Haynie et al., 2005). In a nationally representative study of adolescent youth, researchers examined the influence of romantic partner delinquency on the respondents' self-reported involvement. The findings show that romantic partner delinquency is positively related to the youths' self-reports, even after friend delinquency was accounted for in the analyses. A major strength of this study is that it utilizes survey responses from the youths' actual peer network, and does not rely on respondents to impute sensitive information for their friends and romantic partners. While this study does not rule out the possibility that the relationship between romantic partner delinquency and self-reports are product of self-selection (i.e., homophily), it clearly demonstrates that dating relationships may add to the contours of crime and delinquency. A recent study of Toledo area youth revealed comparable findings in that adolescent dating partners share similar levels of delinquency and drug use even after accounting for traditional social control variables and variations in friend's delinquency (Seffrin et al., 2009). Further evidence of homophily and delinquent relationships are found in a study of young adult couples from New Zealand. This study revealed similar levels of criminal involvement among romantic couples even after controlling for various differences in personality (Krueger et al., 1998).

These studies demonstrate the high levels of delinquency concordance among romantic partners. The consequences of homophily can be immediate in that actors may develop relationships with individuals who reinforce risk-taking tendencies (Seffrin et al., 2009). However, the effects of homophily may also be long-term in that, unlike the same-sex friendships of adolescence, the romantic partnerships of young adulthood may

become protracted, involving a greater amount of time and intensity relative to other individuals in the actor's peer-network.

Involvement in a heterosexual union is often conceptualized as a normative step in the development towards adulthood; yet these adult relationships may also provide a context within which antisocial behaviors may persist beyond adolescence, albeit in a less public way. For example, heterosexual relationships may provide a transformative context for criminal behaviors by enabling addiction to illicit drugs. Unlike domestic violence, which carries an immediate negative connotation, the presence of drugs in the relationship is an issue that takes on a more ambivalent tone, given that partners may actively support each other's involvement (Yamaguchi & Kandel, 1997). In some relationships, one partner may serve as the primary source of financial support for the other's choice of habits. In other relationships, however, patterns of involvement may be mutual between romantic partners, potentially creating an even greater likelihood that the use of illicit substances grows into a major source of preoccupation in the life course of the actor (Giordano, Cernkovich, & Rudolph, 2002). Entering into these risky living circumstances may be especially likely among individuals with a history of unconventional heterosexual behavior, as studies suggest that early exits out of adolescence, such as teenage cohabitation and high school drop out, are often associated with these earlier patterns involvement (Burton, 2007; Manning, Longmore, & Giordano 2007). The relatively private homes or apartments young heterosexual couples may occupy also provide an ideal sort of cover for illicit drug use. The use of these mood-altering substances, which may have previously been an activity reserved for parties or the weekend, may now be much more accessible given the levels of privacy that are

afforded by these independent living circumstances. Moreover, a romantic partner who is acquiescent or supportive of these behaviors may reinforce the likelihood that one's future use of drugs will also go on unabated (Duncan, Wilkerson & England, 2006).

Aside from fostering patterns of drug use, a relationship in which drug use is mutual between partners may compromise one's ability to desist from crime and risky lifestyles (e.g., frequenting bars and nightclubs). The abuse of drugs and alcohol has been well documented as health risks and as potential irritants to the stability of heterosexual unions (Collins et al., 2007), however, there also is a large literature on the use of mood altering drugs as the antecedents to later violent offending and other predatory crimes (e.g., Felson et al., 2008; Miczek et al., 2002; Parker & Auerhahn, 1998; Schroeder, Giordano, & Cernkovich, 2007). Homophily may therefore have an indirect influence on predatory offending via the pairing of romantic partners who are supportive of each other's drug use.

Dating as a Socialization Influence on the Character of Adult Unions

The relationship between heterosexual involvement and risk-taking behavior has been thus far been described as a product of an underlying trait, a result of routine activities, and as a consequence of homophily within interpersonal relationships. While each of these perspectives are seen as having merit, it is also important to consider actual relationship experiences as another way to understand the relationship between crime and social class. In this section of the review, I discuss dating relationships in adolescence as key socializing influences. Participation in traditional dating courtships may facilitate a view of the world that is ordered and just, as the adolescent learns to trust in and

cooperate with non-familial members of the opposite sex. In contrast, individuals who have been exposed to relationships that are non-exclusive may not only develop feelings of mistrust in the opposite sex and the traditional dating courtships in which they are situated, but also a somewhat cynical view of other social institutions, including the legitimacy of legal boundaries (e.g., Black, 1983; Topalli, 2005).

While criminological studies have yet to specifically document the deleterious effects of unconventional heterosexual involvement on social relationships, there exists a precedent in the literature for studying trust and cooperation among people as the essential building blocks of civil societies (Gurr, 1981; Sampson & Groves, 1989; Wilson & Herrnstein, 1985). Anthropological findings together with insights from various other disciplines such as evolutionary psychology, biology, and political science, suggest that monogamous pair bonds may have evolved in early human populations because these interpersonal relationships were well situated to address basic problems related to daily survival by creating a division of labor between men and women (e.g., Alexander, 1987; Diamond, 1997; Buss, 2004). Trust and participation in monogamy and the institution of marriage is also thought, however, to have developed for the more specific reason of moderating conflicts among men, especially when regarding the competition for mates (Sanderson, 2001; see also Kanazawa & Still, 1999). The upshot of these social and culture transformations is argued to have made substantial contributions to the fabric of human affairs –social hierarchies and political power structures began to emerge that leveled control over public displays of violence (Gurr, 1981). The anthropological record seems to be in accordance these theories (Pinker, 1997) as does the rather large collection of sociological studies that finds divorce and single-parent households strong predictors

of crime and disorder, even after holding economic factors constant (e.g., Maume & Lee, 2003; Land et al., 1990; South & Messner, 2000). These observations are highly relevant to the numerous studies that find that trust and cooperation in others (or the lack of it) shares a significant relationship with crime and delinquency, when measured at both the interpersonal and community levels (e.g., Sampson et al., 1997; Messner, Baumer, & Rosenfeld, 2004; Cernkovich & Giordano, 1987; Garcia et al., 2007). Within these research traditions, however, few scholars have extended lines of inquiry to the relationship qualities of adolescent heterosexual unions, despite the recently popularized notion that marriage deters criminal involvement (e.g., Sampson, Laub, & Wimer, 2006).

Interactions with the opposite sex tend to increase in frequency and salience during the adolescent period, thus making interpersonal styles developed within the heterosexual realm potentially consequential in guiding future social interactions (Giordano, 2003); including conflict resolution and contentment within these relationships. The development of interpersonal relationships may be hindered, however, if actors were unable or unwilling to participate in conventional dating courtships due to high levels of uncertainty present in their social environments. Youth from these unstable and impoverished backgrounds may be quite capable of developing a broad array of interpersonal skills for peer socializing, and likewise, go on to lead conventional and monogamous heterosexual lifestyles, yet their sense of openness and trust in these interpersonal relationships may still be challenged by previous experiences related to the instability in their home lives and the disorder in their communities--a consequence that could carry implications for criminal involvement and drug use over the life-course.

In a recent study on the romantic relationships of black and white youths (Giordano, Manning, & Longmore, 2005) researchers find that minority youths, who are much more likely to come from disadvantage homes, report significantly lower levels of intimacy and sexual exclusivity when compared to the relationships of white youths. While the focus of this past work is romantic relationships, these findings are consistent with prior work that finds black youths reporting lower overall levels of intimacy and disclosure among friends as compared to the reports of white youths (Giordano et al., 1993). Anderson (1999) observed a similar level of rapport among youths that he described as "street." Street youths came from families that were structurally unstable and their relationships with the opposite sex tended to focus on physical aspects over subjective qualities such as love and intimacy, which are most associated with traditional dating courtships (McCarthy & Casey, 2008).

The findings from this research have potentially broad implications for the study crime and delinquency. Hirschi's (1969) description of the interpersonal relationships of juvenile delinquents as "cold and brittle" is associated with the social control theory of crime which essentially argues that persons who are not emotionally bonded to others are free to engage in crime and other risk-taking behaviors. This is the same argument used by Laub and Sampson (2003) to explain the so called "good marriage effect." And most recently, the social control argument was used to explain the pro-social benefits of conventional dating courtships in adolescence (McCarthy & Casey, 2008). There is, however, some counter-evidence to the claim that the interpersonal relationships of juvenile delinquents are completely aloof or cold and brittle. In a recent study of adolescent romantic relationships, findings suggest that youths who engage in crime and

other forms of risk-taking report levels of intimacy and self-disclosure that are similar to the reports of non-delinquent youths (Giordano, Lonardo, Manning, & Longmore, 2007). Moreover, recent studies that utilize brain scanning technology (fMRI) and biological samples reveal that the feelings of romantic love closely overlap with activity in neurological systems that regulate other emotions such as lust and anger (Fisher, 2004). For example, in one study researchers found that increases in feelings of love for a romantic partner corresponded with increases in levels of testosterone, a hormone which is often associated with aggressive behavior and risk-taking (Fisher et al., 2002). Thus, there may be alternative reasons as to why interpersonal relationships sometimes fail to alter behavior in ways that are pro-social, other than individuals being incapable of developing feelings of caring or emotional intimacy.

Recall the trend toward homophily, or the tendency for individuals to select romantic partners who reflect their own attitudes and lifestyles, a dynamic that may diminish the likelihood that these relationship will serve as a catalyst for pro-social change. Adolescents who lack experience within these conventional styles of heterosexual socializing may also be more likely than others to become involved in adult relationships that are highly conflictual, or that are unstable due to infidelity. However, in addition to these self-selection processes, limited exposure to traditional dating courtships may also leave youths ill-prepared for the challenges associated with criminal desistance. Not unlike the conventionalizing influence that marriage is purported to have over male levels of criminal offending (Laub & Sampson, 2003), participation in traditional dating courtships may reinforce one's stakes in conformity, thereby legitimizing other sources of social control, such as commitment to school and work, and

transforming views of self from one that is rebellious to one that is mild mannered and goal-oriented (Giordano et al., 2002; Seffrin et al., 2009). Yet this conventionalizing process does not necessarily hinge on the development of emotional attachments within a particular romantic relationship. Attachment to parents is well established in the literature as a protective factor against antisocial behavior, however, the evidence for this is far weaker regarding interpersonal relationships that extend beyond the biological family (e.g., peers and romantic partners; see Giordano, Cernkovich, & Pugh, 1986). In the case of romantic relationships, feelings of caring and intimacy may co-exist alongside other characteristics, such as conflict and infidelity—a dynamic which may ultimately undermine individual efforts to desist from crime and other risky activities.

Relationship Conflict and Infidelity

Despite the levels of emotionality that young couples may experience as they develop more mature relationships, the style of heterosexual involvement that they developed in adolescence may carry over in these later adult unions. Studies on family violence and spousal abuse often indicate that the actors involved in these exchanges are themselves products of abusive homes (Cicchetti & Toth, 2005; Daly & Wilson, 1994; MacMillan, 2001), however, there are equally important structural links observed in the prior literature that may independently contribute to later levels of conflict between romantic couples (DeMaris, et al., 2003; Egely et al., 1991; Fox et al., 2002; Straus & Gelles, 1986). Shifting and unstable family and community environments may result in learning less than productive means of managing interpersonal relationship conflict. These experiences may influence youths by limiting opportunities to socialize, negotiate

differences in opinion, and resolve conflicts with members of the opposite sex in ways that are not alienating or harmful to either partner (Laursen et al, 2001). Regardless of these obstacles, individuals may still be able to develop intimate levels of involvement with a romantic partner that may, in turn, effectively narrow the range of opportunities for crime; by limiting time spent with delinquent peers or by enhancing bonds to conventional lifestyles (Sampson & Laub, 1990; Warr, 1998). However, neither the reorganization of social routines, nor the development of emotional bonds necessarily guarantees an authentic change in an actor's ability to cope with interpersonal conflict. The decision to cohabit, for example, may have the unintended consequence of redirecting the focus of a partner's anger and aggression toward his or her spouse (Giordano et al., 1999). In this case, the romantic partner becomes the private target of antisocial behavior even though ties to delinquent peer networks may have already been reduced and public displays of such activity curtailed.

Relationship infidelity may be another way in which a lack of experience in conventional dating courtships hinders criminal desistance. Rather than emotional ties to romantic partners being the primary cause of criminal desistance, as is argued by social control theory, an actor's openness to monogamy may be equally, if not more crucial for pro-social change. The logic of this perspective is that individuals may lower their likelihood of crime, drug use, and risk-taking behaviors by desisting from the 'single-life' and the routine activities that it encompasses. Similar arguments are made by Warr (1998) who suggests that the emotional bonds of marriage may not be as central to the criminal desistance process as is the severing of ties to delinquent friends. This author tends to agree with Warr's line of reasoning, yet there remains the question as to why

some individuals are able to secure relationships that fosters these changes, while this is a more elusive goal for others. One possibility is that the heterosexual relationships that seem to offer a pro-social benefit are those that are not only low in conflict but are also characterized by monogamous behavior.

Laws against adultery and are rarely enforced in most U.S. criminal courts (Siegel, 1992)--perhaps because relationship infidelity is not typically considered antisocial behavior like that of domestic violence, or because of gender inequalities in political power that may favor a "hands-off" policy with respects to cheating, especially when the male partner is at fault. Regardless of the courts' position on extramarital sex, relationship infidelity in most instances represents a violation of trust and a willingness to renege on interpersonal contracts that entail monogamy (McAnulty & Brineman, 2007; Treas & Giesen, 2000). Thus, relationship infidelity may be a reflection of a continued risky pattern of behavior as well as a detriment to the stabilizing potential of some heterosexual unions. Infidelity, however, does need to be conceptually reinstated as antisocial behavior to have meaningful implications for the study of crime. Relationship infidelity and the quest for partner alternatives, which may have characterized one's style of involvement in adolescence, may also continue into adulthood, even though a concerted effort may have been made by individuals to solidify a long-term union. These cheating behaviors pose a risk for divorce and relationship disillusionment, but they may also create opportunities for crime and drug use. Much like the dating behaviors that go on in adolescence, attempting to cheat on one's partner may entail routines that are risky in terms of exposure to environments that provide definitions "favorable to the violation of law" (Sutherland, 1947). Bars, parties, and nightclubs provide the opportunity for

casual sexual encounters while also being closely associated with violence and illicit drug use. Consequently, the search for partner alternatives may incur a degree of risk that perpetuates one's own involvement in illegal behavior.

Likewise, acts of infidelity, as well as domestic violence and drug use, may serve as a source of stress or strain which generates a high degree of negative emotionality. General strain theory, as proposed by Agnew (2001), states that the presentation of such noxious stimuli may produce feelings of anger and frustration which actors resolve by engaging in crime and drug use (see also Buss, 2004). These risky and illegal behaviors are thought to give some temporary relief to the actor, however, they obviously present additional complications that might in turn generate more strain. In the study by McCarthy and Casey (2008), general strain theory was used to interpret the positive correlation between adolescent sexual involvement and delinquency. The authors of this study argue that the emotions surrounding adolescent sexual involvement produce strain, and in turn, delinquent behavior. Yet the analyses of this study did not actually include a measure of strain so as to verify that adolescent sex, particularly in the context of a relationship that is unconventional, does indeed produce negative emotionality.

Feelings of anger and frustration may certainly become a part of heterosexual relationships, however, prior research shows that individuals who engage in early sexual behaviors and delinquency are more, not less, likely to report permissive sex attitudes (Cleveland, 2003). If youth attitudes toward sex are permissive or liberal, then participation in this behavior may produce relatively lower levels of strain as compared to someone who is more restrictive or conservative in their views. Perhaps a more likely source of strain associated with unconventional relationships might be the levels of

conflict and infidelity present within them. Sexual jealously and the knowledge that a partner has been unfaithful may represent a much more concrete reason for becoming angry, frustrated, or even depressed; all of which are emotions that have been previously shown to be associated with crime and drug use (e.g., Giordano, Cernkovich, & Schroeder, 2007; Hagan & Foster, 2003). Concurrent drug use with partner may also serve as a source of strain as these behaviors may become fodder for arguments related to financial responsibility (Collins et al., 2007). In a more general sense, however, drugs in the relationship may hinder the development of interpersonal styles of rapport that are necessary for non-abusive conflict resolution. Moreover, while the conflict that arises in heterosexual relationships may be the result, as well as the cause of relationship infidelity and concurrent drug use, the negative emotions that stem from these social interactions may, in turn, be tied to criminal behaviors outside the contexts of heterosexual relationships, thus limiting the actor's ability to desist from illegal and risky activities in adulthood.

CHAPTER 5: COMPLICATIONS OF GENDER

This study hypothesizes that risky heterosexual attitudes and behaviors may not only increase the likelihood of teen pregnancy and STIs, but also participation in crime and drug use. If this line of theorizing is correct, then examining male-female differences in unconventional patterns of heterosexual involvement may also speak to the gender-gaps in crime and drug use. Moreover, female participation in less than conventional unions may present a risk for crime and other risk-taking behaviors that is greater than that of the

male heterosexual experience. In the following, I present two brief arguments for the potential mediating and moderating effects of gender.

Male patterns of heterosexual involvement tend to be riskier than that of females. Males, on average, tend to report more favorable attitudes towards casual sex and indicate having more uncommitted sexual partners than do females (e.g., Buss, 1989, 2004; Diamond, 1997; Laumann, 1994; Ridley, 1994). This constellation of stereotypical male attributes may represent the individual-level underpinnings of many social contexts in which unconventional heterosexual socializing is commonly pursued. While young men may indeed be more interested in casual sex, this does not imply that young women do not also seek out the occasional short-term partner. However female relationships with the opposite sex typically undergo more scrutiny and are more tightly regulated than the romantic/sexual relationships of young men (Steffensmeier & Allan, 1996, Hagan, 1985). The curtailing of delinquent behavior is only part of what concerns the social control efforts of the family and the community; regulating the heterosexual relationships of youth is also of chief importance (Browning et al., 2005; DeLamater, 1991). This is especially true for adolescent girls whose freedom to develop cross-sex contacts outside the family may be more heavily regulated by parents or guardians for reasons related to normative gender scripts (i.e. the gender double-standard) but also as a way to guard against early and unwanted pregnancy. These differences in heterosexual social control and gendered mating preferences may contribute substantially to the overall male-female gap in risk-taking behavior.

Participation in unconventional patterns of heterosexual involvement may also impose greater risks for female delinquency. Built into the structure of heterosexual

relationships is the tendency, at least for most men, to "marry up," or select a partner who is relatively less delinquent than they are (Laub & Sampson, 2003). Thus the female romantic partner may serve as model for behavioral change by setting new expectations and acting as a source of social control. As noted by previous scholars, however, this tendency of course limits the supposed conventionalizing influence of heterosexual unions mostly to men, and at the same time, suggests a differential set of mechanisms for explaining criminal desistence among women (e.g., Leverantz 2006).

Although this disparity is somewhat expected given the nature of opposite sex relationships (i.e. male levels of delinquent involvement are usually higher; Steffensmeier & Streifel, 1991), the characteristics that emerge within heterosexual unions may also have a gendered influence on partners' behavior. In terms of criminal involvement, men may be more heavily influenced by levels of discord and discontentment within these unions. Much research suggests that men, when confronted with interpersonal strains, are more likely than women to become angry and act out with violence and criminal perpetration (e.g., Broidy & Agnew, 1997; Dobash et al., 1992; Daly & Wislon, 1988; Agnew, 2001). The aggressive and violent actions of men, for example, are widely noted upon suspicion or discovery of their partner's sexually unfaithfulness (Buss, 2004; Daly & Wilson, 1988). Although other studies have noted the relative high degree of gender symmetry in the perpetration of domestic violence (Archer, 2000, 2002), men's otherwise risky and aggressive tendencies are likely to play a salient role in their ability to cope with the issues related to union conflict and infidelity, if and when they emerge. The negative emotions that stem from these interpersonal problems may not be limited to an intimate partner context, but in fact may motivate criminal actions across multiple social

settings (e.g., Agnew, 2001). Drug use in the relationship, for example, may impose greater relative risks for men because these behaviors may be more likely to escalate into serious patterns of abuse and chemical dependency (Bachman et al., 1997) that may in turn lead to other criminal behaviors (Schroeder, Giordano, & Cernkovich, 2007). Furthermore, men's risk for infidelity, which may or may not be related to other union characteristics, might entail relatively more opportunities for illegal activity as men may be more likely to seek out alternative partners and different sexual outlets in social localities that are hotspots for crime and drug use, such bars, nightclubs, and areas of a city in which prostitution and strip clubs are available (Sampson & Lauretsin, 1990).

It is possible, however that given men's relative weaker economic dependency on heterosexual relationships (Nock, 2001), the likelihood that discord and disloyalty will influence criminal involvement may be lesser for men than woman. Economic dependency may force some women to remain in relationships that are less than optimal (Felson & Messner, 2000; Kaukinen, 2004). This dependency may increase women's exposure to intimate partner abuse but may also magnify the relative importance of the overall quality of the union (Smock, Manning, & Gupta, 1999). Thus, the research appears to be mixed regarding how men and women might react to the strains or negative characteristics of their romantic relationships. At best, the past literature indicates that gender, to some degree, moderates the relationship between crime, heterosexual socializing, and the quality and early adult unions.

CHAPTER 6: HYPOTHESES

The hypotheses are organized into two sections. In addition to these sections are a set of hypotheses that focus specifically on gender. The aims of the first section are to analyze overall styles and strategies for navigating heterosexual relationships and the effects of these interpersonal dynamics on the likelihood of criminal involvement and drug use. The aims of the second section are to examine the characteristics of a specific heterosexual union and the influence that this partnership may have on criminal involvement and risky behavior in early adulthood. Connections to social class are highlighted in both sections.

SECTION 1

Structural Disadvantage, Heterosexual Relationships, and Risk-Taking: An Interpersonal Perspective on the Linkages between Social Class and Crime

The links between structural disadvantage and crime are arguably indirect (e.g., Wright et al., 1999), operating though various intermediate influences such as lax parental supervision, weak family bonds, delinquent peers, and disorder in the school and the community. The attitudes and behaviors associated with heterosexual socializing are also shown to be influenced by structural disadvantage (e.g., Baumer & South, 2001), potentially in ways that not only influence personal health, but also participation in crime and drug use. For example, youths who pursue relationships with the opposite sex in an unconventional manner, such as intercourse outside the context of dating, may be more likely to come into contact with deviant peers and delinquent romantic partners than those who restrict themselves to traditional forms of courtship (Seffrin et al., 2009).

Moreover, these unconventional behaviors are likely to be supported by a comparable set of attitudes that increase exposure to network contacts and routine activities often associated with juvenile delinquency—mainly, the unstructured and unsupervised socializing of same and opposite sex peers (e.g., Osgood & Haynie, 2006). Accordingly, the prior work suggests that risky heterosexual attitudes and behaviors in adolescence may constitute an intermediate link between delinquency and structural disadvantage by influencing the quality of social contacts, routine activities, and interpersonal relationships. Thus the following hypotheses are tested:

H1: Structural disadvantage influences juvenile delinquency indirectly through the development of risky heterosexual attitudes and behaviors which a) increase individual differences in unstructured socializing, and b) increase individual differences in deviant peer contacts; friends and romantic partners.

I expect these differences will exist net of traditional predictors for delinquency and drug use, including environments of uncertainty (structural disadvantage, school and community disorder), family processes (parental attachment, parental supervision, and parent-child conflict), early risky propensity (impulsivity), and demographic indicators.

The above hypotheses are designed to examine the cross-sectional relationships of structural disadvantage, heterosexual socializing, and delinquency. Yet these analyses do not address age-graded changes in these attitudes, behaviors, and interpersonal relationships. In order to address more specific questions regarding the longitudinal impact of heterosexual attitudes and behaviors on crime and delinquency the following hypotheses are evaluated.

H2: Age-graded increases, or within-person changes, in unconventional heterosexual attitudes and behaviors are factors that a) influence the longitudinal stability of individual differences in criminal involvement and drug use, and b) increase overtime the rates at which individuals use drugs and participate in crime (i.e. within-person changes).

These analyses include the same the control variables described for the previous hypothesis. However, additional factors, such as the overall between-person differences in permissive sex attitudes and friends' delinquency, are also included so as to isolate the effects of within-person changes in these respective attitudes and social contacts.

SECTION 2

Structural Disadvantage and the Character of Heterosexual Unions: Implications for Crime, Drug Use, and Risky Behavior in Early Adulthood

Permissive sex attitudes and unconventional behaviors may indeed influence life course changes in criminal participation and drug use, but the reasons for these interpersonal dynamics may, themselves, change with the passage of time. A significant proportion of the adolescent experience centers on dating and first sexual encounters (Giordano, 2003). Many of these early relationships are fleeting, although some mature into longer lasting partnerships that stretch into early adulthood. If, however, either partner has a history of unconventional behavior with respect to the opposite sex, the emergent characteristics of the union may be less than optimal as a positive influence on crime and drug use. In this second section, I examine the impact of earlier adolescent heterosexual experiences on

later adult union characteristics (i.e. conflict, infidelity, concurrent drug use, and attachment) and in turn, the influence of these characteristics on crime and drug use.

The style of heterosexual involvement that is developed in adolescence is shown in prior work to influence the timing and quality of later adult unions (e.g., Raley et al., 2007; Teachman, 2003). While these prior studies are not focused on crime, they imply a developmental process within interpersonal relationships that may be related to crime. More specifically, these adolescent experiences may influence the development of later union characteristics that are in turn related to crime and other risky behavior. The acquisition of socially desirable assets, such education, employment, and regular church attendance may, however, reduce the risk of entering into a union that is less than optimal in terms of relationship conflict, attachment, infidelity, and concurrent drug use. Unfortunately, earlier structural disadvantages may impede youths' progress towards securing these social assets, thus reproducing the social class positions of their parents (e.g., Elder, 1974)—a pattern that may also undermine individual efforts to develop conventional heterosexual relationships in adulthood. The following hypothesis is tested:

H3: Risky heterosexual attitudes and behaviors in adolescence will predict involvement in later adult unions with relatively high levels of conflict, infidelity, concurrent partner drug use, and relatively low levels of partner attachment.

I expect that adolescent attitudes and behaviors will continue to influence these union characteristics even after controlling for social assets (education, employment, and religious attendance), relationship type, relationship duration, and demographic control variables.

These union characteristics may, in turn, influence criminal behavior and risk-taking in early adulthood. The research on criminal desistance, for example, suggests that marriage has a conventionalizing effect because of the emotional attachments developed between spouses and the level of commitment to conventional adult lifestyles that are often entailed in these unions (Laub & Sampson, 2003; Warr, 1998). Additional complications may arise, however, in the forms of conflict, infidelity, and concurrent partner drug use that may consequently diminish the potentially pro-social benefit of marriage and similar unions (e.g., cohabitation and long-term dating relationships). The following hypothesis is evaluated:

H4: Adult relationships characterized by high levels of conflict, concurrent drug use, and a high risk of infidelity will predict individual differences in criminal involvement, drug use, and risky routine activities (going out to bars/nightclubs) even after levels of partner attachment are controlled.

In addition to controlling for attachment, the same control variables described immediately above are also included in these analyses.

Complications of Gender

Women as a group tend to report fewer heterosexual risk-taking attitudes and behaviors (e.g., Buss, 2004). However if these unconventional repertoires are related to crime and drug use as hypothesized, then women who are similar to men with respects to their styles and strategies for heterosexual socializing may also report participating in similar levels of crime and drug use.

H5: Women who are similar to men regarding heterosexual attitudes and behaviors will also participate in similar levels of crime and drug use (mediation).

Moreover, while previous research indicates that the predictors of crime and drug use are similar for both genders (e.g., Steffensmeier, 2000; Steffensmeier & Allan, 1996), men and women may react with varying degrees of criminal severity given the same antecedents (e.g., Broidy & Agnew, 1997). Men, on average, may indeed be likely more to act out in an aggressive or violent manner when personally threatened (e.g., Daly & Wilson, 1988). Within the context of heterosexual relationships, however, women may be more sensitive to interpersonal adversity because of their relatively greater dependency on men for providing resources and protection. Severe and persistent and verbal and physical conflict, for example, may indicate that the male partner is not going to be economically reliable in the long-term, thus creating potentially high levels of anger and despair in those women who have invested a significant portion of their time and resources into the relationship. These gendered dynamics are of course in addition to the relative greater delinquency risks that women face by dating someone who, in all likelihood, is more experienced in criminal behaviors than what they are (i.e. men's higher average involvement in crime). Thus it is reasonable to assume that influences of unconventional patterns of heterosexual involvement and negative union characteristics on crime and drug use may be moderated by the gender of the actor, albeit in opposing or contrary directions. The following hypotheses are tested:

H6: The influence of unconventional heterosexual attitudes, behaviors, and negative union characteristics will be a) stronger for men due to their greater likelihood of reacting violently or aggressively to personal threats and adversity, or b) stronger for women due to a relatively heightened sensitivity to the tenure of heterosexual relationships and because of the average male-female differences in criminal involvement.

CHAPTER 7: DATA, MEASURES, AND METHODS

This research utilizes four waves of panel data from the Toledo Adolescent Relationships Study "TARS" (a stratified random sample of 1,316 adolescents and their parents/guardians). The TARS data set is a longitudinal survey collected over four waves in the years 2001, 2002, 2004, and 2006, respectively. The TARS data contain detailed information on aspects of interpersonal relationships not available in other data sets. Studies such as Add Health and NYS contain information on friends and romantic partners, but are limited in the range of interpersonal qualities that they survey. TARS, with its emphasis on the relational aspects of adolescents and young adults, presents a unique opportunity for examining the heterosexual dimensions of criminal involvement.

The sampling frame of the TARS study encompassed 62 schools across seven school districts. The initial sample was in grades 7th, 9th, and 11th. Students did not have to attend school to be included in the study. The stratified, random sample was devised by the National Opinion Research Center and includes over-samples of African American and Hispanic adolescents.[2] Based on Census data, the socio-demographic characteristics

[2] The sampling frame was divided into 18 strata by grade, race/ethnicity, and sex. When students who were initially selected dropped out of the study, the sample was expanded by selecting the "next" unselected

of the Toledo metropolitan area closely parallel those of the nation in terms of race (13% in the Toledo MSA and 12% in the U.S. are African American); education (80% in the Toledo MSA and 84% in the U.S. are high school graduates); median family income ($50,046 in the Toledo MSA and $50,287 in the U.S.); and marital status (73.5% in the Toledo MSA and 75.9% in the U.S. are married couple families). Structured interviews were conducted for all four waves, using laptop computers and software that contained the survey items. Parent reports from the first wave of data collection are used in this paper to gauge the levels of socioeconomic status, family structure, and youth supervision.

The initial sample included 1,316 respondents and Wave 4 retained 1, 1,088 valid respondents, or 83% of wave 1. Most of the analyses rely on data from Wave 1 and wave 4. However, some analyses of change in drug use and crime use data from each of the four waves. The average age of the respondents is 15 years in wave 1, 16 in wave 2, 18 in wave 3, and 21 years in wave 4. The average time interval separating the second wave from the first is about 14 months, approximately 21 months (on average) separate the third wave of interviews from the second, and approximately 25 months (on average) separate the fourth wave of interviews from the third wave. The total time of the study ranges from 0 to 75 months, although the average study length is 61 months. The analytic sample (N= 930) is based on respondents who participated in waves 1 and 4 and who reported information pertaining to a romantic partner at wave 4.[3]

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student from the same stratum. Sampling weights were calculated based on the inverse probability of selection.

[3] There were 1,088 respondents who participated in waves 1 and 4 of the TARS study, of which 86 cases were subsequently deleted for not reporting on a current or previous partner at the fourth wave of data collection. Logistic regression revealed that age at wave 1 is positively related to the likelihood of missing data on a romantic partner at wave 4. Correcting for this sample-selection bias using Heckman's Two-Step approach is possible but not a realistic option given the relatively small portion of the sample that is

MEASURES

The measures are organized around the hypotheses listed above. Exploratory factory analysis was used on all scales listed below. Orthogonal and oblique rotation methods revealed that each scale is best represented by a single underlying dimension. The variance explained by each factor or dimension was at least twenty percent, all with Eigen-values that exceeded one (see Appendix 1 and 2).

Section 1

Environments of Uncertainty

Structural disadvantage is the only scale in the study measured with census block-level data. Items from the scale include: percent of single mother homes, percent of unemployed adult men, and percent of residents without a high school diploma (see McNulty & Bellair, 2003 for an example). A scale is created by taking the mean across all of the items. The scale is then divided into quartiles, with the top and bottom quartiles representing high and low levels of disadvantage, respectively.[4] Cronbach's alpha = .83.

School Disorder is a 6-item scale that asks the youth respondents "how much do you agree or disagree that the following are problems in your school: fights between students, drug use, vandalism, theft, and students having weapons?" Responses range from (1)

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missing and the difficulties involved in finding a variable that is strongly related to the hazard of selection (i.e. missing) but not significantly correlated with the outcomes; crime and drug use (DeMaris, 2004). Thirty-one respondents at the wave 4 interview are between seventeen or eighteen years of age and still in high school. Because of the statistical and theoretical difficulties in comparing this small subset of respondents to the rest of the sample, they were deleted from all analyses. For similar reasons, 21 respondents who identified as a minority other than black or Hispanic were also deleted. Lastly, 20 additional cases were deleted due to random missing data on several other variables measured at wave 1.

[4] Structural disadvantage quartiles do not vary significantly by age or gender of the adolescent respondents.

strongly disagree, to (5) strongly agree. A scale is created by taking the mean across all of the items. Cronbach's alpha = .79.

Community Disorder is a 6-item scale that asks parents "how much of a problem are the following in your neighborhood: quarrels in which someone is badly hurt, youth gangs, drug use or drug dealing in the open, and prostitution?" The two other items ask "how much do agree or disagree that people in this neighborhood look out for each other?" and "how safe do feel in this neighborhood?" Items were standardized and recoded so that higher values indicate higher levels of disorder. A scale is created by taking the mean across all of the items. Cronbach's alpha = .81.

Risky Heterosexual Attitudes and Behaviors

The adolescent period is marked by significant developments in heterosexual involvement. During this period most youths begin to date, become physically involved to varying degrees with romantic partners, and reorganize peer-networks to include members of the opposite sex. For many youths, these experiences represent a significant leap towards adulthood by facilitating feelings of accomplishment and providing a sense of autonomy (Giordano, 2003). For some youths, however these early relationships also impose a degree of risk, not only in terms of HIV/STI's, but also delinquency and drug use.

Behaviors

Physical Involvement at wave 1 is measured using three mutually exclusive dummy variables. The first identifies youths with little to no cross-sex physical contact (e.g., just

holding hands). The second dummy includes youths who have kissed and/or engaged in heavy petting and youths who are sexually active (i.e. non-virgins by way of intercourse) but strictly within the contexts of a romantic relationship. The third dummy represents youths who are sexually active and report some level of involvement in unconventional behaviors, such as non-relationship sex, early loss of virginity (i.e., 13 years or younger), cheating on a partner, and getting (someone) pregnant as a teen. This coding scheme demarcates youth into three progressive levels of physical involvement, but more important for the purposes of the current study, it separates sexually active youths from those who have engaged in risky and unconventional forms of heterosexual involvement.

Attitudes

Although dating and sexuality obviously encompass a behavioral dimension, the adolescent's more general repertoire of attitudes and emotional responses within the heterosexual domain are also important to consider. Opportunities for heterosexual socializing may be curtailed if youths are sexually unappealing due to personal attributes (e.g. over-weight, acne pocked complexion, and late pubertal timing) or because of limited access to the opposite sex. Limited access to opposite sex partners may occur because of geographical location of the home, school makeup, and other extenuating circumstances such as spending time in a juvenile detention center or being placed on house arrest. Attitudes, on the other hand, may reflect intentions even though the physical ability to act on them may be restricted. Attitudes may also tap more directly into an individual's view of self; thereby providing greater insights into what may motivate behaviors than what can be gleaned from examining physical actions alone. Furthermore,

relatively younger adolescents may not have experienced a physical relationship, yet their attitudes may indicate the potential for future involvement in risky and unconventional behaviors with members of the opposite sex. In the current study I explore adolescent attitudes that index the degree of trust that is experienced with regard to cross-sex relationships and the level of normative restrictions that youths place upon themselves within the arena of dating and sexual activity.

Gender Mistrust is measured at wave 1 with a scale that includes seven items. These items represent a subset of questions pertaining to the perceived intentions and behaviors of the opposite sex. Example items include "you can't trust must guys/girls; girls are too boy crazy; girls will often use a guy to make another guy jealous; you can't trust most girls around other guys." Responses range (0) strongly disagree, to (4) strongly agree. A scale is created by taking the mean across all of the items. The scale is intended to tap the overall levels of mistrust and cynicism that youths harbor with respect to cross-sex relationships. Cronbach's alpha = .69.

Permissive Sex Attitudes are measured across all four waves with a scale that contains five items that ask about the appropriateness of sexual relations under varying circumstance (i.e. before marriage, outside of a relationship). Responses range (0) strongly disagree to (4) strongly agree. Item responses are coded to reflect increasingly permissive attitudes toward sex. A scale is created by taking the mean score across the five items. Cronbach's alpha = .64[5]

[5] Previous analyses with the TARS data indicate that the alpha reliability on the permissive sex attitudes scale moves up in subsequent waves of data collection, reaching a peak alpha of .77 at wave 4 (using the

Crime, Drug Use, Deviant Peer Contacts, and Routine Activities

Delinquency/Crime is measured with a 7-item scale which asks respondents "how often in the past 12 months have you: stolen something worth 5 dollars or less; stolen something worth more than 50 dollars; damaged or destroyed property on purpose; carried a hidden weapon other than a plain pocket knife; attacked someone with the idea of seriously hurting him/her; sold drugs; and broken into a vehicle or building (or tried to break in) to steal something or just look around?" Responses range (0) never, to (8) almost daily. A scale is created by summing the responses. The resulting summation score is logged to normalize the distribution. The delinquency measures are adapted from the earlier scale development work of Elliott, Huizinga, and Ageton (1985). Cronbach's alpha = .80.

Drug use is a single item which asks respondents "how often in the past 12 months have you used drugs to get high not because you were sick?" Responses range (0) never, to (8) almost daily. Items are recoded same as the delinquency scale above. A scale is created by summing the responses. The resulting summation score is logged to normalize the distribution.[6]

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current analytic sample). Cronbach's alpha values remain relatively steady, however, for subsequent measures of crime and friends' delinquency.

[6] Although the use of illicit drugs is officially recognized as a crime and a delinquent act, the drug use item in the current study is analyzed separately because, unlike the other crime and delinquency items, it describes a non-predatory act and requires a degree of specialized access in order to be accomplished (i.e. knowing someone who sells illegal drugs).

Friends' Delinquency is measured with an 8-item scale that refers to the behaviors of the five friends that the respondent "hangs out with most of the time." These scales are measured with the same eight items as the self-report scales above, including drug use, and are also logged to normalize the distributions. Cronbach's alpha = .82.

Romantic Partner Delinquency is measured with the same eight items as friends' delinquency, but because not all respondents were dating at the wave 1 interview, the measure was divided into three categories: not dating, dating someone who is non-delinquent, and dating someone who is delinquent.

Unstructured socializing is measured with one item that asks respondents "during the past week: how many times did you just hang out with your friends?" Responses range (0) not at all, to (3) five or more times. While this single measure of unstructured socializing is less than ideal, it does reflect similarly to that of previous work (see Haynie & Osgood, 2005 for example).

Going out to bars/nightclubs is measured at wave 4 by asking respondents "how often do you go to a bar, pub, or nightclub" Responses range (0) never, to (7) almost daily. Although presented here, this measure is not actually utilized until the second section of the study.

Control Variables for the First Section

Family Processes

Previous research indicates that the family structures and the parent-child dynamics nested within these environments are strongly correlated with delinquent behavior, sexual risk-taking, later relationship conflict (e.g., Demuth & Brown, 2004; Longmore et al., 2001; Swinford et al., 2000; Zimmer-Gembeck & Helfand, 2008). Four measures are used to control for family processes.

Parental Attachment is measured at wave 1 with a 5-item scale from the teen survey that assesses the degree to which adolescents feel bonded or emotionally attached to their parents. The items include: "my parents often ask about what I am doing in school; my parents give me the right amount of affection; my parents trust me; I feel close to my parents; and I'm closer to my parents than a lot of kids my age." Responses range from (1) strongly disagree, to (5) strongly agree. A scale is created by taking the mean across all of the items. Cronbach's alpha = .76.

Parental Supervision is measured with a 4-item scale that asks parents "how often do you allow your child to stay home alone after school, all day when there is no school, at night, over-night?" Response range from (1) never, to (5) very often. A scale is created by reverse coding the items and taking the mean across all of the items. Cronbach's alpha = .80.

Parent-Child Physical Conflict is measured with two items that ask youths "when you and your parents disagree about things how often do they push, slap, or hit you?" and "how often do you push slap or hit them?" Response range from (1) never, to (6) two or more times a week. Due to the low level of affirmative responses, this measure was dichotomized as (1) for any physical conflict, and (0) otherwise.

Early Risky Propensity

Impulsivity, and its popular variant, low self-control, is argued to give rise to multiple forms of risk-taking, including crime, drug use (Pratt & Cullen, 2000). Impulsivity is controlled for in the current study to allow for the possibility that the relationship between crime and risky heterosexual behavior is spurious. *Impulsivity* is measured in the current study using two items. The first asks respondents "how often do you have trouble paying attention in school?" Response range from (1) never, to (5) very often. The second asks "do you have a learning disability such as: dyslexia, attention deficit, hyperactivity, etc?" If an affirmative response was given to either one of these items, respondents were coded as (1) for impulsivity, and (0) otherwise. While the number of survey items that comprise impulsivity are small when compared to similar measures used in other studies (Grasmick et al., 1993), the content of these items are in line with recent research on the potential effects of ADHD and other learning disabilities on the likelihood of crime and risky behavior (Wright & Beaver, 2005).

Demographic Variables

Family structure is dichotomized (1 = biological family intact) and (0 = for other family structures). While the category "other family structures" includes an array possible living arrangements, previous research suggests that the largest delinquency differences are found between youths from biologically intact families and all other family forms (Brown, 2006; Demuth & Brown, 2004).[7]

Age is measured in years at the first interview. *Gender* is dichotomized (1= female). *Race/Ethnicity* is represented with three dummy variables: white, black, and non-white Hispanic/Latino, with white as the reference category.

Measurement for Analyzing Change

For the purpose of analyzing change, the measures for crime, drug use, deviant peer contacts, and unstructured socializing are repeated at waves 2, 3, and 4. The permissive sex attitudes measure is repeated at each wave while gender mistrust is not. The risky or unconventional behavior measure is treated in this section as continuous; each behavior is scored as (1) for any participation, or (0) for no participation and then the items are summed to create an overall index. Romantic partner delinquency is also treated as a continuous variable in the analyses of change where (0) indicates respondents who are not dating as well as those who are dating non-delinquent partners. When analyzing change, it is also necessary to demarcate within-person observations with a measurement

[7] See Apel & Kaukinen (2008) for a discussion on the variability in delinquency among youths from non-traditional family structures.

of time. In the current study, *time* is clocked by the number of months since the first interview. All respondents have a value of zero for time at first interview and then vary from one another for the three follow-up interviews.

Characteristics of Adult Unions

Previous research suggests that emotional attachment to a spouse or partner is beneficial in terms of reducing the risk for criminal involvement (Laub & Sampson, 2003; McCarthy & Casey, 2008). The presence of conflict, drug use, and infidelity within these relationships may, however, counterbalance their supposed conventionalizing effects. In the current study, relationship characteristics are measured at the wave 4 interview in which most all of the youth respondents report some level of involvement with the opposite sex.

Conflict is a scale consisting of fourteen items that ask the respondent if he/she, or their partner, has engaged in physical or verbal abuse over the duration of the relationship. Example items include "During your relationship with X, has he/she pushed you, shoved, or grabbed you; slapped you in the face with an open hand; hit you; put down your physical appearance; ridiculed your values or beliefs?" Respondents were then asked if they perpetrated any of these abusive behaviors. Responses range (0) never, to (4) very often. A scale is created by summing all of the items. The resulting summation score is logged to normalize the distribution. Cronbach's alpha = .90.

Infidelity Risk is a scale that consists of fourteen items. Example items from this scale include "I might cheat on my partner if: I no longer loved my partner; my partner cheated on me first; I was caught up in the moment; another person made me feel wanted and attractive; I'm too young to be tied down to one guy/girl; when it comes to guys/girls, I enjoy the chase for than the relationship." The scale also includes items that ask "since your relationship started with X, how often did you see another guy/girl; how often did you get physically involved with someone else?" Responses range (0) strongly disagree, to (4) strongly agree/never to very often. A scale is created by taking the mean across all of the items. The relationship infidelity scale is intended to tap the respondents' overall commitment to the notion of being involved in a monogamous union. Cronbach's alpha = .92.

Concurrent Drug Use is a single item that asks respondents "how often do you use drugs with X?" Responses range (0) never, to (4) very often. Due to the low level of affirmative responses to this survey item, the measure was dichotomized; (1) if any drug use in the relationship, (0) otherwise.

Attachment is a scale that consists of 6 items: "X is very attractive to me; I'd rather be with X than anyone else; X always seems to be on my mind; and the sight of X turns me on; how much do you love X; how much does X love you?" Responses range (0) disagree/not at all, to (4) strongly agree/very much. A scale is created by taking the mean across all of the items. The partner attachment scale is intended to the tap the overall

level of emotional investment that the respondent places in his/her partner or spouse (see McCarthy & Casey, 2008 for a similar example). Cronbach's alpha = .87.

Past studies have emphasized that stable employment, educational attainment, and religious adherence are social assets that often accompany marriage as part of a respectability package that makes criminal desistance in early adulthood possible (Giordano et al., 2002). These social assets are controlled at wave 4 not only for their purported buffering effects against criminal involvement, but also for the reason that they represent a more updated and proximal measure of the respondent's social class position than the structural disadvantage index measured at wave 1. This study controls for these social assets in addition to the basic parameters of the adult unions: type and duration. The structural disadvantage index and demographic indicators are also controlled for in this section of the analyses.

Relationship Type is measured using three dummy variables: married, cohabiting, and dating. Given the age range of the sample at wave 4 (17 to 24), it is likely that the majority of the respondents are in a 'dating' relationship, however, for those who are already married or cohabiting, these relationship types may potentially represent a life course that is somewhat accelerated when compared to the majority of their peers.

Relationship Duration refers to the length of the respondents' current, or most recent romantic relationship. Relationships of longer duration may indicate commitment on the part the actor to lead a conventional lifestyle. Responses range (0) less than a week, to

(4) more than a year. This study also includes a dummy variable that indicates whether the romantic partner the respondent is referring to is current or recently dated.

Social Assets: "Adult Respectability Package"

Socioeconomic Achievement is measured with a composite of education and employment indicators. There are four socioeconomic achievement categories ranging from more than twelve years of education (i.e. beyond high school) and working full-time to less than twelve years of education and unemployed. *Religious Attendance* at wave 4 is measured with one item that asks "how often do you attend religious services?" Responses originally range (0) never, to (4) daily. Responses were recoded into three levels of attendance: never attend; rarely attend (about once a year); regularly attend (at least once at month). While religious and spiritual belief typically accompanies religious attendance, previous work suggests that strong religious attitudes and extremist view - points (e.g., Biblical literalism) are more commonly held among individuals living in impoverished communities whereas regular church/temple/mosque attendance is more often associated with educated and economically stable groups (Steensland et al., 2000; see however Stark, 2007).

ANALYTIC STRATEGY

The current study draws on four waves of panel data to investigate the linkages between structural disadvantage, heterosexual relationships, crime, and drug use. Indicators of structural disadvantage are examined throughout the study as exogenous social forces. Structural disadvantaged is hypothesized to influence the development of heterosexual

attitudes and behaviors, and in turn, predict variations in criminal involvement and drug use in adolescence through to adulthood. Two major objectives guide these analyses.

The first objective is to examine the respondents' overall style or strategy for heterosexual involvement as a significant factor in the life-course of crime. This objective includes analyses that utilize the first wave of the TARS data, when most of the respondents were between fourteen and sixteen years of age. It also draws on all four waves of the data to conduct a longitudinal analysis on the effects of changing attitudes and behaviors in emerging adulthood. The second objective is to examine the characteristics of a specific union in early adulthood and their influence on antisocial behavior and drug use beyond the crime-peak years. The second objective draws on waves 1 and 4 of the data in order to examine the longitudinal influence of adolescent experiences on later adult behavior.

In connection with the first objective, impulsivity is also examined as a potentially important intervening variable that, when included in the models, may reveal a spurious relationship between heterosexual involvement and crime. In addition, deviant peer contacts and unstructured socializing are examined as mediating mechanisms in the relationship between delinquency and heterosexual involvement. Unique to the second objective is the examination of social assets, which are positioned in the analyses as factors that may protect against or serve to limit the aggravating influences of a less than optimal adult union on the chances for criminal desistance. The specific methods for achieving these objectives are described below.

Bivariate Analyses

Bivariate analyses are used to examine between-person differences according to structural disadvantage quartiles. As structural disadvantage is the only measure in the current study that is not self-reported by the parent or youth respondents, it is important that its relationship with other variables not only be in synch with prior work, but also that the direction and nature of these relationships fall in line with current theorizing. Using quartiles of structural disadvantage as the basis of comparison, this study examines differences in means (ANOVA) and proportions (chi-square), primarily at wave 1 and wave 4 for crime and drug use, adolescent heterosexual attitudes and behaviors, adult union characteristics, social assets, deviant peer contacts, routine activities, deviant peer contacts, and early risky propensity.

Between-Person Differences

These analyses are followed by a series of multivariate regression models for examining between-person differences, each of which test for gender moderating influences. The multivariate analyses of the current study are organized around the hypotheses described above. Given the continuous nature of the dependent variables, OLS regression is the primary method of analyses used to examine between-person differences in crime, drug use, deviant peer contacts, and routine activities at wave 1 and wave 4, and union characteristics at wave 4. There are, however, two major exceptions. Romantic partner delinquency at wave 1 is analyzed using multinomial logistic regression because the measure contains three discrete categories. Likewise, concurrent drug use is analyzed

using binomial logistic regression because the measure is dichotomous. For most all of dependent variables, the zero-order relationships are presented first, followed by a series of models that separately estimate the effects of each heterosexual variable (i.e. permissive sex attitudes), and each union characteristic (i.e. infidelity), plus control variables. Full models are then presented. Models estimated for adult union characteristics take a slightly different approach where in adolescent attitudes and behaviors are entered into the analyses as a block intended to represent a holistic snapshot of early heterosexual experiences. Zero-order models for the multilevel/mixed regression are not presented in tabular form, however, some of these results are reported in order to supplement related analyses. Gender moderation effects are tested for the heterosexual variables and union characteristics. The OLS regression estimates are compared to estimates yielded from more specialized techniques (i.e., Tobit's regression and ordered logistic regression) so as to assess the sensitivity of the findings.

Analyzing Change

We use a multilevel/mixed model procedure to examine changes in crime, heterosexual attitudes and behaviors, deviant peer contacts, and routine activities (e.g., Singer & Willett, 2003). This regression technique estimates the between and within-person effects of X on the mean differences in Y and the rates of change in Y. Within-person centering is used to isolate the effects of change in X. Within-person measures are created by subtracting each respondent's overall average on X (across all waves) from each time-ordered observation of X. Within and between-person components are then including in each regression equation. The variable representing time (months into study), and the

intercept are modeled as fixed effects with a random variance component. By allowing the intercept to have a random variance component, I model the differences in the estimate of error between-persons (i.e. heterogeneity), and by allowing time to have a random variance component, I model the differences in the estimate of error within-persons (i.e. over time). Moreover, the within and between-person effects of X on the rates of change in Y are estimated with the cross-product of time (months into study) by X. This statistical method improves upon ordinary-least-squares estimates and cross-sectional designs by modeling the serially correlated and heteroscedastic error structure that underlies time-series panel data (see Lauretsin (1998); Raudenbush & Chan (1992) for related discussions).[8]

The multilevel/mixed regression is conceptualized as a two-level model, but for ease of interpretation, I present level one and two models as a composite.

Composite Model:

$$Y_{ij} = \sum_{i=1}^{n} 0_i \gamma_k X_{ik} + (\varepsilon_{ij} + \zeta_{0i} + \zeta_{1i} \text{Time}_{ij}).$$

The notation $\sum_{i=1}^{n} 0_i \gamma_k X_{ik}$ is the structural part of the model and represents a vector of fixed effects and the intercept for the *i*th respondent at the *j*th time of measurement. The notation $(\varepsilon_{ij} + \zeta_{0i} + \zeta_{1i} \text{Time}_{ij})$ is the stochastic part of the model and represents the random variance components (ζ) for time and the intercept, and the error (ε). Unlike between-

[8] Multivariate data formats are converted in person-period formats by repeating each person-level id for all variables, across all longitudinal data waves (see Willet, 1998 for more detailed instructions).

person analyses described above that utilized OLS regression, the beta estimates produced by the multilevel/mixed model are not standardize but are still subject to a 'unit impact' interpretation.

In addition to the regression models, I also present figures that display the estimated trajectories for crime, drug use, permissive attitudes and unconventional behavior. These trajectories are estimated via regression at four age points (15, 16, 18, and 21 years) and at each quartile of structural disadvantage in order to evaluate the potential of a delayed on indirect impact on crime and drug use.

CHAPTER 8: RESULTS (PART I)

In the following analyses, I examine the indirect impact of structural disadvantage on juvenile delinquency by exploring heterosexual attitudes and behaviors as potentially important intermediate mechanisms.

Bivariate Results

Table 1 displays wave 1 means and proportions across four quartiles of structural disadvantage. Results from one-way ANOVA models and chi-square tests indicate negligible differences in levels of self-reported delinquency, drug use, deviant peer contacts, and unstructured socializing across the four quartiles. In contrast, there are statistically significance differences in heterosexual attitudes and behaviors, where the most disadvantaged youths (Quartile 4) report significantly more permissive sex attitudes, more gender mistrust, and greater involvement in unconventional heterosexual behavior than the least disadvantaged youths (Quartile 1). For example, 24 percent of

youths from the top quartile of disadvantage report engaging in unconventional heterosexual behavior compared to only 9 percent of youths from the bottom quartile of disadvantage. These bivariate comparisons support the notion that adolescent styles and strategies of heterosexual socializing are directly associated with class-related experiences whereas delinquency, unstructured socializing, and deviant peer contacts are not.

The proportion of respondents at wave 1 who report an early risk propensity (impulsivity) do not vary significantly across levels of disadvantage, while mean levels of school and community disorder are significantly higher among the most disadvantaged respondents (see Table 1). Differences in family processes are less consistent. Mean levels of parental attachment are significantly higher among the least disadvantaged youths when compared to mean levels at the third quartile of disadvantage, but comparisons between the top and bottom quartiles are negligible. Mean levels of parental supervision, as indicated by the parent respondents, are significantly higher among the most disadvantaged youths (Quartile 4) when compared to the least disadvantaged (Quartile 1). However, a significantly larger proportion of youths from the top quartile of disadvantage report physical conflict with their parents (29%) versus youths from the bottom quartile (17%). Lastly, while mean age levels and gender proportions do not vary significantly across quartiles of structural disadvantage, minority youths and youths from two-parent (biologically intact) families are significantly underrepresented in the first and fourth quartiles, respectively.

Between-Person Regression Results

The multivariate analyses test whether structural disadvantage and delinquency are linked indirectly via the experiences associated with heterosexual socializing. With exception to the multinomial models for dating a delinquent partner, beta estimates in the OLS regression models are standardized which allows for the direct comparison of the covariates' effect size. Standardized beta estimates are equal to the effect of a 1 standard deviation difference in X on the proportion of difference in a 1 standard deviation in Y. For the multinomial models (see Table 3), 'dating a delinquent partner' is the comparison category. Results are discussed in the order of the modeling sequences.

As shown in Tables 2-4, zero-order models (displayed in column [1]) that analyze variations in deviant peer contacts and unstructured socializing indicate that permissive sex attitudes, gender mistrust, and unconventional heterosexual behavior positively predict friends' delinquency, and romantic partner delinquency. Positive and significant beta effects are also found with regard to unstructured socializing, however, the effect of gender mistrust is significant and a slightly negative (see Table 4). As shown in Tables 5 and 6, positive and significant effects for the heterosexual variables are also found in zero-order models of delinquency and drug use. Gender mistrust does not, however, significantly predict drug use.

At the zero-order (displayed in column [1]), impulsivity does indeed show positive and significant effects on all outcomes except for dating delinquent partners (see Table 3). However the significant effects of the heterosexual variables are consistently larger than impulsivity for all outcomes. While the effects of structural disadvantage are largely negligible for all outcomes, there are significant zero-order relationships detected

with regards to friends' delinquency (see Table 2) and unstructured socializing (see Table 4). Youths from the bottom two quartiles of disadvantage have significantly less delinquent friends than youths from the top quartile, yet these differences are reduced to non-significance in the following models that control for family processes and demographic variables. As for unstructured socializing, youths from the first and third quartiles of disadvantage engage in significantly more "hanging out with friends" than youths from the fourth quartile (see Table 4). School and community disorder, for the most part, positively predict these outcomes (except for unstructured socializing) while high levels of parental attachment exerts a fairly consistent negative or protective influence. Similar results are found with respects to parent supervision and parent-child conflict at the zero-order. Family structure effects are largely negligible except in the case of friend delinquency in which case youths from intact families are estimated to have significantly lower levels when compared to youths from non-traditional family forms (see Table 2).

The estimates for male indicate higher mean levels of friends' delinquency, unstructured socializing, and self-reported delinquency, whereas the estimates for female compared to male indicate a higher likelihood of dating a partner who is delinquent versus one who is not (see Table 3). Hispanic youth, over white youth, indicate significantly higher mean levels of friends' delinquency, self-reported delinquency, and drug use, but relatively lower levels of unstructured socializing (see Table 4). Black youth, compared white youth, indicate significantly lower levels of drug use and unstructured socializing. The race effects for the dating analyses are not significant (see Table 4). Age effects, where they are significant, are largely positive except in the

multinomial model for not dating vs. dating a delinquent partner, in which case older respondents are significantly more likely to be dating a delinquent partner than not dating (see Table 3).

Models displayed in column [2] include all covariates except for the heterosexual variables. Impulsivity positively predicts self-reported delinquency, and drug use, but not unstructured socializing or the likelihood of dating a delinquent partner, net of other covariates. Moreover, in analyses not shown here, impulsivity was examined as a predictor of unconventional heterosexual attitudes and behaviors. Results from these analyses indicate that impulsivity shares positive and significant relationships with permissive sex attitudes and unconventional behavior, net of controls for family process, structural disadvantage, and demographic variables. These results suggest that impulsivity represents a fairly reliable control for testing the notion that the relationship between heterosexual socializing and delinquency is spurious, or a by-product of the same underlying trait (e.g., Gottfredson & Hirschi, 1990).

Structural disadvantage shares no significant relationships with delinquency, drug use, friends' delinquency, and unstructured socializing, net of other covariates. However school disorder and the family processes of attachment and parent-child conflict are fairly consistent predictors of these outcomes. Exceptions include the negligible effects of school disorder on drug use and dating a delinquent partner. Interestingly, net of other covariates, youths from the bottom quartile of structural disadvantage are actually more likely to date a delinquent partner than a non-delinquent partner when compared to youths from the top quartile of disadvantage (see Table 4). This finding suggests that under normal circumstances, structural disadvantage has little to no direct impact on the

likelihood of dating a delinquent partner. Yet in cases where economically advantaged youths share some of the same risk factors more commonly associated with the experiences of disadvantaged youths (i.e. parent-child conflict), they are in fact at a relatively stronger risk of becoming romantically involved with someone who uses illegal drugs and participates in criminal activities. The effects of the demographic indicators are similar to the zero-order models.

Models displayed in columns [3], [4], and [5] test the individual effects of each heterosexual variable, net of controls for impulsivity, environments of uncertainty, family processes, and demographic indictors. Although the effect sizes are reduced in most models, the beta estimates for heterosexual attitudes and behaviors remain largely positive and significant. For example, in the model for delinquency (see Table 5), the effect of conventional sexual behavior is -.281, indicating that there is nearly an estimated one-third of a standard deviation difference in delinquency between these youths and those who report unconventional heterosexual behaviors, net of other covariates. Moreover, the effect of this variable is more than twice the effect size estimated for impulsivity in the same model. The effect of gender mistrust on delinquency is, however, reduced to non-significance in this model, but its effect on friends' delinquency remains positive and significant. Compared to the models in column [2], there are also notable changes with regards to the effects of the demographic variables. However, these differences will be addressed in the full models after all heterosexual variables are included.

Models displayed in column [6] include all covariates. Net of all covariates, the effects of heterosexual attitudes and behaviors remain positive and significant. In fact,

the significant standardized effects of the heterosexual variables are of equal or greater magnitude when compared to the effect sizes of other significant covariates. Moreover, it is important to note that for most of these outcomes, there are significant differences between youths who are sexually active in a conventional manner, and those who engage in risky or unconventional sexual activities. These results illustrate the importance of distinguishing traditional dating courtships from more unconventional styles of heterosexual involvement when examining variations in delinquency.

Regarding demographic effects, in the models for friends' delinquency, unstructured socializing, and self-reported delinquency (see Tables 2, 4, and 5) the beta estimates indicate that the average male-female difference in these measures are reduced to non-significance after controlling for heterosexual attitudes and behaviors. In other words, while adolescent females report lower average levels of permissive sex attitudes and unconventional behavior when compared to male adolescents, the subset of females who are like males in heterosexual attitudes and behaviors also tend to engage in male-average levels of deviant friend contact, unstructured socializing, and delinquency. Heterosexual attitudes and behaviors also show mediating effects on the average difference in drug use between Hispanic youth and white youth (see Table 5). Including all heterosexual variables in this model also reduces the effect of impulsivity to non-significance, indicating that these interpersonal factors may be more relevant for understanding patterns of drug use than a general behavioral risk factor such as impulsivity. Lastly, comparing models in column [2] with the full models in column [6]

reveals that the heterosexual variables explain an additional 10 to 12 percent of the variance in delinquency and drug use, respectively.[9]

In order to assess more fully the potential mediating roles of deviant peer contacts and unstructured socializing, models for delinquency and drug use are reevaluated with these variables included (see Table 7). Results from these models indicate positive and significant effects of friends' delinquency, dating a delinquent partner, and unstructured socializing on self-reported delinquency and drug use, net of controls. The only exception here is the non-significant effect of unstructured socializing on self-reported delinquency, net of all other covariates. Adding these covariates to the models reduces the effect sizes of the heterosexual variables substantially in most cases, which suggests a mediating role as theorized. However the beta estimates for unconventional behaviors and permissive sex attitudes (in the model for drug use) remain positive and significant even after controlling for deviant peer contacts and unstructured socializing. Adding deviant peer contacts and unstructured socializing to the models explains an additional 15 to 17 percent of the variance in delinquency and drug use, respectively.[10]

Lastly, I evaluated gender interactions in the full models for deviant peer contacts, unstructured socializing, delinquency and drug use. This involved the creation of three separate two-way cross-product terms that contained the variable for male and each of the heterosexual variables (permissive attitudes, gender mistrust, and unconventional behaviors). These cross-product terms were then introduced individually into the models. Results indicate that nearly all of the heterosexual variables predict these outcomes

[9] Although not shown here, t-tests for mean differences revealed significantly higher levels of permissive sex attitudes and unconventional behaviors among the males in the sample.

[10] Results from a Tobit's regression were compared to the OLS runs in the current study. Findings were nearly identical for crime and drug use. Results from an ordered logit model for unstructured socializing were also found to be nearly identical to the OLS runs in the current study (see DeMaris, 2004 for a discussion on these regression techniques).

equally for males and females, however, two exceptions were found in the models estimating drug use and romantic partner delinquency (results not shown in table). The chances of dating someone who is delinquent in adolescence vs. dating a non-delinquent partner is significantly impacted only by the unconventional behaviors of adolescent girls ($b = 1.48$, $p<.001$) but not by similar styles of heterosexual involvement of adolescent boys ($b = .039$, $p>.10$). However the reverse is found for adolescent drug use, where male behaviors ($\beta = .377$, $p<.001$) are more predictive of this illicit activity than are the unconventional behaviors of adolescent girls ($\beta = -.096$, $p>.10$).[11]

In sum, these between-person analyses reveal that heterosexual attitudes and behaviors are a potentially important link between structural disadvantage and juvenile delinquency. Similar results are found with respects to deviant peer contacts and unstructured socializing, thus supporting hypothesis one. While some evidence was found to suggest heterosexual experiences may have a differential impact on male and female levels of deviant peer contact and drug use, the results by and large indicate that these dynamics operate similarly for both genders. There are, however, findings from these analyses that suggest that the average male-female difference in early heterosexual experiences are at least part of what explains (i.e. mediates) gender gaps in juvenile delinquency, contact with delinquent friends, and unstructured socializing. Hypotheses five and six therefore receive partial support in these findings. In the following, I move beyond between-person differences by examining the longitudinal impact of heterosexual experiences on the rates of change in crime and drug use.

[11] The unstandaridized beta estimates for these cross-products are $b = 1.44$, $p<.05$ and $b = .456$, $p<.001$, respectively.

Within-Person Results: Analyzing Change

Heterosexual attitudes and behaviors in adolescence are highly subject to change. Even though many adolescents may refrain from sexual activity until their later teen years, this does not exclude them from initiating a pattern of unconventional behavior in early adulthood. Moreover, some youths may not have had the opportunity by age fifteen to pursue the opposite sex in a style or manner that may place them at risk for crime and drug use. However, in the ensuing years, most adolescents will gain access to a car, money, and greater personal freedoms that in turn may change the dynamics between heterosexual involvement and crime. Thus, it is important to examine longitudinal patterns in heterosexual socializing and crime simultaneously, as well as the respective changes in these patterns. I examine these longitudinal patterns while controlling for life course changes in deviant peer contacts and unstructured socializing.

Exploring Trajectories

I begin analyzing change by estimating life course trajectories for crime, drug use, permissive sex attitudes, and unconventional behavior (see Figures 1-4). So as to evaluate the long-term impact of early social class stratification on these attitudes and behaviors, trajectories are examined for youths from each quartile of structural disadvantage. The means are estimated in OLS regression using the average raw scores from each scale. Means for these trajectories are estimated at age 15, 16, 18 and 21 years (i.e. the average age at each of the four waves of data collection). These age categories often demarcate significant changes in the levels of personal freedom that parents and governments bestow upon young people (e.g. a driver's license at 16, a legal adult at 18,

and freedom to buy liquor at 21) and are therefore useful markers for studying change in risky and illegal behaviors.

Trajectories for criminal involvement reveal somewhat disparate pathways when comparing youths from the top (Q4) and bottom (Q1) quartiles of structural disadvantage (see Figure 1). Although estimated mean levels of crime/delinquency are similar for all socioeconomic groups at age 15, by age 21 youths from the bottom quartile of disadvantage appear to be desisting from criminal involvement while youths from the top quartile report more involvement in crime, on average, than was reported in adolescence. Results from a one-way ANOVA model confirm statistically significant differences between these groups regarding respective levels of criminal involvement at age 21 (see table 11 in the following section). Trajectories estimated for drug use indicate an upward trend for all socioeconomic groups, however, no significant differences are found between-groups (see Figure 2).

Trajectories estimated for permissive attitudes and unconventional behaviors indicate upward trends for all socioeconomic groups. Yet, for both of these measures, much of the initial between-group differences reported at age 15 are maintained through to age 21. Most disparate in these regards are youths from the top and bottom quartiles, in which case the most disadvantaged are more likely, on average, to hold permissive attitudes and participate in unconventional behaviors throughout the course of adolescence.

Although not shown here, trajectories for deviant peer contacts and unstructured socializing were also examined. The trajectories estimated for friends' delinquency were found to be very similar to that of criminal involvement. Trajectories for romantic partner

delinquency were also similar to criminal involvement, in that the most disadvantage youths showed a pattern of dating relatively more delinquent partners, but not until they reached approximately twenty-one years of age. Trajectories estimated for unstructured socializing indicate a downward trend for all socioeconomic groups. However, unlike the trajectories for crime and deviant peer contacts, the least disadvantage youths (those from the bottom quartile) report the greatest amount of unstructured socializing by age twenty-one.

Results from these trajectories indicate that structural disadvantage may have an indirect or delayed effect on criminal involvement through the initiation and maintenance of unconventional styles and strategies of heterosexual involvement. In order to evaluate this notion more thoroughly, I examine the impact of changing heterosexual attitudes and behaviors on overall between-person differences and age-graded changes in crime and drug use. Further, so as to account for the possibility that heterosexual experiences are linked with crime and drug use via deviant peer contacts, changes in friends' delinquency, romantic partner delinquency, and unstructured socializing are controlled for in the models.

Multilevel/Mixed Regression Model

Prior to discussing the results shown in Tables 8 and 9, it is worth while to note that structural disadvantage does indeed demonstrate positive and significant effects on the trajectory for criminal involvement. Zero-order models (not shown in table) indicate significant differences in criminal involvement between respondents from the top and bottom quartiles of structural disadvantage. These results are in line with what was found

in Figure 1 above, further indicating that the effects of structural disadvantage on crime are indirect, or cumulative, and largely not evident until later adolescence or early adulthood. The models shown in Tables 8 and 9 evaluate heterosexual attitudes and behaviors as intermediate mechanisms that may link the delayed or indirect effects of structure disadvantage with life course patterns of crime and drug use.

The multilevel/mixed model [1] estimates the effects of the control variables only (see Tables 8 and 9). As seen in Table 8, the effects of structural disadvantage are no longer significant as they were in the zero-order models for criminal involvement described above. Demographic variables, and to a much larger extent, family processes are responsible for this reduction. The effects of parental attachment are negative and significant for both crime and drug use, however, the effects of the other family and demographic variables are less consistent.

Model [2] includes permissive attitudes and unconventional behavior. Adding these heterosexual variables to the models explains an additional 10 to 13 percent of the overall variation in crime and drug use, respectively. Moreover, the models in column [2] indicate that increases or within-person changes in permissive attitudes and unconventional behavior predict between-person differences in crime and drug use, net of controls for impulsivity, environments of uncertainty, family processes, and demographic variables.

Models [3] and [4] include within and between-person differences in deviant peer contacts and unstructured socializing. These models estimate the effects of the heterosexual variables on crime and drug use separately. The effects of deviant peer contacts and unstructured socializing are largely significant however the beta estimates

for permissive sex attitudes and unconventional behavior maintain much of their statistical significance in these models (see Tables 8 and 9). Yet controlling for deviant peer contacts and unstructured socializing reduces the effect sizes of all the heterosexual variables. These results are largely in line with the expectation that peer networks may mediate the pathways between crime and heterosexual socializing.

Similar results are found in the full models in column [5] which heterosexual attitudes and behaviors. The dependent variables, crime and drug use, are logged which allows the unstandardized beta estimates to be exponitiated for a 'percent difference' interpretation in the average of Y for a single unit increase in X (e.g., Woolridge, 2000). A one unit change in unconventional behavior is therefore interpreted as producing a $[(e^{.021}) - 1]100 = 2$ percent difference in the average of criminal involvement (see Table 8). The measures for friend and romantic partner delinquency, however, are also logged which allows an elasticity interpretation where a one percent difference in X is equivalent to a (b x 100) percent difference in Y. For example, a one percent increase in friends' delinquency is equal to almost two-tenths of a percent difference in crime and drug use.

While the majority of the significant control variables in model [4] show beta estimates in the expected directions, the effects of structural disadvantage, school disorder, and parent-child conflict are negative in the analysis of drug use (see Table 9). However, these variables are not significant at the zero-order (not shown in tables), indicating that in the case of structural disadvantage, for example, when youths from different socioeconomic backgrounds are matched on heterosexual attitudes and behaviors, the least disadvantaged youths emerge as the group most likely to use drugs in a habitual manner. The same interpretation applies to the negative effects of black in the

models for drug use as well as the negative effects of age in the models for crime. Controlling for heterosexual attitudes and behaviors does not mediate the average male-female difference in crime but these variables do appear to explain the average Hispanic-white difference in crime (as seen when comparing model 1 to model 2). Likewise, in the zero-order model for crime discussed above, a significant black-white difference also emerged, however, controlling for family processes reduces this particular race-gap to non-significance (not shown in table). Similar to the cross-sectional analysis of drug use in the previous section, controlling for heterosexual variables reduces the effect of impulsivity to non-significance (see Table 9). However in the model for criminal involvement, the effect of impulsivity is reduced to non-significance only after including the covariates deviant peer contacts and unstructured socializing. This may indicate that individuals who are impulsive may prefer company who offer instantly gratifying experiences, as suggested by previous theorizing (Gottfredson & Hirschi, 1990).

The significant chi-square statistics indicate that the multilevel/mixed model regression has produced more accurate standard error estimates than what would be yielded by a pooled-OLS regression. A shrinking BIC statistic across models indicates that including the heterosexual variables improved the overall fit of the models for crime and drug use. Moreover, heterosexual attitudes and behaviors explain approximately 10 to 13 percent of the overall variance in crime and drug use, respectively. The significance of the random variance terms for the intercept and time indicates that there is variance both between and within-persons not explained by the current models, respectively.[12]

[12] Restricted maximum likelihood (RML) is used to avoid biasing estimates for the random parameters (Dempster, Laird, & Rubin, 1977). As such we use the Bayesian information criterion (BIC) to judge

Next, I examine the between and within-person effects of the heterosexual variables on age-graded changes in criminal involvement and drug use. This is done by creating cross-products with the variable for time (months into the study). Only one significant interaction emerged in these analyses in which case the cross-product (time x between-person permissive attitudes) was found to be positive in the model for drug use ($b = .002$, $p<.001$, not in table). This finding suggests that youths who endorse relatively high levels of permissive sex attitudes are more likely to experience increases in drug use, on average, than those who hold more conservative views on heterosexual relationships.

Lastly, gender interactions with the heterosexual variables were evaluated in the final multilevel/mixed models for crime and drug use (not shown in table). In the model for crime, the cross-product (male x differences between-persons in unconventional behavior) was found to be positive and significant ($b = .084$, $p<.001$). Thus, the between-person effect of unconventional behavior on crime is $b = .109$, $p<.001$ for males and $b = .025$ $p>.10$ for females. However, in the model for drug use, the cross-product (male x within-person changes in unconventional behavior) was found to be negative and significant ($b = -.050$, $p<.001$). Thus, the effect of age-graded increases in unconventional behavior on drug use is $b = .003$, $p>.10$ for males and $b = .050$, $p<.001$ for females.

In sum, these results complement the between-person analyses above by highlighting the influences of within-person changes in heterosexual attitudes and

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improvements on the model goodness-of-fit. Raftery (1995) suggests that when comparing models, a 2-6 point decrease in BIC is weak while a 10 point or greater decrease is a strong improvement. The SAS 'mixed' procedure is used to compute the estimates.

behaviors on criminal involvement and drug use. Although changes in heterosexual attitudes and behaviors were not found in most cases to predict age-graded changes in crime and drug use, increases in these interpersonal dynamics did predict respective between-person differences in these outcomes. In other words, both the initial differences as well as age-graded changes in risky or unconventional heterosexual attitudes and behaviors are more reliable predictors of the between-person differences in crime and drug use than are they effective predictors of change in these outcomes. Thus, partial support is found for the second hypothesis. Evidence is also mixed with regards to the hypotheses on gender. The overall male-female difference in crime was not reduced to non-significance after controlling for heterosexual attitudes and behaviors, and the limited moderation effects of gender found here suggest these interpersonal dynamics are stronger for women in the case of drug use, but stronger for men in the case of crime. Hypotheses five and six therefore find only a weak level support by the results from these analyses. Meditation of the average Hispanic-white difference in criminal behavior over the life course does however support the more general notion that structural disadvantage is indirectly linked with illegal behavior via the pursuit of unconventional heterosexual experiences.

CHAPTER 9: RESULTS (PART II)

In early adulthood many youths begin shifting their heterosexual styles and strategies toward securing a long-term mate (Giordano, 2003). Thus it is important to explore more than just general patterns of heterosexual involvement and consider the characteristics of specific unions as potentially salient influences on crime and drug use in early adulthood.

These early adult courtships may take the form of a dating relationship, a cohabiting union, or even marriage, all of which however are subject to the influence of earlier dating and sexual experiences (e.g., Raley et al., 2007). In section two of the current study, I examine the influence of adolescent heterosexual attitudes and behaviors on the characteristics of early adult unions, and in turn, the influence of these characteristics on crime and drug use.

Bivariate Results

Table 10 displays wave 4 means and proportions across four quartiles of structural disadvantage measured at wave 1. Results from one-way ANOVA models indicate negligible differences in drug use, however, respondents from the top two quartiles of disadvantage report significantly higher levels of crime than respondents from the bottom two quartiles. In contrast, respondents from the bottom two quartiles of disadvantage (Q1 and Q2) report significantly higher levels of going out to bars and nightclubs than respondents from the top two quartiles. These findings suggest that structural disadvantage increases the odds of criminal behavior in early adulthood while decreasing access to venues often associated with illegal behavior. Thus the relationship between social class, heterosexual socializing, and the risk of becoming involved in crime and drug use is not straightforward. Factors other than routine activities, such as the quality or characteristics of a specific heterosexual union, may also help to explain social class differences in adult levels of crime and drug use.

A similarly nuanced picture is found, however, with respects to structural disadvantage and adult union characteristics. Respondents from the top quartile of

disadvantage report significantly higher levels of conflict and infidelity than respondents from the bottom quartile. Significant differences are also found in the proportion of respondents who report concurrent drug use with their partners, however, these differences are not substantial. Negligible differences are found with respect to levels of attachment. Relationship duration varies significantly across quartiles of disadvantage, but more important are the differences in union type. For example, while only about 12 percent of the respondents from the bottom quartile are in a cohabiting union, nearly one-third of the respondents that came from the most disadvantaged communities are currently cohabiting or have cohabited in the recent past. Results from these bivariate analyses are in keeping with the notion of an accelerated life course (Burton, 1990, 2007) in which early adult role exits, such as cohabitation, often characterize the heterosexual experiences of those who were reared in environments that were highly unstable or uncertain.

Respondents from the top quartile of disadvantage report significantly lower levels of socioeconomic achievement than respondents from the bottom quartile. For example, while only about 10 percent of the respondents from the bottom quartile are unemployed and have less than 12 years of formal education, 38 percent, or nearly four times as many respondents from the top quartile fall into this category. Similar significant class disparities are found with respect to religious attendance where 31 percent of the least disadvantaged report never attending service in the past 12 months while 42 percent of the most disadvantaged report no recent attendance. These findings suggest that early structural disadvantage may impede progress toward acquiring a

collection of social assets that may in turn deter criminal behavior and drug use in early adulthood.

Between-Person Regression Results

The multivariate analyses in this section are divided into two stages. In the first stage I evaluate hypothesis 3 by examining the impact of adolescent heterosexual attitudes and behaviors on the adult union characteristics of conflict, infidelity, concurrent drug use, and attachment. In the second stage I evaluate hypothesis 4 by examining the impact of these characteristics on variations in crime, drug use, and routine activities in early adulthood. With the exception of the logistic models for concurrent drug use, beta estimates in the OLS regression models are standardized which allows for the direct comparison of the covariates' effect size. Standardized beta estimates are equal to the effect of a 1 standard deviation difference in X on the proportion of difference in a 1 standard deviation in Y. Results are discussed in the order of the modeling sequences.

Adult Union Characteristics

Zero-order models (displayed in column [1]) that analyze variations in conflict, infidelity, and concurrent drug use reveal that permissive attitudes, gender mistrust, and unconventional behaviors have a significant and positive influence on most all of these outcomes (see Tables 11-14). However these adolescent attitudes are non-significant with respect to attachment. Respondents who engaged in unconventional behavior in adolescence do though report significantly lower mean levels of attachment than those who were restricted in adolescence to more traditional modes of forming physical

relationships with the opposite sex. The beta estimates for structural disadvantage tell a similar story with the most disadvantaged respondents experiencing relatively higher levels of conflict, infidelity, and concurrent drug use than those from the least disadvantaged communities. Structural disadvantage does not however significantly predict variations in attachment.

The type of union and its duration are also found to influence these union characteristics. Cohabitors, for example, have significantly higher mean levels of attachment than respondents who are dating (see Table 14), but they also have higher levels of conflict and are more likely to use drugs with their partners (see Tables 11 and 13). Relationships with a duration of more than a one year have significantly lower mean levels of infidelity but higher mean levels of conflict and attachment as compared to those with shorter relationship durations. Respondent who are reporting for a current relationship have lower mean levels of infidelity and higher mean levels of attachment when compared to those who reported on a past relationship. Respondents with the lowest levels of socioeconomic achievement and religious attendance have higher mean levels of conflict and infidelity and higher odds of concurrent drug use than those who attend church regularly and are employed and educated beyond high school. One exception to this trend concerns the relatively higher odds of concurrent partner drug use among those who are unemployed but educated beyond high school. These social assets do not however show any utility in predicting levels of attachment.

Regarding demographic effects, males and minorities have higher mean levels of infidelity than females and whites, while Hispanic/Latinos have significantly higher odds of concurrent partner drug use than whites. Age does not significantly predict any of

these characteristics except for attachment, in which case the relatively older respondents have higher mean levels when compared to younger respondents.

Models displayed in column [2] estimate the effects of the heterosexual variables while controlling for structural disadvantage and demographic indicators. Results from these analyses indicate that for all union characteristics except attachment, either attitudes or behaviors or both are positive and significant predictors, net of controls. Moreover, in models for conflict and attachment, results suggest that controlling for adolescent heterosexual attitudes and behaviors mediates the effects of structural disadvantage on these union characteristics.

Models displayed in column [3] examine more closely the effects of social assets on adult union characteristics while controlling for relationship type, duration, and demographic variables. Although reduced in effect size, most of the beta estimates for social assets maintain their significance in these models. However in the model for conflict, socioeconomic achievement is no longer a significant predictor, net of controls. One other notable change is in the model for attachment (see Table 14) in which case married and cohabiting couples no longer have significantly higher mean levels when compared to couples who are dating.

Models displayed in column [4] include all covariates. Results indicate that adolescent heterosexual attitudes and behaviors continue to predict significant differences in later levels of union conflict, infidelity, and concurrent drug use. Controlling for adult social assets mediates the longitudinal effect of early unconventional behaviors in models predicting conflict and infidelity (see Tables 11 and 12). However in models predicting current partner drug use (see Table 13), conventional behaviors are still more likely to

lower the odds of concurrent partner drug use. For example, respondents who reported that they were sexually active in adolescence, but strictly within the context of dating relationships, are estimated to have over 50 percent lower odds (.454 x 100 – 1.00) of using illicit drugs with an adult partner than respondents who reported unconventional behaviors in adolescence. While the effect for male is reduced to non-significance in the models for infidelity and attachment, it emerges as significant in the final model for conflict. This suggests that while males and females share a similar likelihood of becoming involved in a union that is combative, once they are matched on earlier heterosexual attitudes and behaviors, males incur a greater risk of experiencing a relationship with high levels of verbal and physical conflict. While interesting if not somewhat perplexing, this finding is not applicable to either one of the gender hypotheses, five or six. The final models for conflict, infidelity, concurrent drug use, and attachment explain approximately 12, 28, 9, and 24 percent of the variation, respectively.

Lastly, gender interactions with the heterosexual variables were evaluated in the final models for the union characteristics (results not shown in table). Two significant cross-products emerged. In the model for conflict, the significant cross-product (male x gender mistrust; $\beta = -.362$, $p<.05$) indicates that the effect of gender mistrust on later union conflict is significantly larger for females ($\beta = .172$, $p<.001$) and not significant for males ($\beta = .041$, $p>.10$). And in the model for infidelity risk, the significant cross-product (male x permissive attitudes, $\beta = .204$, $p<.01$) indicates that the effect of permissive attitudes on later union infidelity is significantly larger for males ($\beta = .320$, $p<.001$) compared to its estimated effect for females ($\beta = .151$, $p<.05$). These findings present a somewhat complicated picture with regards to the role of gender and the

development of adult union characteristics. Consequently, gender hypothesis six receives partial support in these findings.

Several additional model specifications were tested but are not shown in the tables. Although not the focus of the current study, many have argued and demonstrated that early family experiences have a long reach in terms of their influence on later interpersonal relationships (see Furman, Brown, & Feiring, 1999 for more in depth discussion). While the aims of the current study are certainly not in conflict with this perspective, the models presented in Tables 11-14 focus more specifically on adolescent experiences and not on family influences that may be closely tied to developing heterosexual attitudes and behaviors. In order to assess more fully the independent effects of adolescent experiences on later union characteristics, wave 1 measures of parental attachment, conflict, and supervision were included in the models. Results from these analyses indicate that adolescent levels of parental attachment and conflict are significantly related to later differences in union conflict and concurrent drug use, but not infidelity, net of controls for adolescent heterosexual attitudes and behaviors In fact, controlling for adolescent experiences in the heterosexual realm reduced the negative and significant effect of parental attachment on later infidelity risk to non-significant levels (not shown in table). Controlling for these family processes did not however alter the results found for the heterosexual variables.

These findings reaffirm past work by indicating that adolescent heterosexual experiences are indeed stratified along lines of class and culture (e.g., Meier & Allen, 2009) and are significant influences on the characteristics of adult unions (e.g., Raley et al., 2007). Hypothesis three therefore receives partial support. In the next stage of

analyses, I examine these characteristics as predictors of crime, drug use, and routine activities.

Adult Crime, Drug Use, and Routine Activities

Zero-order models (displayed in column [1]) that analyze variations in crime, drug use, and routine activities reveal that the union characteristics conflict, infidelity, and concurrent partner drug use have positive and significant influences on these outcomes (see Tables 15, 16, and 17). Attachment is not significant at the zero-order for criminal involvement, drug use, or going out to bars and nights. Married respondents go out to bars and nightclubs less frequently than respondents who are dating, but no difference in average levels of crime and drug use are detected across relationship type. Respondents who are reporting on a current relationship are estimated to have significantly lower mean levels of crime than those who are reporting on a past relationship.[13]

Although adolescent levels of structural disadvantage are not significantly related to drug use in adulthood, respondents from the most disadvantaged communities have significantly higher mean levels of crime when compared with respondents from the least disadvantaged communities. However, there are significantly higher mean levels of going out to bars and nightclubs among those from the bottom quartile of disadvantage compared to those from the top quartile. Respondents with relatively low levels of socioeconomic achievement have significantly higher mean levels of crime and drug use when compared to respondents who are employed and have more than 12 years of education. This reverse is true, however, for going out to bars and nightclubs, perhaps

[13] Concurrent drug use is not estimated in the model for self-reported drug use due to obvious problems of endogenity. Consequently, there are only five models in the regression for drug use.

because these routine activities are relatively normative among college students (e.g., see Barrett, 2005). Lastly, respondents who report that they never or rarely attend church have significantly higher mean levels of crime, drug use, and going out to bars and nightclubs than those who attend religious services regularly.

Males and minorities have significantly higher mean levels of crime and drug use while white respondents have significantly higher mean levels of going out to bars and nightclubs as compared to black respondents (see Table 17). Age positively predicts going out to bars and nightclubs but not crime or drug use.

Models displayed in columns [2], [3], [4] and [5] test the individual effects of each union characteristic, net of controls for social assets, earlier structural disadvantage demographic indicators, and the type and duration of the union. Although the effect sizes are reduced in most models, the beta estimates for union characteristics remain largely positive and significant, except for attachment. For example, in the model for crime (see Table 15), the standardized effect of infidelity is .239, indicating that there is over an estimated two-tenths of a standard deviation difference in crime for every one standard deviation difference in infidelity risk, net of other covariates. Similar effect sizes are reported for between-person differences in infidelity risk on the between-person differences in drug use and going out to bars and nightclubs.

Models displayed in column [6] include all covariates. In these final models, the effects of infidelity and concurrent drug use remain positive and significant. Thus, hypothesis four receives partial support in these findings. Union conflict is no longer significant. Interestingly, however, is the now positive and significant effect of attachment on all three of the dependent variables. This somewhat non-intuitive finding

may be interpreted to suggest that, while infidelity and attachment are often thought of as polarizing aspects of a relationship, these opposing forces may, nevertheless, characterize a number of early heterosexual unions. Attachments developed within these precarious relationship contexts may therefore fail to provide the pro-social benefit traditionally discussed in the criminological literature (e.g., Hirschi, 1969; Sampson & Laub, 1990).[14]

In the final models the effects of structural disadvantage and social assets are largely no longer significant. However there remains a non-negligible difference in average levels of criminal involvement between respondents from the top and bottom quartiles of disadvantage. Similar differences persist with regards to the highest and lowest levels of socioeconomic achievement and average levels of going out to bars and nightclubs. Lastly, in the final model for drug use, the average male-female difference is reduced to non-significance, thus supporting hypothesis five, while in the final model for crime, the average black-white difference is reduced to non-significance. Because minority youths (especially African Americans) are disproportionately represented in the most disadvantaged communities, this finding provides further evidence that heterosexual experiences are a potentially important intermediate link between social class and illegal behavior. The final models for crime and routine activities each explain approximately 21 percent of the variation while about 12 percent of the variation in drug use is explained.

Gender interactions with the union characteristics were evaluated in the final models for crime, drug use, and routine activities. After testing eight interactions, only two significant cross-products emerged (results not shown in table). In the model for crime, the significant cross-product (male x conflict; $\beta = .200$, $p<.01$) indicates that the

[14] The correlation between the attachment and infidelity risk scales is -.33, $p<.001$.

effect of conflict on criminal involvement is significantly larger for men ($\beta = .133$, $p<.01$) and non-significant for women ($\beta = -.030$, $p>.10$). And also in the model for crime, the significant cross-product (male x concurrent drug use, $\beta = .214$, $p<.001$) indicates that the effect of concurrent drug use on other criminal behaviors is significantly larger for men ($\beta = .415$, $p<.001$ compared to females $\beta = .121$, $p<.01$). Much like the gender interactions described above, these findings complicate the relationships between crime and heterosexual socializing. Consequently, hypothesis six receives a small amount of support in these findings.

Several additional model specifications were tested but not shown in the tables. A model that included wave 1 measures of crime, drug use, and unstructured socializing was tested for each respective outcome at wave 4. Because respondents were not asked at wave 1 how often they go out to bars or nightclubs, the unstructured socializing variable was selected as a control in the model that predicts wave 4 routine activities. These additional model specifications provide a conservative test for the effects of union characteristics on crime and other risky behaviors because baseline measures are controlled, which in turn allows the researcher to interpret the beta estimates of the heterosexual variables as influencing change in criminal involvement (Allison, 1990). Results from these analyses are similar to those shown in Tables 15, 16, and 17. Infidelity, in particular, remains robust and significant in its influence on all three outcomes, even after baseline behaviors are controlled for in the models.

In sum, these findings support the notion that a broader array of union characteristic, other than emotional attachments, are important factors that may influence variations in drug use, routine activities, and criminal desistance during the early adult

years. Most notable are the complications that infidelity brings to the likelihood of criminal desistence. Not only is the risk of infidelity found here to increase crime, drug use, and risky routine activities, but it also appears to transform the otherwise negligible influence of partner attachment into a negative emotional force, perhaps jealousy or possessiveness, which might in turn increase levels of criminal participation. These results indicate that more research is needed in the areas of heterosexual relationships and criminal behavior.

Table 1. Adolescent Characteristics: Means and Proportions at Four Levels of Structural Disadvantage

	Structural Disadvantage Quartiles				
	$Q1_{(a)}$: Lower 25%	$Q2_{(b)}$	$Q3_{(c)}$	$Q4_{(d)}$: Upper 25%	Test
High Risk Behaviors					
Delinquency	1.08	.74	1.14	1.05	F = .63
Drug Use	.78	.50	.70	.60	F = 1.13
Deviant Peer Contacts					
Friend Delinquency	4.11	4.41	4.85	5.37	F = 1.16
Romantic Partner: #					
Not Dating	.48	.40	.36	.36	
Non-Delinquent Partner	.23	.30	.32	.35	
Delinquent Partner	.28	.29	.32	.29	χ^2 = 11.94
Unstructured Socializing	2.22	2.08	2.18	2.00	F = 2.69
Heterosexual Attitudes and Behaviors					
Attitudes:					
Permissive Sex	1.06	1.18	$1.26_{(a)}$	$1.44_{(a,b)}$	F = 10.31***
Gender Mistrust	3.30	3.29	$3.44_{(b)}$	$3.58_{(a,b,c)}$	F = 12.22***
Behaviors: #					
Not S.A.	.76	.74	.58	.62	
S.A. Conventional	.15	.12	.18	.14	
S.A. Unconventional	.09	.14	.22	.24	χ^2 = 29.28***
Early Risk Propensity#					
Impulsivity	.21	.22	.24	.25	χ^2 = 1.25
Environments of Uncertainty					
School Disorder	-.24	-.01	$.03_{(a)}$	$.21_{(a,b,c)}$	F = 14.82***
Community Disorder	-.36	-.30	$-.05_{(a,b)}$	$.70_{(a,b,c)}$	F = 159.14***
Family Processes					
Parental Attachment	$4.06_{(c)}$	3.96	3.88	3.98	F = 3.08*
Parental Supervision	2.90	2.88	2.92	$3.16_{(a,b,c)}$	F = 4.36*
Parent-Child Conflict	.17	.23	.26	.29	χ^2 = 11.02*
Demographics					
Biological Family Intact#	.79	.54	.47	.28	χ^2 = 123.27***
Male#	.47	.42	.50	.44	χ^2 = 4.44
Age	16.55	16.51	16.43	16.48	F = .19
Race: #					
White	.96	.85	.63	.24	
Black	.02	.08	.22	.58	
Hispanic/Latino	.02	.07	.15	.18	χ^2 = 328.15***
N = 930					

Notes: S.A. = Sexually Active. #Proportions; columns = 1.00. p.*<.05, **<.01, ***<.001. F-tests are for one-way ANOVA models.
Letters in subscript indicate significant mean differences across the four levels of structural disadvantage.

Table 2. OLS Regression of Friends' Delinquency on Adolescent Heterosexual Attitudes and Behaviors

	[1]		[2]		[3]		[4]		[5]		[6]	
Models:	B	S.E.	B	S.E.	B	S.E.	B	S.E.	B	S.E.	B	S.E.
Heterosexual Attitudes and Behaviors												
Attitudes:												
Permissive Sex	.366***	.043			.285***	.046					.172***	.048
Gender Mistrust	.196***	.056					.140***	.057			.126***	.053
Behaviors:												
Not S.A.	-.540***	.084							-.431***	.092	-.345***	.097
S.A. Conventional (S.A. Unconventional)	-.220***	.110							-.203***	.109	-.144***	.112
Early Risk Propensity												
Impulsivity	.156***	.082	.133***	.077	.100**	.075	.121***	.077	.107***	.073	.080**	.072
Environments of Uncertainty												
Structural Disadvantage												
Bottom 25%	-.132***	.099	-.048	.127	-.035	.122	-.049	.126	-.043	.120	-.038	.117
Q2	-.112**	.098	-.067	.119	-.062	.114	-.058	.118	-.055	.112	-.046	.110
Q3	-.041	.098	-.021	.106	-.010	.102	-.023	.105	-.044	.100	-.035	.098
(Top 25%)												
School Disorder	.215***	.046	.141***	.046	.135***	.045	.123***	.046	.131***	.044	.112***	.043
Community Disorder	.118***	.048	.043	.055	.036	.053	.040	.054	.039	.052	.032	.051
Family Processes												
Parental Attachment	-.151***	.054	-.089**	.053	-.033	.052	-.085**	.052	-.076*	.050	-.042	.050
Parental Supervision	-.128***	.035	-.042	.036	-.027	.034	-.036	.035	-.020	.034	-.011	.033
Parent-Child Conflict	.093**	.081	.050	.077	.045	.074	.038	.077	.031	.073	.021	.072

Table 2 cont.

Demographics												
Biological Family Intact	-.077*	.070	-.036	.071	-.020	.068	-.030	.070	.019	0.068	.024	.066
Male (Female)	.092**	.067	.103**	.065	.017	.066	.130***	.066	.063*	.062	.044	.065
Black	.044	.085	-.040	.098	-.087*	.095	-.064	.098	-.063	.093	-.108**	.092
Hispanic/Latino (White)	.140***	.112	.096**	.112	.068*	.108	.085*	.111	.069*	.106	.046	.104
Age	.275***	.020	.233***	.021	.197***	.021	.228***	.021	.105**	.022	.098**	.022
F test			13.70***		18.67***		14.29***		20.50***		21.50***	
Adj. R^2			.162		.224		.178		.253		.286	
N = 930												

Notes: S.A. = Sexually Active. Beta estimates are standardized. Comparison categories appear in parentheses. Intercepts are estimated but not shown.
*<.05, **<.01, ***<.001.

Table 3. Multinomial Regression of Romantic Partner Delinquency on Adolescent Heterosexual Attitudes and Behaviors

	[1]				[2]				[3]			
	Not Dating		Dating a Non-Delinquent		Not Dating		Dating a Non-Delinquent		Not Dating		Dating a Non-Delinquent	
Models:	b	S.E.	b	S.E.	b	S.E.	b	S.E.	b	S.E.	b	S.E.
Heterosexual Attitudes and Behaviors												
Attitudes:												
Permissive Sex	-.291**	.104	-.273*	.111					-.311*	.128	-.346*	.133
Gender Mistrust	-.710***	.138	-.522***	.145								
Behaviors:												
Not S.A.	1.584***	.223	.723***	.218								
S.A. Conventional (S.A. Unconventional)	-.528	.353	.720**	.260								
Early Risk Propensity												
Impulsivity	-.083	.188	.050	.201	-.179	.203	-.001	.210	-.106	.207	.076	.213
Environments of Uncertainty												
Structural Disadvantage												
Bottom 25%	.318	.227	-.386	.249	.277	.340	-1.074**	.353	.254	.340	-1.097**	.353
Q2	.125	.228	-.119	.237	.257	.319	-.537	.323	.250	.320	-.544	.324
Q3	-.086	.228	-.163	.232	-.082	.281	-.435	.284	-.103	.282	-.456	.284
(Top 25%)												
School Disorder	-.354**	.110	-.137	.117	-.105	.124	-.101	.128	-.099	.124	-.096	.129
Community Disorder	-.063	.110	-.015	.115	.100	.145	-.134	.150	.109	.146	-.120	.150
Family Processes												
Parental Attachment	.526***	.126	.588***	.137	.349***	.139	.554***	.144	.283*	.143	.483**	.147
Parental Supervision	.247**	.081	.072	.086	.077	.095	.115	.097	.066	.096	.102	.098
Parent-Child Conflict	-.528**	.181	-.601**	.198	-.380	.199	-.431*	.208	-.373	.200	-.420*	.209

Table 3 cont.

Demographics												
Biological Family Intact	-.268	.159	-.290	.279	.142	.187	.193	.187	.121	.188	.250	.194
Male (Female)	.840***	.164	.486**	.175	.897***	.176	.487**	.183	1.054***	.189	.664**	.197
Black	.048	.197	-.051	.207	.124	.261	-.247	.266	.217	.264	-.149	.269
Hispanic/Latino (White)	.374	.251	-.424	.275	-.195	.289	-.682*	.308	-.128	.290	-.616*	.310
Age	-.351***	.050	-.021	.052	-.335***	.058	.032	.060	-.320	.058	.048	.061
-2 Log Likelihood					1870.01				1861.24			
R^2_L					.070				.081			
N = 930												

Notes: Multinomial outcomes are compared to dating a delinquent partner. S.A. = Sexually Active. Beta estimates are standardized. Comparison categories appear in parentheses. Intercepts are estimated but not shown.
*<.05, **<.01, ***<.001.

Table 3. (Continued) Multinomial Regression of Romantic Partner Delinquency on Adolescent Heterosexual Attitudes and Behaviors

	[4]				[5]				[6]			
	Not Dating		Dating a Non-Delinquent		Not Dating		Dating a Non-Delinquent		Not Dating		Dating a Non-Delinquent	
Models:	b	S.E.	b	S.E.	b	S.E.	b	S.E.	b	S.E.	b	S.E.
Heterosexual Attitudes and Behaviors												
Attitudes:												
Permissive Sex									-.039	.143	-.170	.146
Gender Mistrust	-.485**	.155	-.413*	.160					-.495**	.160	-.404*	.162
Behaviors:												
Not S.A.					1.513***	.265	.810**	.258	1.483***	.290	.690*	.283
S.A. Conventional (S.A. Unconventional)					-.276	0.369	.846**	.279	-.319	.383	.721*	.297
Early Risk Propensity												
Impulsivity	-.115	.206	.050	.212	-.059	..210	.054	.213	-.014	.214	.132	.217
Environments of Uncertainty												
Structural Disadvantage												
Bottom 25%	.287	.342	-1.059**	.354	.357	.351	-1.104**	.354	.365	.353	-1.095**	.356
Q2	.227	.321	-.558	.325	.260	.329	-.553	.323	.229	.332	-.580	.326
Q3	-.072	.284	-.423	.285	.091	.291	-.412	.287	.096	.294	-.412	.288
(Top 25%)												
School Disorder	-.051	.126	-.052	.130	-.061	.127	-.093	.130	-.007	.129	-.043	.132
Community Disorder	.108	.147	-.120	.150	.133	.153	-.112	.150	.143	.154	-.100	.151
Family Processes												
Parental Attachment	.340*	.141	.545***	.145	.341*	.144	.529***	.145	.327*	.148	.488***	.148
Parental Supervision	.066	.096	.108	.098	.055	.098	.096	.098	.041	.099	.086	.099
Parent-Child Conflict	-.326	.201	-.388	.210	-.312	.206	-.403	.210	-.254	.208	.363	.212

Table 3 cont.												
Demographics												
Biological Family Intact	.123	.189	.268	.194	-.074	.196	.192	.198	-.094	.197	-.169	.200
Male (Female)	.789***	.180	.394	.187	1.062***	.186	.615**	.190	.975***	.199	-.601**	.204
Black	.260	.266	-.126	.270	.249	.270	-.208	.269	.392	.277	-.050	.275
Hispanic/Latino (White)	-.114	.292	-.611*	.310	.009	.301	-.647*	.312	.089	.305	-.545	.314
Age	-.333***	.058	.033	.061	-.159*	.064	.079	.067	-.157*	.064	.081	.068
-2 Log Likelihood	1859.07				1800.00				1787.74			
R^2_L	.082				.111				.120			
N = 930												

Notes: Multinomial outcomes are compared to dating a delinquent partner. S.A. = Sexually Active. Comparison categories appear in parentheses. Intercepts are estimated but not shown.
*<.05, **<.01, ***<.001.

Table 4. OLS Regression of Unstructured Socializing on Adolescent Heterosexual Attitudes and Behaviors

Models:	[1] B	S.E.	[2] B	S.E.	[3] B	S.E.	[4] B	S.E.	[5] B	S.E.	[6] B	S.E.
Heterosexual Attitudes and Behaviors												
Attitudes:												
Permissive Sex	.111***	.039			.118**	.045					.086*	.049
Gender Mistrust	-.073	.050					-.043	.054			-.051	.053
Behaviors:												
Not S.A.	-.152***	.080							-.151**	.091	-.112*	.098
S.A. Conventional (S.A. Unconventional)	-.091*	.106							-.091*	.107	-.065	.113
Early Risk Propensity												
Impulsivity	.040	.071	.039	.072	.025	.073	.043	.073	.029	.072	.026	.073
Environments of Uncertainty												
Structural Disadvantage												
Bottom 25%	.103*	.086	.038	.119	.043	.118	.038	.119	.039	.118	.043	.118
Q2	.038	.085	-.016	.111	-.013	.111	-.019	.111	-.013	.111	-.015	.110
Q3	.085*	.085	.047	.098	.053	.098	.048	.098	.039	.098	.046	.098
(Top 25%)												
School Disorder	-.021	.041	.000	.044	-.002	.043	.006	.044	-.001	.043	.004	.044
Community Disorder	-.031	.051	.009	.051	.007	.051	.010	.051	.006	.051	.007	.051

Table 4 cont.

Family Processes												
Parental Attachment	.010	.047	.021	.049	.044	.050	.020	.049	.026	.049	.040	.050
Parental Supervision	-.071*	.030	-.026	.033	-.020	.033	-.027	.033	-.017	.033	.018	.033
Parent-Child Conflict	-.050	.070	-.032	.072	-.034	.072	-.028	.073	.039	.072	.034	.072
Demographics												
Biological Family Intact	.027	.060	-.022	.066	-.016	.066	-.024	.066	-.004	.067	-.006	.067
Male (Female)	.107**	.060	.100**	.061	.064	.064	.092**	.063	.085*	.062	.054	.066
Black	-.092**	.073	-.097*	.092	-.116**	.092	-.089*	.093	-.105*	.091	-.108*	.093
Hispanic/Latino (White)	-.069*	.097	-.068	.105	-.080*	.105	-.065	.105	-.078*	.105	-.079*	.105
Age	.063	.017	.063	.019	.047	.019	.064	.019	.024	.021	.023	.021
F test			2.33**		2.87***		2.28**		2.74***		2.80***	
Adj. R^2			.020		.030		.020		.030		.034	
N = 930												

Notes: S.A. = Sexually Active. Beta estimates are standardized. Comparison categories appear in parentheses. Intercepts are estimated but not shown.
*<.05, **<.01, ***<.001.

Table 5. OLS Regression of Delinquency on Adolescent Heterosexual Attitudes and Behaviors

Models:	[1] B	S.E.	[2] B	S.E.	[3] B	S.E.	[4] B	S.E.	[5] B	S.E.	[6] B	S.E.
Heterosexual Attitudes and Behaviors												
Attitudes:												
Permissive Sex	.263***	.022			.237***	.030					.134***	.032
Gender Mistrust	.070*	.028					.038	.036			.025	.035
Behaviors:												
Not S.A.	-.355***	.044							-.364***	.059	-.299***	.064
S.A. Conventional (S.A. Unconventional)	-.284***	.059							-.281***	.070	-.237***	.073
Early Risk Propensity												
Impulsivity	.156***	.041	.140***	.049	.111***	.048	.136***	.049	.116***	.047	.102**	.047
Environments of Uncertainty												
Structural Disadvantage												
Bottom 25%	-.037	.049	.044	.081	.056	.079	.043	.081	.054	.078	.059	.077
Q2	-.065	.050	-.010	.076	-.004	.074	-.007	.076	-.001	.072	.002	.072
Q3	.024	.050	.013	.067	.024	.066	.013	.067	.004	.065	.012	.064
(Top 25%)												
School Disorder	.050**	.024	.065*	.030	.061*	.029	.060	.030	.063*	.028	.058	.028
Community Disorder	.067*	.024	.051	.035	.046	.034	.050	.035	.046	.033	.044	.033

Table 5 cont.

Family Processes											
Parental Attachment	-.224***	.027	-.199***	.033	-.153***	.033	-.198***	.033	-.184***	.032	-.159***	.033
Parental Supervision	.000	.017	.012	.023	.025	.022	.014	.023	.034	.022	.039	.022
Parent-Child Conflict	.149***	.040	.106**	.049	.102**	.048	.103**	.049	.092**	.047	.090**	.047
Demographics												
Biological Family Intact	-.035	.035	-.003	.045	.011	.044	-.001	.045	.038	.044	.039	.044
Male (Female)	.089**	.034	.113***	.042	.042	.043	.121***	.042	.072*	.040	.044	.043
Black	-.025	.042	-.027	.062	-.067	.062	-.034	.063	-.048	.060	-.071	.061
Hispanic/Latino (White)	.122***	.056	.128***	.072	.105**	.070	.125***	.072	.109**	.069	.097**	.069
Age	.043	.010	.048	.014	.019	.013	.047	.014	-.025	.014	-.027	.014
F test			10.06***		13.00***		9.47***		14.91***		14.22***	
Adj. R^2			.121		.163		.120		.194		.205	
N = 930												

Notes: S.A. = Sexually Active. Beta estimates are standardized. Comparison categories appear in parentheses. Intercepts are estimated but not shown.
*<.05, **<.01, ***<.001.

Table 6. OLS Regression of Drug Use on Adolescent Heterosexual Attitudes and Behaviors

	[1]		[2]		[3]		[4]		[5]		[6]	
Models:	B	S.E.	B	S.E.	B	S.E.	B	S.E.	B	S.E.	B	S.E.
Heterosexual Attitudes and Behaviors												
Attitudes:												
Permissive Sex	.321***	.017			.309***	.026					.196***	.028
Gender Mistrust	.044	.022					.034	.032			.016	.030
Behaviors:												
Not S.A.	-.478***	.034							-.436**	.052	-.342***	.056
S.A. Conventional (S.A. Unconventional)	-.278***	.045							-.295**	.062	-.232***	.064
Early Risk Propensity												
Impulsivity	.099**	.033	.082*	.044	.046	.042	.079*	.044	.054	.041	.035	0.041
Environments of Uncertainty												
Structural Disadvantage												
Bottom 25%	.050	.039	.080	.072	.096	.069	.080	.072	.090	.068	.098	.067
Q2	-.013	.039	-.012	.067	-.005	.065	-.010	.067	-.001	.064	.002	.063
Q3	.035	.039	.021	.060	.035	.058	.020	.060	.006	.057	.018	.056
(Top 25%)												
School Disorder	.068*	.019	.027	.026	.021	.025	.023	.027	.021	.025	.017	.025
Community Disorder	.023	.019	.022	.031	.016	.030	.022	.031	.017	.029	.014	.029

Table 6 cont.

Family Processes												
Parental Attachment	-.178***	.021	-.146***	.030	-.086**	.029	-.146***	.030	-.130***	.028	-.094**	.028
Parental Supervision	-.114***	.014	-.028	.020	-.011	.019	-.027	.020	-.004	.019	-.003	.019
Parent-Child Conflict	.029	.032	-.003	.044	-.008	.042	-.006	.044	-.021	.042	-.021	.041
Demographics												
Biological Family Intact	-.033	.027	-.051	.040	-.033	.039	-.049	.040	.000	.038	.001	.038
Male (Female)	.063	.027	.044	.037	-.049	.038	.050	.038	-.003	.035	-.048	.037
Black	-.078*	.034	-.069	.056	-.120**	.054	-.075	.056	-.093*	.053	-.123**	.053
Hispanic/Latino (White)	.089**	.045	.090*	.064	.059	.061	.087	.064	.065*	.060	.050	.060
Age	.230***	.008	.195***	.012	.157***	.012	.194	.012			.092*	.012
F test			7.63***		13.06***		7.18***		14.53***		14.93***	
Adj. R^2			.091		.164		.091		.190		.214	
N = 930												

Notes: S.A. = Sexually Active. Beta estimates are standardized. Comparison categories appear in parentheses. Intercepts are estimated but not shown.
*<.05, **<.01, ***<.001.

Table 7. OLS Regression of Delinquency and Drug Use on Heterosexual Attitudes and Behaviors Net of Deviant Peer Contacts

	Delinquency		Drug Use	
Models:	B	S.E.	B	S.E.
Heterosexual Attitudes and Behaviors				
Attitudes:				
Permissive Sex	.065	.029	.122***	.023
Gender Mistrust	-.040	.032	-.043	.025
Behaviors:				
Not S.A.	-.134**	.060	-.154***	.047
S.A. Conventional (S.A. Unconventional)	-.163***	.067	-.135***	.053
Deviant Peer Contacts				
Friend Delinquency	.389***	.021	.350***	.017
Not Dating	-.112***	.047	-.163***	.037
Non-Delinquent Partner (Delinquent Partner)	-.147***	.048	-.235***	.038
Unstructured Socializing	.018	.020	.057**	.015
Early Risk Propensity				
Impulsivity	.078**	.043	-.006	.034

Tables 7 cont

Environments of Uncertainty				
Structural Disadvantage				
Bottom 25%	.056	.070	.078	.055
Q2	.012	.065	.008	.051
Q3	.011	.058	.014	.045
(Top 25%)				
School Disorder	.015	.026	-.039	.020
Community Disorder	.026	.030	-.003	.023
Family Processes				
Parental Attachment	-.128***	.030	-.062*	.023
Parental Supervision	.048	.020	.000	.015
Parent-Child Conflict	.067*	.043	-.061*	.033
Demographics				
Biological Family Intact	.033	.039	-.004	.031
Male (Female)	.038	.039	-.072*	.031
Black	-.026	.055	-.091**	.043
Hispanic/Latino (White)	.070*	.062	.017	.049
Age	-.030	.013	.079*	.010
F test	23.86***		24.36***	
Adj. R^2	.352		.360	
N = 930				

S.A. = Sexually Active. Beta estimates are standardized.
Comparison categories appear in parentheses. Intercepts are estimated but not shown.
*<.05, **<.01, ***<.001.

Table 8. Longitudinal Model of Criminal Involvement: Adolescence to Early Adulthood

Models:	[1]		[2]		[3]		[4]		[5]	
	b	S.E.	b	S.E.	b	S.E.	b	S.E.	b	S.E.
Heterosexual Attitudes and Behaviors										
Permissive Attitudes:										
Within-Person			.064**	.019	.040*	.017			.031	.018
Between-Person			.092***	.031	.027	.025			-.034	.027
Unconventional Behavior:										
Within-Person			.041***	.009			.025**	.009	.021*	.009
Between-Person			.171***	.017			.077***	.014	.085***	.015
Deviant Peer Contacts										
Friend Delinquency:										
Within-Person					.187***	.013	.188***	.012	.185***	.013
Between-Person					.302***	.021	.281***	.021	.287***	.021
Romantic Partner Delinquency:										
Within-Person					.069***	.011	.067***	.012	.066***	.012
Between-Person					.129***	.027	.102***	.027	.102***	.027
Unstructured Socializing:										
Within-Person					.017	.012	.015	.012	.015	.012
Between-Person					.047*	.022	.037	.021	.039	.021
Early Risk Propensity										
Impulsivity	.166***	.038	.097**	.035	.058	.030	.050	.030	.053	.030
Environments of Uncertainty										
Structural Disadvantage										
Bottom 25%	-.046	.063	-.002	.057	-.068	.050	-.056	.049	-.062	.049
Q2	-.085	.059	-.068	.054	-.072	.046	-.069	.046	-.070	.046
Q3	-.019	.052	-.034	.047	-.045	.041	-.051	.040	-.054	.040
(Top 25%)										
School Disorder	.042	.023	.037	.021	-.004	.018	-.001	.018	-.001	.018
Community Disorder	.020	.027	.031	.025	.009	.021	.015	.021	.015	.021

Table 8 cont.

Family Processes									
Parental Attachment	-.129***	.026	-.078**	.024	-.058**	.021	-.052*	.020	-.056**	.021
Parental Supervision	-.005	.018	-.016	.016	-.015	.014	-.016	.014	-.015	.014
Parent-Child Conflict	.037	.038	.028	.035	-.001	.030	.000	.029	-.001	.029
Demographics										
Biological Family Intact	-.050	.035	.016	.032	.014	.028	.027	.027	.025	.027
Male (Female)	.220***	.032	.090**	.033	.124***	.031	.106***	.029	.119***	.031
Black	.039	.049	.054	.045	.072	.038	.036	.038	.037	.038
Hispanic/Latino	.163*	.056	.097	.051	.078	.044	.064	.043	.067	.043
(White)										
Age	-.006	.010	-.036***	.010	-.017*	.008	-.025**	.008	-.023**	.008
Time										
Months into study	.000	.000	-.001**	.000	-.002***	.000	-.002***	.000	-.002***	.000
Variance Components										
Intercept	.180***	.017	.130****	.015	.081***	.012	.076***	.012	.075****	.012
Time	.0001***	.000	.0001***	.000	.0001*	.000	.0001*	.000	.0001*	.000
Summary Statistics										
BIC	6849.0		6656.3		6083.5		6053.6		6060.6	
Model $\chi 2$	510.47		353.48		210.48***		191.23***		190.60***	
Model R-square	.078		.170		.319		.328		.329	

N = 930

Notes: Comparison categories appear in parentheses. Intercepts are estimated for the fixed effects but not shown.
*<.05, **<.01, ***<.001.

Table 9. Longitudinal Model of Drug Use: Adolescence to Early Adulthood

Models:	[1]		[2]		[3]		[4]		[5]	
	b	S.E.	b	S.E.	b	S.E.	b	S.E.	b	S.E.
Heterosexual Attitudes and Behaviors										
Permissive Attitudes:										
Within-Person			.091***	.016	.063***	.016			.055***	.016
Between-Person			.192***	.027	.126***	.022			.087***	.024
Unconventional Behavior:										
Within-Person			.040***	.008			.024***	.008	.018*	.008
Between-Person			.133***	.015			.073***	.012	.054****	.013
Deviant Peer Contacts										
Friend Delinquency:										
Within-Person					.193***	.011	.195***	.011	.191***	.011
Between-Person					.249***	.018	.251***	.018	.238***	.018
Romantic Partner Delinquency:										
Within-Person					.074***	.010	.073***	.010	.071***	.010
Between-Person					.208***	.023	.189***	.024	.190***	.023
Unstructured Socializing:										
Within-Person					.022*	.011	.021	.011	.021	.011
Between-Person					.064***	.019	.068****	.019	.060*	.019
Early Risk Propensity										
Impulsivity	.111*	.034	.031	.031	-.003	.026	.001	.026	-.007	.026
Environments of Uncertainty										
Structural Disadvantage										
Bottom 25%	.108	.057	.166**	.050	.116**	.043	.105*	.043	.119**	.043
Q2	-.005	.053	.020	.047	.020	.040	.017	.040	.021	.040
Q3	.006	.047	.002	.041	-.015	.036	-.028	.035	-.021	.035
(Top 25%)										

Table 9 cont.	.008	.021	.002	.018	-.033*	.016	-.031	.016	-.031*	.016
School Disorder										
Community Disorder	-.016	.024	-.007	.021	-.027	.018	-.024	.018	-.024	.018
Family Processes										
Parental Attachment	-.105***	.024	-.043*	.021	-.015	.018	-.024	.018	-.015	.018
Parental Supervision	.031	.016	.017	.014	.009	.012	.011	.012	.009	.012
Parent-Child Conflict	-.039	.035	-.046	.030	-.071**	.026	-.070**	.026	-.070**	.026
Demographics										
Biological Family Intact	-.087**	.032	-.020	.028	-.026	.024	-.025	.024	-.019	.024
Male (Female)	.033	.029	-.128	.029	-.036	.027	-.007	.026	-.039	.027
Black	-.103	.044	-.188	.039	-.058	.033	-.074*	.034	-.080*	.033
Hispanic/Latino	.101	.050	.031	.044	.032	.038	.033	.038	.025	.038
(White)										
Age	.038	.009	.003	.008	.014	.007	.014	.007	.010	.007
Time										
Months into study	.003***	.000	.002	.000	.002***	.000	.002***	.000	.002***	.000
Variance Components										
Intercept	.108*	.011	.070***	.010	.047***	.008	.043***	.008	.042***	.008
Time	.0001***	.000	.0001****	.000	.0001***	.000	.0001***	.000	.0001***	.000
Summary Statistics										
BIC	6034.8		5754.7		5340.96		5345.10		5332.90	
Model $\chi 2$	811.48***		594.13***		296.68***		305.87***		298.00***	
Model R-square	.058		.187		.398		.397		.402	
N = 930										

Notes: Comparison categories appear in parentheses. Intercepts are estimated for the fixed effects but not shown.
*<.05, **<.01, ***<.001.

Table 10. Adult Characteristics: Means and Proportions at Four Levels of Structural Disadvantage

	Structural Disadvantage Quartiles				
	$Q1_{(a)}$: Lower 25%	$Q2_{(b)}$	$Q3_{(c)}$	$Q4_{(d)}$: Upper 25%	Test
High Risk Behaviors and Routine Activities					
Crime	.47	.61	$1.35_{(a,b)}$	$1.61_{(a,b)}$	F = 7.71***
Drug Use	1.29	1.31	1.41	1.58	F =. 44
Bars/Nightclubs	$2.62_{(c,d)}$	$2.45_{(d)}$	1.82	2.02	F = 7.25***
Union Characteristics					
Conflict	2.96	3.94	$4.97_{(a)}$	$5.02_{(a)}$	F = 6.17***
Infidelity Risk	1.91	1.96	$2.09_{(a)}$	$2.36_{(a,b)}$	F = 9.28***
Concurrent Drug Use[#]	.17	.19	.22	.18	χ^2 = 2.09**
Attachment	2.92	3.04	3.04	3.01	F = 1.01
Duration:[#]					
<1year	.54	.46	.42	.38	
≥1year	.46	.54	.58	.62	χ^2 = 13.02**
Type:[#]					
Dating	.82	.73	.65	.61	
Cohabiting	.12	.20	.27	.31	
Married	.06	.07	.08	.08	χ^2 = 31.47***
Current Partner	.63	.73	.70	.79	
Ex-Partner	.37	.27	.30	.21	χ^2 = 13.69***

Table 10 cont.					
Social Assets					
Socioeconomic Achievement: #					
Unemp./≤12yrs. ed.	.10	.12	.24	.38	
Emp./≤12yrs. ed.	.22	.21	.33	.26	
Unemp./>12yrs. ed.	.15	.13	.11	.11	
Emp./>12yrs. ed.	.53	.54	.32	.25	$\chi^2 = 101.38$***
Religious Attendance: #					
Never	.31	.39	.45	.42	
Rarely	.37	.37	.25	.28	
Regular	.32	.24	.30	.30	$\chi^2 = 16.64$*
N = 930					

Notes: #Proportions; columns = 1.00. p.*<.05, **<.01, ***<.001. F-tests are for one-way ANOVA models.
Letters in subscript indicate significant mean differences across the four levels of structural disadvantage.

Table 11. OLS Regression of Adult Union Conflict on Adolescent Heterosexual Attitudes

Models:	[1]		[2]		[3]		[4]	
	B	S.E.	B	S.E.	B	S.E.	B	S.E.
Adolescent Heterosexual Attitudes and Behaviors								
Attitudes:								
Permissive Sex	.212***	.044	.114**	.055			.109**	.053
Gender Mistrust	.146***	.057	.112**	.060			.117***	.058
Behaviors:								
Not S.A.	-.222***	.091	-.122*	.111			-.087	.108
S.A. Conventional (S.A. Unconventional)	-.142***	.121	-.081	.130			-.076	.124
Environments of Uncertainty								
Structural Disadvantage								
Bottom 25%	-.127**	.098	.001	.118			.035	.117
Q2	-.080*	.097	.032	.113			.052	.110
Q3	-.003	.097	.060	.105			.062	.100
(Top 25%)								
Union Characteristics								
Duration:								
≥1year (<1year)	.188**	.069			.181***	.075	.182***	.074
Type:								
(Dating)								
Cohabiting	.157***	.083			.115**	.090	.097**	.90
Married	.056	.134			.048	.142	.045	.014
Current Partner (Ex-Partner)	-.013	.077			-.097**	.079	-.094**	.078
Social Assets								
Socioeconomic Achievement:								
Unemp./≤12yrs. ed.	.221*	.092			.030	.098	.011	.099
Emp./≤12yrs. ed.	-.023	.087			-.039	.090	-.055	.090
Unemp./>12yrs. ed.	-.011	.111			-.015	.109	-.020	.107
(Emp./>12yrs. ed.)								
Religious Attendance:								
Never	.085*	.085			.080*	.084	.058	.084
Rarely	.051	.089			.043	.087	.041	.085
(Regular)								

Table 11 cont.								
Demographics								
Male (Female)	.101	.069	.059	.075	.123***	.069	.101**	.073
Black	.145	.084	.092*	.105	.132***	.085	.099*	.103
Hispanic/Latino	.113	.112	.086*	.121	.096**	.111	.074*	.116
(White)								
Age	.048	.020	-.006	.022	-.022	0.022	-.068	.024
F test			7.65***		7.68***		7.07***	
Adj. R^2			.076		.086		.116	
N = 930								

S.A. = Sexually Active. Beta estimates are standardized. Comparison categories appear in parentheses. Intercepts are estimated but not shown.
*<.05, **<.01, ***<.001.

Table 12. OLS Regression of Adult Infidelity Risk on Adolescent Heterosexual Attitudes and Behaviors

Models:	[1]		[2]		[3]		[4]	
	B	S.E.	B	S.E.	B	S.E.	B	S.E.
Adolescent Heterosexual Attitudes and Behaviors								
Attitudes:								
Permissive Sex	.379***	.029	.246***	.034			.232***	.034
Gender Mistrust	.118***	.039	.102**	.037			.102**	.037
Behaviors:								
Not S.A.	-.235***	.063	-.065	.068			-.079	.069
S.A. Conventional (S.A. Unconventional)	-.170***	.083	-.018	.080			-.023	.079
Adolescent Environments of Uncertainty								
Structural Disadvantage								
Bottom 25%	-.188***	.067	.003	.073			.001	.075
Q2	-.166***	.067	.031	.069			.029	.071
Q3	-.086*	.066	.005	.064			.009	.064
(Top 25%)								
Union Characteristics								
Duration								
≥1year (<1year)	-.149***	.048			-.088**	.049	-.088	.047
Type:								
(Dating)								
Cohabiting	-.047	.057			-.024	.059	-.053	.057
Married	-.166***	.092			-.093**	.094	-.091**	.091
Current Partner	-.155***	.052			-.109***	.052	-.110***	.050
(Ex-Partner)								
Social Assets								
Socioeconomic Achievement:								
Unemp./≤12yrs. ed.	.145*	.063			.089*	.064	.063	.063
Emp./≤12yrs. ed.	.065	.060			.054	.058	.033	.057
Unemp./>12yrs. ed.	.069	.076			.032	.070	.024	.068
(Emp./>12yrs. ed.)								
Religious Attendance:								
Never	.101**	.058			.105**	.055	.064	.053
Rarely	.080*	.061			.091*	.056	.082*	.054
(Regular)								

Table 12 cont.								
Demographics								
Male (Female)	.315***	.045	.217***	.046	.253***	.045	.197***	.046
Black	.284***	.056	.210***	.064	.282***	.056	.208***	.066
Hispanic/Latino (White)	.121***	.075	.103**	.074	.155***	.072	.114***	.074
Age	.075	.014	-.079*	.014	.052	.014	-.027	.015
F test			27.23****		19.92***		18.24***	
Adj. R^2			.242		.218		.281	
N = 930								

Notes: S.A. = Sexually Active. Beta estimates are standardized. Comparison categories appear in parentheses.
Intercepts are estimated but not shown.
*<.05, **<.01, ***<.001.

Table 13. Logistic Regression of Concurrent Drug Use on Adolescent Heterosexual Attitudes and Behaviors

Models:	[1]		[2]		[3]		[4]	
	O.R.	S.E.	O.R.	S.E.	O.R.	S.E.	O.R.	S.E.
Heterosexual Attitudes and Behaviors								
Attitudes:								
Permissive Sex	1.430***	.107	1.325*	.138			1.241	.142
Gender Mistrust	.903	.138	.797	.153			.785	.158
Behaviors:								
Not S.A.	.420***	.199	.468**	.261			.457**	.272
S.A. Conventional (S.A. Unconventional)	.416**	.287	.485*	.317			.454*	.324
Environments of Uncertainty								
Structural Disadvantage								
Bottom 25%	.939	.245	1.111	.301			1.221	.317
Q2	1.05	.239	1.109	.285			1.149	.295
Q3	1.29	.232	1.288	.261			1.326	.266
(Top 25%)								
Union Characteristics								
Duration:								
≥1year (<1year)	1.124	.169			1.249	.199	1.218	.204
Type:								
(Dating)								
Cohabiting	1.465*	.191			1.332	.224	1.270	.230
Married	.622	.391			.592	.443	.548	.455
Current Partner (Ex-Partner)	.786	.180			.699	.203	.651*	.206
Social Assets								
Socioeconomic Achievement:								
Unemp./≤12yrs. ed.	1.34	.224			1.189	.256	1.114	0.267
Emp./≤12yrs. ed.	1.19	.216			1.168	.236	1.045	0.244
Unemp./>12yrs. ed.	1.670*	.255			1.791*	.267	1.705*	0.271
(Emp./>12yrs. ed.)								
Religious Attendance:								
Never	2.213***	.221			1.997**	.233	1.836*	.239
Rarely	1.625*	.237			1.516	.245	1.538	.248
(Regular)								

Table 13 cont.

Demographics								
Male	1.040	.168	.775	.191	.976	.179	.741	0.199
Black	.896	.213	.807	.270	.893	.231	.874	0.279
Hispanic/Latino (White)	1.689*	.245	1.526	.277	1.789*	.262	1.740	0.286
Age	1.028	.049	.962	.058	1.043	.056	0.972	0.064
Model χ^2			31.158***		31.098***		52.74***	
R^2			.055		.053		.093	
N = 930								

Notes: S.A. = Sexually Active. O.R. = Odds Ratio. Comparison categories appear in parentheses. Intercepts are estimated but not shown.
*<.05, **<.01, ***<.001.

Table 14. OLS Regression of Adult Attachment on Adolescent Heterosexual Attitudes and Behaviors

Models:	[1]		[2]		[3]		[4]	
	B	S.E.	B	S.E.	B	S.E.	B	S.E.
Adolescent Heterosexual Attitudes and Behaviors								
Attitudes:								
Permissive Sex	-.064	.035	-.058	.044			-.042	.039
Gender Mistrust	.032	.044	.007	.048			.020	.042
Behaviors:								
Not S.A.	-.026	.071	-.034	.088			.035	.079
S.A. Conventional	.101*	.094	.061	.103			.069	.091
(S.A. Unconventional)								
Adolescent Environments of Uncertainty								
Structural Disadvantage								
Bottom 25%	-.043	.076	-.087	.093			-.014	.086
Q2	.019	.075	-.027	.089			.010	.081
Q3	.017	.075	-.011	.083			.025	.074
(Top 25%)								
Union Characteristics								
Duration:								
≥1year (<1year)	.420***	.049			.317***	.054	.315***	0.055
Type:								
(Dating)								
Cohabiting	.211***	.063			.058	.065	.056	.065
Married	.188***	.101			.045	.104	.044	.105
Current Partner	.371***	.055			.259****	.057	.260***	.057
(Ex-Partner)								
Social Assets								
Socioeconomic Achievement:								
Unemp./≤12yrs. ed.	-.018	.071			-.004	.071	.003	.073
Emp./≤12yrs. ed.	-.046	.068			-.037	.064	-.033	.066
Unemp./>12yrs. ed.	.008	.086			.029	.078	.034	.078
(Emp./>12yrs. ed.)								
Religious Attendance:								
Never	-.050	.065			-.065	.060	-.062	.061
Rarely	-.013	.069			-.031	.062	-.032	.062
(Regular)								

Table 14 cont

Demographics								
Male (Female)	-.128***	.053	-.091*	.059	-.022	.049	.000	.054
Black	-.036	.065	-.065	.083	-.086**	.062	-.082	.076
Hispanic/Latino	.020	.087	-.009	.095	-.043	.080	-.043	.085
(White)								
Age	.114***	.016	.084*	.018	-.017	.016	-.012	.017
F test			3.25***		22.71***		15.17***	
Adj. R^2			.027		.242		.243	
N = 930								

Notes: S.A. = Sexually Active. Beta estimates are standardized. Comparison categories appear in parentheses.
Intercepts are estimated but not shown.
*<.05, **<.01, ***<.001.

Table 15. OLS Regression of Crime on Adult Union Characteristics

Models:	[1]		[2]		[3]		[4]		[5]		[6]	
	B	S.E.	B	S.E.	B	S.E.	B	S.E.	B	S.E.	B	S.E.
Union Characteristics												
Conflict	.173***	.021	.123***	.021							.041	.021
Infidelity Risk	.326***	.029			.239***	.033					.199***	.034
Concurrent Drug Use	.315***	.054					.299***	.053			.259***	.053
Attachment	-.022	.028							.051	.031	.109**	.030
Duration:												
≥1year (<1year)	-.046	.045	-.042	.049	.001	.048	-.028	.047	-.037	.051	-.051	.049
Type:												
(Dating)												
Cohabiting	.020	.055	-.012	.092	.017	.090	.005	.088	-.009	.092	.016	.087
Married	-.048	.089	.023	.059	.039	.057	.021	.056	.034	.059	.015	.055
Current Partner	-.081*	.050	-.059	.052	-.047	.051	-.052	.049	-.084*	.054	-.059	.050
(Ex-Partner)												
Adolescent Environments of Uncertainty												
Structural Disadvantage												
Bottom 25%	-.182***	.064	-.090	.077	-.083	.075	-.095*	.074	-.087	.077	-.090*	.072
Q2	-.153***	.063	-.068	.072	-.062	.071	-.071	.069	-.063	.073	-.073	.068
Q3	-.053	.063	-.025	.066	-.018	.064	-.032	.063	-.019	.066	-.036	.062
(Top 25%)												
Social Assets												
Socioeconomic Achievement:												
Unemp./≤12yrs. ed.	.155***	.060	.074	.064	.060	.063	.066	.062	.078*	.065	.052	.061
Emp./≤12yrs. ed.	.078*	.056	.026	.059	.014	.058	.015	.056	.023	.059	.015	.055
Unemp./>12yrs. ed.	.093**	.072	.063	.070	.055	.069	.040	.067	.060	.071	.035	.066
(Emp./>12yrs. ed.)												
Religious Attendance:												
Never	.117***	.055	.091*	.055	.076*	.054	.061	.052	.104**	.055	.050	.052
Rarely	.038	.057	.039	.056	.023	.055	.025	.054	.046	.056	.011	.053
(Regular)												

Table 15 cont

Demographics												
Male (Female)	.215***	.044	.181***	.045	.132****	.045	.197***	.042	.197***	.045	.143***	.044
Black	.164***	.054	.092*	.066	.046	.066	.111**	.063	.114**	.066	.060	.064
Hispanic/Latino	.097**	.073	.068*	.076	.047	.075	.056	.072	.082*	.076	.032	.072
(White)												
Age	-.045	.013	-.024	.014	-.034	.014	-.034	.013	-.027	.014	-.038	.013
F test			7.29****		9.46***		12.75***		12.50***		13.23***	
Adj. R^2			.104		.135		.178		.092		.210	
N = 930												

Notes: Beta estimates are standardized. Comparison categories appear in parentheses. Intercepts are estimated but not shown.
*<.05, **<.01, ***<.001.

Table 16. OLS Regression of Drug Use on Adult Union Characteristics

Models:	[1]		[2]		[3]		[4]		[5]	
	B	S.E.	B	S.E.	B	S.E.	B	S.E.	B	S.E.
Union Characteristics										
Conflict	.126***	.025	.096**	.025					.039	.026
Infidelity Risk	.278***	.035			.245***	.039			.264***	.042
Attachment	-.014	.032					.044	.036	.121**	.037
Duration:										
≥1year (<1year)	-.055	.048	-.047	.058	-.008	.057	-.044	.061	-.052	.060
Type:										
(Dating)										
Cohabiting	.034	.063	-.031	.108	-.002	.107	-.029	.109	-.008	.106
Married	-.054	.103	.034	.070	.047	.068	.043	.069	.037	.068
Current Partner	-.055	.053	-.040	.061	-.024	.060	-.060	.063	-.050	.062
(Ex-Partner)										
Adolescent Environments of Uncertainty										
Structural Disadvantage										
Bottom 25%	-.006	.074	.073	.091	.079	.089	.075	.091	.080	.089
Q2	-.018	.074	.041	.085	.046	.084	.045	.086	.042	.083
Q3	-.017	.074	.003	.078	.008	.076	.008	.078	.003	.076
(Top 25%)										

Table 16 cont

Social Assets										
Socioeconomic Achievement:										
Unemp./≤12yrs. ed.	.103**	.070	.090*	.076	.074	.075	.093*	.076	.072	.074
Emp./≤12yrs. ed.	.015	.066	.005	.070	-.006	.068	.003	.070	-.002	.068
Unemp./>12yrs. ed.	.081*	.084	.071*	.083	.063	.081	.068*	.083	.059	.081
(Emp./>12yrs. ed.)										
Religious Attendance:										
Never	.216***	.063	.196***	.065	.179***	.063	.207***	.065	.182	.063
Rarely	.112**	.066	.098**	.066	.080*	.065	.104**	.067	.080	.065
(Regular)										
Demographics										
Male (Female)	.141***	.052	.108**	.053	.055	.054	.122***	.053	.050	.053
Black	.028	.064	.040	.078	-.012	.078	.057	.078	-.014	.078
Hispanic/Latino	.075*	.086	.094**	.090	.069*	.088	.105**	.090	.067*	.088
(White)										
Age	.027	.015	.034	.017	.025	.016	.032	.017	.025	.016
F test			4.83***		7.42***		4.46***		7.30***	
Adj. R^2			.067		.106		.060		.120	
N = 930										

Notes: Beta estimates are standardized. Comparison categories appear in parentheses. Intercepts are estimated but not shown.
*<.05, **<.01, ***<.001.

Table 17. OLS Regression of Going out to Bars and Nightclubs on Adult Union Characteristics

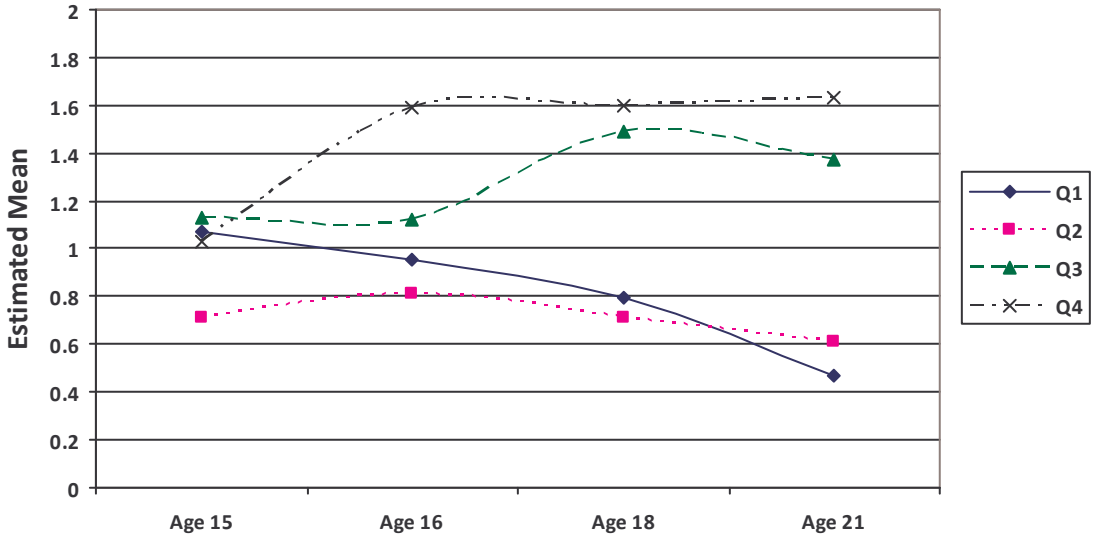
Models:	[1]		[2]		[3]		[4]		[5]		[6]	
	B	S.E.	B	S.E.	B	S.E.	B	S.E.	B	S.E.	B	S.E.
Union Characteristics												
Conflict	.017	.065	.036	.063							-.035	.065
Infidelity Risk	.174***	.094			.231***	.097					.245***	.105
Concurrent Drug Use	.116***	.175					.110***	0.163			.073*	.163
Attachment	-.006	.085							.010	.091	.069	.092
Duration:												
≥1year (<1year)	.004	.140	-.011	.146	.016	.141	-.007	.143	-.008	.151	.000	.150
Type:												
(Dating)												
Cohabiting	-.009	.167	-.066	.174	-.061	.169	-.068	.172	-.063	.173	-.063	.169
Married	-.085*	.272	-.159***	.271	-.134***	.265	-.153***	.269	-.157***	.271	-.131***	.265
Current Partner	-.058	.153	-.057	.153	-.037	.149	-.054	.151	-.063	.158	-.052	.153
(Ex-Partner)												
Adolescent Environments of Uncertainty												
Structural Disadvantage												
Bottom 25%	.123**	.195	.075	.227	.080	.222	.073	.073	.076	.228	.080	.221
Q2	.090*	.194	.039	.213	.041	.208	.038	.038	.041	.213	.039	.207
Q3	-.040	.194	-.050	.194	-.049	.189	-.054	-.054	-.049	.194	-.052	.189
(Top 25%)												

Table 17 cont.

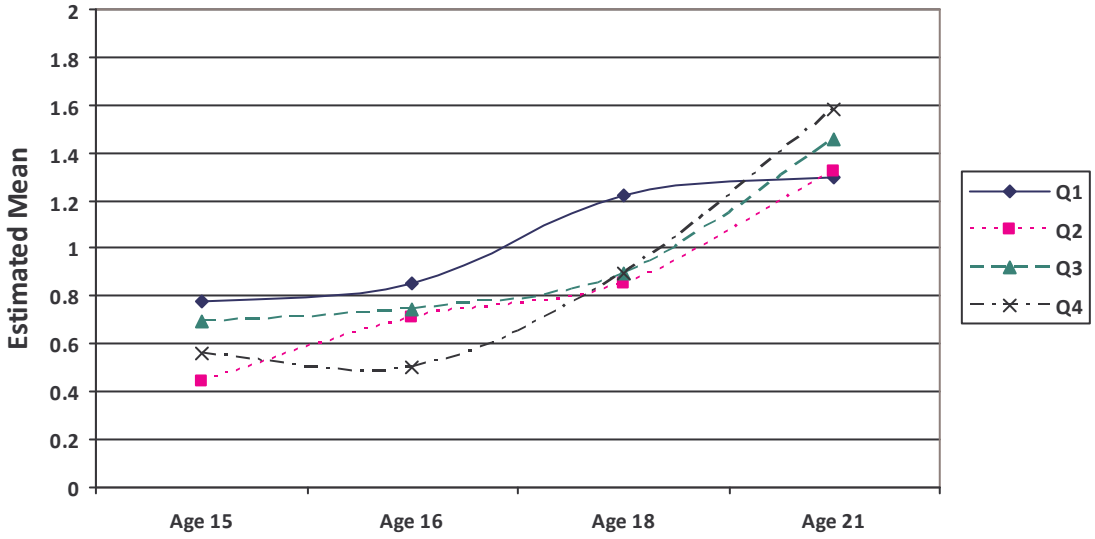
Social Assets												
Socioeconomic Achievement:												
Unemp./≤12yrs. ed.	-.220****	.181	-.075*	.190	-.092*	.186	-.079*	.189	-.074*	.190	-.094*	.185
Emp./≤12yrs. ed.	-.180***	.171	-.042	.174	-.051	.169	-.045	.173	-.043	.174	-.052	.169
Unemp./>12yrs. ed.	-.090*	.218	-.039	.208	-.046	.203	-.048	.207	-.040	.208	-.054	.202
(Emp./>12yrs. ed.)												
Religious Attendance:												
Never	.028	.169	.016	.161	-.004	.158	.005	.161	.020	.161	-.008	.158
Rarely	.094*	.178	.053	.166	.034	.162	.048	.165	.055	.166	.031	.162
(Regular)												
Demographics												
Male (Female)	-.006	.140	-0.032	.132	-.089**	.133	-.027	.130	-.027	.131	-.086	.133
Black	-.069*	.169	-0.031	.196	-.088*	.195	-.026	.193	-.025	.195	-.081	.195
Hispanic/Latino	.039	.226	0.057	.224	.029	.219	.052	.222	.061	.223	.027	.219
(White)												
Age	.341***	.037	0.369***	.041	.362***	.040	.366***	.041	.368***	.041	.359***	.040
F test			11.83***		15.18***		12.67***		12.75***		13.58***	
Adj. R^2			.166		.207		.177		.165		.214	
N = 930												

Notes: Beta estimates are standardized. Comparison categories appear in parentheses. Intercepts are estimated but not shown.
*<.05, **<.01, ***<.001.

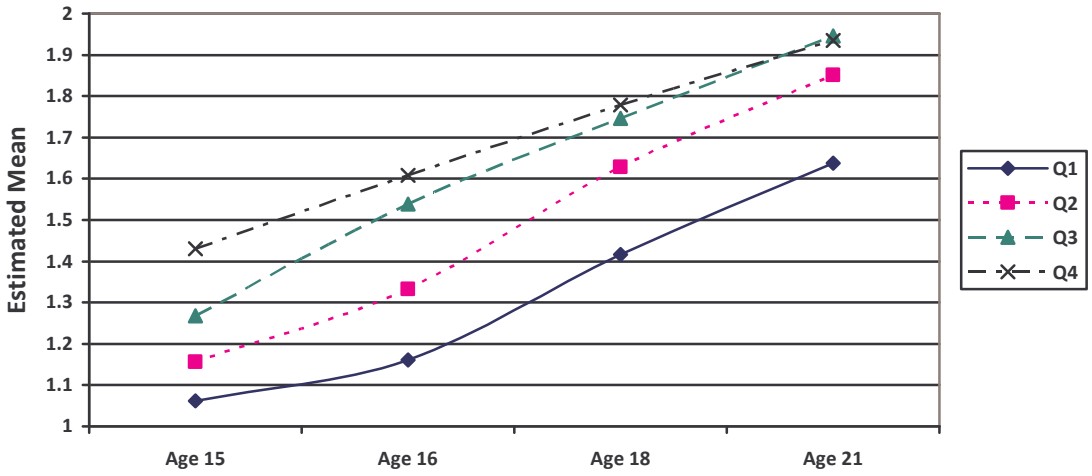
Fg. 1 Criminal Involvement



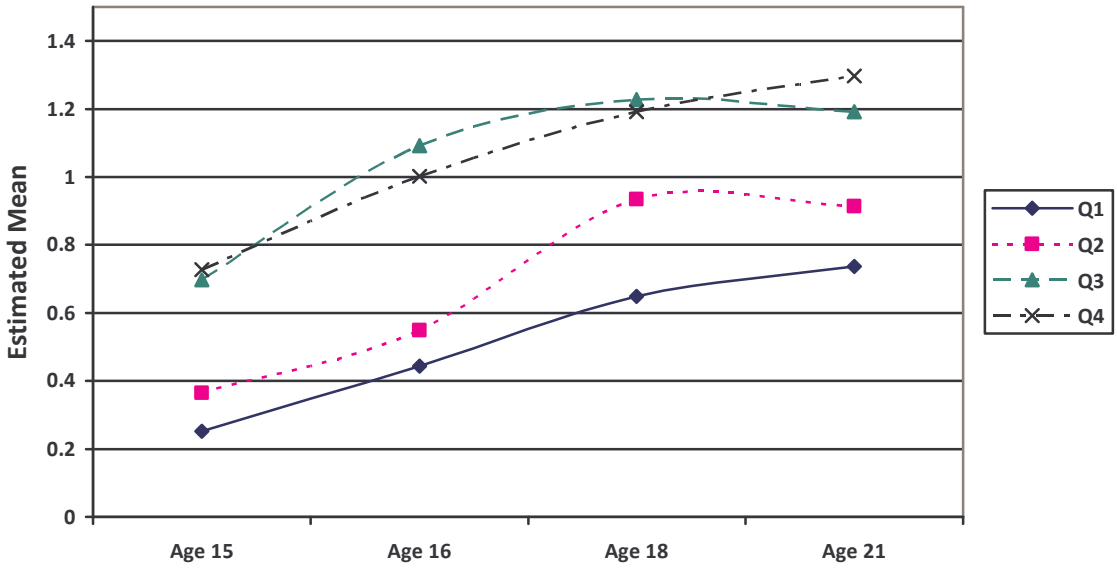
Fg. 2 Drug Use



Fg. 3 Permissive Attitudes



Fg. 4 Unconventional Behavior



CHAPTER 10: REVIEW OF THE FINDINGS

Adolescents are keenly interested in sex, love, and heterosexual companionship and while these experiences are no doubt significant to the development of later adult unions, recent studies suggest that these interpersonal relationships may also influence life course patterns of crime and drug use (e.g., McCarthy & Casey et al., 2008, Sampson, et al., 2006; Haynie et al., 2005; Seffrin et al., 2009). However the previous studies have been limited by focusing largely on marriage and dating and also by ignoring the structural and economic factors that may influence the development of one's style or strategy for navigating the heterosexual world (e.g., Anderson, 1999; Burton, 2007; Harding, 2007; Meier & Allen, 2009; Baumer & South, 2001). The current study expanded upon prior work by examining the intersection of social class, crime, and heterosexual relationships in a longitudinal sample of adolescents followed to adulthood. I analyzed these relationships from the perspective of general attitudes and behaviors as well as by focusing on a specific heterosexual union and its influence on crime and drug use in early adulthood. The findings of this study are discussed in the contexts of these two objectives.

Heterosexual Attitudes and Behaviors

In keeping with much prior work, findings showed that risky heterosexual attitudes and behaviors are more prevalent among youths from disadvantaged communities (e.g., Harding 2007). Further, between-person analyses revealed that differences in heterosexual attitudes and behaviors in adolescence predicted differences in delinquency,

drug use, deviant peer contacts, and unstructured socializing even after accounting for a wide array of other relevant factors such as family processes, community disorder, and impulsivity. Youths who reported highly permissive attitudes and unconventional sexual behaviors, such as engaging in sex outside romantic relationships, were more likely to report involvement in delinquency and drug use than youths who reported more traditional dating repertoires. These risky attitudes and behaviors were also found to be associated with deviant peer contacts (friends and romantic partners) and unstructured socializing, or "hanging-out" with friends (e.g., Osgood, 1996). Controlling for peer-network deviance and unstructured socializing was found to partially mediate the relationship between risky heterosexual attitudes and behaviors, drug use, and juvenile delinquency. Thus, hypothesis one was largely supported in these findings.

H1: Structural disadvantage influences juvenile delinquency indirectly through the development of risky heterosexual attitudes and behaviors which a) increase individual differences in unstructured socializing, and b) increase individual differences in deviant peer contacts; friends and romantic partners.

These findings go beyond past work by positioning heterosexual relationships as a potentially important intermediate mechanism that links juvenile delinquency with social class. However the inferential power of these analyses are somewhat limited because at the age of fifteen for example, some youths may simply not have had the opportunity to pursue the opposite sex in a style or manner that places them at risk for delinquency or drug use. The above analyses were thus complemented with a longitudinal examination

of criminal involvement and drug use that focused on age-graded changes (i.e. within-person differences) in heterosexual attitudes and behaviors.

While these longitudinal analyses showed structural disadvantage to have little to no direct relationship with initial levels of crime and drug use, findings did however indicate that early enmeshment in a highly uncertain environment may be related to later levels of crime due to early and escalating patterns of unconventional heterosexual involvement among youths who were disadvantaged in adolescence. Moreover, the Hispanic-white gap in crime was reduced to non-significance after controlling for heterosexual attitudes and behaviors, which offers further support for the hypothesis that crime and social class are linked through the varied styles and strategies of heterosexual socializing. Furthermore, age-graded increases in risky heterosexual attitudes and behaviors predicted between-person differences in crime and drug use even after controlling for between and within-person differences in deviant peer contacts and unstructured socializing. The majority of these analyses did not, however, predict respective changes or growth in crime or drug use. This indicates that while aging and other factors may explain a large proportion of the shape of criminal trajectories (e.g. Casey, 2008; Gottfredson & Hirschi, 1990), age-graded variations in heterosexual experiences may add substantially to the long-term individual differences in antisocial behavior and drug use. Thus, hypothesis two receives partial support in these findings.

H2: Age-graded increases, or within-person changes, in unconventional heterosexual attitudes and behaviors are factors that a) influence the longitudinal stability of individual differences in criminal involvement and drug use, and b) increase overtime the

rates at which individuals use drugs and participate in crime (i.e. within-person changes).

Adult Union Characteristics

The previous discussion centered on the delinquent consequences of one's overall style or strategy for heterosexual socializing. Yet many young people, as they begin to take on a heavier load of adult roles and responsibilities (e.g., going to work and paying bills), shift their heterosexual interests and efforts toward securing a longer lasting union that will most likely occupy significant proportions of the actor's time and resources (e.g., Giordano, 2003). This age-graded transformation in the relative importance of opposite sex unions is broad based and not exclusive to a particular class or culture (e.g., Buss, 2004). Thus, in the second part of the study, the characteristics of a specific heterosexual union were examined as possible influences on crime, drug use, and routine activities in early adulthood.

Results show that structural disadvantage in adolescence was associated with relatively high levels of conflict and infidelity in later adult relationships. Analyses further indicated that permissive attitudes, gender mistrust, and unconventional sexual actively in adolescence predicted all but one of these union characteristics with a moderate degree of strength—the exception being that of partner attachment which, unlike most of the other union characteristics, was also found to be unrelated to earlier structural disadvantage. Moreover, adolescent attitudes and behaviors continued to show utility in predicting these later union characteristics even after controlling for

socioeconomic achievement, religious attendance, and demographic variables. Consequently, hypothesis three receives partial support in these findings.

H3: Risky heterosexual attitudes and behaviors in adolescence will predict involvement in later adult unions with relatively high levels of conflict, infidelity, concurrent partner drug use, and relatively low levels of partner attachment.

These findings are in line with previous work that has examined connections between heterosexual experiences in adolescence and the quality of later unions (e.g., Raley et al., 2007; Teachman, 2003). However, the current research adds to this literature by focusing on a wider range of union characteristics, such as infidelity and concurrent drug use, than has been previously studied (i.e. traditionally focused on marital timing and divorce). Furthermore, these findings highlight the importance of studying the long-term impact of structural disadvantage on the development of heterosexual relationships in adolescence through to adulthood.

Lastly, the union characteristics of conflict, infidelity, concurrent drug use, and attachment were examined as influences on crime, drug use, and routine activities in adulthood. Findings showed that, even after controlling for levels of emotional attachment, type and duration of the union, as well as socioeconomic achievement and other background factors, levels of conflict, infidelity risk, and concurrent partner drug use predicted variations in criminal involvement, self-reported drug use, and the frequency with which individuals go out to bars and nightclubs—a routine activity that

carries with it a risk for criminal involvement and victimization (e.g., Cohen & Felson, 1979; Sampson & Lauretsin, 1990).

Among these union characteristics, infidelity risk was shown be the most reliable predictor for all of these behaviors, perhaps because of the multiple avenues through which being unfaithful to one's spouse or partner may increase the risk for crime. For example, cheating may entail routine activities (such as sneaking off to a bar or nightclub) that are themselves risky in terms of crime and drug use. However just as likely is a scenario in which actors may become enraged or depressed upon learning that their partner has cheated on them, which may in turn increase levels of conflict within the relationship and ultimately more negative emotionality that may foster criminal behaviors and abusive patterns of drug use (e.g. Agnew, 2001; Giordano et al., 2007; Katz, 1988). The fact that, in the finals models for crime and drug use, relationship conflict is reduced to non-significance after controlling for infidelity provides some evidence for this claim. Interestingly through, examining these characteristics in tandem revealed a positive and significant relationship between partner attachment, crime, and drug use. Obviously, these findings present a more complex picture of emotional attachment and crime than what is commonly portrayed in the literature (e.g. McCarthy & Casey, 2008; Laub & Sampson, 2003). Suggested by these findings is the notion that strong emotional attachment within relationships that are unstable due to conflict and infidelity may further compromise efforts to desist from lifestyles and worldviews that foster criminal behavior. Within this rather precarious relationship context, high levels of attachment may translate into feelings of jealously and insecurity that may in turn produce high levels of negative

emotionality or strain (e.g., Agnew, 2001).[15] This does not imply that emotional attachments developed within heterosexual relationships are incapable of reducing the risk of criminal behavior, only that these interpersonal dynamics are perhaps more complex than previously theorized. It is also likely that the supposed deterrent effect of emotional bonds on criminal behavior may be relationship specific (e.g., parent vs. romantic partner) and take years to develop which, given the youthfulness of the TARS sample, may not yet be detectable. More importantly though, if pro-social attachments are slow to develop, relationships that are unstable due to conflict and infidelity may not survive long enough to enjoy these benefits. Given these findings, hypothesis four receives partial support:

H4: Adult relationships characterized by high levels of conflict, concurrent drug use, and a high risk of infidelity will predict differences in criminal involvement, drug use, and risky routine activities (going out to bars/nightclubs) even after levels of attachment are controlled.

Future research may improve upon the current study as well as past work by developing a model of heterosexual relationships that includes an even broader array of union characteristics that may potentially influence crime, drug use, and other high risk behaviors. However, as many scholars have argued, commitments to conventional adult

[15] Statistical examination of the current study's attachment scale (i.e. factor analysis) did not reveal evidence of a multidimensional structure. However the scale does combine items that ask about levels of attraction with items that inquire on love and emotional intimacy. Consequently, the current scale may be measuring a version of attachment that is relatively distinct from the feelings of closeness that a young person might associate with his or her mother or father—feelings which have been long thought among criminologists to keep individuals bonded to conventional others and therefore protective against criminal behavior (Hirschi, 1969). Even so, the measurement approach used in the current study is largely in line with past work which also equates romantic love between intimates with that of feelings of attachment (e.g., Laub & Sampson, 2003; McCarthy & Casey, 2008).

lifestyles that include educational attainment beyond high school, stable employment, and regular church attendance are also likely to play prominent roles in the criminal desistance process (e.g., Dannefer, 1984; Elder, 1998; Laub & Sampson, 2003; Giordano et al., 2002; Uggen, 2000). Although the current study included attention to these factors, more research is needed specifically on how styles and strategies for heterosexual socializing may influence the acquisition of these social assets. For example, becoming a teen mother or teen father may have somewhat of a status enhancing quality among disadvantaged youths (e.g., Anderson, 1999; Burton, 1990, 2007), however the cumulative burden of childcare may derail educational aspirations and it turn, lower the likelihood of criminal desistance. Controlling for these union characteristics was found to mediate race gaps in criminal offending among whites, blacks, and Hispanics which reinforces the notion that structural disadvantage has a cumulative, yet delayed effect over the life-course by negatively influencing the development of stable and potentially pro-social heterosexual relationships. The levels of conflict, mistrust and betrayal that are often associated with these relatively accelerated patterns of heterosexual involvement may accumulate within the actor as negative emotionality, creating a less than conformist view of self that runs counter to the notion of "settling down" and finding contentment in legitimate avenues of success (e.g., Giordano et al., 2007; Hagan, 1997; Hagan & Foster, 2003). More general research on the emotional and cognitive underpinnings of criminal offending would assist greatly in future studies that look specifically at the connections between social class, heterosexual relationships, and antisocial behavior. Indeed, there is at least some tangential evidence to suggest that heterosexual experiences are tied not only to the negative emotional aspects of crime

(McCarthy & Casey, 2008), but also to feelings of excitement and thrill-seeking. This may be especially true for a group of adolescent boys who set out to rendezvous with a group of adolescent girls, but in the process are sidetracked into delinquent activities, in part, because of the high levels of arousal associated with these pursuits (Loewenstein et al., 1997), and the lack of capable guardians that might prohibit such activity.

Complications of Gender

Throughout the previous sections, gender was examined as a moderating force and as demographic correlate of crime that may be explained once average differences in heterosexual attitudes and behaviors between men and women were accounted for the models. Findings from these analyses suggest that accounting these heterosexual differences explains a significant proportion of the gender-gap in crime. Furthermore, evidence was found to suggest that gender moderates these relationships. The effects of heterosexual attitudes and behaviors on crime, drug use, and later union characteristics were similar in most cases for men and women, however, several exceptions emerged that are worth noting. Male levels of criminal involvement, for instance, are disproportionately impacted by relationship conflict and the partner's concurrent drug use. Similar to recent studies, these findings emphasize the quality of heterosexual unions as a salient force in male patterns of criminal offending (e.g., Capaldi et al., 2008). However, females' likelihood of dating a delinquent partner was found to be closely tied with their involvement in unconventional sexual activity whereas these behaviors had a negligible impact on male relationships. Although this finding is somewhat expected given the nature of opposite sex relationships (i.e. men, on average, are more delinquent

than women; e.g., Steffensmeier & Streifel, 1991), it reinforces the more general notion that, with a women's entrée into the world of dating and sex, also comes the risk of selecting a partner who is relatively more delinquent and who will most likely also serve as a gateway into male dominated social networks, that as a whole, are much more delinquent than networks dominated by adolescent females (e.g., Haynie, 2003; McCarthy, Felmlee, & Hagan, 2004). Thus, hypotheses five receives some support from these findings whereas support for hypothesis six is substantially weaker, but not absent.

H5: Women who are similar to men regarding heterosexual attitudes and behaviors will also participate in similar levels of crime and drug use (mediation).

H6: The influence of unconventional heterosexual attitudes, behaviors, and negative union characteristics will be a) stronger for men due to their greater likelihood of reacting violently or aggressively to personal threats and adversity, or b) stronger for women due to a relatively heightened sensitivity to the tenure of heterosexual relationships and because of the average male-female differences in criminal involvement

Similarity rather than difference appears to characterize the nature of the relationships between heterosexual socializing and crime for men and women. However several exceptions were found which suggests that gender may modify these relationships with a greater degree of complexity than what was tested in the current study.

CHAPTER 11: DISCUSSION, LIMITATIONS, AND DIRECTIONS FOR FURTURE RESEARCH

Structural disadvantage is related to criminal behavior, however many scholars have noted that this relationship is not straightforward. In the current study, I explored the possibility that crime and social class may be linked through the development of one's style or strategy for heterosexual socializing. The findings are largely in line this notion which suggests that heterosexual experiences may provide useful information in the construction of criminological theories that emphasize social class to explain racial disparities in offending (e.g. Anderson, 1999; Hagan, 1985, 1991, 1992, 1997; Messner et al., 2004; Tittle, 1990). Moreover, this study contributed to the literature by identifying and evaluating multiple pathways though which heterosexual attitudes and behaviors are linked with crime and delinquency.

The negative characteristics of a heterosexual union, infidelity in particular, may delay or derail criminal desistance by generating high levels of negative emotionality which may complicate the individual's ability to transform his or her view of self from a rebellious adolescent to that of a tempered and mild mannered adult (Giordano, et al., 2002). The levels of strain that extend from these precarious partnerships may, in other words, cast a shadow of doubt over the legitimacy of monogamous unions and the institution of marriage, thus eroding the prospect of achieving social status through conventional means and, in turn, encouraging antisocial behavior (e.g., Cernkovich, Giordano, Rudolph, 2000; MacLeod, 1987; Maume & Lee, 2003; Messner & Rosenfeld, 2003). As prior works have demonstrated, the sustainability of heterosexual unions are a key structural force in the suppression crime and social disorder, perhaps even greater so

than economic forces such as labor availability. Hence, infidelity, being such a salient threat to heterosexual unions and the cultural values upon which they are built, is likely to be a flashpoint among those attempting to solidify a long-term commitment, thus diminishing trust in the opposite sex. As a consequence, a view of human relationships may develop, one that is consistent with the view of antisocial behaviors as justifiable and even necessary given past negative experiences (e.g., Agnew, 2001; Black, 1983; Giordano et al., 2007; Topalli, 2005). Furthermore, it is unlikely that emotional bonds, such as feelings of caring and concern for the partner's well-being, are absent within relationships where cheating occurs; nevertheless, romantic love may not be enough to overshadow or outweigh the negative dynamics that flow from these indiscretions. The countervailing forces of verbal and physical conflict, and of course cheating, may in fact limit the sequence through which romantic love develops into more stable forms of psychological attachment—a process that has previously been discussed as one of the principle mechanisms that explain conformity among conventionally situated adults (e.g., Hirschi, 1969; Laub & Sampson, 2003).

It is possible however that attachment, as measured in the current study, is conflated somewhat with feelings of romantic love. Recent evidence from studies examining human emotions and brain function suggest that romantic love, lust, and attachment are related, but distinct neurological factors that influence heterosexual relationships (Fisher, 2004). Future research should therefore expand upon the conceptualization and measurement of the qualities of interpersonal relationships when developing theories of crime and delinquency (see also Hazen & Shaver, 1987).

Another limitation of the current study is that the infidelity measure focused on the respondent's likelihood of cheating, not their partner's, which limits somewhat the argument that its connections with crime and other risky behaviors are a result of negative relationship experiences. The recent study by McCarthy and Casey (2008) contains similar limitations. However, the respondent's risk of infidelity may be strongly associated with the belief that their partner has cheated or will, at some point, involve themselves in a physical relationship with another. In addition, infidelity may lead to criminal involvement and drug use for reasons largely independent of negative relationships experiences. Likewise, concurrent drug use within heterosexual unions may be a determinant to relationship stability, but it may also occupy a relatively small amount of the actor's time and resources and therefore not interfere greatly in the progression of the relationship. Thus, this study has looked beyond the characteristics of a specific union and examined the styles and strategies of heterosexual involvement that no doubt contribute to these interpersonal dynamics.

While the delinquent behavior of one's peers, both friends and romantic partners, is well-established as a correlate of self-reported criminal involvement, more research is needed on interpersonal dynamics that are not already so endogenous to the behaviors in question. Styles and strategies for heterosexual socializing may be particularly salient in these respects as they may influence the development of peer networks and guide the routine activities in which criminal behavior and drug use unfold (Seffrin et al., 2009). Inclusion of the heterosexual domain may therefore add to recent efforts in the field that have taken innovative steps to revitalize the research on peer networks and crime (e.g., Haynie & Osgood, 2005; Haynie, 2001; Kreager, 2007; Lonardo, Giordano, Longmore,

& Manning, 2009; McGloin, 2009; Warr, 2002). Moreover, patterns of risky or unconventional styles of involvement were found in this study to be more prevalent among youths from disadvantaged communities which suggests that social class shares a relationship with crime and delinquency due at least in part to these interpersonal dynamics. Although numerous findings of the current study support this position, in some analyses structural disadvantage did not emerge as an aggravating influence on crime and deviant peer contacts. For example, longitudinal patterns of drug use were, in some instances, found to be more serious among the least disadvantaged youths. Similar findings have surfaced in other studies that have examined delinquency in large, economically diverse youth samples (e.g., Wright et al., 1999). Similarly, while unstructured socializing in adolescence and going out to bars and nightclubs in early adulthood were both correlated with risky and unconventional styles of heterosexual involvement, these behaviors were more prevalent among the least disadvantaged respondents.

Although negative union characteristics, such as infidelity, may account for a greater degree of the connection between social class and crime, it is likely that the way routine activities were operationalized in the current study failed to capture the types of situations more specific to youths living in disadvantaged communities. As suggested in prior work, youths from low-income areas may have difficulty forming traditional school-based friendships due to the high levels of residential instability and community violence which often limits the opportunity children have to socialize in a safe environment (e.g., Giordano et al., 1993; Sampson et al., 1999). Yet in response to this adversity, some adolescents may develop a rather unique set of associations with older

peers who may offer protection, but also tutelage in the ways of becoming a "gangster" or "street-hood" (Harding, 2009). Past work suggests that the emotional connections within these relationships may be no less salient than relationships among non-delinquent peers (Giordano, Cernkovich, & Pugh, 1986), but given the matter of age differences, it is likely that the younger adolescents may be introduced to sexual knowledge and physically intimate situations at relatively early ages (Browning & Lauman, 1997; see also Hagan & McCarthy, 1997). More research is needed on these contextual elements as they may modify the risk that comes along with "just hanging out" and other forms of unstructured socializing (Osgood et al., 1996). Likewise, young adults who live in a low-income community versus those who live on or around a college campus may be relatively more isolated from establishments that offer a broad array of nightlife, mainly bars, nightclubs, and other venues that serve alcoholic beverages. These localities are hot spots for heterosexual cruising as well as criminal activity, but their availability is limited somewhat to those who can afford a bar tab and have transportation to and from the venue. However, environments similar to these may be generated in the form of a "party house," which is perhaps more accessible among those living in low income communities. Moreover, the types of venues that cater specifically to a "singles crowd" are more likely to draw a younger demographic than a sports bar or tavern, and as a result, may be a more probable location in which heterosexual interests intersect with criminal activity. Although the current study lacked the ability to evaluate fully these complications, future research should attend to these contextual correlates when developing studies of routine activities and their impact on crime and delinquency.

Lastly, this study argued that the styles and strategies of heterosexual involvement may be more relevant than personality traits, such as impulsivity, for explaining life-course patterns of crime and drug use. Although evidence was marshaled in support of this claim, this study utilized a rather narrow measure of low self-control. It may not be the case that an alternative and more detailed measure of low-self control as traditionally discussed (see Grasmick et al., 1993; Gottfredson & Hirschi, 1990) will dislodge the findings of the current study, nevertheless recent re-conceptualizations of the topic may prove to be a more useful vantage point for exploring interpersonal development (Muraven & Baumeister, 2000; Muraven et al., 2006). This research suggests that heterosexual socializing may require one to exercise a high degree of restraint or self-control, which may rapidly become depleted, resulting in an individual who is vulnerable to instantly gratifying experiences that crime and casual sex may provide. This perspective implies that individuals who are already pursuing an unconventional strategy for heterosexual involvement have self-control, and do indeed exercise it despite participating in sex outside dating relationships, child-bearing outside of marriage, and the like. Yet, the strains and challenges associated with these unconventional styles of involvement may gradually erode self-restraint mechanisms and may therefore undermine later efforts to desist from patterns of antisocial behavior and drug use (see also Foster et al., 2008).

Clearly, more research is needed on the conditions under which risky and unconventional heterosexual behaviors influence crime and delinquency. The current study expanded upon past work that focused almost exclusively on marriage and dating by emphasizing the relative differences in criminal risk-taking between those who

participate in traditional forms of romantic courtships and those who are involved in less conventional relationships. However this approach does not fully address the complexities of heterosexual involvement, crime, and social class. Marital infidelity, for example, is documented in previous research as occurring most frequently among couples who have disposable wealth as well as those who struggle to meet more basic needs (Treas & Giesen, 2000). The chance that these adulterous behaviors are risky in terms of criminal involvement may be quite disparate given the local socioeconomic conditions in which partners live. Disposable wealth may afford the ability to engage in clandestine meetings with partner alternatives to which there may only be a moderate degree of risk of being exposed (i.e. on a business trip or at a nightclub on the other side of town). Yet a lack of economic resources may confine infidelity to a more localized area in which interlopers may be more readily identified and retaliated against, as might be the case for juveniles who often have little disposable wealth, as well as poor and working class adults whose ability to pursue partner alternatives may operate around similar constraints. For these groups, tactics for handling interpersonal conflicts may also be more likely to intersect and become interwoven with violence and other illegal activities (e.g., damaging or stealing the private property of the romantic partner or the interloper or both) —in part because antisocial behavior is more often accepted as a means of social control and as a symbol of social status among youths and economically disadvantaged adults (e.g., Black, 1983; Hagan & McCarthy, 1997; Kreager, 2007; McLeod, 1987; Stewart et al., 2006; Topalli, 2005). This study calls for more research on these interpersonal dynamics as they may relate to the general levels of crime and disorder within low-income communities and youthful peer-networks.

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Appendix 1. Descriptive Statistics and Factor Analytic Results for Wave 1 Variables					
	Mean/Proportion	Standard Deviation	Range	Explained Variance	Eigen-Value
High Risk Behaviors and Early Risk Propensity					
Delinquency	1.00	3.36	0 to 49	.88	2.98
Drug Use	.51	1.46	0 to 8	.83	3.06
Unstructured Socializing					
Impulsivity	.23		0 to 1		
Heterosexual Attitudes and Behaviors					
Attitudes:					
Permissive Sex	1.24	.76	0 to 4	.81	1.51
Gender Mistrust	3.40	.60	0 to 4	.74	1.86
Behaviors:					
Not S.A.	.68		0 to 1		
S.A. Conventional	.14		0 to 1		
S.A. Unconventional	.18		0 to 1		
Environments of Uncertainty					
Structural Disadvantage	14.05	9.93	0.74 to 50.52	1.00	1.96
School Disorder	0.00	0.73	-1.61 to 1.67	.89	2.23
Community Disorder	0.00	0.73	-0.69 to 3.27	.85	2.97
Family Processes					
Parental Attachment	2.96	.34	0 to 4	.84	2.18
Parental Supervision	3.03	.50	0 to 4	.80	2.22
Parent-Child Conflict	24.19		0 to 4		
Demographics					
Biological Family Intact	51.83		0 to 1		
Male	46.34		0 to 1		
Black	22.58		0 to 1		
Hispanic/Latino	10.97				
Age	15.33	1.70	12 to 19		
N = 930					

Notes: S.A. = Sexually Active. Promax (oblique) rotation method was used for factor analyses.

Appendix 2. Descriptive Statistics and Factor Analytic Results for Wave 4 Variables					
	Mean/Proportion	Standard Deviation	Range	Explained Variance	Eigen-Value
High Risk Behaviors and Routine Activities					
Crime	1.02	3.13	0 to 32	.61	2.16
Drug Use	1.13	2.32	0 to 8		
Go Out to Bars/Nightclubs	2.23	2.11	0 to 7		
Union Characteristics					
Conflict	5.22	6.01	1 to 43	.61	5.94
Infidelity Risk	2.06	0.73	.94 to 4.63	.67	7.14
Concurrent Drug Use	.19		0 to 1		
Attachment	3.01	0.81	0 to 4	.82	3.41
Duration	.55		0 to 1		
Type:					
Dating	.71		0 to 1		
Cohabiting	.22		0 to 1		
Married	.07		0 to 1		
Current Partner	.71		0 to 1		
Social Assets					
Socioeconomic Achievement :					
Unemp./≤12yrs. ed.	21.18		0 to 1		
Emp./≤12yrs. ed.	25.27		0 to 1		
Unemp./>12yrs. ed.	12.80		0 to 1		
Emp./>12yrs. ed.	40.57		0 to 1		
Religious Attendance:					
Never	.39		0 to 1		
Rarely	.31		0 to 1		
Regular	.29		0 to 1		
Demographics					
Male	46.34		0 to 1		
Black	22.58		0 to 1		
Hispanic/Latino	10.97		0 to 1		
Age	20.50	1.75	17 to 24		
N = 930					
Notes: S.A. = Sexually Active. Promax (oblique) rotation method was used for factor analyses.					