IDENTIFYING MEDIATORS IN THE RELATIONSHIP BETWEEN FAMILY OF ORIGIN
HOSTILITY AND EXPERIENCES OF SEXUAL COERCION

by

EMILY LAMB SMITH

(Under the Direction of Leslie Gordon Simons)

ABSTRACT

This study uses ordinary least squares regression (OLS) with a sample of 1136 (673 females and 463 males) college students to examine research questions regarding possible mediators in the association between family of origin hostility and sexual coercion victimization and perpetration. Results indicated that none of the hypothesized mediators- attitudes about hooking up, substance use, and risky sexual behavior- mediated the association between family of origin hostility and both sexual coercion victimization and perpetration for males. For females, attitudes about hooking up and participation in risky sexual behavior mediated the association between family of origin hostility and sexual coercion victimization and perpetration. However, the mediators were directly related to sexual coercion for both males and females. These results are discussed in relation to antisocial orientation perspective and the culture of casual sex for college students. In addition, implications for education and prevention programs are discussed.

INDEX WORDS: Sexual coercion, Parenting, Risky behaviors, Alcohol consumption, College, Hooking up

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EMILY LAMB SMITH

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EMILY LAMB SMITH

Major Professor: Leslie Gordon Simons

Committee: Chalandra Bryant

Stephanie Burwell

Electronic Version Approved:

Maureen Grasso Dean of the Graduate School The University of Georgia May 2012

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TABLE OF CONTENTS

| | | Page |
|--------|--|------|
| ACKNI | LOWEDGEMENTS | iv |
| LIST O | F TABLES | vii |
| LIST O | F FIGURES | viii |
| СНАРТ | TER | |
| 1 | Introduction | 1 |
| | Purpose of the Study | 6 |
| 2 | Review of Literature | 8 |
| | Parental Behavior and Sexual Coercion | 10 |
| | Potential Mediators in the Relationship between Family of Origin Hostility Sexual Coercion | |
| | Theoretical Perspective | 19 |
| | Model to be Tested | 21 |
| | Research Questions | 25 |
| 3 | Methods | 26 |
| | Sample and Procedures | 26 |
| | Measures | 27 |
| | Analytic Strategy | 31 |
| 4 | Results | 33 |
| | Initial Findings | 33 |
| | Is Family of Origin Hostility Positively Related to Experiences of Sexual Coercion? | 42 |

| | Is the Association between Family of Origin Hostility and Sexual | Coercion |
|-----------|---|-------------------|
| | Partially Mediated by Sociosexuality, Substance use, and Risky S | Sexual Behaviors? |
| | | 47 |
| 5 | Discussion | 50 |
| | Sexual Coercion Victimization | 52 |
| | Sexual Coercion Perpetration | 53 |
| | Mediators Influences in the Relationship between Family of Original | • |
| | Sexual Coercion | 54 |
| | Limitations and Suggestions for Future Research | 58 |
| | Conclusions | 58 |
| Reference | es | 61 |
| APPEND | DICES | 71 |
| A | SEXUAL COERCION QUESTIONS | 71 |
| В | FAMILY OF ORIGIN HOSTILITY QUESTIONS | 73 |
| C | ATTITUDES ABOUT HOOKING UP QUESTIONS | 77 |
| D | SUBSTANCE USE QUESTIONS | 79 |
| E | RISKY SEXUAL BEHAVIOR QUESTIONS | 82 |
| F | CONTROL QUESTIONS | 85 |

LIST OF TABLES

| | Page |
|--|------|
| Table 1: Frequencies for Sexual Coercion Victimization | 35 |
| Table 2: Frequencies for Sexual Coercion Perpetration | 37 |
| Table 3: Correlation Matrix for Study Variables | 40 |
| Table 4: Frequencies for Family of Origin Hostility | 75 |
| Table 5: Frequencies for Attitudes about Hooking up | 78 |
| Table 6: Frequencies for Substance Use | 80 |
| Table 7: Frequencies for Risky Sexual Behaviors | 83 |
| Table 8: Frequencies for Controls | 86 |

LIST OF FIGURES

| Pa | ge |
|--|----|
| Figure 1: Theoretical model of predictors of sexual coercion experiences | 23 |
| Figure 2: Mediators in the relationship between parenting factors and female victimization | 43 |
| Figure 3: Mediators in the relationship between parenting factors and male victimization | 44 |
| Figure 4: Mediators in the relationship between parenting factors and female perpetration | 45 |
| Figure 5: Mediators in the relationship between parenting factors and male perpetration | 46 |

CHAPTER 1

Introduction

Sexual violence in romantic relationships has become an increasingly important area of study for scholars and a matter of great concern for policy makers, the media, and the general population. Specifically, emphasis has been placed on sexual violence within emerging adulthood and perhaps even more importantly violence against college women. Prior research indicates that college women are at the greatest risk for date rape and other forms of sexual violence (Wolitzky-Taylor et al., 2008). Roughly 12 percent of college women report having been forced into sexual intercourse sometime in the past year (YRBS, 2004). Another study found that roughly 40 percent of college women report having participated in oral sex or sexual intercourse despite wishes not to participate (Simons, Simons, Lei, & Sutton, in press b). On the other hand, roughly six percent of college men report having engaged in forced intercourse in the past year (YRBS, 2004) and 15-25 percent of college men report having at least initiated some type of sexual aggression while with a romantic partner (Forbes & Adams-Curtis, 2001). These rates indicate that the sexual coercion of women is still a major area of concern.

While the sexual coercion of women is still a major concern for scholars and policy makers, the sexual coercion of men is increasingly becoming a major concern. While prior research indicated that women were more likely to be victims of aggression and violence (Bergman, 1992; Roscoe & Kelsey, 1986), more recent studies indicate that men report similar rates of frequency of victimization (Straus, 2004; Straus & Ramirez, 2007). These results indicate that women do engage in sexual coercion toward their partners and that men do report

victimization of sexual coercion. Sexual coercion can be described on a continuum with verbal coercion and physical coercion at either end of the continuum (Felson, 2002; Simons, Burt, & Simons, 2008). Verbal sexual coercion usually includes insisting on or threatening the victim into participation while physical sexual coercion usually includes using physical force to get the victim to participate in a sexual act (Hines, 2007).

Scholars have investigated an array of factors that may predict sexual coercion and dating violence in emerging adulthood. Exposure to parental hostility is consistently found to be a leading factor associated with various types of violence within romantic relationships (Black, Susman, & Unger, 2010; Carr & Van Deusen, 2002; Foshee, Bauman, & Linder, 1999; Hendy et al., 2003; Kwong, Bartholomew, Henderson, & Trinkel, 2003; Lewis & Fremouw, 2001; Simons et al., 2008; Tschann et al., 2009; Simons, Simons, Hancock, & Fincham, in press a; Simons et al., in press b). Exposure to parental hostility is the main component of the intergenerational transmission of violence hypothesis which is considered the most widely accepted explanation for relational violence. This hypothesis posits that being raised in a home characterized by high levels of violence increases an individual's risk of becoming violent in his or her own romantic relationships later in life (O'Leary, 1988). Two types of parental aggression, interparental hostility and hostile parenting, have been examined in prior research as uniquely pertinent to intergenerational transmission of violence. Interparental hostility refers to both verbal and physical aggression during conflict between parents while hostile parenting refers to verbal and physical aggression by parents towards children. The probability of engaging in partner violence later in life increases when individuals are raised in families where these two types of parental hostility are present.

Research on intimate partner violence and sexual coercion has often been studied as separate phenomena that require different explanations. However, recent research indicates that intimate partner violence and sexual coercion are correlated (Simons et al., 2008). Both events involve aspects of physical force that produce the desired outcome for the perpetrator. Learning to use physical force to obtain a specific outcome is a behavior learned within the family of origin. Harsh parenting teaches children that violence and coercion are aspects of intimate relationships and can be used as tactics to obtain desired outcomes (Straus, Gelles, & Steinmetz, 1980; Straus & Smith, 1990). Although there has been literature examining parental factors and sexual coercion, there may be mechanisms by which these phenomena are linked. While past research demonstrates a direct link between family of origin hostility and offspring experiences with intimate partner violence (Simons et al., 2008), there are undoubtedly mediating mechanisms that partially explain this association.

Simons et al. (2008) found that permissive sexual attitudes mediated the association between parental factors and sexual coercion. Permissive sexual attitudes, also defined as individuals' sociosexuality, are individuals' willingness to engage in uncommitted sexual relationships with others. Individuals' sociosexuality influences how active they are in the culture of casual sex in college (Simpson & Gangestad, 1991). Individuals high on sociosexuality are characterized by an unrestricted sociosexual orientation; they feel comfortable in sexual relationships that lack commitment or closeness. On the other hand, individuals low on sociosexuality are characterized by a restricted sociosexual orientation; they require commitment and closeness in a relationship before sexual activity occurs (Gangestad & Simpson, 1990). In addition to sociosexuality, there may be additional factors that mediate this association that have not been addressed in prior research. Therefore, the present study examines sociosexuality as a

possible mediator in addition to substance use and participation in risky sexual behaviors in men and women's separate associations between family of origin hostility and sexual coercion victimization and family of origin hostility and sexual coercion perpetration.

Prior research indicates that there is an association between family of origin experiences, specifically parenting practices, and later substance use. Poor parenting practices such as high levels of parental rejection and low levels of emotional warmth are linked to increased rates of alcohol consumption in adolescences (Barnow, Schuckit, Lucht, John, & Freyberger, 2002). While in college, roughly 30 percent of individuals meet the DSM-IV criteria for a diagnosis of alcohol abuse (Knight et al., 2002). High rates of alcohol use can place individuals in situations where they have less control over what may occur. Negative outcomes, include sexual coercion, are likely in these situations. In 2001, 97,000 college students were victims of alcohol related sexual assaults and rapes (Hingson, Zha, & Weitzman, 2009). In situations of sexual coercion, alcohol not only plays a role in the increased likelihood of victimization but of perpetration. Consuming high amounts of alcohol can lower one's inhabitations to partake in multiple risky behaviors including using violence when frustrated or upset (Curtis, 1975). Men often cite alcohol as a precipitant and excuse for their sexually aggressive behavior and use alcohol as a tool in their sexual coercion of women (Abbey, McAuslan, Zawacki, Clinton, & Buck, 2001; Carr & VanDeusen, 2004; Larimer, Lydum, Anderson, & Turner, 1999). Since the association between alcohol and both parenting and sexual coercion is evident, it is likely that alcohol use will mediate the association between family of origin factors and both sexual coercion victimization and perpetration for college students.

There is strong evidence that connects family of origin factors to involvement in risky sexual behaviors. While sociosexuality is individuals' attitude and orientation towards sex,

individuals' risky sexual behaviors are their actual sexual experiences and behaviors. Risky sexual behaviors include low rates of condom use and high rates of multiple casual partners (Bond, Lavelle, & Lauby, 2002; Krantz, Lynch, & Russell, 2002; Metzler, Noell, & Biglan, 1992; Sarkar, 2001). Parenting is noted as one of the leading family of origin factors related to risky sexual behavior. Prior research has established that high amounts of warmth and support from parents is a protective factor against risky sexual behavior (Kapungu, Holmbeck, & Paikoff, 2006; Landor, Simons, Simons, Brody, & Gibbons, 2011; Miller, Benson, & Gilbraith, 2001; Simons et al., under review). These research findings suggest that when low amounts of warmth and support from parents are present, individuals are vulnerable to participating in risky sexual behaviors. These risky behaviors have increased the likelihood of college students being placed in circumstances where sexual coercion may occur. Casual sex, sometimes characterized as "hooking up," places individuals in a situation where they are sexual involved with individuals they may have little or no prior contact. With lack of prior knowledge of sex partners, individuals are unaware of their partners' expectations and desires when it comes to sexual experiences. This may result in one partner becoming frustrated and upset with a disagreement of what acts will occur within the sexual experience. When this happens, sexual coercion is a tactic that can be used to get the desired outcome from the sexual encounter.

Although past research extensively shows the influence parenting practices has on the probability of sexual coercion perpetration and victimization, there is much less clarity on how different mediating factors play a role in these associations. Prior research has noted the mediating effect of antisocial orientations, sociosexuality, and believing that violence is a legitimate part of romantic relationships in the association between parenting and sexual coercion perpetration (Simons et al., 2008). With the exception of sociosexuality (Simons et al.,

2008), no research to knowledge has examined how specific components of the sexual culture in college mediates these associations. Specifically, no studies have examined the risky sexual behaviors involved in a casual sexual experience among emerging adults as a mediator between the association of family of origin hostility and both sexual coercion victimization and perpetration. Because sexual coercion is especially prevalent among college students, it is important to address the intervening issues that may be especially salient to this population. To extend past research, the current study examines several mediating variables which include substance use, sociosexuality, and risky sexual behavior.

Purpose of the Study

I will attempt to extend past research by identifying the mediators in the association between family of origin hostility and experiences of sexual coercion victimization and perpetration of college men and women. Past research suggests that individuals that experience hostility and violence in their family of origin later experience violence in their romantic relationships both in adolescence and in emerging adulthood (Johnson & Ferraro, 2000; Lewis & Fremouw, 2001). This association is present in predicting sexual coercion victimization and perpetration of both males and females. The present study will look at the mediating variables of substance use, sociosexuality, and involvement in risky sexual behavior in the association between family of origin hostility and sexual coercion perpetration by males, as well as females and family of origin hostility and sexual coercion victimization of females as well as males. It is posited that family of origin hostility is related to male or female's sexual coercion perpetration or victimization primarily through its influence on the mediators (i.e., positive attitudes about casual sex, substance use, and participation in risky sexual behaviors).

A study of the predictors of sexual coercion is important to the study of romantic relationships and dating culture of emerging adults for three reasons. First, aggression in dating relationships early in life predicts later marital violence (O'Leary et al., 1989). Thus, research on predicting sexual coercion in college romantic relationships may enhance the understanding of how spousal abuse arises. Second, the results of this study will help to inform education and prevention programs for college students dealing with the culture of casual sex and high rates of sexual coercion in college and after. Finally, no research to date has examined attitudes about hooking up as a predictor of sexual coercion. By doing this, the current study will help to further the field of study on sexual coercion.

CHAPTER 2

Review of Literature

Prior research indicates that sexual coercion exists on a continuum where less intimidating strategies are used in the beginning and slowly escalate to higher levels of force when the initial tactics fail (Felson, 2002; Simons et al., 2008). Coercion escalates from verbal to physical when prior attempts fail to pressure a victim into participation (Felson, 2002; Simons et al., 2008). Earlier research found that women were more likely to be victims of aggression and violence within romantic relationships compared to men (Bergman, 1992; Roscoe & Kelsey, 1986). However, more recent studies found that men now report similar rates of frequency of victimization as women (Archer, 2000; Bell & Naugle, 2007; Moffitt, Caspi, Rutter, & Silva, 2001; Straus, 2009). While the consequences and severity of violence differ by gender, studies now indicate that both women and men are victims of aggression and violence.

Gender differences in sexual coercion perpetration and victimization. Sexual coercion occurs when there is a lack of concordance in the sexual interactions between men and women. Perpetrators are able to succeed in attempts at sexual coercion when they are able to create an atmosphere of threat for the victims (Dutton & Goodman, 2005). When this atmosphere is present, the victims feel they must comply with perpetrators' requests to escape with the least harm possible. College women report they often give into unwanted sex when their refusals are followed by emotional and physical pressures from males (Katz & Tirone, 2010). Men are more likely to use severe levels of aggression compared to women resulting in serious injuries that

may lead to hospital visits and reports to authorities (Archer, 2000; Ehrensaft, Moffitt, & Caspi, 2004). Therefore, women often use less severe levels of aggression compared to men.

Additional research corroborates that men use more severe forms of coercion (Simons et al., in press b). In a study of sexual coercion perpetration by men, roughly 47 percent reported engaging in at least one sexually coercive tactic against their partners. Specifically, men reported trying to turn on women by touching them (reported by roughly 33 percent of men), getting them drunk or stoned (roughly 26 percent), making false promises to them about the future of the relationship (roughly 17 percent), making them feel guilty (roughly 15 percent), threatening to end the relationship (roughly 11 percent), physically holding them down to force sex with them (over 8 percent), and threatening to disclose negative or private information (roughly 6 percent; Simons et al., in press b). Almost 40 percent of women in this study reported engaging in oral or sexual intercourse even though they did not wish to participate.

While men often use more extreme forms of physical coercion, additional studies note that women do use high amounts of verbal coercion. Hines (2007) found that while only three percent of men reported physical coercion from a partner, 22 percent of the men reported use of verbal coercion by the perpetrating female. Together, these studies indicate that perpetration and victimization of sexual coercion is done by both males and females. It is important to note however that the outcomes of perpetration vary by gender. As noted, males are more likely to use more forceful tactics which are at the higher end of the coercion spectrum (such as physically holding a women down) compared to less forceful tactics at the lower end of the coercion spectrum used by women (such as verbal coercion). Though physical and psychological consequences for female victims by male perpetrators may be significantly more serious, the

findings that women do engage in coercive behaviors toward male partners warrants further study. Therefore, this study looks at perpetration by both males and females.

Parental Behavior and Sexual Coercion

Violence within the family of origin, specifically between parents and from parent to child, lays the foundation where children learn that violence and love go hand in hand. When growing up in homes characterized by violence, children learn that violence is a natural part of loving and romantic relationships. Children from these homes do not learn that violence, hostility, and aggression are negative actions to show loved ones. Rather, they learn that these actions are normal aspects of loving relationships. Because of this, children raised in homes with these characteristics are more likely to engage in partner violence later in life.

Interparental conflict. Prior studies have found an association between family of origin factors and subsequent sexual coercion and dating violence (Johnson & Ferraro, 2000; Lewis & Fremouw, 2001; Simons et. al, in press b.). Specifically, aggressive attitudes and behaviors are learned within the family of origin (Straus et al., 1980). One area of learned behavior comes from interparental conflict. Parental management of conflict influences the development of behavior problems in youth. Stress, depression, aggression, and substance abuse are all long-term effects found from witnessing interparental conflict and violence (Graham-Bermann, & Edleson, 2001; Jaffe, Baker, & Cunningham, 2004). Furthermore, conflict and negative family interactions predict dating violence perpetration and victimization (Andrews, Foster, Capaldi, & Hops, 2000; Linder & Collins, 2005). This association is especially strong when witnessing interparental violence (Ehrensaft et al., 2003). The violence watched further confirms for children that hitting loved ones to get what you want is acceptable and normal.

A longitudinal study by Tschann et al., (2009) found that both interparental violence and high levels of nonviolent parental conflict predicted increased levels of verbal and physical aggression of youth with their dating partners. Prior research indicates that women exhibit higher levels of hostility towards their romantic partners than men (Cui, Lorenz, Conger, Melby, & Bryant, 2005). Furthermore, mothers as perpetrators compared to fathers as perpetrators uniquely predicts later relationship violence in adolescents and college (Hendy et al., 2003). This is explained by the likelihood that mothers' perpetration happens in front of children more often than fathers' perpetration (Olsen, Parra, & Bennett, 2010). Since males use more forceful tactics in coercion (Koss, Gidycz, & Wisniewski, 1987), it is posited that these interactions happen behind closed doors away from children. Furthermore, since women use more verbal than physical tactics in coercion (Hines, 2007; Struckman-Johnson & Struckman-Johnson, 1998), it is likely that this interaction occurs in front of children and therefore internalized. These internalized lessons are then used later in handling disagreements, including differences in sexual desires, in later relationships.

Harsh parenting. Straus and colleagues (Straus et al., 1980; Straus & Smith, 1990) argue that harsh parenting teaches children that violence, coercion, and force are aspects of romantic relationships and that they are legitimate behaviors to show loved ones. Research done by Simons and colleagues (Simons et al., 2008; Simons et al., in press b) corroborate this argument. Their 2008 study found that the association between harsh corporal punishment and both dating violence and sexual coercion was mediated by the belief that violence is a legitimate part of romantic relationships. By using harsh corporal punishment, parents are changing undesired behaviors through physical force. This teaches children that hitting others is a legitimate strategy for behavior change. Emerging adults who come from homes characterized

by harsh parenting may hold the belief that force will change behaviors. Seeing as sexual coercion involves changing behaviors to get a desired outcome, these emerging adults likely see sexual coercion, in the face of frustrated sexual desires and/or a reluctant or unwilling partner, as a legitimate approach to getting what they want.

For example, prior research indicates an association between parental behaviors and partner violence (Holtzworth-Munroe, Meehan, Herron, Rehman, & Stuart, 2000). Negative mother-daughter interactions (i.e., negativity, harshness, and derogatory evaluations) early in life are correlated with victimization from romantic partners at age 21 (Magdol, Moffitt, Caspi, & Silva, 1998). These interactions can be both physically and emotionally impactful for children. Childhood physical abuse is predictive of later life perpetration of dating violence by women while childhood emotional abuse is predictive of later life perpetration of dating violence by men (Milletich, Kelley, Doane, & Pearson, 2010). These studies suggest that both negative emotional and physical interactions with parents increases the probability of using violence in romantic relationships later in life. While negative parent-child conflict increases the likelihood of dating violence and sexual coercion, positive parent-child conflict can buffer this association. For example, involved and supportive parenting is negatively related to perpetration of dating violence in males (Simons, Lin, & Gordon, 1998). Taken together, these studies suggest that family of origin hostility strongly predicts sexual coercion victimization or perpetration for both men and women.

Potential Mediators in the Relationship between Family of Origin Hostility and Sexual Coercion

Extant research emphasizes the direct association between family of origin factors and sexual coercion later in life (Black et al., 2010; Carr & Van Deusen, 2002; Foshee et al., 1999;

Hendy et al., 2003; Kwong et al., 2003; Lewis & Fremouw, 2001; Simons et al., 2008; Tschann et al., 2009; Simons et al., in press a; Simons et al., in press b). Recent literature (Simons et al., 2008) has extended this research by examining some of the factors that mediate this direct association. However, there are still additional potential mediators to be identified. It is especially important to focus on the factors that are salient to a college student population. Extant research suggests that substance use, high sociosexuality, and risky sex may be mediators that explain the link between family of origin hostility and aggression and the experience of sexual coercion perpetration and victimization. Therefore, the current study will focus on mediators that center on the social culture on college campuses and how they may mediate, partially or in full, the direct association between family of origin factors and sexual coercion victimization or perpetration.

Substance use. Substance use can include both alcohol and drug use. Alcohol use has been widely examined in rape and sexual coercion studies while drug use has not been studied to the same extent (Messman-Moore, Coates, Gaffey, & Johnson, 2008). Reports by the Task Force of the National Advisory Council on Alcohol Abuse and Alcoholism place roughly 40 percent of college students reporting regular, heavy use of alcohol (National Institute on Alcohol Abuse and Alcoholism, 2002). In addition, reports by the Substance Abuse and Mental Health Services Administration place roughly 40 percent of individuals aged 12 or older having tried marijuana at least once (Substance Abuse and Mental Health Services Administration, 2004). While some see alcohol and drug use during this time period as a normal activity, it can be an unhealthy consequence from negative family of origin experiences. Prior research indicates that poor parental bonds are linked to problems with alcohol (Barnow, et al., 2002). Parental behaviors and values, including high rates of monitoring, lower rates of permissiveness, and disapproval of

heaving drinking, are directly associated with lower degrees of heavy episodes of alcohol consumption by college bound students (Wood, Read, Mitchell, & Brand, 2004). Parents that are actively aware and monitor their children in addition to limiting their excessive strictness and conflict have children that consume less alcohol during adolescents (Latendresse et al., 2009). Therefore, it is inherent that parenting practices characterized by high degrees of strictness, conflict, and permissiveness will increase the likelihood of offspring's alcohol use later in life.

Two areas in which substance use can lead to risky and unsafe events are in the risky sexual culture of college and sexual coercion. Messman-Moore and colleagues (2008) found that both alcohol and marijuana use increased the risk of rape for college women. Because of the desire to be socially accepted by peers, college students perceive rewards for substance use in the culture of casual sex. In fact, 94 percent of college students report alcohol or drug use as typical parts of casual sex experiences (Paul & Hayes, 2002). Alcohol acts as a disinhibiting force which allows men and women to interact with others they normally would not talk to while sober due to fear of rejection. Because of this, it allows for greater likelihood of sexual activity with individuals they would normally not interact with while sober (Vander Van & Beck, 2009). In addition to this "liquid courage," alcohol provides a built in justification and explanation for hooking up (Vander Van & Beck, 2009). Giving the excuse of being drunk and hooking up is more socially acceptable than participating while sober because it removes blame from the person and places it on being drunk (i.e. saying "I was so drunk that it just happened;" Kimmel, 2008). Because alcohol is both the gateway to and excuse for risky sexual behaviors, alcohol easies the transition for college students into the risky sex culture.

Alcohol and drug use is also a consistent predictor of sexual coercion, violence, and aggression (Jackson, Cram, & Seymour, 2000; Swartout & White, 2010). Similar to being a

gateway and excuse for casual sex, alcohol is a gateway and excuse for sexually aggressive behavior in men (Abbey et al., 2001). In a study of sexual coercion, Tyler et al. (1998) found 23 percent of college males admitted to getting their date drunk or stoned to engage in sexual intercourse. Furthermore, Simons et al., (2008) found alcohol as the leading tactic used by males to obtain sexual intercourse from females. In reports from women, 37 percent state that their dates use alcohol or other drugs to force sex with them (Simons et al., in press b). In addition, Teten and colleagues (2009) found that using alcohol and drugs as a tactic to go further sexually with their dates peaked for males at age 20. Therefore, alcohol and other substances are used as a tactic in sexual coercion to place victims in situations where they have less control and say over what is occurring in the sexual interaction.

Because negative family of origin factors increases alcohol consumption in emerging adulthood where alcohol and other drug use is already the gateway to risky sex, it is posited that substance use will mediate the association between family of origin hostility and sexual coercion for men's separate experiences of victimization and perpetration and women's separate experiences of victimization and perpetration. It is likely that the individuals that consume more alcohol and drugs because of negative experiences with parents will already be placing themselves at higher risks of experiencing sexual coercion at the hand of alcohol and drugs.

Sociosexuality. One's sociosexual orientation is influenced by experiences in the family of origin. Specifically, development of high sociosexuality is a result of low parental trust and support (Simons et al., 2008). Simons et al. (2008) have presented two reasons for the association between parenting and sociosexuality. First, emerging adults may form a model of relationships characterized by craving love and fearing rejection because of troubled relationships with parents early in life. In an attempt to achieve intimacy, these individuals seek

out multiple sexual partners and if rejection from them seems eminent, sexual coercion is used to receive the needed sex and the intimacy. Second, they have argued that sex is seen as a casual enjoyment rather than loving and intimate because of individuals' detached relationships with parents. A distant relationship with parents fosters a view of relationships as being distant and unemotionally involved. Both of these explanations posit that a lack of parental trust and support within the family of origin will foster a high degree of sociosexuality. A high degree of sociosexuality created by family of origin factors increases the likelihood of engaging in sexual coercion (Simons et al., 2008; Tyler, Hoyt, & Whitbeck, 1998). These findings support Simons and colleagues' (2008) second hypothesis that troubled relationships with parents encourages a distant and emotionally uninvolved view of relationships. This view causes sex to be seen as casual rather than loving and intimate. Because these individuals bring a causal view of sex into sexual experiences, it may be that when partners refuse their sexual advances perpetrators respond with sexual coercion out of frustration and anger (Simons et al., 2008).

The characteristics of individuals high on sociosexuality are consistent with the hypothesis posited by Simons et al. (2008). Because low parental trust and support creates a distant relationship with parents (Simons et al., 2008), individuals believe that all intimate relationships are characterized by these negative traits. Further, romantic interactions will be distant and unemotionally involved like their parental relationships. This fosters a high desire for uncommitted sex and thus increases their likelihood of participation in the risky culture of casual sex. High sociosexuality results in individuals expecting intercourse to be the outcome of most intimate interactions. Therefore, if partners refuse individuals sexual advices, they may become frustrated and angry because they do not understand others taking sex seriously and respond with sexual coercion (Simons et al., 2008). For example, permissive sexual attitudes have been found

to be associated with an increased use of sexual coercion tactics within sexual experiences between partners (Simons et al., 2008; Tyler et al., 1998).

To extend past research by Simons et al. (2008), this paper examines sociosexuality through the lens of hooking up. By doing this, the current culture of casual sex of college will be examined. While the percentage of college students participating in hooking up ranges, prior research indicates up to 78 percent of college students have participated in a hook up (Paul, McManus, & Hayes, 2000). This implies that hooking up has become extremely common place in college and is the main avenue in which casual and risky sexual experiences occur. Therefore, it is especially salient to study sociosexuality through hook up experiences for a college student population.

Hooking up is a difficult term for both researchers and college students to define. In her book *Unhooked* (2007), Stepp discusses that the term leaves the sexual actions that take place completely ambiguous. Because of this, the term allows for the sexual actions to never be fully explained or defined and thus can range from just kissing to coitus (Kimmel, 2008; Stepp, 2007). Therefore, the lack of clarification on sexual behaviors during a hook up allows for a discontinuity between what partners may expect to be part of a typical hook up experience. This discontinuity, in turn, may lead to sexual coercion. For the purpose of this paper, hooking up will be defined as "an event in which two people are physically intimate outside of a committed relationship without expectation of future encounters" (pg. 656; Owen, Rhoades, Stanley, & Fincham, 2010).

Risky sexual behavior. Prior research has established that specific parenting practices are related to risky sexual behaviors in adolescence. Specifically, multiple studies found parental warmth and support to be leading factors (Kapungu et al., 2006; Miller et al., 2001). High

amounts of warmth and support are protective factors against risky sexual behavior (Kapungu et al., 2006; Landor et al., 2011; Miller et al., 2001; Simons et al., under review). These findings suggest that low parental warmth and support may be associated with increased engagement in risky behaviors among adolescents. Therefore, it is posited that family of origin hostility will be related to a high sociosexuality and increased involvement in risky sexual behaviors for both males and females.

In addition, research indicates that risky sexual behaviors and permissive attitudes are a predictor of sexual coercion (Simons et al., 2008; Tyler et al., 1998). Multiple studies indicate that risky sexual behavior is associated with dating violence victimization (Cleveland, Herrera, & Stuewig, 2003; Gover, 2004; Raj et al., 2006). Individuals that are more accepting of casual sex had become sexually active at a younger age while in adolescence (Kan, Cheng, Landale, & McHale, 2010). These students likely have more permissive attitudes about sex which can make them more vulnerable to sexual coercion. Looking at gender separately, college men have higher levels of sexual risk taking than college women (Gover, Kaukinen, & Fox, 2008). In addition, men tend to be more sexually permissive compared to women (Oliver & Hyde, 1993). This indicates that men likely want a sexual interaction to go further than women which may lead to sexual coercion perpetration by males and victimization of females.

Risky sex and substance use go hand in hand in the culture of casual sex on college campuses. Alcohol consumption is a leading predictor of partaking in hook up experiences (Owen et al., 2010). Prior research indicates that alcohol lowers inhibitions and may alter the decision making process that may keep college students from partaking in casual sex and other risky sexual experiences (Fielder & Carey, 2010; Owen et al., 2010; Paul et al., 2000). By altering the decision making process, alcohol may lead college students to participate in risky

sexual experiences. These risky sexual experiences place individuals in situations with partners that they may have little or no prior contact with. This, in turn, may increase the likelihood of sexual coercion because of the lack of sexual preference knowledge between the participants.

Theoretical Perspective

Many theories have been used to explain sexual coercion in romantic relationships though few incorporate family of origin influences. Three theories often suggested are social learning theory, coercion theory, and antisocial orientation perspective. These three theories are often used to explain the association between family of origin experiences, including parental hostility, and sexual coercion perpetration and victimization.

Social learning theory posits that individuals learn through observing and imitating behaviors of others (Bandura, 1977). Two factors that encourage the engagement in learned behaviors are reinforcement and learning the cost and benefits of a behavior (Bandura, 1977). If individuals observe specific behaviors repeatedly, as well as the given costs or benefits associated with it, they are socially trained to either partake in or refrain from these behaviors. An important mechanism of development in social learning theory is modeling behaviors of important individuals in people's lives (McHale, Bissell, & Kim, 2009). Therefore, individuals may learn to model their parents' behaviors. Prior research indicates that individuals learn to solve their own disputes with others by observing how their parents resolved interparental conflict while they were growing up (Ehrensaft et al., 2003; Underwood, Beron, Gentsch, Galperin, & Risser, 2008). Thus, if individuals see their parents resolving conflict through violence and coercion, they may internalize and later use these same tactics to resolve their own disputes. In addition, if parents use violence and coercion as aspects of discipline, children learn that these tactics cause behavior change in others (Patterson, Reid, & Dishion, 1992). Therefore,

they may learn to later use these same strategies with sexual partners later in life to get their own desired outcomes out of the sexual experience.

A second theory that has emerged from social learning theory is coercion theory. Coercion theory states that coercive and deviant behavior traits are produced out of a coercive process between parents and children (Patterson, 1982, 1996, 1997). This coercive process is a continuous progression of parents reinforcing negative behaviors in children that escalate in severity over time (Crosswhite & Kerpelman, 2009). This can be seen in how children escalate their negative behavior (screaming, yelling, or throwing a tantrum) until their parents give in and let children do what they want. If parents do not stand their ground and succeed at disciplining, then children learn to continue to escalate the severity of their behaviors until parents given in.

Because of this ineffective parenting, children learn that it is acceptable to act in a negative manner to obtain whatever they want and will continue to do this into adulthood (Crosswhite & Kerpelman, 2009). This behavior may later translate to how and why individuals are sexually coercive.

Finally, a theory often suggested in criminology literature is the antisocial orientation perspective. Researchers note that antisocial behaviors are stable over the life course (Caspi & Moffitt, 1992; Loeber & LeBlanc, 1990; Sampson & Laub, 1993). Deviant behaviors are correlated and show that individuals who engage in one type of deviant behavior often participate in other types (Farrington, 1991; Osgood, Johnston, O'Malley, & Bachman, 1988). Individuals who begin their antisocial behavior at an early age are at high risk of continuing this behavior into adolescents and through to adulthood (Farrington, 1991; Loeber & LeBlanc, 1990; Patterson & Yoerger, 1993). Therefore, an antisocial behavior is a trait that is characterized by a pattern of behaviors seen across different time points and situations (Allport, 1937).

Prior research indicates a pathway that suggests a link between poor parenting and sexual coercion through an antisocial orientation (Simons et al., 2008). Antisocial behaviors are traits that develop over time in response to unskilled parenting (Burt, Simons, & Simons, 2006; Simons, Simons, & Wallace, 2004). Specifically, sexual coercion and dating violence are antisocial behaviors that develop over time from ineffective parenting. Males who abuse their dating partners have a history of other types of antisocial behavior (Simons, Lin, Gordon, Conger, & Lorenz, 1999). For example, males' antisocial behavior and substance abuse was found as a mediating link between unskilled parenting practices and later violence perpetration (Simons et al., 1998). In addition, individuals who recreationally use marijuana are more likely to engage in other risky behaviors which may result in a more deviant lifestyle (Lane, Yechiam, & Busemeyer, 2006). This deviant lifestyle includes violence against women (Stuart et al., 2008).

As noted earlier, antisocial behavior is linked to many individual and family factors including unskilled parenting. Antisocial orientation perspective would posit that antisocial behaviors- which include substance use, positive attitudes about hooking up, risky sexual behaviors, and sexual coercion-are examples of an antisocial orientation that is grounded in ineffective parenting. This logic from the antisocial orientation perspective is used to guide the theoretical model predicting sexual coercion perpetration and victimization for this paper.

Model to be Tested

A theoretically and empirically informed model is proposed (see figure 1). It is expected that hostility and aggression in the family of origin will be directly and positively related to sexual coercion victimization and perpetration. Further, it is expected that there are factors that mediate, partially or in full, this association. Prior research has found that this is the case

(Simons et al., 2008). For example, believing that violence is a legitimate part of romantic relationships partially mediates the association between harsh corporal punishment and sexual coercion perpetration (Simons et al., 2008). However, the mediators in that study did not account for all of the variance. Thus, in addition to factors already described by prior research, there must be additional factors directly related to the college environment that mediate this association.

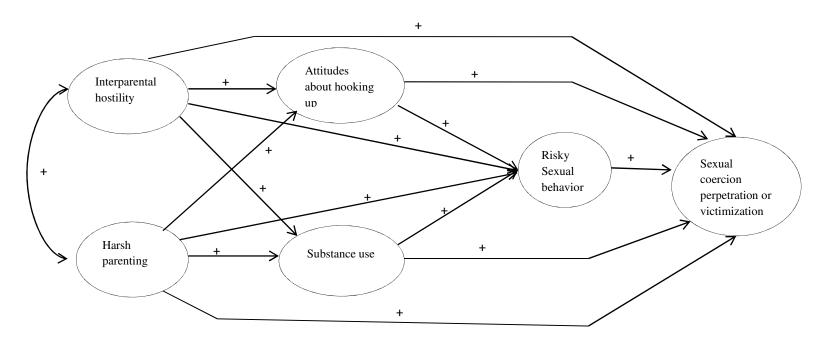


Figure 1. Theoretical model of predictors of sexual coercion experiences.

The current college environment is characterized by a variety of risky behaviors including experiencing unwanted sexual advances. There is evidence that these risky behaviors are predicted by negative family of origin hostility (Simons et al., under review) and are in turn predictive of sexual coercion. In addition to the direct positive relationship from interparental hostility and harsh parenting on sexual coercion victimization and perpetration, I expect that the relationships will be partially explained by the mediators. Specifically, I expect that interparental hostility and harsh parenting will be positively associated to positive attitudes about hooking up and substance use which, in turn, will be positively associated directly to sexual coercion perpetration and victimization. In addition, I expect that positive attitudes about hooking up and substance use will be positively associated to risky sexual behavior which, in turn, will be positively associated to sexual coercion perpetration and victimization. Finally, I expect that interparental hostility and harsh parenting will be positively associated directly to risky sexual behaviors which, in turn, will be positively associated to sexual coercion perpetration and victimization.

Finally, prior research indicates that this association differs by gender and role (i.e., victim or perpetrator; Milletich et al., 2010). If prior research indicates there are differences in examining gender and role in sexual coercion, then this association will be theoretically different when taking each variable into account. Therefore, this model will be examined with four different outcome variables: sexual coercion perpetration by males, sexual coercion perpetration by females, sexual coercion victimization of males, and sexual coercion victimization of females. This theoretical perspective directs the research questions for this study.

Research Questions

Extant research suggests that parental warmth is negatively related to experiences of sexual coercion. Further, both harsh parenting and interparental hostility are positively related to intimate partner violence. I plan to extend this research to examine the extent to which hostile parenting and interparental hostility are related to both sexual coercion perpetration and victimization. Additionally, I will investigate the extent to which relevant factors identified in the literatures (i.e., substance use, sociosexuality, and risky sexual behaviors) mediate, partially or in full, this direct association. I expect that family of origin hostility will predict positive attitudes about hooking up and substance use. With high levels of sociosexuality and substance use, individuals will be involved in more risky sexual behaviors. This, in turn, will predict involvement in sexually coercion perpetration or victimization.

Research Question 1: Is family of origin hostility positively related to experiences of sexual coercion?

Research Question 2: Is the association between family of origin hostility and sexual coercion partially mediated by sociosexuality, substance use, and risky sexual behaviors?

Research Question 3: Are these mediated paths different for sexual coercion perpetration verses victimization?

CHAPTER 3

Methods

Sample and Procedures

Data was collected as part of a larger research project studying dating, sexuality, marriage, and family relationships of college students during spring 2011.

Researchers administered the survey to students enrolled in introductory family studies and consumer economics courses. The study was explained to students a few days in advance of the administration of the survey. They were asked to complete a questionnaire that included 171 items and were told the survey would focus on topics ranging from dating and sex to family relationships. They were further told that some items would be of a personal nature. Participation was voluntary and subjects could discontinue at any time if they became uncomfortable with the questions. Because of the sensitive nature of the survey, the pencil and paper surveys were proctored like an exam. For individuals who declined to participate in the survey, an alternate activity of comparable length and difficulty was offered though no participants declined to participate in the survey. Therefore, the response rate was nearly 100% yielding a sample of 1136 (673 females and 463 males). The ethnicity of participants was European American (81.3%), African American (7.7%), Asian/Pacific Islander (7.1%), Hispanic/Latino (1.6%), and other (2.4%). Median family income was between \$100,001 and \$140,000. Roughly 73% of respondents indicated that their parents were married to each other.

Measures

Sexual Coercion. Respondents reported on their perpetration of sexual coercion. Sexual coercion perpetration was assessed using a six-item scale adapted from the Sexual Coercion Scale (Tyler et al., 1998). The scales asks participants to indicate the most intimate sexual outcome achieved with each of several behaviors initiated with a date despite his/her wish not to participate. The behaviors were: I got my date drunk or stoned, I threatened to terminate the relationship, I said things to make the other person feel guilty (i.e. "If you really cared about me."), I tried to turn my date on by touching him/her even though he/she wasn't interested, I made false promises about the future of the relationship, or I physically held my date down. Participants were asked to indicate the most extreme outcome that occurred for each of these coercive strategies. The response format for these items were 0 = not applicable (no sexual behavior occurred under this condition), 1 = breast touching, 2 = genital touching, 3 = oral sex, and 4 = sexual intercourse. High scores on all items indicated high levels of sexual coercion toward a partner. Scores were summed to form a measure of sexual coercion perpetration. Cronbach's alpha for sexual coercion perpetration is .73 for males and .52 for females.

Sexual coercion victimization was assessed by using the same items as those in the perpetration scale expect they were reworded so that participants reported on whether they had been a victim of these acts. The response format for these items ranged from 0 (not applicable) to 4 (sexual intercourse). Scores were summed to form a measure of sexual coercion victimization. Cronbach's alpha for sexual coercion victimization is .78 for males and .69 for females.

Family of origin hostility. Respondents reported on their family of origin hostility including: interparental hostility, mother to child hostility, and father to child hostility.

Interparental hostility was assessed with a four-item scale that asked participants to report how often while growing up did their mother and father criticize each other's ideas, shout or yell at each other, hit/push/shove/grab each other, and insult or swear at each other. The response format for this instrument ranged from 0 (*never*) to 4 (*always*). Scores were summed with the additional measures for family of origin hostility. Cronbach's alpha for interparental hostility is .81 for males and .78 for females.

Both mother to child and father to child hostility were assessed separately using items adapted from the Iowa Youth and Families Project (Conger, Elder, Lorenz, Simons, & Whitbeck, 1992; Conger & Elder, 1994). Prior research indicates high validity and reliability of these measures. For instance, results from the Iowa Youth and Families Project have shown that parent reports, child reports, and observer ratings on these items were all correlated (Conger et al, 1992; Simons & Johnson, 1996). Furthermore, they are shown to predict various dimensions of child behaviors across several years (Simons, Chao, Conger, & Elder, 2004).

Parent to child hostility was examined using a seven-item scale. Participants were asked to report how often while growing up did their mother shout or yell at them, criticize their ideas, and insult/swear or call them a bad name and how often while growing up did their father shout or yell at them, criticize their ideas, and insult/swear or call them a bad name. Similar to the interparental hostility measure, response options for these items were 0 = never, 1 = not too often, $2 = about \ half \ of the \ time$, $3 = fairly \ often$, and 4 = always. In addition, one item assessing physical aggression by parents asked participants to report if a parent, stepparent, or foster parent ever pushed, shoved, or grabbed at them in anger. Scores from mothers' hostility, fathers' hostility, and parental physical aggression were summed to form a measure of harsh parenting. Cronbach's alpha for harsh parenting is .76 for males and .72 for females.

Attitudes about hooking up. Respondents reported on their desire for sex in a casual context. Sociosexuality was assessed using items adapted from the Attitudes about Hooking up Scale created by Owen et al. (2010). Attitudes about hooking up was examined by using a four-item scale that asked respondents to indicate the extent to which they agreed (1 = strongly disagree to 4 = strongly agree) that they would have sex with someone that they had no plans to ever talk to again, think it's okay to have 'friends with benefits,' feel more comfortable hooking up with someone than talking about their feelings with them, and feel that hooking up is a normal activity for college students. Cronbach's alpha for attitudes about hooking up is .77 for males and .73 for females.

Substance use. Respondents reported on three items to construct a substance use measure. The measure includes two items on alcohol use and one item on other drug use.

Alcohol use was examined by asking how often they have a drink containing alcohol with the response options of 0 = never, 1 = once a month or less, 2 = 2-4 times per month, 3 = 2-3 times per month, and 4 = 4 or more times per week, and asking them to think about a typical night when they go out drinking with friends, how many drinks they typically consume with the response options of 0 = not applicable, I don't drink, 1 = 1-3, 2 = 4-6, 3 = 7-9, and 4 = 10 or more.

Other drug use was assessed by asking study participants to indicate how often they used illegal drugs such as pot, hash, LSD, cocaine, meth, or other drugs during the past 12 months. The response format for this item was 0 = never, 1 = once, 2 = 2 to 3 times, 3 = 4 to 5 times, and 4 = 6 or more times. The item was dichotomized with the respond format as 0 = never and 1 = any substance use.

The items were standardized and summed to create the substance use scale. Cronbach's alpha for substance use is .72 for males and .79 for females.

Risky sex. Respondents reported on four items to construct a risky sex measure. The four items were number of sex partners, number of oral sex partners, condom use during sexual intercourse, and number of hook ups. The items were recoded such that individuals who never experience sexual intercourse were scored as zero.

Number of sex partners was assessed by asking study participants how many persons they have had sexual intercourse with. The response format for this item was 0 = none, 1 = one, 2 = two to four, 3 = five to nine, and 4 = ten or more.

Number of oral sex partners was assessed by asking study participants how many persons with whom they have had oral sex (defined as oral/genital contact). The same response format used for number of sex partners was used for this item.

Condom use during sexual intercourse was assessed by asking study participants how often they use condoms during sexual intercourse. The response format for this item was 0 = always, 1 = sometimes, 2 = never, and individuals who have never had sex were coded as missing for this item.

Respondents reported on their involvement in hook up experiences. Hooking up was defined on the survey instrument as "an event in which two people are physically intimate outside of a committed relationship without the expectation of future encounters" (p.656; Owen et al., 2010). The amount of hook up experience was assessed by asking study participants how many times they have ever hooked up. The response format for this item was 0 = none, 1 = once, 2 = 3-5 times, 3 = 6-9 times, and 4 = 10 or more times.

The items were standardized and summed to create the risky sex scale. Cronbach's alpha for risky sex is .67 for males and .63 for females.

Controls. Respondents reported on their religiosity, family income, and parents' marital status. The three items were used as controls in the study.

Religiosity was assessed by asking study participants the influence their religious beliefs have on their daily life. The response format for this item was 0 = none, 1 = minimal, 2 = moderate, 3 = high, and 4 = very influential.

Family income was assessed by asking study participants to indicate their family's approximate total income. The response format for this item was 1 = less than \$60,000, 2 = \$60,001 - \$100,000, 3 = \$100,001 - \$140,000, 4 = \$140,001 - \$180,000 and 5 = over 180,000.

Parents' marital status was assessed by asking study participants to indicate which of the following best describes their parents' marital status. The response format for this item was 1=my parents were never married to each other, 2=my parents are currently married to each other, 3=my parents are divorced or separated, neither has remarried, 4=my parents are divorced and one or both of my parents has remarried and 5=one or both of my parents is deceased. The item was dichotomized with the respond format as 0=parents currently married to each other and 1=other.

Analytic Strategy

Data was analyzed using regression analysis. Specifically, ordinary least squares regression was used to examine the pathways between family of origin hostility and sexual coercion victimization and perpetration. By using ordinary least squares regression, family of origin hostility was used to predict attitudes about hooking up, substance use, and risky sexual behavior, and sexual coercion. Attitudes about hooking up, substance use, and risky sexual

behaviors were also used to predict sexual coercion. In addition, analysis was run separately for males and females. For participants who reported never having had oral sex or sexual intercourse, reports were coded as continuous variables to still include them in the analysis of experiencing varying degrees of sexual coercion.

CHAPTER 4

Results

Initial Findings

All models have been controlled for religiosity, family income, and parents' marital status and significant paths are presented in the figures presented below. Similar proportions of women and men reported their dates used some type of sexual coercion to initiate an intimate sexual outcome despite their wishes not to participate. Table 1 displays the incidence of sexual coercion victimization for both women and men. Overall, 48.9% of women reported being victims of at least one form of sexual coercion while 37.9% of males reported being victims of at least one form of sexual coercion. The most common forms of coercion experienced by both women and men were their dates "tried to turn me on by touching" (36.2% for women and 32.1% for men) and their dates "got me drunk or stoned" (30.0% for women and 28.5% for men). In addition, 32.4% of females and 33.3% of males reported engaging in oral sex or sexual intercourse regardless of their wishes not to participate. Also, the most common forms of coercion experienced by females to obtain oral sex or sexual intercourse were their dates "got me drunk or stoned" (17.6%) and their dates "said things to make me feel guilty" (12.6%). For men, the most common forms of coercion experience to obtain oral sex or sexual intercourse were their dates "got me drunk or stoned" (22.7%) and their dates "tried to turn me on by touching even though I wasn't interested" (21.0%). Men were 50 percent more likely to report that they had engaged in unwanted intercourse because their date tried to turn them on by touching (14.5%) than females (9.4%). Women were nearly twice as likely to indicate that they had

engaged in unwanted intercourse because a partner had made false promises about the relationship (8.6%) than men (4.8%).

Table 1 Frequencies for Sexual Coercion Victimization (females n = 673; males n = 463)

"For the following list of situations, indicate the most intimate sexual outcome that occurred with a partner *despite your wish* <u>not</u> to participate":

| | | | Females | | Males | | | | | |
|---|-------|--------------------|---------------------|-------------|-----------------------|-------|--------------------|---------------------|-------------|-----------------------|
| | None | Breast Touching | Genital Touching | Oral Sex | Sexual Intercourse | None | Breast Touching | Genital Touching | Oral Sex | Sexual Intercourse |
| Got me drunk or stoned | 70.1% | 4.5% | 7.9% | 3.3% | 14.3% | 71.4% | 1.7% | 4.1% | 4.5% | 18.2% |
| Threatened to terminate the relationship | 94.9% | .4% | .7% | .7% | 3.1% | 92.4% | .9% | 1.9% | 2.4% | 2.4% |
| Said things to make me feel guilty | 81.6% | 1.8% | 4.0% | 4.6% | 8.0% | 85.3% | 2.2% | 2.8% | 3.7% | 6.1% |
| Tried to turn me on by touching even though I wasn't interested | 63.8% | 10.0% | 14.6% | 2.2% | 9.4% | 67.9% | 2.2% | 8.9% | 6.5% | 14.5% |
| Made false promises | 84.7% | 1.3% | 2.4% | 3.0% | 8.6% | 90.5% | 1.3% | 1.5% | 2.0% | 4.8% |
| Physically held me down. | 93.5% | .6% | 1.8% | .7% | 3.4% | 93.3% | 1.3% | .9% | 1.3% | 3.2% |

Men reported higher rates of sexual coercion perpetration than women regardless of the specific behavior in question. Table 2 displays the incidence of sexual coercion perpetration for both women and men. Overall, 38.3% of men reported using at least one form of coercion with a partner while only 13.1% of women reported any instance of such behavior toward a partner. The most common forms of perpetration reported by both females and males were "tried to turn my date on by touching" (9.0% of women and 31.1% of men) and "got my date drunk or stoned" (4.4% of women and 23.1% of men). In addition, 7.9% of females and 31.4% of males reported coercing a date into performing oral sex or sexual intercourse regardless of their wishes not to participate. Also, the most common forms of coercion perpetrated to obtain oral sex or sexual intercourse were they "tried to turn my date on by touching" (4.1% of women and 19.4% of men) and they "got my date drunk or stoned" (2.7% of women and 17.5% of men).

Table 2 Frequencies for Sexual Coercion Perpetration (females n = 673; males n = 463)

"For the following list of situations, indicate the most intimate sexual outcome that occurred of behaviors that *you initiated* with a partner despite his/her wish not to participate":

| | | | Females | | | Males | | | | | | |
|--|-------|--------------------|---------------------|-------------|-----------------------|-------|--------------------|---------------------|-------------|-----------------------|--|--|
| | None | Breast Touching | Genital Touching | Oral Sex | Sexual Intercourse | None | Breast Touching | Genital Touching | Oral Sex | Sexual Intercourse | | |
| Got date drunk or stoned | 95.5% | .7% | 1.0% | .3% | 2.4% | 76.8% | 2.8% | 2.8% | 5.4% | 12.1% | | |
| Threatened to terminate the relationship | 99.4% | .3% | 0% | .1% | .1% | 94.1% | 1.5% | 1.3% | 1.7% | 1.3% | | |
| Said things to make the other person feel guilty | 96.4% | .6% | .9% | .7% | 1.3% | 86.6% | 2.4% | 2.8% | 4.5% | 3.7% | | |
| Tried to turn date on by touching even though he/she wasn't interested | 90.9% | .7% | 4.2% | 1.0% | 3.1% | 68.8% | 5.0% | 6.7% | 5.8% | 13.6% | | |
| Made false promises | 98.4% | .1% | .4% | .1% | .9% | 87.4% | 1.5% | 1.5% | 3.5% | 6.1% | | |
| Physically held my date down. | 99.6% | .1% | .1% | 0% | .1% | 95.9% | 1.5% | .9% | .7% | 1.1% | | |

Table 3 presents the correlation matrix for all study variables. The correlations above the diagonal are for females while the correlations below the diagonal are for males. The associations were generally consistent with the theoretical model proposed and prior research. The correlations indicate that men reared in homes with high amounts of interparental hostility and harsh parenting are more likely to be both victims and perpetrators of sexual coercion. On the other hand, the correlations indicate a different relationship between the independent and dependent variables for women. As expected, women raised in homes characterized by harsh parenting are more likely to be both victims and perpetrators of sexual coercion. However, there is no significant association between interparental hostility and sexual coercion victimization and perpetration for women. This finding is not consistent with prior research.

The correlations between the mediators and the independent and dependent variables produced interesting results. Regardless of gender, the correlations indicate that the mediating variables-substance use, attitudes about hooking up, and risky sexual behavior- are all positively associated with sexual coercion victimization and perpetration. Contrary to this, an only attitudes about hooking up is significantly associated with harsh parenting for men. For women, attitudes about hooking up is correlated with interparental hostility while attitudes about hooking up and risky sexual behavior are correlated with harsh parenting.

To further explore these relationships and the proposed research questions, OLS regression models were examined. Religiosity, family income, and parents' marital status were controlled across the fully recursive model. Originally, harsh parenting was assessed separately by mothers' harsh parenting and fathers' harsh parenting with both daughters and sons. Results indicated that there were little differences between mothers' and fathers' harsh parenting by

gender of child. Therefore, mothers' and fathers' harsh parenting were combined to form one measure of harsh parenting for both males and females.

Table 3
Correlation Matrix for Study Variables

| | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | 9. | 10. | М | SD |
|--|--------|--------|-------------|--------|--------|--------|--------|-------|--------|-------------|------|------|
| 1. Sexual Coercion Victimization | | .288** | .062 | .146** | .264** | .329** | .307** | 158** | .018 | .075 | .52 | .73 |
| 2. Sexual Coercion Perpetration | .639** | | .044 | .080* | .156** | .228** | .131** | 121** | .047 | .017 | .09 | .29 |
| 3. Interparental Hostility | .309** | .122** | | .510** | .017 | .100* | .039 | 103** | 182** | .299** | .92 | .67 |
| 4. Harsh Parenting | .291** | .148** | .608** | | .040 | .147** | .107* | 138** | 147** | .132** | .75 | .56 |
| 5. Substance Use | .188** | .174** | .007 | .061 | | .631** | .542** | 415** | .220** | .046 | .00 | .84 |
| 6. Attitudes about Hooking up | .188** | .261** | .042 | .119* | .499** | | .555** | 437** | .171** | 003 | 1.98 | .66 |
| 7. Risky Sexual Behavior | .184** | .196** | .018 | .034 | .378** | .397** | | 189** | .167** | .052 | .14 | .60 |
| 8. Religiosity | 047 | 101* | 046 | 111* | 371** | 385** | 031 | | .018 | 082* | 2.27 | 1.16 |
| 9. Family Total Income | 013 | .042 | - .162** | .153** | .199** | .037 | .091 | .049 | | - .219** | 3.07 | 1.37 |
| 10. Parents' Marital Status | .041 | .033 | .101* | .059 | 017 | .125** | .109* | 053 | 255** | | .29 | .45 |

| M | .51 | .43 | .98 | 1.00 | .00 | 2.73 | .38 | 1.84 | 3.22 | .24 |
|----|-----|-----|-----|------|-----|------|-----|------|------|-----|
| SD | .81 | .71 | .64 | .64 | .80 | .76 | .64 | 1.19 | 1.38 | .42 |

^{**} $p \le .01$; * $p \le .05$ (two-tailed tests); Correlations for females (n = 673) displayed above the diagonal; correlations for males (n = 463) displayed below the diagonal. Means and standard deviations for females are presented in the vertical columns and the means and standard deviations for males are presented in the horizontal rows.

Is Family of Origin Hostility Positively Related to Experiences of Sexual Coercion?

Victimization. Figure 2 depicts the results of the regression analysis where sexual coercion victimization was predicted from hostile parenting and interparental hostility for females. As expected, the results indicated that harsh parenting was positively related to women's sexual coercion victimization ($\beta = .17$, p < .05). Contrary to expectations, there was no significant association between interparental hostility and women's sexual coercion victimization ($\beta = .08$, p > .05).

Figured 3 depicts this relationship for males. As expected, the results indicated that harsh parenting was positively related to men's sexual coercion victimization (β = .21, p < .01). Furthermore, interparental hostility was positively related to men's sexual coercion victimization (β = .24, p < .01).

Perpetration. Figure 4 depicts the results of the regression analysis where sexual coercion perpetration was predicted from hostile parenting and interparental hostility for females. Contrary to expectations, the results indicated that harsh parenting was not significantly related to women's sexual coercion perpetration ($\beta = .03$, p > .05). In addition, there was no significant association between interparental hostility and women's sexual coercion perpetration ($\beta = .001$, p > .05).

Figure 5 depicts the results for males. Results indicated that there was no significant association between harsh parenting and men's sexual coercion perpetration ($\beta = .10$, p > .05). Furthermore, there was no significant association between interparental hostility and men's sexual coercion perpetration ($\beta = .06$, p > .05).

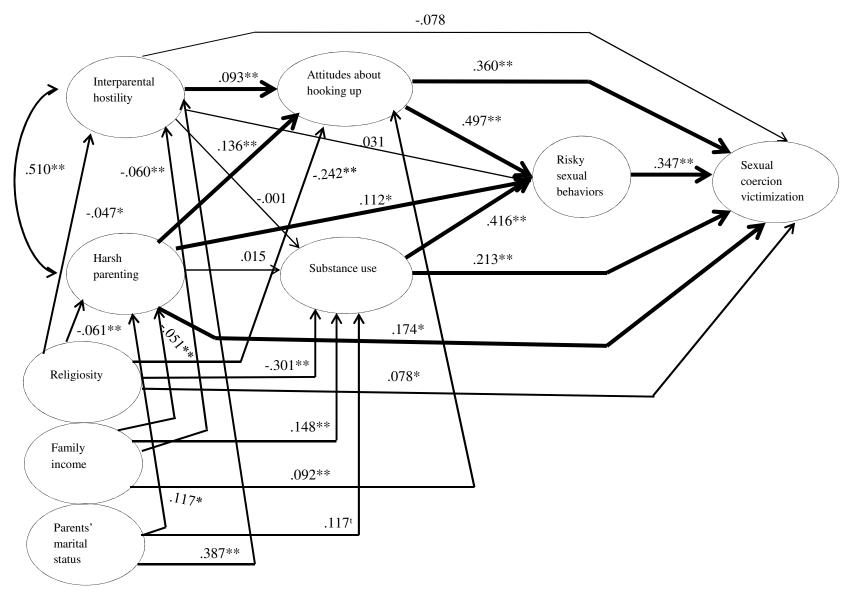


Figure 2. Mediators in the relationship between parenting factors and female victimization (n = 673).

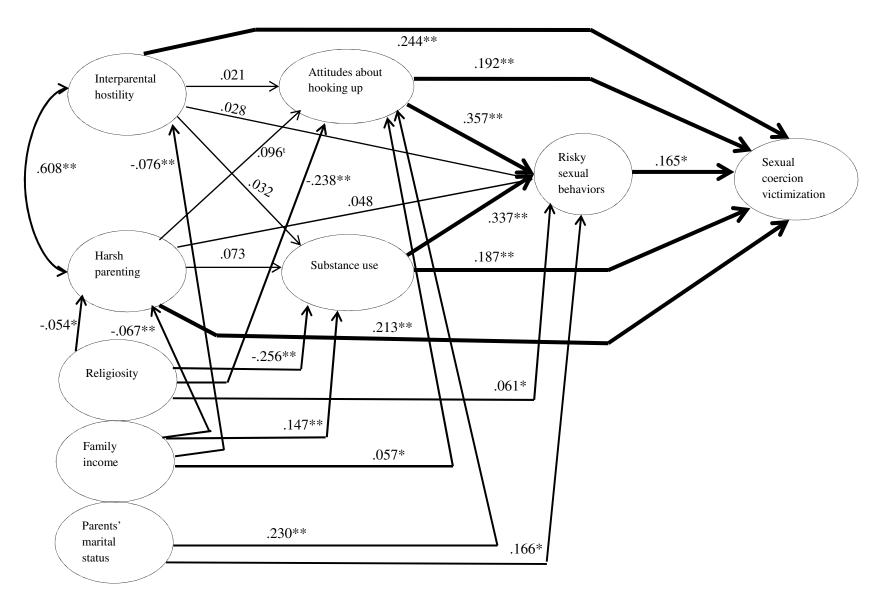


Figure 3. Mediators in the relationship between parenting factors and male victimization (n = 463).

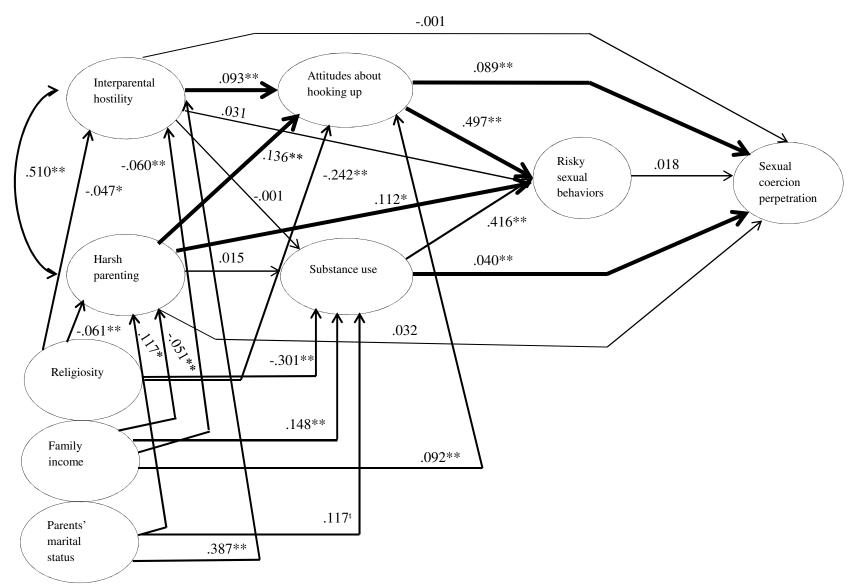


Figure 4. Mediators in the relationship between parenting factors and female perpetration (n = 673).

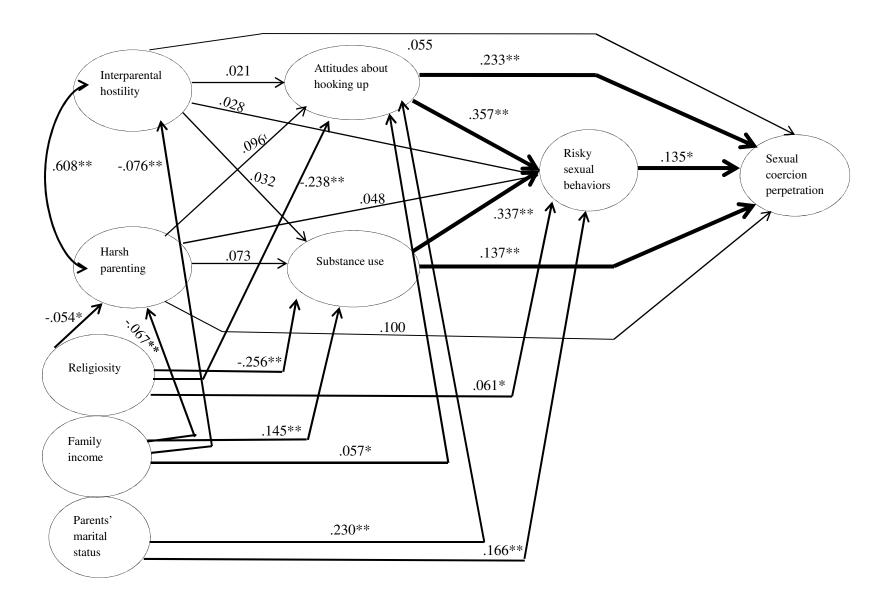


Figure 5. Mediators in the relationship between parenting factors and male perpetration (n = 463).

Is the Association between Family of Origin Hostility and Sexual Coercion Partially Mediated by Sociosexuality, Substance use, and Risky Sexual Behaviors?

Victimization. Extant literature suggests that specific aspects of the college culturesociosexuality, substance use, and risky sexual behaviors- may mediate the relationship between family of origin hostility and sexual coercion victimization. It was expected that the association between family of origin hostility and sexual coercion victimization was partially mediated by attitudes about hooking up, substance use, and risky sexual behaviors but there was mixed support for the posited relationship. As seen in figure 2, three pathways through attitudes about hooking up were found to significantly mediate the relationship between family of origin hostility and sexual coercion victimization for women. First, both interparental hostility and harsh parenting were positively related to attitudes about hooking up ($\beta = .09$, p < .01; $\beta = .14$, p< .01). Attitudes about hooking up, in turn, was directly related to women's sexual coercion victimization ($\beta = .36$, p < .01). Second, attitudes about hooking up was positively related to risky sexual behaviors ($\beta = .50$, p < .01). Risky sexual behavior was then positively related to women's sexual coercion victimization ($\beta = .35$, p < .01). Finally, a pathway through risky sexual behaviors was present. Harsh parenting was positively related to risky sexual behaviors (β = .11, p < .05) which was then positively related to women's sexual coercion victimization ($\beta =$.35, p < .01). Neither harsh parenting nor interparental hostility was related to substance use though harsh parenting is related to sexual coercion victimization. In addition, once the controls were entered into the model it was clear that religiosity, family income, and parents' marital status influenced the associations within the model.

It was expected that the association between family of origin hostility and sexual coercion victimization was partially mediated by attitudes about hooking up, substance use, and

risky sexual behaviors but there was little support for the posited relationship for males. As seen in figure 3, no significant pathways were found to mediate the relationship between family of origin hostility and sexual coercion victimization for men. However, there are two pathways that were close to reaching significance. First, harsh parenting was close to reaching significance related to attitudes about hooking up ($\beta = .10$, p = .07). Attitudes about hooking up, in turn, was directly related to men's sexual coercion victimization ($\beta = .19$, p < .01). Second, attitudes about hooking up was positively related to risky sexual behaviors ($\beta = .36$, p < .01). Risky sexual behaviors was then positively related to men's sexual coercion victimization ($\beta = .17$, p < .05). Neither harsh parenting nor interparental hostility was related to substance use though both of these factors are related to sexual coercion victimization. In addition, once the controls were entered into the model it was clear that religiosity, family income, and parents' marital status influenced the associations within the model.

Perpetration. Extant literature suggests that specific aspects of the college culture-sociosexuality, substance use, and risky sexual behaviors- may mediate the relationship between family of origin hostility and sexual coercion perpetration. It was expected that the association between family of origin hostility and sexual coercion perpetration was partially mediated by attitudes about hooking up, substance use, and risky sexual behaviors but there was mixed support for the posited relationship. As seen in figure 4, one pathway through attitudes about hooking up was found to significantly mediate the relationship between family of origin hostility and women's sexual coercion perpetration. Both interparental hostility and harsh parenting were positively related to attitudes about hooking up ($\beta = .09$, p < .01; $\beta = .14$, p < .01). Attitudes about hooking up, in turn, was directly related to women's sexual coercion perpetration ($\beta = .09$, p < .01). Neither harsh parenting nor interparental hostility was related to substance use. In

addition, once the controls were entered into the model it was clear that religiosity, family income, and parents' marital status influenced the associations within the model.

It was expected that the association between family of origin hostility and sexual coercion perpetration was partially mediated by attitudes about hooking up, substance use, and risky sexual behaviors but there was little support for the posited relationship for males. As seen in figure 5, no significant pathways were found to mediate the relationship between family of origin hostility and sexual coercion perpetration for men. However, there are two pathways that were close to reaching significance. First, harsh parenting was close to reaching significance related to attitudes about hooking up ($\beta = .10$, p = .07). Attitudes about hooking up, in turn, was directly related to men's sexual coercion perpetration ($\beta = .23$, p < .01). Second, attitudes about hooking up was positively related to risky sexual behaviors ($\beta = .36$, p < .01). Risky sexual behaviors was then positively related to men's sexual coercion perpetration ($\beta = .14$, p < .05). Neither harsh parenting nor interparental hostility was related to substance use. In addition, once the controls were entered into the model it was clear that religiosity, family income, and parents' marital status influenced the associations within the model.

CHAPTER 5

Discussion

This study of college students examined the predictors of sexual coercion. More specifically, potential mediators in the association between family of origin hostility and experiences of sexual coercion victimization and perpetration of college men and women were examined. Results indicated that both men and women reported similar rates of sexual coercion victimization while men reported higher rates of perpetration than women. In addition, the reported severity of sexual coercion outcome is important to note. Women were most likely to be victims of oral sex or sexual intercourse when males verbally coerced them into the experiences while men were more likely to be victims of oral sex or sexual intercourse when females used more physical forms of coercion, but not force.

While females and males indicated using the same types of sexual coercion tactics when perpetrating, the severity of the outcomes were quite different. For example, when trying to turn on a date by touching, nine percent of women and roughly 31 percent of men reported using this tactic. However, roughly four percent of these experiences perpetrated by women resulted in oral sex or sexual intercourse while roughly 19 percent of men engaged in oral sex or sexual intercourse with an unwilling partner when using this strategy. Taken together, these results indicate that while both men and women report sexual coercion victimization and perpetration, the outcome severity of these experiences differs by gender. This is consistent with prior research that indicates gender differences in severity of sexual coercion tactics (Archer, 2000; Ehrensaft et al., 2004).

The first research question of this study asked if family of origin hostility is positively related to experiences of sexual coercion. In partial support of the first hypothesized relationship, results indicated a direct and positive association between both types of family of origin hostility and experiences of sexual coercion victimization for males. However, contrary to expectations, only harsh parenting was positively associated to sexual coercion victimization for females. In addition, contrary to expectations, family of origin hostility was not significantly associated to sexual coercion perpetration for males and females.

The second research question of this study asked if the association between family of origin hostility and sexual coercion are partially mediated by sociosexuality, substance use, and risky sexual behaviors. Mixed evidence was found to support the second hypothesized relationship. For males, neither substance use, attitudes about hooking up, nor participation in risky sexual behavior were found to mediate the association between family of origin hostility and either sexual coercion victimization or perpetration. Instead, it appears that the results suggest that substance use, attitudes about hooking ups, and participation in risky sexual behavior are all directly related to sexual coercion. Thus, while there was no support for the expectation that they were mediators, it seems that the present study has corroborated that each of these factors is a predictor of both perpetration and victimization of males. Further, the relationship between substance use and an endorsement of attitudes associated with the culture of casual sex was partially mediated by the influence of participation in risky sex behavior.

For females, attitudes about hooking up and participation in risky sexual behavior were found to mediate the association between family of origin hostility and sexual coercion victimization and perpetration but substance use was not found to mediate this relationship. In addition, it appears that the results suggest that substance use, attitudes about hooking up, and

participation in risky sexual behavior are all directly related to sexual coercion victimization.

Only substance use and attitudes about hooking up are directly related to sexual coercion perpetration. Thus, while there was some support for the expectation that they were mediators, it seems that the present study has corroborated that these factors are predictors of both perpetration and victimization of females. Further, the relationship between substance use and an endorsement of attitudes associated with the culture of casual sex was partially mediated by the influence of participation in risky sexual behavior for victimization of females.

Sexual Coercion Victimization

Findings from this study corroborate reports from prior work indicating that women and men experience roughly the same rates of aggression and violence (Archer, 2000; Bell & Naugle, 2007; Moffitt et al., 2001; Straus, 2009). In addition, findings from this study corroborate reports that men and women experience a range in severity of outcomes (Archer, 2000; Moffitt et al., 2001). While this study finds that men and women are victims of sexual coercion, the influence of family of origin hostility did not associate to victimization as posited. For females, only harsh parenting directly predicted sexual coercion victimization. This is consistent with prior research (Magdol et al., 1998; Simons et al., in press b) which indicates harsh parenting by both mothers and fathers predicts sexual coercion victimization for females. It may be that because perpetration by fathers of mothers happens behind closed doors, college women do not internalize experiences of interparental hostility and learn that it is acceptable for males to be violent or coercive towards women in romantic relationships. However, females directly experience parents' hostility. Therefore, women may learn that their personal treatment by loved ones can be characterized by violence and coercion. For males, both harsh parenting and interparental hostility directly predicted sexual coercion victimization. This is consistent with

research that indicates both aspects of family of origin hostility-interparental hostility and harsh parenting- predict sexual coercion victimization (Linder & Collins, 2005).

Sexual Coercion Perpetration

While prior research indicates that males and females perpetrate using tactics at opposite ends of the sexual coercion continuum (Hines, 2007; Simons et al., in press b), this study indicates contradictive findings. Men and women reported using the same tactics when pressuring their partners into sexual acts. These tactics, which use touching and alcohol or drugs to coerce their dates, are reported more often by males than females in the literature (Simons et al., in press b). In addition, results indicate that college students use characteristics of a deviant lifestyle, alcohol and drug use, to perpetrate which itself is considered a deviant behavior. This is consistent with the antisocial orientation perspective. The difference between males and females in their sexual coercion tactics is found in the severity of the outcome for their victims. This study indicates that men are more likely to have perpetration of sexual coercion result in oral sex or sexual intercourse compared to women. These results indicate that while college males and females may be using similar tactics in sexual coercion, men's perpetration results in more severe unwanted sexual experiences for women than when females perpetrate males.

In addition, the association between family of origin hostility and perpetration were similar for males and females. That is, for neither men nor women, did family of origin hostility predict sexual coercion perpetration. This was the case for interparental hostility as well as harsh parenting. This is inconsistent with the predictions of social learning theory and coercion theory. However, this corroborates prior research that challenges social learning theory which found that witnessing violence between parents did not significantly impact perpetration of dating violence (Gover et al., 2008). These results might be because few women in the study reported

perpetration. The lack of self-report from women may be because college women do not realize they are sexually coercive when using these tactics to be involved with men. Society socializes men and women to assume men are always willing and ready to have sex with women (Kimmel, 2008). Because of this, women may assume that men always want sex and just need "signals," "encouragement," or "guidance" which are actually considered coercive tactics. For males, the results are inconsistent with social learning theory and the intergenerational transmission of violence hypothesis that posits being raised in homes characterized by violence increases individuals' risk of becoming violent in their romantic relationships later in life (O'Leary, 1988). Perhaps, the measures do not adequately get at the constructs being measured.

The sexual double standard might be an explanation for the perpetration results from this study. In his interviews with men across college campuses, Kimmel repeatedly heard men tell him, "girls 'have to say no' to protect their reputations, they 'mean yes, even if they say no,' and 'if she's drunk and semiconscious, she's willing'" (pg. 218; Kimmel, 2008). Recent prevention programs have advocated a "no means no" viewpoint towards women and sex to try and combat this common reputation protecting perspective from men. Because of this, men might now understand that when women say no, they actually mean what they are saying. On the other hand, the sexual double standard indicates that men are always willing and able to have sex. Because of this, women may assume that even when men say no, they really do want to have sex. Therefore, their initiation and actions are not considered coercive in their minds.

Mediators Influences in the Relationship between Family of Origin Hostility and Sexual Coercion

There was a lack of support for the expected combined influence that the culture of casual sex among college students has in the association between family of origin hostility and

sexual coercion victimization and perpetration. Risky sexual experiences were only related to harsh parenting for women's experiences of sexual coercion victimization. However, attitudes about the acceptability of casual sexual encounters (i.e., hook ups) had the greatest influence on the relationship between family of origin hostility and experiences of sexual coercion victimization and perpetration. For females, positive attitudes about hooking up mediated the relationship between family of origin hostility and both sexual coercion victimization and perpetration. While no significant mediators were found in the relationship between family of origin hostility and sexually coercive behavior for males, positive attitudes about hooking up approached significance for both sexual coercion victimization and perpetration. These findings are consistent with results from Simons et al.'s (2008) study.

While substance use was not associated with negative parenting practices as prior research indicates (Barnow et al., 2002), the association between substance use and the culture of casual sex among college students was consistent with findings from prior research (Vander Van & Beck, 2009). The attitudes and behaviors of college students create the culture of casual sex that is present today. Alcohol and additional drugs fuel these attitudes and behaviors by lowering inhibitions and allowing for more risky behaviors to occur than would while sober. The antisocial orientation perspective further explains this association. Deviant behaviors are correlated and show that individuals who engage in one type of deviant behavior often participate in other types (Farrington, 1991; Osgood et al., 1988). Prior research indicates that substance use and drug use are aspects of individuals who can be characterized as leading a more deviant lifestyle (Lane et al., 2006; Simons et al., 1998). Therefore, individuals that consume more alcohol and use more drugs are likely to be involved in risky behaviors such as being active in the culture of casual sex among college students. Furthermore, these individuals would then be

more likely to be part of extreme aspects of a deviant lifestyle, including sexual coercion, which is consistent with the present study's findings.

The development of high sociosexuality from negative family of origin experiences may lead college students to see sex as a casual enjoyment (Simons et al., 2008) and assume this viewpoint is held by all college students. Seeing as 78 percent of college students have participated in a hook up (Paul et al., 2000), believing all college students see sex as a casual enjoyment may be the case. In the current study, 74.4 percent of women and 88.5 percent of men reported some degree of agreement that hooking up is a normal part of college. These beliefs may then lead individuals into seeking sexual experiences with others where they assume concordance on attitudes and behaviors but then realize their attitudes and actual behaviors differ. Frustration in the face of sexual desires may lead to the use of sexually coercive tactics in an attempt to achieve the desired goal, perhaps through what may, in some cases, be seen as acceptable ways to encourage or entice a partner into participation.

Finally, it is evident that the controls played a unique role in the associations within all four models. Prior research indicates the association between religiosity and family of origin hostility. Parents that are more religious and have greater sanctification of parenting are less likely to use negative aggression towards their children (Murray-Swank, Mahoney, & Pargament, 2006). This is evident in the present study's results that report more religiosity was negatively associated with family of origin hostility. Aspects of the culture of casual sex in college-substance use, attitudes about hooking up, and risky sexual behaviors- are all associated with religiosity. Simons et al. (2009) found that religious college students have low sociosexuality and participate less in risky sexual behaviors. Results from the current study are consistent with Simons et al.'s findings. Finally, an association between religiosity and female

sexual coercion victimization is present. It may be that more religious females hold more conservative gender roles. These conservative gender roles may make women feel they must be more passive when interacting with men. Because of this, women may feel they are unable to say no to men and therefore be more at risk for sexual coercion.

The second control, family income, was uniquely associated to family of origin hostility, substance use, and attitudes about hooking up. The association between family of origin hostility and family income is consistent with prior studies that indicate a significant negative association between family income and parental hostility (Pinderhughes, Dodge, Bates, Pettit, & Zelli, 2000). In addition, the association between family income and substance use and attitudes about hooking up are consistent with prior studies. Owen et al. (2010) found that all three of these variables are predictors of hooking up. They discuss that it may be that individuals who have higher family incomes are able to spend more time and money participating in social activities and drinking while individuals with less family income must spend free time working or have less spending money to devote to social activities including alcohol and drug use.

Finally, parents' marital status was uniquely associated with family of origin hostility and aspects of the culture of casual sex in college-substance use, attitudes about hooking up, and risky sexual behaviors. As prior research indicates, children of divorced parents report negative outcomes within the family of origin. For example, parents' divorce was associated with lower quality father-child relationships (Riggio, 2004). A lower quality relationship with divorced parents is consistent with the findings from this study. Prior research indicates that individuals from divorced families are more likely to participate in aspects of the culture of casual sex including substance use, positive attitudes about hooking up, and participating in risky sexual behaviors (Glenn & Marquardt, 2001; Needle, Su, & Doherty, 1990). For example, individuals

who experienced parental divorce during adolescents have greater drug use than individuals from continuously married families (Needle et al., 1990). Because of what findings from prior research indicate and the significant associations in this study; controlling for religiosity, family income, and parents' marital status was needed.

Limitations and Suggestions for Future Research

Although findings reveal that college men and women experience sexual coercion victimization and perpetration, there are several limitations to this study. One notable limitation is the sample population and its generalizability. Data was collected from a college sample and while many studies within risky behaviors and sexual coercion use college samples (Simons et al., under review; Simons et al., 2008; Simons et al., in press b), future research should examine individuals of the same age outside of college to see if similar results are found. Second, the design was cross sectional and relied on retrospective reports of family of origin hostility during childhood. Future research should examine this relationship longitudinally and with prospective data. Third, because of the sensitive nature and stigma related to the perpetration of sexual coercion, it is likely that respondents underreported their involvement in these experiences. Finally, the measures used may be considered a limitation of this study. Specifically, the family of origin hostility measure was a shorted version of the full instrument developed for the Iowa Youth and Families Project (Conger et al., 1992; Conger & Elder, 1994). Future research should use more complete measures which may yield different results.

Conclusions

Despite these notable limitations, this study of college students found that both women and men experience victimization and perpetration of sexual coercion and experience varying degrees of severity of outcome from the experiences. Hostility and aggression learned in the

family of origin are especially influential in terms of its impact on the experiences of sexual coercion victimization for both males and females. Family of origin aggression and hostility were less important as explanatory variables in understanding perpetration of sexual coercion. Instead, sexual attitudes and behaviors as well as substance use are better predictors of both perpetration and victimization among college students. In addition, this is the first known study to find that attitudes about hooking up predicted sexual coercion victimization and perpetration which is a major contribution to both the hook up and sexual coercion literature.

The results indicate important implications for education and prevention programs. First, the influence of the mediators on sexual coercion must be focal points of programs. College students should learn to avoid excessive alcohol consumption and substance use because of their impairment on judgment and inhibitions. In addition, the concern of hooking up with people individuals do not know should be expressed to college students so they understand the risky and unsafe situations that they place them in. Further, programs should teach that both men and women can be perpetrators and victims of sexual coercion. In addition, college women should learn what tactics are considered coercive and that college men do not always want sex as society indicates. The sexual double standard should be part of this discussion and make clear that it is just as important to understand its negative influence on males as females. In trying to bring equality to men and women, there is a responsibility to not lose sight of the struggles and inequality that both genders experience in sexual relationships.

Finally, college women should learn that their experiences of sexual coercion victimization are more likely to end in more sever forms of sexual coercion (i.e., forced sexual intercourse) and college males should learn their experiences of sexual coercion perpetration are more likely to end in more sever forms of sexual coercion for their partners. If college students

gain a better understanding of sexual coercion and their individual roles in the experience as well as the potentially devastating consequences of such behavior, then violence and coercion may be reduced.

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APPENDIX A: SEXUAL COERCION QUESTIONS

Victimization

People use many different methods to get a partner to engage in sexual behavior. Indicate the most intimate sexual outcome that occurred with a partner despite your wish <u>not</u> to participate. If you have not experienced such behavior, circle E for Not Applicable. Indicate the most extreme behavior that occurred. A = Less extreme, D = More extreme

| | | Breast Touching | Genital Touching | Oral Sex | Sexual Intercourse | Not Applicable |
|-----|---|--------------------|---------------------|----------|-----------------------|-------------------|
| 59. | The other person got me drunk or stoned. | A | В | С | D | E |
| 60. | The other person threatened to terminate the relationship. | A | В | C | D | E |
| 61. | The other person said things to make me feel guilty (i.e., "If you really cared about me.") | A | В | С | D | Е |
| 62. | The other person tried to turn me on by touching me even though I wasn't interested. | A | В | С | D | Е |
| 63. | The other person made false promises about the future of the relationship | A | В | C | D | E |
| 64. | The other person physically held me down. | A | В | С | D | E |

Perpetration

For the following list of situations, indicate the most intimate sexual outcome of behaviors that *you initiated* with a partner despite his/her wish not to participate. If you have not engaged in such behaviors, circle E for Not Applicable. Indicate the most extreme behavior that occurred. A = Less extreme, D = More extreme

| Breast | Genital | Oral Sex | Sexual | Not |
|----------|----------|----------|-------------|------------|
| Touching | Touching | | Intercourse | Applicable |

| 65. | I got my drunk or stoned. | A | В | С | D | E |
|-----|--|---|---|---|---|---|
| 66. | I threatened to terminate the relationship. | A | В | С | D | Е |
| 67. | I said things to make the other person feel guilty (i.e., "If you really cared about me.") | A | В | С | D | Е |
| 68. | I tried to turn my date on by touching him/her even though he/she wasn't interested. | A | В | С | D | Е |
| 69. | I made false promises about the future of the relationship | A | В | С | D | Е |
| 70. | I physically held my date down. | A | В | C | D | E |

APPENDIX B: FAMILY OF ORIGIN HOSTILITY QUESTIONS

Interparental Hostility

Please think about times when you were growing up and living at home with your parents (or parent and step-parent) to answer the following questions. Your choices are:

- A. Always
- B. Fairly often
- C. About half of the time
- D. Not too often
- E. Never

When they interacted with each other, how often did your parents...

- 14. Criticize each other's ideas?
- 15. Shout or yell at each other because they were mad?
- 18. Hit, push, shove, or grab each other?
- 19. Insult or swear at each other?

Mother to Child Hostility

Thinking about your mom or female caregiving answer the following questions using these choices:

- A. Always
- B. Fairly often
- C. About half of the time
- D. Not too often
- E. Never

While you were growing up at home how often did your mom...

- 22. Shout or yell at you because she is mad at you?
- 24. Criticize you or your ideas?
- 26. Insult or swear at you or call you bad names?

Father to Child Hostility

Thinking about your dad or male caregiving answer the following questions using these choices:

- A. Always
- B. Fairly often
- C. About half of the time
- D. Not too often
- E. Never

While you were growing up at home how often did your mom...

- 32. Shout or yell at you because he is mad at you?
- 34. Criticize you or your ideas?
- 36. Insult or swear at you or call you bad names?

Parental Physical Aggression

When you were a child, did a parent, stepparent, or foster parent ever do any of the following? Use the following response format:

- A. Never
- B. Once
- C. Sometimes
- D. Often
- E. Always
- 43. Push, shove, or grab you in anger?

Table 4 Frequencies for Family of Origin Hostility (females n = 673; males n = 463)

| | | | Females | | | | | Males | | |
|--|--------|-----------------|------------------------|---------------------|-------|--------|-----------------|------------------------|---------------|-------|
| | Always | Fairly often | About half of the time | Not too often | Never | Always | Fairly often | About half of the time | Not too often | Never |
| Criticize each other's ideas? | 2.4% | 15.8% | 23.2% | 51.3% | 7.3% | 3.7% | 21.8% | 24.2% | 45.8% | 4.5% |
| Shout or yell at each other because they were mad? | 3.0% | 12.9% | 15.2% | 47.5% | 21.4% | 3.2% | 10.4% | 13.4% | 50.3% | 22.7% |
| Hit, push, shove, or grab each other? | .3% | .7% | 1.5% | 10.6% | 86.9% | 1.1% | 3.0% | 1.1% | 11.7% | 83.1% |
| Insult or swear at each other? | 1.3% | 4.5% | 7.0% | 35.3% | 51.9% | 1.5% | 4.5% | 6.9% | 35.7% | 51.3% |
| Shout or yell at you because she is mad at you? | 2.5% | 8.8% | 15.9% | 56.5% | 16.3% | 2.8% | 13.0% | 17.1% | 55.3% | 11.9% |
| Criticize you or your ideas? | 1.0% | 5.5% | 10.1% | 42.9% | 40.5% | 2.2% | 6.9% | 15.4% | 48.7% | 26.8% |
| Insult or swear at you or call you bad | .6% | 2.8% | 2.7% | 17.7% | 76.2% | 1.1% | 3.2% | 4.8% | 24.6% | 66.3% |

| Push, shove, or grab you in anger? | 64.9% | 11.3% | 13.5% | 2.4% | 7.9% | 53.7% | 16.5% | 17.3% | 4.3% | 8.2% |
|--|-------|-------|-----------|-------|--------|-------|-------|-----------|-------|------------|
| | Never | Once | Sometimes | Often | Always | Never | Once | Sometimes | Often | Alway s |
| Insult or swear at you or call you bad names? | 1.2% | 2.4% | 2.7% | 14.4% | 79.3% | 1.7% | 5.2% | 5.8% | 26.6% | 60.7% |
| Criticize you or your ideas? | 1.3% | 4.5% | 9.5% | 38.1% | 46.6% | 3.5% | 9.1% | 16.6% | 45.6% | 25.3% |
| Shout or yell at you because he is mad at you? | 2.1% | 5.4% | 11.0% | 50.1% | 31.4% | 3.0% | 11.9% | 14.5% | 52.8% | 17.7% |
| names? | | | | | | | | | | |

APPENDIX C: ATTITUDES ABOUT HOOKING UP QUESTIONS

Using the following response options, indicate the extent to which you agree or disagree with the following:

- A. Strongly Agree
- B. Moderately Agree
- C. Moderately Disagree
- D. Strongly Disagree

| 103. | I would have sex with someone that I had no plans to ever talk to again. |
|------|--|
| 104. | I think it's okay to have 'friends with benefits.' |
| 105. | I feel more comfortable hooking up with someone than talking about my |
| | feelings with them. |
| 107. | I feel that hooking up is a normal activity for college students. |

Table 5 Frequencies for Attitudes about Hooking up (females n = 673; males n = 463)

| | | Fen | nales | | | Males | | | | | |
|--|----------------|------------------|---------------------|-------------------|----------------|------------------|---------------------|-------------------|--|--|--|
| | Strongly agree | Moderately agree | Moderately disagree | Strongly disagree | Strongly agree | Moderately agree | Moderately disagree | Strongly disagree | | | |
| I would have sex with someone that I had no plans to ever talk to again. | 2.1% | 8.0% | 11.6% | 78.2% | 21.8% | 29.2% | 17.4% | 31.6% | | | |
| I think it's okay to have 'friends with benefits.' | 5.7% | 32.4% | 24.3% | 37.6% | 28.9% | 41.7% | 14.1% | 15.2% | | | |
| I feel more comfortable hooking up with someone than talking about my feelings with them. | 4.2% | 14.8% | 22.4% | 58.6% | 13.3% | 30.6% | 34.4% | 21.7% | | | |
| I feel that hooking up is a normal activity for college students. | 26.5% | 47.3% | 12.8% | 13.4% | 46.6% | 41.9% | 6.9% | 4.6% | | | |

APPENDIX D: SUBSTANCE USE QUESTIONS

Substance use

Indicate how often you have engaged in the following behaviors using the following response scale:

- A. Never
- B. Once
- C. 2 to 3 times
- D. 4 to 5 times
- E. 6 or more times
- 130. Used illegal drugs such as pot, hash, LSD, cocaine, meth, or other drugs

Alcohol use

- 131. How often do you have a drink containing alcohol?
 - A. Never
 - B. Once a month or less
 - C. 2-4 times per month
 - D. 2-3 times a week
 - E. 4 or more times per week
- 132. Thinking about a typical night when you go out drinking with friends, how many drinks do you typically consume?
 - A. Not applicable, I don't drink
 - B. 1-3
 - C. 4-6
 - D. 7-9
 - E. 10 or more

Table 6 $Frequencies \ for \ Substance \ Use \ (females \ n=673; \ males \ n=463)$

| | | Fe | emales | | | | | Males | | |
|--|--|----------------------|------------------------------|------------------------|-----------------------------------|--|----------------------|---------------------------|---------------------------|--------------------------------------|
| | Never | Once | 2 to 3 times | 4 to 5 times | 6 or more times | Never | Once | 2 to 3 times | 4 to 5 times | 6 or more times |
| Used illegal drugs such as pot, hash, LSD, cocaine, meth, or other drugs | 60.4% | 9.8% | 8.0% | 5.1% | 16.7% | 45.7% | 6.3% | 11.3% | 4.8% | 32.0% |
| | Never | Once a month or less | 2-4 times per month | 2-3 times a week | 4 or more times per week | Never | Once a month or less | 2-4 times per month | 2-3 times a week | 4 or more times per week |
| How often do you have a drink containing alcohol? | 12.8% | 16.8% | 33.3% | 31.4% | 5.8% | 5.0% | 11.0% | 22.5% | 36.9% | 24.6% |
| | Not applicable, I don't drink | 1-3 | 4-6 | 7-9 | 10 or more | Not applicab le, I don't drink | 1-3 | 4-6 | 7-9 | 10 or more |
| Thinking about a typical night | 16.2% | 35.5% | 37.0% | 10.3% | 1.0% | 6.7% | 16.6% | 26.8% | 29.8% | 20.1% |

when you go drinking with friends, how many drinks do you typically consume?

APPENDIX E: RISKY SEXUAL BEHAVIOR QUESTIONS

Please answer the next questions using the following response format:

- A. None
- B. One
- C. Two to four
- D. Five to nine
- E. Ten or more
- 53. With how many persons have you had sexual intercourse?
- 54. With how many persons have you had oral sex (that is, oral/genital contact)?
- 56. How often do you use condoms during sexual intercourse?
 - A. Always
 - B. Sometimes
 - C. Never
 - D. I have never had sexual intercourse

Hooking up can be defined as "an event in which two people are physically intimate outside of a committed relationship without the expectation of future encounters."

- 84. How many times have you ever hooked up?
 - A. None
 - B. Once
 - C. 3-5 times
 - D. 6-9 times
 - E. 10 or more times

Table 7

Frequencies for Risky Sexual Behaviors (females n = 673; males n = 463)

| | | | Fema | les | | Males | | | | | |
|--|--------|-------|----------------|--|-------------|--------|---------------|-------------|--|-------------------|--|
| | None | One | Two to four | Five to nine | Ten or more | None | One | Two to four | Five to nine | Ten or more | |
| With how many persons have you had sexual intercourse? | 30.8% | 19.0% | 28.7% | 14.7% | 6.7% | 18.1% | 20.5% | 24.8% | 22.0% | 14.5 | |
| With how many persons have you had oral sex (that is, oral/genital contact)? | 23.8% | 17.4% | 36.1% | 17.2% | 5.5% | 10.4% | 18.1% | 30.0% | 22.2% | 19.2 % | |
| | Always | Somet | Never | I have never had sexual intercourse | | Always | Someti mes | Never | I have never had sexual intercourse | | |
| How often do you use condoms during sexual | 26.3% | 34.8% | 8.0% | 30.9% | | 30.0% | 43.2% | 8.9% | 17.9% | | |

| intercourse? | | | | | | | | | | |
|--|-------|-------|--------------|-----------|------------------------|-------|------|--------------|-----------|------------------------|
| | None | Once | 3-5 times | 6-9 times | 10 or more times | None | Once | 3-5 times | 6-9 times | 10 or more times |
| How many times have you ever hooked up? | 33.1% | 12.7% | 23.7% | 12.5% | 18.0% | 16.1% | 7.8% | 23.2% | 14.1% | 38.8 |

APPENDIX F: CONTROL QUESTIONS

Religiosity

- 5. The influence of my religious beliefs on my daily life is:
 - A. None
 - B. Minimal
 - C. Moderate
 - D. High
 - E. Very influential

Family Income

- 6. Indicate your family's approximate <u>total</u> income:
 - A. Less than \$60,000
 - B. \$60,001 \$100,000
 - C. \$100,001 \$140,000
 - D. \$140,001 \$180,000
 - E. Over \$180,000

Parents' Marital Status

- 7. Which of the following best describes your parents' marital status?
 - A. My parents were never married to each other.
 - B. My parents are currently married to each other.
 - C. My parents are divorced or separated, neither has remarried.
 - D. My parents are divorced and one or both of my parents has remarried.
 - E. One or both of my parents is deceased.

Table 8 Frequencies for Controls (females n = 673; males n = 463)

| | | | Femal | les | | | Males | | | | | |
|--|---|-----------------------------------|---|--|---|--|-----------------------------------|-------------------------------------|--------------------------------------|--|--|--|
| | None | Minimal | Moderate | High | Very influenti al | None | Minimal | Moder ate | High | Very influential | | |
| The influence of my religious beliefs on my daily life is: | 5.9% | 18.4% | 38.6% | 16.0% | 21.0% | 14.5% | 26.3% | 30.9% | 17.5% | 10.8% | | |
| | Less than \$60,0 00 | \$60,001 - \$100,00 0 | \$100,001 - \$140,000 | \$140,00 0- \$180,00 0 | Over \$180,00 0 | Less than \$60,000 | \$60,001 - \$100,00 0 | \$100,0 01- \$140,0 00 | \$140, 000- \$180, 000 | Over \$180,000 | | |
| Indicate your family's approxim ate total income? | 13.7% | 26.7% | 20.9% | 16.6% | 22.1% | 13.0% | 21.0% | 23.4% | 16.2% | 26.4% | | |
| | My parent s were never marrie d to | My parents are currentl y married | My parents are divorced or separated | My parents are divorced and one or both | One or both of my parents is decease | My parents were never married to each | My parents are currentl y married | My parents are divorce d or separat | My parent s are divorc ed and one or | One or both of my parents is deceased. | | |

| | each other | to each other. | , neither has remarried | of my parents has remarrie d. | d. | other. | to each other. | ed, neither has remarri ed. | both of my parent s has remarried. | |
|---|---------------|----------------|-------------------------------|---|------|--------|----------------|---|------------------------------------|------|
| Which of the following best describes your parents' marital status? | 1.5% | 71.0% | 7.7% | 15.8% | 4.0% | 1.5% | 76.5% | 5.8% | 12.7% | 3.5% |