

**Childhood Abuse, Parenting Styles & Social Support
in the Development of Depression & Sexual Risk Taking**

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THESIS

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TABLE OF CONTENTS

<u>CHAPTER</u>	<u>PAGE</u>
I. INTRODUCTION	1
A. Literature Review	1
1. Childhood maltreatment	3
a. Childhood maltreatment and adult functioning	4
2. Parenting behavior in childhood	7
a. Parenting behavior and adult functioning	9
3. Quality of interpersonal relationship in adulthood	11
a. Quality of interpersonal relationships and adult functioning	12
B. Hypotheses	14
II. METHODS	16
A. Participants	16
B. Procedure	16
C. Measures	17
1. Child's Report of Parental Behavior Inventory	17
2. Childhood Maltreatment Inventory	17
3. Network of Relationships Inventory	18
4. Beck Depression Inventory – II	19
5. Sexual Risk Survey	19
III. RESULTS	21
A. Overview of Analytic Strategy	21
B. Factor Analysis of CMI and CRPBI	22
1. CMI factor structure	22
2. CMI and CRPBI factor structure	23
C. Final CMI & CRPBI Scales	24
D. Prevalence of Childhood Abuse, Depression, and Sexual Risk Taking	25
E. Gender, Ethnicity, Age and Sexual Orientation Differences	26
F. Correlations Among Variables	28
G. Hierarchical Regression Analysis of Main and Interaction Effects	30
1. Main and interaction effects on depression	31
2. Main and interaction effects on sexual risk taking	32
IV. DISCUSSION	36
A. Depression	37
B. Sexual Risk Taking	39
C. Overall Findings	41
D. Strengths and Limitations	43
REFERENCES	73

TABLE OF CONTENTS (continued)

<u>CHAPTER</u>	<u>PAGE</u>
APPENDICES	86
Appendix A	86
Appendix B	87
Appendix C	91
Appendix D	95
Appendix E	100
Appendix F	103
IRB DOCUMENTATION.....	105
VITA	112

LIST OF TABLES

<u>TABLE</u>	<u>PAGE</u>
I. DEMOGRAPHIC & DESCRIPTIVE CHARACTERISTICS OF SAMPLE	48
II. OBLIMIN ROTATION OF 4-FACTOR SOLUTION FOR ORIGINAL CMI ITEMS.....	49
III. OBLIMIN ROTATION OF 5-FACTOR SOLUTION FOR REDUCED CMI AND MATERNAL CRPBI	50
IV. OBLIMIN ROTATION OF 5-FACTOR SOLUTION FOR REDUCED CMI AND PATERNAL CRPBI.....	53
V. CHILDHOOD MALTREATMENT INVENTORY FINAL ITEM SOLUTION..	56
VI. CHILD’S REPORT OF PARENTAL BEHAVIOR FINAL ITEM SOLUTION.....	57
VII. INTERNAL CONSISTENCY COEFFICIENTS FOR CMI, CRPBI, NRI AND SRS FACTORS	58
VIII. GENDER DIFFERENCES AMONG INDEPENDENT AND DEPENDENT VARIABLES	59
IX. ETHNIC DIFFERENCES AMONG INDEPENDENT AND DEPENDENT VARIABLES	60
X. AGE DIFFERENCES AMONG INDEPENDENT AND DEPENDENT VARIABLES	61
XI. SEXUAL ORIENTATION DIFFERENCES AMONG INDEPENDENT AND DEPENDENT VARIABLES	62
XII. BIVARIATE CORRELATIONS AMONG INDEPENDENT VARIABLES	63
XIII. BIVARIATE CORRELATIONS AMONG INDEPENDENT AND DEPENDENT VARIABLES.....	65
XIV. MAIN EFFECTS REGRESSION ANALYSES ON BDI	67
XV. MAIN EFFECTS REGRESSION ANALYSES ON SRS RISKY SEXUAL BEHAVIOR	68

LIST OF TABLES (continued)

<u>TABLE</u>		<u>PAGE</u>
XVI.	MAIN EFFECTS REGRESSION ANALYSES ON SRS SEXUALLY RISKY BEHAVIOR WITH UNCOMMITTED PARTNERS	69
XVII.	MAIN EFFECTS REGRESSION ANALYSES ON SRS ANAL SEXUAL RISK BEHAVIOR.....	70
XVIII.	MAIN EFFECTS REGRESSION ANALYSES ON SRS INTENT TO ENGAGE IN SEXUALLY RISKY BEHAVIOR	71
XIX.	MAIN EFFECTS REGRESSION ANALYSES ON SRS IMPULSIVE SEXUAL BEHAVIOR	72

LIST OF ABBREVIATIONS

BDI	Beck Depression Inventory – II
CMI	Childhood Maltreatment Inventory
CRPBI	Child's Report of Parental Behavior Inventory
NRI	Network of Relationships Inventory
SRS	Sexual Risk Survey
R ² Δ	Change in R-squared
<i>M</i>	Mean
<i>N</i>	Number in total group
<i>r</i>	Pearson correlation coefficient
<i>p</i>	Probability
<i>SD</i>	Standard deviation
<i>SE B</i>	Standard error of beta
β	Standardized regression coefficient (beta)
<i>t</i>	t statistic

SUMMARY

Research has established that the transition to college and young adulthood can be a time of both stress and also excitement, as students develop new social relationships and begin to spend less time with their parents. Although many enjoy exploring the novelty of young adulthood, research also indicates alarming rates of depression and sexual risk taking during this time, especially among those who were exposed to abuse and problematic parenting practices in childhood. This study sought to bridge these areas of research by attempting to parse out the distinct contributions of childhood abuse, parenting behaviors experienced in childhood, and current interpersonal relationship qualities on the development of depression and sexual risk taking in a sample of 282 ethnically diverse undergraduate college students. It was hypothesized that both childhood abuse and parenting behaviors would independently predict symptoms of depression and frequency of sexual risk taking behaviors. We also hypothesized that the quality of adult interpersonal relationships would moderate the effect of these childhood experiences on adult depression and sexual risk taking, such that 1) the relationship between childhood abuse and poor parenting behaviors on depression and sexual risk taking behaviors would be stronger for individuals with high levels of interpersonal conflict than their counterparts with low levels of interpersonal conflict, and 2) high quality interpersonal relationships would buffer against the association between childhood abuse and poor parenting behaviors on depression and sexual risk taking behaviors.

Through use of hierarchical regression analysis, results show that in models including abuse, parenting behaviors and relationship qualities, physical abuse, low maternal warmth/involvement, and high partner conflict were associated with increased depression scores.

SUMMARY (continued)

No support was found for the moderating effect of partner conflict on the maternal warmth/involvement – depression association, or the physical abuse – depression association. In models that included abuse and parenting behaviors to predict sexual risk taking, results indicate that physical abuse was associated with increased sexual risk taking and sexual abuse was associated with decreased sexual risk taking. Additionally, high maternal harsh overcontrolling parenting and lax discipline were associated with increased sexual risk taking, and low paternal warmth/involvement was associated with increased sexual risk taking. In models that included significant abuse and parenting behaviors in tandem with current interpersonal relationships, high quality opposite-sex friendships and low opposite-sex friend conflict were associated with decreased sexual risk taking, and high quality partner relationships were associated with both increased and decreased risk for sexual risk taking behaviors. No support was found for a moderating effect of adult interpersonal relationships on the association between childhood abuse and parenting experiences on sexual risk taking.

These results underscore the need for ecologically inclusive models that allow for the simultaneous examination of factors as they naturally co-occur. Results also provide evidence that the assessment of childhood abuse and parenting behaviors experienced in childhood, both maternal and paternal, are essential, as well as highlighting the role of positive and negative aspects of current interpersonal relationships in developmental outcomes, such as depression and sexual risk taking.

I. INTRODUCTION

A. Literature Review

The transition to college can be a time of both stress and excitement as young adults begin to take on adult roles and responsibilities. Young adults (between 18 and 25 years) face a host of novel situations, changes and challenges. During this time students begin to explore aspects of life and identity, such as work, career, academics and independent living. This time is also associated with changes in the nature of relationships, such that students begin to spend less time with their parents and become more involved in peer, romantic and sexual relationships. The accompanying decrease in parental monitoring that occurs in young adulthood, especially among those who move out of their parents' homes, provides opportunities to engage in social behaviors that were less likely prior to leaving home. For example, Americans engage in more risky behaviors during young adulthood than at any other point in life (Arnett, 1992). This time of life can also prove stressful for many (D'Zurilla & Sheedy, 1991; Towbes & Cohen, 1996), and the stress that accompanies this transition can lead to increases in a variety of psychological and behavioral problems, including depression and sexually risky patterns of behavior.

Depression remains one of this country's leading public health concerns in terms of prevalence, chronicity and economic cost. Epidemiological studies suggest that between 5% and 25% of the population will experience at least one depressive episode during their lifetime and that of those, 15% will go on to experience a second episode within the following two years (Hall & Wise, 1995). It is also estimated that up to 15% of severely depressed individuals will commit suicide (Gotlib & Hammen, 2002). The rates of depression among college students are even more staggering; there is research indicating that 53% of college students report

experiencing depression and that 9% report seriously thinking about suicide at some point during this time (Furr, Westefeld, McConnell, & Jenkins, 2001).

Sexually risky behavior is another problem among college students, one associated with a vast range of serious consequences. Although definitions and measurement of what constitute sexual risk taking behavior vary greatly across studies, sexual risk taking behavior is generally understood to encompass sexual behaviors that increase the likelihood of contracting a sexually transmitted disease (STD) or increase the likelihood of an unplanned pregnancy (Turchik & Garske, 2009). Variables most often used to measure this construct include condom use, number of sexual partners, age of first intercourse, participation in anal sex, relationship commitment, and substance use prior to initiating sexual activity (Turchik & Garske, 2009).

The World Health Organization (2008) estimates that at the end of 2008 there were 415,193 people living with HIV in the United States and that 12% of newly diagnosed cases of HIV occur among 15-24 years olds. Furthermore, although representing only 25% of sexually active individuals in the US, young adults between 15 and 24 account for almost 50% of new cases of STDs (Weinstock, Berman, & Cates, 2004); the frequency for which college students engage in sexually risky behaviors directly increases their likelihood for contracting STDs (DiClemente, et al., 1992; Ford, Rubinstein, & Norris, 1994). It seems clear that emerging adults engage in sexually risky behaviors at alarming rates and this rate seems to be increasing (Pluhar, Fongillo, Stycos, & Dempster-McClain, 2003).

Although a large body of research exists documenting the relationship between childhood adversity and adult depression and sexual risk taking, it is important to note that even among those children who have experienced severe stressors, not all will develop depression or problematic sexual behavior patterns in adulthood. It has been suggested that multifinality of

outcomes is to be expected and that possible explanations for such differing outcomes lie in the interactive protective influence of contextual factors that are oftentimes neglected in research. For example, it is possible that our understanding of the mechanisms involved in the association between childhood maltreatment and poor adult outcomes may be facilitated by the inclusion of additional contextual factors such as parental behavior and the quality of adult interpersonal relationships.

1. **Childhood maltreatment**

Each year approximately 3 million cases of child abuse are reported to Child Protective Services (CPS); 3.4 million children received investigations or assessments during 2011 and a national rate of 27.4 per 1,000 children with CPS verified cases of abuse ("U.S. Department of Health and Human Service, Administration on Children, Youth and Families," 2011). With estimates as high as 1 in 5 children in the United States suspected of experiencing some type of maltreatment (Finkelhor, Turner, Ormrod, & Hamby, 2009), child abuse represents an alarming public health concern.

Childhood maltreatment is commonly described in terms of 3-4 separate theoretical constructs representing neglect, emotional, physical or sexual abuse, with neglect and emotional abuse oftentimes collapsed into one category. Unfortunately, the nature of these definitions tends to be rather vague and few studies have attempted to empirically validate their true structure. This practice also creates problems in the research, as implementing discordant operational definitions across studies is one possible reason for the contradictory nature of results and clearly obscures the likelihood of understanding the consequences of maltreatment. In a critique of the maltreatment research, Cicchetti & Manly (2001) indicate that our understanding of the effects of maltreatment on developmental processes and outcomes has been compromised by the lack of

unification in the definition of maltreatment. The same argument can be applied to the specific sub-types of maltreatment. Perhaps even more problematic, many studies examine abuse through simple dichotomizing techniques, capturing the existence of abuse or lack thereof. Because of the great amount of variation in abuse (e.g., severity/frequency) such global measures are not capable of capturing the nature of abuse.

Another problem with current research lies in the fact that most large-scale epidemiological studies do not systematically investigate the prevalence or correlates of co-occurring abuses (Scher, Forde, McQuaid, & Stein, 2004) and research indicates that most forms of childhood abuse co-occur (Manly, Kim, Rogosch, & Cicchetti, 2001; Scher, et al., 2004). For example, in a study of maltreated children between the ages of 5 and 11, 64% of maltreated children experienced more than one type of abuse; 34% with two co-occurring abuses; and 23% with three types; 6% experienced all four subtypes of physical abuse, sexual abuse, emotional abuse, and physical neglect (Manly, et al., 2001).

a. **Childhood maltreatment and adult functioning**

Perhaps because of the numerous methodological problems with maltreatment research, results describing the association between specific forms of childhood abuse and adult depression are inconsistent. For example, Gibb et al. (2003) found that psychiatric patients with a primary depressive disorder diagnosis were more likely to report a history of childhood emotional abuse than patients with anxiety disorder, even when controlling for the effects of other forms of maltreatment. However, in a community-based longitudinal study, Johnson et al. (2001) found that verbal abuse was associated with increased risk for borderline, narcissistic, obsessive-compulsive and personality disorders, while there was no association between verbal abuse and depression, anxiety, or substance abuse disorders. In another study examining the roles

of childhood maltreatment and cognitive vulnerability on the development of depression, emotional abuse was found to be more predictive of changes in depressive symptomatology over time than physical or sexual abuse, when controlling for initial levels of depression (Hankin, 2005). Other studies have found that physical abuse is also associated with the development of depression but that this association is most likely moderated by specific aspects of the maltreatment, such as the existence of co-occurring abuses (e.g. see review by Malinosky-Rummell & Hansen, 1993).

In terms of sexual abuse, it has been estimated that approximately 30% of women and 15% of men report having been sexually abused in childhood (Briere & Elliott, 2003; Finkelhor, Hotaling, Lewis, & Smith, 1990; Senn, Carey, Vanable, Coury-Doniger, & Urban, 2006); however, a broad range of sexual activities are encompassed in the term sexual abuse and these activities are not consistent among studies, creating problems when attempting to understand the true prevalence or nature of the abuse. Among the activities generally included in the construct of sexual abuse are intercourse, attempted intercourse, oral or genital contact, inappropriate touching of genitals, or exposing children to sexual activities or pornography (Putnam, 2003). Perhaps more so than with physical or emotional abuse, sexual abuse constitutes an extremely heterogeneous group.

As with physical and emotional abuse, sexual abuse is associated with a vast range of internalizing and externalizing behaviors throughout the lifespan (Trickett & McBride-Chang, 1995) and the association between sexual abuse and major depression has been found in numerous studies (e.g. see reviews by Beitchman, et al., 1992; Neumann, Houskamp, Pollock, & Briere, 1996; Paolucci, Genuis, & Violato, 2001; Polusny & Follette, 1995; Putnam, 2003), especially among women (Bifulco, Brown, & Adler, 1991). Even when accounting for other

forms of abuse, the relationship between sexual abuse and adult depression seems well substantiated. For example, one study taking into account the co-occurrence of sexual abuse and physical abuse, found that sexual abuse, but not physical abuse, was associated with increased major depression in adult women (Hill, et al., 2001) and Brown et al. (1999) found that childhood sexual abuse, but not childhood physical abuse or neglect, was associated with lifetime depression and suicide attempts.

Research demonstrates that childhood maltreatment is also associated with increased sexual risk taking behaviors, especially among those who have been sexually abused. Numerous studies have found that sexual abuse is associated with inconsistent condom use (Arriola, Louden, Doldren, & Fortenberry, 2005; Bensley, Van Eenwyk, & Simmons, 2000; Greenberg, et al., 1999; Holmes, Foa, & Sammel, 2005; Senn, et al., 2006), promiscuity (Bensley, et al., 2000; M. Cohen, et al., 2000; Cunningham, Stiffman, Doré, & Earls, 1994; Testa, VanZile-Tamsen, & Livingston, 2005; Wilsnack, Vogeltanz, Klassen, & Harris, 1997), early sexual onset (Gold, Sinclair, & Balge, 1999; Koenig & Clark, 2004; Noll, Trickett, & Putnam, 2003; Senn, et al., 2006; Wilson & Widom, 2008), and prostitution (Cunningham, et al., 1994); however, other studies have failed to find an association between sexual abuse and sexually risky behavior such as condom use (Cunningham, et al., 1994), promiscuity (Miner, Flitter, & Robinson, 2006; Wilson & Widom, 2008), early sexual debut (Merrill, Guimond, Thomsen, & Milner, 2003; Noll, et al., 2003) or total number of high risk sexual behaviors (Cunningham, et al., 1994).

Sexual abuse has also been shown to be associated with an array of sexual risk taking related outcomes, including incident of sexually transmitted disease (STD; e.g., Wingood & DiClemente, 1997), greater number of lifetime STD's (e.g., Greenberg, et al., 1999) and HIV status (Anaya, Swendeman, & Rotheram-Borus, 2005; M. Cohen, et al., 2000; Wyatt, Carmona,

Loeb, & Williams, 2005). Research demonstrates that as many as 30% - 50% of HIV-positive women self-report histories of sexual abuse (Koenig & Clark, 2004) and in at least one study, 20% of HIV-positive men reported histories of sexual abuse (Holmes, 1997). Although the relationship between other forms of abuse and HIV risk has not been as well addressed in the literature (Walker, et al., 1999; Wilson & Widom, 2008), there is some evidence that physical abuse is associated with an increase in total number of overall sexually risky behaviors but not decreased condom use (Cunningham, et al., 1994) and that when abused adult women (sexually, physically or emotionally) are compared with non-abused women, women with a history of any form of child abuse are more likely to report a history of STD's (Walker, et al., 1999).

Overall, although there are numerous methodological problems with current childhood maltreatment research, there is strong evidence supporting a relationship between childhood maltreatment, and depression and sexual risk taking in adulthood. Children with histories of childhood sexual abuse, physical abuse and emotional abuse seem to be at increased risk for adult depression. Likewise, children exposed to maltreatment, especially sexual abuse, are at risk for increased sexual risk taking in adulthood.

2. Parenting behavior in childhood

Across social and psychological disciplines, the two domains of parenting behavior that have received the most empirical support in terms of the development of psychopathology include the dimensions of Emotional Involvement (i.e. warmth, affection, sensitivity, emotional availability, and attachment) and Psychological/Behavioral Control (i.e. behavioral management) (Cummings, Davies, & Campbell, 2000; Gerlsma, Emmelkamp, & Arrindell, 1990). Together these two domains are believed to effectively capture the most important elements of parenting behavior (Gerlsma, et al., 1990).

The emotional relationship between parent and child is generally described in terms of Emotional Involvement and can encompass themes of emotional sensitivity, availability, acceptance, reciprocity and attachment styles. Although operational definitions can vary greatly, researchers tend to assess this construct through measures of emotional tone, expressions of warmth, sensitivity and response to the psychological states and social communication of the child (Cummings, et al., 2000). A long history documenting the effects of emotional relationships between parent and child has firmly established that high quality emotional relationships are associated with beneficial developmental outcomes across psychosocial domains. Likewise, studies show that deficits in emotional warmth between the parent and child are associated with a host of less than optimal psychosocial outcomes (Cummings, et al., 2000; Grace, 2006).

Parental Control includes parental communication about rules, the monitoring of a child's behavior and whereabouts, and the behavioral strategies designed to enforce such rules. The use of inductive techniques that stress the consequences of a child's actions on others are believed to promote value development in the child, provide opportunities for which to evaluate one's own behavior, as well as set the stage for the development of pro-social and empathetic behavior (Cummings, et al., 2000). In contrast, the over-use of harsh directives is not generally viewed as helpful in these domains. Behavioral and/or Psychological Control are viewed in terms of two separate constructs: monitoring behavior and discipline practices. Unlike emotional involvement, monitoring and discipline are not unipolar dimensions. Rather, high levels of behavior in each direction are regarded as having negative developmental consequences. For example, both high and low levels of parental monitoring are associated with negative outcomes, such that high levels of power-assertive monitoring is associated with a vast array of internalizing and

externalizing behaviors, and that low levels of monitoring behavior is associated with increased delinquency and aggression (Cummings, et al., 2000).

a. **Parenting behavior and adult functioning**

Among the litany of family risk factors, parenting behaviors have emerged as important in the etiology of depression. Studies show that the two parenting domains of emotional involvement and psychological/behavioral control are associated with differential outcomes in terms of the development of depression, although findings are somewhat inconsistent. Studies show that parental antipathy is associated with twice the rate of depression (Bifulco, Brown, Moran, Ball, & Campbell, 1998), and that parental over-protection and low warmth are also established risk factors for the development of depression (Parker, 1993), as is general maternal control (Garber, Robinson, & Valentiner, 1997; Grace, 2006), while positive parenting styles such as maternal warmth have been shown to decrease risk for depressive symptoms (Garber, et al., 1997). Despite these findings, a meta-analysis that included 19 studies analyzing the association between parenting behavior and depression found that both high and low levels of parental emotional involvement and high and low levels of parental control were associated with depression (Gerlsma, et al., 1990).

Much of the research examining parental behaviors and sexual risk taking has focused solely on child and adolescent populations (Padilla-Walker, Nelson, Madsen, & Barry, 2008). Given that research documenting an association between adult sexually risky behaviors and childhood parental behaviors is somewhat limited, much of our understanding of this relationship is based on theoretical extrapolations from adolescent research, of which there is voluminous research to indicate that parenting behaviors are an important factor in the development of sexual behaviors.

In a review of the literature, Kotchick, Shaffer, & Forehand (2001) found that the quality of the parent-child relationship, parental monitoring and parent-child communication predict sexual risk taking behaviors among adolescents. Specifically, other studies indicate that low parental monitoring is associated with increased sexual risk taking in adolescence, including increases in the number of sexual partners and less consistent contraceptive use (Huebner & Howell, 2003; Luster & Small, 1997; Metzler, Noell, Biglan, Ary, & Smolkowski, 1994; Rodgers, 1999); lenient discipline styles are associated with sexual permissiveness (Miller, Higginson, McCoy, & Olson, 1987); high levels of parental communication is associated with decreased sexual risk behavior (e.g., Baumeister, Flores, & Marin, 1995; Leland & Barth, 1993; Luster & Small, 1994); and overcontrol is associated with greater sexual risk taking (Rodgers, 1999). On the other hand, some studies have failed to find a relationship between the parent-adolescent relationship and proxies of sexual risk taking such as early pregnancy (Resnick, et al., 1997).

Overall, it seems clear that maternal and paternal parenting behaviors can have an effect on developmental functioning. More specifically, research indicates that a combination of high emotional involvement and parental monitoring is associated with less depression and sexual risk taking; however, this is not always the case. While research highlights the importance of parenting behaviors on psychological and behavioral development, relatively little is known about the underlying developmental mechanisms involved in the association between parenting behavior and the development of adult depression or sexual risk taking. It is likely that the inclusion of contextual factors in more expansive models will offer insight into the mechanisms that confer risk for adult depression and sexual risk taking.

3. **Quality of interpersonal relationship in adulthood**

While the nature of interpersonal relationships has been examined from the perspective of numerous disciplines, psychological frameworks tend to emphasize the role of ‘support’ within social relationships. In a seminal paper, Cobb (1976) suggested that relationship support is experienced as subjective appraisal of the nature of interpersonal relationships conveying “information from others that one is loved and cared for, esteemed and valued, and part of a network of communication” (Cobb, 1976, p. 300). As such, psychological conceptualizations of interpersonal support tend to focus on one’s perceptions of the messages received from others, rather than those messages that are given.

A vast body of research indicates that relationship support is linked to a variety of health outcomes across the lifespan, both psychological and physical. Moreover, there is evidence that interpersonal relationship quality plays a *causal* role in health outcomes such as mortality, low birth weight, complications during pregnancy, arthritis, alcoholism and depression (e.g., see review by House, Landis, & Umberson, 1988). While there is general agreement that social relationships are associated with physical, psychological and behavioral health, we have yet to determine much of how and under what conditions various aspects of these relationships influence health. For instance, because many support researchers have focused solely on the positive facets of social support (e.g., intimacy, companionship, instrumental aid and nurturance), our understanding of the ways in which many of the negative aspects of interpersonal relationships (e.g., disagreement, criticism, excessive demands and behaviors that are perceived of as offensive) affect health remains limited. More recent research addressing both dimensions indicates that positive and negative dimensions of support are separate constructs (Rook, 1990; Shinn, Lehmann, & Wong, 1984) and therefore likely to influence

psychological health through distinct mechanisms (Abbey, Abramis, & Caplan, 1985; Bertera, 2005; Hupcey, 1998). In fact, some research indicates that although negative aspects of relationships are less prevalent, they may be more predictive of emotional functioning than positive aspects of support (Lepore, 1992).

For the proposed study and based upon the suggestions of Furman and Buhrmester (1985, 1992), interpersonal relationships will be considered in terms of both positive and negative aspects: the ‘quality’ (companionship, instrumental aid, satisfaction, intimacy, nurturance, affection, admiration, relative power, and reliable alliance) and ‘level of conflict’ within the relationship.

a. **Quality of interpersonal relationships and adult functioning**

An overwhelming amount of research demonstrates that high quality social support is associated with enhancement and maintenance of psychological health and that low quality interpersonal relationships are associated with a wide variety of psychological difficulties, including depression (Aneshensel & Stone, 1982; G. W. Brown, Andrews, Harris, Adler, & Bridge, 1986; Ensel, 1986 ; George, Blazer, Hughes, & Fowler, 1989; Monroe, Bromet, Connell, & Steiner, 1986) in both males and females (e.g., Ensel, 1986) and that perceived availability of overall interpersonal support buffers against the effect of stress on depression (G. W. Brown, et al., 1986; reviewed by S. Cohen & Wills, 1985). However, while the relationship between overall level of interpersonal support and depression is quite well documented, our understanding of specific aspects of these relationships that affect depression are not as well understood, such as level of conflict within the relationships.

Consistent with the parenting behavior and adult sexual risk taking research, there is a paucity of research addressing the relationship between adult relationship support and adult

sexually risky behavior. Again, due to the lack of research with adults on this topic, it is only possible to extrapolate from adolescent research how support may be associated with adult sexual risk taking behaviors. In addition, theoretical conceptualizations of ‘relationship support’ in the context of sexual risk taking most often focus on communication patterns about the risky behavior and not the overall nature of the relationship itself.

Given these considerable limitations, findings suggest that interpersonal relationships are important to risk taking decisions among adolescents, including sexual risk taking. In a recent review of 35 longitudinal studies, Zimmer-Gembeck & Helfand (2008) found that the overall quality of adolescent peer relationships was associated with sexual behaviors, but that this relationship seemed to differ by gender. Crockett, Bingham, Chopak, & Vicary (1996) found that girls but not boys who remained abstinent in grade 12 had less positive peer relationships than those who had their first sexual experience between 15 and 17 years. In a study examining proxies of relationship quality and sexual risk taking, Miller-Johnson (1999) found that well-liked children were less likely to have their own children in adolescence. In regards to parental support, research shows that low-risk adolescents and adolescents who abstain from sex are more likely to perceive their parents as supportive than high-risk adolescents (Luster & Small, 1994; Metzler, et al., 1994). Overall, the research conducted on adolescents shows a relationship between interpersonal support and risk taking, especially among parents and peers. It is plausible that this association continues into adulthood.

While there is evidence that the nature of social relationships is associated with depression and sexual risk taking, more recent research indicates that the role of interpersonal relationships on adult psychological health is better explained through more complicated models that include additional contextual factors. For example, some have proposed that the effect of

social support on functioning is dependent on the extent of stress in one's life, such that the mitigating effect of high quality relationships on functioning is stronger in the face of extreme stress than low stress. Conversely, this buffering model proposes that low quality relationships in of themselves may not be associated with psychological dysfunction and that only when accompanied by extreme stress is the relationship between support and dysfunction catalyzed.

By utilizing this framework, is possible that children who grow up in homes where basic needs are not met, safety is threatened or emotional support is not provided, are at risk for later life psychological and behavioral problems (e.g., depression and sexually risky behavior) and more proximal factors in adulthood (e.g., poor quality interpersonal relationships) may further confer risk for the development of psychological and behavioral problems. Likewise, it is feasible that among adults who were exposed to abuse and poor parenting in childhood, high quality adult relationships act as a protective factor, reducing risk for depression and sexually risky behavior.

B. Hypotheses

The current study sought to examine the relations between childhood maltreatment, parenting behaviors and adult social support as they relate to symptoms of psychopathology in young adulthood (depression and sexual risk taking). The following hypotheses were tested:

1. Depression and sexual risk taking in young adulthood will vary by form of abuse (emotional, physical or sexual) and parenting behavior (maternal or paternal warmth, overcontrol, or lax discipline), such that individuals who report higher levels of childhood abuse will be more likely to experience increased depression and sexual risk taking behaviors, and individuals who report higher levels of parental rejection, overcontrol, or lax discipline will be more likely experience increased depression and sexual risk taking behaviors.

2. Parenting behaviors and childhood maltreatment will independently predict level of depression and sexual risk taking in young adults.

3. The quality of interpersonal relationships in adulthood, as measured by level of support and conflict, will moderate the role of abuse and parenting on adult functioning, such that the relationship between childhood abuse and poor parenting behaviors on depression and sexual risk taking behaviors would be stronger for individuals with high levels of interpersonal conflict than their counterparts with low levels of interpersonal conflict. Similarly, high quality interpersonal relationships would buffer against the association between childhood abuse and poor parenting behaviors on depression and sexual risk taking behaviors.

II. METHOD

A. **Participants**

The present study included a sample of 282 undergraduate students recruited from the University of Illinois at Chicago between the Fall 2009 and Spring 2011 semesters. All Psychology 100 students 18 years old and above were invited to participate in a study titled “Lifespan Relationships and College Experiences.” Participants (39% male, 61% female) ranged in age from 18 to 31, with a mean age of 19.0 years ($SD = 1.67$ years). Subjects were of diverse racial backgrounds (35% Caucasian, 7% African American, 23% Hispanic, 23% Asian American, 4% Pacific Islander, 5% Middle Eastern, 3% Bi-racial). See Table 1 for demographic characteristics.

B. **Procedure**

The study was conducted on the University of Illinois at Chicago campus. Participants were asked to complete the questionnaires in a group setting with the investigator present. Upon entry to the room, participants were informed that the questionnaires they were about to complete would help researchers to understand relationships across the lifespan, and various behaviors and feelings college students experience. Following the consent procedure, participants answered six questionnaires anonymously (only a randomly generated study ID was connected to the data). The packet of questionnaires took approximately 1.5 hours to complete and participants received 2 PEC for participating.

C. **Measures**

1. **Child's Report of Parental Behavior Inventory**

(CRPBI; Schaefer, 1965) Considered to be one of the most reliable and valid measures of parental behavior, the CRPBI is a 90-item self-report measure designed to assess the parental dimensions of Affection and Control (overcontrol and discipline), considered to be critical domains of effective parenting (Arrindell, Perris, Perris, Eisemann, & et al., 1986; Parker, 1983; Richman & Flaherty, 1987). In addition, the CRPBI is a factor analytically derived instrument with a factor structure that has been replicated on a wide variety of populations with satisfactory reliability (Gerlsma, Emmelkamp, & Arrindell, 1991). Across informants this factor structure has been replicated satisfactorily (Chronbach's alpha ranged between .57 and .95) and although the interrater agreement between parent and child has been shown to be low ($r = .30$) (Schwarz, Barton-Henry, & Pruzinsky, 1985) this does not necessarily translate into low validity. Because it is likely that different members of a family will view various aspects of similar behaviors differently and studies show interrater agreement of family behavior tends to be low (Steele, Henderson, & Duncan-Jones, 1980), the use of interrater agreement to validate family behaviors has been questioned (Parker, 1983, 1984).

The CRPBI asks respondents to rate the degree to which items were like their mother or father (assessed separately) on a scale of 1 to 3, with 1 = "Like my mother/father" and 3 = "Not like my mother/father." Items are then averaged to create the three parenting factors assessing parental warmth/rejection, psychological control, and lax discipline.

2. **Childhood Maltreatment Inventory**

(CMI; Cicchetti, 1989). This inventory, developed and validated by Cicchetti (1989) is a revision of the 87-item interview format measure designed to assess incidence and conditions of

specific abuse behaviors. The revised CMI was converted to a self-administered questionnaire consisting of 35 items for which subjects were asked to rate the frequency for which a behavior occurred in childhood, scored on a scale of 1 to 5, with 1 = “never,” 2 = “very rarely,” 3 = “rarely,” 4 = “frequently” and 5 = “very frequently.” Aspects of maltreatment assessed include behaviors consistent with theoretical understandings of physical neglect, emotional abuse, physical abuse, and sexual abuse.

3. **Network of Relationships Inventory**

(NRI; Furman & Buhrmester, 1985, 1992). The version of the NRI used in this study is an abbreviated version of the NRI originally created by Furman & Buhrmester (1985). The original NRI consists of 30 questions designed to assess 10 relationship qualities (reliable alliance, enhancement of worth, instrumental guidance, companionship, affection, intimacy, power, conflict, satisfaction, general importance). Because this original version would need to be completed for 6 sources of support, resulting in 180 items, the measure was reduced to include only 12 items, each measuring 4 relationships (sibling, same-sex peers, opposite-sex peers and partner), resulting in 60 items. For each item participants are asked how often they engage in a particular activity or feel a certain way about the source of support. Each item is scored on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree) and then averaged to create two factors (overall quality of support and level of conflict). Previous research demonstrates that the abbreviated version effectively distinguishes among two factors (quality of support and level of conflict) (Grace, 2008). The Quality scale consists of 7 items, including “How much does this person treat you like you’re admired and respected?” “How much do you share your secrets and private feelings with this person?” “How much does this person really care about you?” and “How much do you play around and have fun with this person?” The Conflict scale consists of 5

items, including “How much do you and this person disagree and quarrel?” “How much do you and this person get upset with or mad at each other?” and “How much do you and this person hassle or nag one another?”

In the present study, coefficient alphas for both factors across sources of support were all good, ranging from .81 to .91 and a confirmatory factor analysis indicates that the measure effectively distinguishes among the two factors.

4. **Beck Depression Inventory – II**

(BDI; Beck, revised 1996). Believed to be the most widely implemented self-report measure of depression (Katz, Shaw, Vallis, & Kaiser, 1995), the BDI is a 21-item self-report scale designed to assess intensity of depressive symptoms on a scale from 0 to 3. With a total of 63 points, higher scores represent greater severity of depression. The BDI measures cognitive, affective and somatic aspects of depression, and has been shown to be a reliable and valid measure of depressive symptomatology among clinical and non-clinical populations (Beck, Steer, & Garbin, 1988). Nonetheless, distress as measured on the BDI does not equate to clinical depression.

5. **Sexual Risk Survey**

(SRS; Turchik & Garske, 2009). The SRS is a broad assessment of sexual risk taking, measuring five analytically derived factors of risky sexual behavior: sexual risk taking with uncommitted partners, intent to engage in risky sexual behaviors, engagement in risky sexual behaviors, impulsive sexual behaviors, and risky anal sex acts. The measure consists of 23 items for which participants are asked the number of times they engaged in each behavior within the past 6 months. Sample items include, “How many times have you had sex with someone you don’t know well or just met?” “How many times (that you know of) have you had sex with

someone who was also engaging in sex with others during the same time period?” and “How many times have you had anal sex without a condom?” In a study of undergraduate college students, the SRS was demonstrated to be psychometrically sound with good reliability, validity, internal consistency and test-retest reliability (Turchik & Garske, 2009).

After conducting a log transformation of items to account for the positively skewed results common in sexual risk taking research (Schroder, Carey, & Vanable, 2003), and in order to verify the structure of the factors, a principal components factor analysis was conducted. Results indicate that the measure effectively distinguishes among the 5 factors; however, resulted in the loss of 3 items. This final solution was used for all future analyses. Internal reliability for the five factors of the SRS was fair to good, ranging from .556 to .878.

III. RESULTS

Table 1 shows the descriptive characteristics for all measures. Sample size varied among measures dependent upon the types of relationships that were present within a participant's life at that time (e.g., paternal relationship, opposite-sex peers, romantic relationship).

A. **Overview of Analytic Strategy**

Because the CRPBI and CMI both measure parenting behaviors experienced during childhood and adolescence, it is important to address the structural integrity and potential overlap of items between the two measures. In order to address this, a series of factor analyses were performed for the sample of 282 subjects. The first analysis examined the factor structure of the CMI, with the aim of identifying items that would be eliminated if they fail to load highly on any factor, or loaded on multiple factors. This reduced set of items were then used in a factor analysis of items from both the CMI and CRPBI. The factor structure was examined separately for mothers and fathers to identify and eliminate items that did not load highly on both mothers and fathers reported parenting behaviors, and to also ensure that the items measured on the CRPBI and CMI were in fact separate constructs. Only items that loaded highly and did not load on multiple factors in the maternal and paternal behavior models were retained. The resulting factor items were averaged to create composite measures.

Next, correlations among the CRPBI, CMI and NRI mean scores were computed to determine whether the three inventories measured distinct aspects of relationships and relationship behaviors. We also examined the effects of gender, ethnicity, age and sexual orientation on all measures to determine if it might be necessary to control for these variables in subsequent analyses. Finally, a series of hierarchical regressions were conducted to ascertain

how reports of parental behaviors, childhood maltreatment and level of relationship support differentially predict symptoms of depression and risky sexual behaviors.

B. Factor Analysis of CMI and CRPBI

1. CMI factor structure

To determine the underlying structure of the CMI, principal component analyses with oblimin rotation was performed on the 35 items from the CMI for the sample of 274 subjects who answered all items. Visual inspection of the scree plot suggested that a 4-factor structure was appropriate. Principal component with oblimin rotation was run with four forced factors (eigenvalues of 9.87, 4.98, 2.32 and 1.71), explaining a total of 53.94% of the variance. The nine items that failed to load above .40, or loaded on multiple factors (<.3 difference in factor loadings) were eliminated. These eliminated items included: “How often did adults tell you that they wished you were dead or had never been born?” “How often were you intentionally frightened or scared by someone?” “How often did you have any other experience that we haven’t asked about?” “How often did a relative or caregiver or any other adult attempt to kiss you passionately?” “How often did you witness a caregiver or relative’s self-destructive or suicide acts?” “How often were you attacked verbally?” “How often were you called bad or unworthy of love?” “How often did you see serious fighting between adults in your household?” and “How often did an important family member abandon you?”

Although three of the four factors that emerged through factor analysis correspond well with prior abuse research, an additional factor emerged that has not been replicated in previous research. Specifically, while the factors of Psychological Abuse/Neglect, Physical Abuse and Sexual Abuse, commonly understood to reflect the phenomenon of childhood maltreatment emerged as distinct, a fourth factor involving three items also emerged. This fourth factor

included the following items: “How often were you allowed to watch caregivers or other adults engage in any form of sexual relations?” “How often were you forced to dress up like a child of the opposite-sex?” and “How often were you involved with pornographic materials – for example, showing or taking pictures that were sexually stimulating?” The initial CMI maltreatment factor structure is presented in Table 2.

2. **CMI and CRPBI factor structure**

In the next set of factor analyses, the CRPBI and CMI were factor analyzed together to minimize overlap between the two scales. Because visual inspection of both the maternal and paternal scree plots suggested that a 5-factor structure was appropriate, principal component with oblimin rotation was run with five forced factors on the combined CRPBI and CMI analyses. The 90 original CRPBI items and reduced set of 26 CMI items were run separately for mothers and fathers. Items that did not load strongly on any factor ($>.40$) were eliminated, as were items that loaded on multiple factors ($<.30$ difference among factor loadings), resulting in the loss of 55 CRPBI items and 10 CMI items. Eigenvalues for reports of maternal behaviors and CMI items were 19.70, 11.10, 6.89, 4.97 and 3.57, explaining a total of 39.85% of the variance. Eigenvalues for reports of paternal behaviors and CMI items were 23.35, 11.57, 6.92, 5.02 and 3.59, explaining a total of 43.50% of the variance. There was good correspondence between results for reports of mothers and fathers parenting behaviors.

The combined CRPBI and CMI factor analysis final solution indicated that the childhood maltreatment and reports of parenting behavior are distinct constructs. No maltreatment items overlapped with any report of parental behavior. Based on the final factor structures, composite scores were created and mean scores were used for all subsequent analyses. The final CMI and

CRPBI maternal and paternal factor structures are presented in Tables 3 and 4 and the final item solutions are presented in Tables 5 and 6.

C. **Final CMI & CRPBI Scales**

Coefficient alphas, means and standard deviations of the two childhood maltreatment factors and the three maternal and paternal parenting behaviors are presented in Table 7.

Coefficient alphas for the maltreatment factors were good (.88 and .95), and coefficient alphas for reports of maternal and paternal parenting behaviors ranged from satisfactory to good (from .64 to .95). For correlations among all factors see Tables 12 and 13.

The first abuse factor, which is referred to as ‘Sexual Abuse,’ was composed of seven items from the CMI. Example items within this scale included: “How often were you approached in a flirtatious or seductive manner by a relative or caretaker or any other adult?” “How often did an adult expose himself or herself to you in a sexual way?” “How often did a relative or caretaker or any other adult kiss you passionately?” “How often did a relative or caretaker or other adult touch you sexually?” “How often did a relative or caretaker or other adult attempt to have sexual intercourse with you?” The second abuse factor, referred to as ‘Physical Abuse,’ was composed of nine items from the CMI. Items included: “How often were you thrown against a wall or other object, or just thrown?” “How often were you hit with a fist?” “How often were you beaten up?” “How often were you physically restrained, held down, tied up, locked in a closet or a room?” “How often did caregiver(s) threaten you with abandonment?” “How often were you hit with an object such as a paddle, brush, whip, etc.?” “How often did you have to assume responsibilities in the household that were inappropriate?” “How often did a household member threaten you with serious bodily harm?”

The three parenting behavior factors to emerge were named ‘Warmth/Involvement,’

‘Harsh/Overcontrolling,’ and ‘Lax Discipline.’ The first parenting factor, ‘Warmth/Involvement,’ contained 20 CRPBI items. Example items included, “Made me feel like the most important person in his/her life,” “Believed in showing his/her love for me,” “Said I made him/her happy,” “Enjoyed staying at home with me more than going out with his/her friends,” “Became very involved in my life,” and “Comforted me when I was afraid.” The ‘Harsh/Overcontrolling’ factor contained ten CRPBI items. Example items included: “Kept reminding me about things I was not allowed to do,” “Would talk to me again and again about anything bad I did,” “Didn’t forget very quickly the things I did wrong,” “Wouldn’t have anything to do with me until I found a way to make up after I had upset him,” and “Had more rules than I could remember so was often punishing me.” The third and final parenting factor, which is referred to as ‘Lax Discipline,’ contained the following five items: “Let me get away without doing work I had been given to do,” “Could be talked into things easily,” “Couldn’t say no to anything I wanted,” “Excused my bad conduct,” and “Could be talked out of an order, if I complained.” Descriptive statistics for the CMI and CRPBI scales are presented in Table 1.

D. **Prevalence of Childhood Abuse, Depression, and Sexual Risk Taking**

Childhood abuse, depression and sexual risk taking means and standard deviations are presented in Table 1. In terms of physical abuse ($M = 1.56$, $SD = .68$, total possible score = 5), 21% of participants reported “never” experiencing physical abuse, 70% reported experiencing physical abuse “very rarely,” 6% reported experiencing physical abuse “rarely,” 2% reported experiencing physical abuse “frequently,” and 1% reported experiencing physical abuse “very frequently.” When considering sexual abuse prevalence rates ($M = 1.10$, $SD = .40$, total possible score = 5), 87% of participants reported “never” experiencing sexual abuse, 11% reported experiencing sexual abuse “very rarely,” 1% reported experiencing sexual abuse “rarely,” and

1% reported experiencing sexual abuse “frequently.”

Although the current study did not assess incidence of clinical depression, and BDI scores do not indicate the existence of clinical depression, 67% of participants reported experiencing “minimal” levels of depression (BDI scores between 0 and 13), 14% reported experiencing “mild” depression (BDI scores between 14 and 19), 13% reported experiencing “moderate” depression (BDI scores between 20 and 28), and 6% reported experiencing “severe” depression (BDI scores between 29 and 63).

Sexual risk taking results indicate that during the past six months, 61% of participants reported engaging in some form of risky sexual behavior ($M = 12.51$, Range = 0-750.5), 42% reported engaging in some form of sexual behavior with uncommitted partners ($M = .62$, Range = 0-21.9), 15% reported engaging in some form of anal sexual behavior ($M = .56$, Range = 0-48), 38% reported engaging in some form of intent to engage in sexual risk behavior ($M = 1.18$, Range = 0-48), and 39% reported engaging in some form of impulsive sexual behavior ($M = .72$, Range = 0-20).

E. **Gender, Ethnicity, Age and Sexual Orientation Differences**

Gender differences for all variables are shown in Table 8. Opposite-sex friend conflict, sexual behavior with uncommitted partners and intent to engage in sexually risky behavior differed by gender, such that men reported higher levels of opposite-sex friend conflict $F(1,269) = 6.40$, $p = .012$, sexual behavior with uncommitted partners, $F(1,273) = 4.45$, $p = .036$, and intent to engage in engage in sexually risky behavior, $F(1,274) = 19.62$, $p = .000$. Although there was a trend towards significance among same-sex friend conflict, paternal lax discipline and sexual abuse with men reporting less paternal lax discipline, $F(1,271) = 3.73$, $p = .055$, and sexual abuse, $F(1,274) = 2.73$, $p = .100$, and females reporting less same-sex friend conflict,

$F(1,270) = 3.18, p = .076$, these differences were not statistically significant. No other CRPBI, or NRI scale varied by gender, nor did physical abuse or depression scores.

In terms of ethnicity, results indicate that reports of paternal warmth/involvement, $F(6,270) = 2.88, p = .010$, harsh/overcontrol, $F(6,270) = 4.01, p = .001$, and lax discipline, $F(6,270) = 2.23, p = .040$, differed by ethnicity. Post-hoc analysis indicates that Caucasian and Middle-Eastern participants reported more paternal warmth/involvement, Caucasian participants reported less paternal harsh/overcontrolling behaviors, and Hispanic participants reported less paternal lax discipline than the mean of all other ethnic groups combined. Reports of maternal harsh/overcontrolling, $F(6,273) = 3.22, p = .005$, and maternal lax discipline, $F(6,273) = 5.56, p = .000$, varied by ethnicity but not maternal warmth/ involvement, with Caucasian participants reporting less maternal harsh/ overcontrolling behavior, and African American and Hispanic participants reporting less maternal lax discipline than the mean of other ethnic groups combined. Among NRI factors, only opposite-sex friend quality varied by ethnicity, $F(6,269) = 2.36, p = .031$, such that Caucasian participants reported less conflict than the mean of other ethnic groups combined. Additionally, there existed ethnic differences in risky sexual behavior, $F(6,273) = 4.65, p = .000$, sexual risk taking with uncommitted partners, $F(6,273) = 3.86, p = .001$, and impulsive behavior, $F(6,273) = 2.56, p = .020$, such that Asian American participants reported less risky sexual behavior, sexual risk taking with uncommitted partners, and impulsive sexual risk taking. See Table 9.

Age and sexual orientation differences for all variables were also examined to determine whether it was appropriate to control for these in subsequent analyses. Because of the limited number of participants in several age groups, age was dummy coded such that 1 = 18 years, 2 = 19 years, 3 = 20 years, 4 = 21 years and 5 = 22 year and above. Overall results suggested that it

was appropriate to control for both age and sexual orientation in subsequent analysis, as age differences existed in risky sexual behavior, $F(4,276) = 4.00, p = .004$, and impulsive sexual behavior, $F(4,276) = 3.08, p = .017$, such that 18 year old participants reported less risky sexual behavior, participants 22 years and older reported more risky sexual behavior, 21 year old participants reported more impulsive sexual behavior, and acts of anal sexual risk taking varied by sexual orientation, $F(2,278) = 34.29, p = .000$, such that participants who identified as heterosexual reported less anal sexual risk taking than homosexual or bisexual participants, and homosexual participants reported more anal risk taking than heterosexual participants. Although the overall model was not significant, bisexual participants reported significantly higher BDI scores than heterosexual and homosexual participants together. Age and sexual orientation difference are provided in Tables 10 and 11.

F. **Correlations Among Variables**

The bivariate correlations among all independent and dependent variables are presented in Tables 12 and 13. BDI scores were significantly correlated with increased physical abuse, decreased reports of maternal and paternal warmth/involvement and increased reports of maternal and paternal harsh/overcontrolling behaviors, but not with sexual abuse, or either maternal or paternal lax discipline. BDI scores were also positively correlated with all sources of NRI conflict (sibling, partner, same-sex friend and opposite-sex friend), but not with any source of NRI quality (although there was a trend towards significance for sibling quality such that higher quality sibling relationship was associated with lower BDI scores).

In terms of SRS factors, physical abuse was associated with increased impulsive sexual behaviors, and a trend towards significance existed between physical abuse and increased sexual risk taking with uncommitted partners. Impulsive sexual behavior was also associated with

decreased maternal and paternal warmth/involvement, increased maternal harsh/overcontrolling parenting, and, although not significant, a trend existed towards significance with increased paternal harsh/overcontrolling behavior. Increased maternal harsh/overcontrolling parenting and lax discipline was associated with higher intent to engage in sexually risky behavior scores and, although not statistically significant, there was a trend towards significance between higher maternal warmth/involvement and decreased risky sexual behaviors.

The associations among NRI conflict and relationship quality varied by relationship source and SRS factor. Although increased sibling conflict was associated with higher intent to engage in sexual risk taking and impulsive sexual risk taking behavior, the quality of the sibling relationship only trended to significantly predicting decreased risky sexual behavior. High levels of same-sex friend and opposite-sex friend conflict were associated with higher intent to engage in sexual risk taking and impulsive sexual risk taking behavior, high levels of partner conflict were associated with increased risky sexual behavior, and interestingly, high levels of opposite-sex friend conflict was associated with decreased risky sexual acts. High quality same-sex and opposite-sex friendships, and low quality partner relationships were associated with decreased risky sexual behavior, and although not significant, a trend towards significance existed between high quality partner relationships and increased acts of anal sexual behavior, and decreased intent to engage in sexual behavior and impulsive sexual behavior. Frequency of sexual risk taking with uncommitted partners was not associated with any NRS factor.

Although interesting, because the aim of examining the bivariate correlations within this analysis is to determine whether there exists sufficient evidence to justify inclusion of the CMI, CRPBI and NRI in one model to predict depression and sexual risk taking behaviors, the interrelationships among independent variables are not discussed (for reference these correlations

are presented Table 12) . However, it should also be noted that although there exist significant associations among and within factors, when potential threats of multicollinearity were examined, no correlation coefficient was found to be above the suggested .80 cutoff level suggested by Tabachnick & Fidell (2007). This overall pattern of associations, and the lack of associations, provides preliminary support that 1) the CMI, CRPBI and NRI are differentially associated with BDI and SRS scores, and 2) there is sufficient distinction among measures to justify examination of each within one model.

G. **Hierarchical Regression Analysis of Main and Interaction Effects**

The associations between childhood maltreatment, reports of parental behaviors and level of relationship support on depression and sexual risk taking were examined using a series of sequential hierarchical multiple regressions. Because it is common to control for the effect of gender in depression and sexual risk taking research, gender was controlled for in all analyses. In addition, because age differences existed in risky sexual behavior and impulsive sexual behavior, and sexual orientation differences existed in anal sexual behavior, these effects were controlled for in the relevant regressions. Due to the low number of participants who identified as homosexual or bisexual, sexual orientation was dummy coded such that 1 = heterosexual and 2 = homosexual and bisexual.

In the first set of regressions, main effects for the two factors that emerged from the CMI (Physical Abuse and Sexual Abuse) were run together on depression and sexual risk taking factors. In the second set of regressions, the two CMI factors and the three factors that emerged from the CRPBI (Warmth/Involvement, Harsh/ Overcontrolling and Lax Discipline) were run together (for maternal and paternal behaviors) on depression and sexual risk taking scores to determine the additive utility of reports of parenting behavior to abuse in the prediction of

depression and sexual risk taking. Because children grow up in an environment experiencing the effects of the presence and lack thereof of maternal *and* paternal behaviors simultaneously, it seems appropriate to enter maternal and paternal behaviors together. By entering both reports of maternal and paternal behaviors simultaneously, it is believed that we better approximate the actual environment that children develop within. In the third set of analyses, the two factors from the NRI (Level of Conflict and Quality of Support) and all significant CMI and CRPBI factors from the previous analyses were regressed together on depression and sexual risk taking scores. Lastly, in order to test the potential moderating role of current relationships on depression and sexual risk taking, the interaction terms for all significant childhood factors (CMI and CRPBI) and both NRI factors (conflict and quality) will be used in a regression model that includes all significant childhood factors and NRI factors.

1. **Main and interaction effects on depression**

Results indicate that when both forms of childhood maltreatment are entered together, physical abuse, $\beta = .421$, $t(7.12)$, $p < .001$, but not sexual abuse, predicted increased BDI scores above the effect of gender, explaining 15.8% of the variance in depression scores. When reports of maternal and paternal parenting behavior were examined with both forms of childhood abuse entered simultaneously, while controlling for gender, physical abuse, $\beta = .271$, $t(3.88)$, $p < .001$, and low maternal warmth/involvement, $\beta = -.157$, $t(-2.45)$, $p < .05$, predicted increased depression scores. There also existed a trend to significance for paternal harsh/ overcontrol, $\beta = .122$, $t(1.72)$, $p = .086$, such that high paternal harsh/overcontrol was associated with increased depression scores. This model accounted for 19.3% of the variance in BDI scores. When all sources of both NRI factors (Level of Conflict and Quality of Support) and significant CMI and CRPBI factors from the previous analyses were regressed together on depression scores, physical

abuse, $\beta = .280$, $t(3.72)$, $p < .001$, low maternal warmth/involvement, $\beta = -.176$, $t(-2.33)$, $p < .05$, and only high partner conflict, $\beta = .138$, $t(1.99)$, $p < .05$, improved ability to predict increased BDI scores above the effects of gender, explaining 23.8% of the variance in depression scores. Although approaching significance, the effect of sibling conflict on increased BDI scores fell below significance, $\beta = .133$, $t(1.78)$, $p = .078$. BDI main effects regression results are presented in Table 14.

In order to test the potential moderating effect of current social relationships on the association between childhood abuse and parenting experiences on adult depression, the predictive value of the interaction between significant childhood factors (CMI and CRPBI) and current social relationships (NRI) were examined. Moderation was tested using hierarchical multiple regression (Baron & Kenny, 1986). In the first step, gender was entered to control for this effect on depression. In Step 2, significant childhood factors (CMI and CRPBI) and the potential moderating variables (NRI) were entered as predictors. In Step 3, the interaction terms were entered. For conceptual clarity, separate regressions were run for each potential interaction. All predictor and interaction terms at Step 2 and 3 were centered as recommended by Aiken and West (1991). No support was found for the moderating effect of partner conflict on the maternal warmth/involvement – depression association, or the physical abuse – depression association.

2. **Main and interaction effects on sexual risk taking**

Results indicate that when both forms of childhood abuse are entered together, controlling for the effects of gender and significant demographics, physical abuse was associated with increased risky sexual behaviors with uncommitted partners, $\beta = .136$, $t(2.13)$, $p < .05$, and increased impulsive sexual risk taking, $\beta = .209$, $t(3.30)$, $p < .01$. Sexual abuse was associated with *decreased* risky sexual behaviors, $\beta = -.133$, $t(-2.11)$, $p < .05$, but no other sexual risk taking

outcome, and anal risk taking and intent to engage in sexual risk taking were not associated with either form of abuse. These models accounted for 4.5% of the variance in risky sexual behavior, 2.2% of the variance in risky sexual behavior with uncommitted partners, and 4.2% of the variance in impulsive sexual risk taking.

When parenting behaviors were included with childhood abuse to predict sexual risk taking behaviors, results show that no parenting factor predicted sexual risk taking with uncommitted partners or anal risk taking, and although there was a trend to high maternal lax discipline predicting *decreased* risky sexual behavior, $\beta = -.122$, $t(1.74)$, $p = .08$, this was not statistically significant. When considering intent to engage in sexual risk taking, increased maternal harsh/overcontrolling parenting, $\beta = .223$, $t(3.08)$, $p < .01$, and maternal lax discipline, $\beta = .165$, $t(2.48)$, $p < .05$, improved ability to predict increased scores above the effect of gender, explaining 9.9% of the variance in intent to engage in sexual risk taking scores. When considering impulsive sexual risk taking, increased maternal harsh/overcontrolling parenting, $\beta = .158$, $t(2.13)$, $p < .05$, and decreased paternal warmth/involvement, $\beta = -.169$, $t(-2.37)$, $p < .05$, improved ability to predict increased scores above the effects of gender and age. Although in models that included parenting behaviors in tandem with childhood abuse, physical abuse remained a significant predictor of increased sexual risk taking with uncommitted partners, $\beta = .169$, $t(2.179)$, $p < .05$, and sexual abuse remained a significant predictor of *decreased* risky sexual behavior, $\beta = -.130$, $t(-2.04)$, $p < .05$, physical abuse fell below significance in the prediction of increased impulsive sexual behavior, $\beta = .126$, $t(1.65)$, $p = .10$. These models accounted for 5.0% of the variance in risky sexual behavior, 1.3% of the variance in risky sexual behavior with uncommitted partners, 9.9% of the variance in intent to engage in sexual risk taking, and 6.5% of the variance in impulsive sexual risk taking.

In the final set of main effects analyses, significant abuse and parenting factors were examined with both NRI factors (level of conflict and quality of support) for each sexual risk taking outcome, controlling for gender, and age and sexual orientation when significantly associated with the outcome variable. Results indicate that although parental behavior was associated with intent to engage in sexually risky behavior and impulsive sexual behavior when considering childhood abuse and parenting behaviors together, in models that included current relationship quality and levels of conflict, no parenting behavior significantly predicted any sexual risk taking factor. In these models, high maternal harsh/overcontrol, $\beta = .122$, $t(1.66)$, $p = .09$, and high maternal lax discipline fell below significance in the prediction of increased intent to engage in sexually risky behavior, $\beta = .130$, $t(1.83)$, $p = .07$, as did low paternal warmth/involvement in the prediction of increased impulsive sexual behaviors, $\beta = -.135$, $t(1.77)$, $p = .08$. Maternal harsh/overcontrolling parenting was no longer associated with impulsive sexual behavior when childhood abuse, parenting behavior and current interpersonal relationships were considered together.

When considering the utility of NRI factors in predicting sexual risk taking outcomes, only opposite-sex friend and partner relationships were associated with sexual risk taking factors. Results indicate that high opposite-sex friend conflict was associated with increased impulsive sexual behavior, $\beta = .231$, $t(2.03)$, $p < .05$, and low quality opposite-sex friendship was associated with increased risky sexual behavior, $\beta = -.216$, $t(-1.98)$, $p < .05$. Interestingly, high quality partner relationships were associated with *increased* risky sexual behavior, $\beta = .218$, $t(2.86)$, $p < .01$, and anal sexual risk behavior, $\beta = .140$, $t(2.00)$, $p < .05$, but *decreased* intent to engage in sexually risky behavior, $\beta = -.173$, $t(2.35)$, $p < .05$. Although high levels of opposite-sex friendship conflict trended to significance in the prediction of increased anal sexual risk

behavior, $\beta = .185$, $t(1.82)$, $p = .07$, and high levels of partner conflict closely approached significance in the prediction of increased risky sexual behavior, $\beta = .146$, $t(1.94)$, $p = .054$, these associations were not statistically significant. Risky sexual behavior with uncommitted partners was not associated with any NRI factor. These models accounted for 11.2% of the variance in risky sexual behavior, 0.9% of the variance in risky sexual behavior with uncommitted partners, 22.9% of the variance in anal sexual risk taking, 15.0% of the variance in intent to engage in sexual risk taking, and 9.6% of the variance in impulsive sexual risk taking. Sexual risk taking main effects regression results are presented in Tables 15 through 19. Because sexual risk taking was not associated with both a significant childhood factor (childhood abuse and parenting behavior) and NRI factor, moderation models were not tested.

IV. DISCUSSION

The present study examined the differential relationships between childhood maltreatment, parenting behaviors experienced during childhood, and current interpersonal relationships on the development of depression and sexual risk taking in young adulthood. Three hypotheses were tested. In the first hypothesis, it was predicted that depression and sexual risk taking in young adulthood would vary by form of abuse and parenting behaviors exposed to in childhood. In the second hypothesis, it was predicted that parenting behaviors would predict young adult depression and sexual risk taking beyond the effects of childhood maltreatment. Finally, in the third hypothesis, it was predicted that the quality of interpersonal relationships in young adulthood would moderate the role of abuse and parenting on adult functioning.

Although the current study did not assess incidence of clinical depression, BDI scores suggest that participants experience significant levels of depression. Nineteen percent of young adults in this study reported experiencing “moderate” to “severe” levels of depressive symptoms (BDI scores >20). While this rate is higher than found in some epidemiological studies of college students (American College Health Association, 2009; Eisenberg, Gollust, Golberstein, & Hefner, 2007), other research has found that as much as 53% of college students report experiencing depression (Furr, Westefeld, McConnell, & Jenkins, 2001). In addition, because BDI scores do not indicate the existence of clinical depression, this rate should be interpreted with caution.

In terms of sexual risk taking, results indicate that during the past six months, 61% of participants reported engaging in some form of risky sexual behavior, 42% reported engaging in some form of sexual behavior with uncommitted partners, 15% reported engaging in some form

of anal sexual behavior, 38% reported engaging in some form of intent to engage in sexual risk behavior, and 39% reported engaging in some form of impulsive sexual behavior. These rates provide evidence of both the relatively high rate of sexual risk taking college students engage in, and also the amount of variation in sexual risk taking behaviors among college students.

While estimates as high as 1 in 5 children in the United States are suspected of experiencing some type of maltreatment (Finkelhor, Turner, Ormrod, & Hamby, 2009), in the current study 21% of participants reported “never” experiencing physical abuse, 70% reported experiencing physical abuse “very rarely,” 6% reported experiencing physical abuse “rarely,” and 3% reported experiencing physical abuse “frequently” or “very frequently.” When considering sexual abuse prevalence rates, in the current study 87% of participants reported “never” experiencing sexual abuse, 11% reported experiencing sexual abuse “very rarely,” 1% reported experiencing sexual abuse “rarely,” and 1% reported experiencing sexual abuse “frequently.”

A. **Depression**

With regards to the first hypothesis, bivariate and regression results suggest that abuse and parenting behaviors are differentially associated with depression. Regression results show that although physical abuse was associated with increased depression scores when examined in combination with sexual abuse, and also when considered with parenting behaviors, sexual abuse did not predict depression scores in either model. In addition, bivariate results did not support an association between sexual abuse and depression. These findings are inconsistent with a body of research demonstrating that sexual abuse is associated with the development of depression (e.g. see reviews by Beitchman, et al., 1992; Neumann, Houskamp, Pollock, & Briere, 1996; Paolucci, Genuis, & Violato, 2001; Polusny & Follette, 1995; Putnam, 2003). It is likely that the relatively

small sample size and low sexual abuse base rate contributed to the lack of significant findings found in this study.

When considering the effect of parenting behaviors on depression, bivariate results show that, when considered alone, low maternal and paternal warmth/involvement and high harsh/overcontrolling parenting are associated with increased depression scores. While bivariate results show both maternal and paternal parenting factors are associated with depression, regression results indicate that when parenting behaviors are considered together and in tandem with childhood abuse, only low maternal warmth/involvement significantly predicted increased depression scores. In this combined childhood abuse and parenting behavior model, physical abuse remained a significant predictor of increased depression. These regression results provide evidence to support our second hypothesis, mainly that parenting behaviors and childhood maltreatment would independently predict level of depression.

In our final depression model, we examined the contribution of current interpersonal relationships on the association between significant childhood abuse and parenting behaviors on depression scores. Although bivariate results show that each source of relationship conflict (sibling, same-sex friend, opposite-sex friend and partner) individually was associated with increased depression scores, when significant forms of abuse and parenting behaviors were combined with all sources of relationship conflict and relationship quality, only high partner conflict significantly predicted increased BDI scores. In addition, results indicate that high quality relationships were not associated with depression, either when considered alone (bivariate correlations), or in combination with childhood abuse and parenting behaviors. In this final model, physical abuse and low maternal warmth/involvement remained significant predictors of increased depression scores, but no support was found for the moderating effect of

partner conflict on either the maternal warmth/involvement – depression association, or the physical abuse – depression association.

B. Sexual Risk Taking

Bivariate and regression results also provide evidence that abuse and parenting behaviors are differentially associated with aspects of sexual risk taking. Although bivariate results indicate that physical, but not sexual abuse, was associated with only increased impulsive sexual behaviors, when both forms of abuse were regressed together on sexual risk taking outcomes, results indicate that physical abuse was associated with increased sexually risky behavior with uncommitted partners and increased impulsive sexual behavior, and sexual abuse was associated with *decreased* risky sexual behavior.

Maternal and paternal parenting behaviors were also differentially associated with sexual risk taking. While bivariate results indicate that low maternal warmth/involvement and high maternal harsh/overcontrolling behaviors are associated with increased impulsive sexual behavior, and high maternal harsh/overcontrolling behaviors and lax discipline are associated with increased intent to engage in sexual risk taking, the only paternal factor associated with sexual risk taking was paternal warmth/involvement, which was associated with decreased impulsive sexual behavior.

Consistent with bivariate results, when parenting behaviors are examined in combination with physical and sexual abuse, parenting behaviors were associated with intent to engage in sexual risk taking and impulsive sexual risk taking, but not other forms of sexual risk taking. Also consistent with bivariate results, regression results indicate that high maternal harsh/overcontrolling parenting and high lax discipline were associated with increased intent to engage in sexual risk taking, and high maternal harsh/overcontrolling behavior and low paternal

warmth/involvement were associated with increased impulsive sexual risk taking. In contrast to bivariate results, maternal warmth/involvement was not associated with impulsive sexual risk taking when parenting behaviors and childhood abuse were examined together. In these combined childhood abuse and parenting behavior models, sexual abuse remained a significant predictor of decreased risky sexual behavior, and physical abuse remained a significant predictor of increased risky sexual behavior; however, physical abuse fell below significance in the prediction of increased impulsive behavior.

Although results indicate that no source of high quality relationship support was associated with depression scores, bivariate and regression results indicate that both quality and conflict were associated with sexual risk taking. Bivariate results show that, when considered alone, high level sibling, same-sex friend and opposite-sex friend conflict were associated with increased intent to engage in sexual behavior and impulsive sexual behavior, and high partner conflict was associated with increased risky sexual behavior. Interestingly, high opposite-sex friend conflict was associated with *decreased* risky sexual behavior. In terms of the quality of interpersonal relationships, bivariate results indicate that high quality same-sex and opposite-sex friendship was associated with decreased risky sexual behavior, but that high quality partner relationships were associated with *increased* risky sexual behavior.

Regression results also provide evidence that some aspects of sexual risk taking are associated with high quality partner relationships. Results show that, when considered in combination with significant forms of abuse and parenting behaviors, a high quality relationship with a partner was associated with *increased* risky sexual behavior and anal sexual risk behavior, and was associated with decreased intent to engage in sexually risky behavior. In addition, high quality opposite-sex friendship was associated with decreased risky sexual behavior, and high

opposite-sex friend conflict was associated with increased impulsive behavior. Sibling and same-sex friendships were not associated with any sexual risk taking outcome when considered in combination with abuse and parenting behaviors, and risky sexual behavior with uncommitted partners was not associated with any source of relationship support or conflict. Finally, because sexual risk taking was not associated with either childhood abuse or parenting behaviors when interpersonal relationships were included, moderation was not tested.

C. **Overall Findings**

While depression results highlight the role of childhood factors (physical abuse and maternal warmth/involvement) and adult relationship factors (partner conflict) in the development of depression, sexual risk taking models provide a different understanding of the importance of childhood factors and adult relationships. Regression results indicate that physical and sexual abuse are associated with sexual risk taking outcomes, in both models where childhood abuse is considered alone and when considered in tandem with parenting factors; however, abuse did not always act as a risk factor. In fact, results suggest that in the only instance where sexual abuse predicted sexual risk taking (risky sexual behavior), sexual abuse was associated with decreased risk. These findings were surprising and somewhat inconsistent with a body of research demonstrating a positive correlation between sexual abuse and increased sexual risk taking behaviors. It is possible that these findings were due to a variety of factors, including the somewhat unique urban population composed of a broad range of ethnically diverse students, many of whom also resided at home. In models where physical abuse predicted sexual risk taking (sexually risky behavior with uncommitted partners and impulsive sexual behaviors), physical abuse was consistently associated with increased sexual risky behavior. In addition, although when childhood abuse and parenting behaviors were examined together to

predict changes in depression scores, childhood abuse *and* parenting behaviors independently predicted depression, both childhood abuse and parenting behaviors were not associated with sexual risk taking outcomes when examined together. That is, in models in which childhood abuse predicted sexual risk taking (risky sexual behavior and sexual risk taking with uncommitted partners), parenting factors did not, and in models in which parenting behaviors predicted sexual risk taking (intent to engage in sexual risk taking and impulsive sexual risk taking), childhood abuse did not.

When considering the effects of parenting behaviors on the development of depression and sexual risk taking in young adulthood, results provide evidence that each parenting factor was important, as were both maternal and paternal factors. Although only low maternal warmth/involvement was associated with increased depression, and maternal warmth/involvement was not associated with any aspect of sexual risk taking, both high maternal harsh/overcontrolling parenting and lax discipline were associated with increased sexual risk taking. In addition, while paternal factors were not associated with depression when considering childhood abuse and parenting factors together, paternal warmth/involvement predicted impulsive sexual behavior. Paternal factors were not associated with other aspects of sexual risk taking.

Results also underscore the importance of current interpersonal relationships in the development of depression and sexual risk taking, particularly opposite-sex friendships and partner relationships. While sibling and same-sex friendships were not associated with either depression or sexual risk taking when considering significant childhood abuse and parenting behaviors in tandem with adult interpersonal relationships, level of conflict and the quality of opposite-sex friendships and partner relationships were associated with aspects of sexual risk

taking and depression. Regression results suggest that high conflict within opposite-sex friendships is associated with increased impulsive sexual risk taking and high quality opposite-sex friendships is associated with decreased risky sexual behavior. Interestingly, regression results suggest that high quality partner relationships may both confer risk and decrease risk for certain sexual risk behaviors. Whereas high quality partner relationships were associated with decreased intent to engage in sexual risk taking, high quality partner relationships were associated with increased risky behavior and anal sexual risk taking. High partner conflict was associated with increased depression scores; however, was not associated with any aspect of sexual risk taking. Finally, it is important to note that in models that included significant childhood factors and current interpersonal relationships, childhood abuse, parenting behaviors and interpersonal relationship factors were associated with depression; however, in similar models, only interpersonal relationship factors were associated with sexual risk taking.

Taken together, results from the combined abuse and parenting behaviors depression and sexual risk taking regressions, provide strong evidence that while forms of abuse and parenting behaviors are differentially associated with depression and aspects of sexual risk taking, the inclusion of parenting behaviors to childhood abuse models in the prediction of depression and sexual risk taking provides a more enriched understanding of the developmental sequelae, and that parenting behaviors predict young adult depression and sexual risk taking beyond the effects of childhood maltreatment. In addition, models that include both childhood factors and adult interpersonal relationships, demonstrate the importance of including both distal and proximal factors when considering depression and sexual risk taking in young adulthood.

D. **Strengths and Limitations**

A critical issue addressed within this study was the empirical structure of childhood

abuse and parenting behaviors. Rather than utilizing theoretical concepts, this study sought to determine the underlying behaviors of each construct through the use of factor analysis, and to verify the distinct natures of childhood abuse and parenting behaviors. Results demonstrate that these two factors are separate constructs, each with unique predictive ability to detect symptoms of depression and sexual risk taking behaviors. These results also provide evidence that, while common understandings of sexually abuse behaviors co-occur, physical harm tends to occur in an environment that includes threats of harm and abandonment. The use of statistical analysis models to determine the structure of forms of maltreatment is relatively novel in childhood abuse research and improves upon current research by expanding upon the need for clear definitions of what comprise these constructs (Cicchetti & Manly, 2001).

In addition to utilizing an empirically driven model of understanding childhood abuse and parenting behaviors, this study attempted to address numerous methodological problems common within current childhood maltreatment research. Unlike some maltreatment research, this study sought to better approximate the complex environments in which children grow up by examining forms of abuse as they naturally co-occur and in the context of parenting behaviors experienced. It is believed that these inclusive models provide a better opportunity to examine the differential aspects of developmental antecedents upon adult functioning and to address the overlap between both co-occurring abuses as well as pathogenic parenting behaviors. We know of no study that has set out to investigate these factors in tandem, so as to better differentiate among these aspects of childhood experiences that may be associated with depression and sexual risk taking.

Additionally, the examination of childhood abuse and parenting behaviors in the prediction of both internalizing and externalizing outcomes provided this study a unique

opportunity to bridge multiple disparate bodies of research that are rarely examined together. Moreover, because much of the research on sexual risk taking and childhood experiences has been limited to adolescent populations, it is believed that this study adds to understandings of sexual risk taking in young adulthood by including important developmental factors, mainly childhood abuse and parenting behaviors experienced while growing up.

Although this study highlights the important role of maltreatment, parenting and current interpersonal relationships in the development of symptoms of depression and sexual risk taking, we were unable to provide insight into the specific mechanisms involved for numerous reasons. First, the cross-sectional nature of this study precludes examination of the reciprocal nature of relationships, and our ability to demonstrate causality between independent and dependent variables. Secondly, it is possible that our analyses contain a floor effect, given that we utilized a sample of young adults currently attending college and, therefore, are most likely functioning at a higher level than a clinical sample. To this, it is important to note that prevalence rates for depression scores, sexually risky behavior (especially anal sexual risk taking), physical abuse and sexual abuse, were relatively low. It is also likely that the relatively small sample size might have masked significant effects and reduced our ability to parse out the unique contribution of each construct, especially within the moderation models.

It should be noted that all measures were limited to self-reports, and retrospective reports of childhood experiences. In the future, it will be important to address children's experiences of parenting behaviors, including childhood abuse, as they occur, without the bias of time or reporter bias; however, this form of research implies ethical considerations that have yet to be resolved. In addition, it is important to also note that our measurement of childhood abuse did not take into account many nuances of maltreatment, such as the participants' relationship to the

perpetrator, duration of the abuse, or specific developmental timing of the abuse. It is likely that these factors affect the impact of abuse on the development of depression and sexual risk taking behaviors in ways that this study was not able to address.

It should also be noted that the population studied was characteristically different than many student populations examined in research. This urban population was composed of an ethnically diverse range of students (35% Caucasian, 23% Hispanic, 23% Asian American, 7% African American, 5% Middle Eastern, 4% Pacific Islander, and 3% Biracial), many of whom also lived at home and worked full-time while completing coursework. In the future, it will be important to examine aspects of these characteristics to better understand mechanisms that may play a role in depression and sexual risk taking behaviors. Finally, although controlling for the effects of gender, age and sexual orientation may be considered a strength of this study, it is also possible that, as a result, certain mechanisms relevant to these demographics were not addressed. Further attention to ethnic and gender differences may prove especially useful to understanding developmental trajectories related to depression and sexual risk taking behavior.

Despite these limitations, through use of a racially diverse sample of young adults, the results of our study expand on a body of research demonstrating the importance of childhood abuse, parenting behaviors experienced in childhood and adult interpersonal relationships on the development of depression and sexual risk taking behaviors in young adulthood, and also improve upon our understanding of differential trajectories that are generally not examined together. Research aimed at better understanding the complex mechanisms involved suggest practitioners consider a broader range of influences in the development of depression and sexual risk taking and also provide for the possibility of novel interventions.

These findings provide evidence that the assessment of childhood abuse and pathogenic

parenting behaviors experienced in childhood, both maternal and paternal, are essential. Results underscore the importance of clinical interventions to reduce depression and sexual risk taking among those who experienced childhood abuse and pathogenic parenting. In addition, results highlight the role of positive and negative aspects of current interpersonal relationships in developmental outcomes. It follows that interventions aimed at reducing relationship conflict and increasing supportive behaviors may be helpful in the reduction of depression and aspects of sexual risk taking in young adulthood, and it will be important to evaluate the effectiveness of such interventions to help determine causality in the relationship between interpersonal relationships and young adult psychological health.

TABLE I
DEMOGRAPHIC & DESCRIPTIVE CHARACTERISTICS OF SAMPLE

	N	M	SD	Median	Range
Age	282	19.0	1.67	19	18-31
Gender		<u>%</u>			
Female	168	61%			
Male	108	39%			
Ethnicity					
Caucasian	98	35%			
Hispanic	64	23%			
Asian American	66	23%			
African American	20	7%			
Middle Eastern	14	5%			
PacificIslander	10	4%			
Bi-racial	9	3%			
Sexual Orientation					
Heterosexual	270	95%			
Homosexual	7	3%			
Bisexual	5	2%			
CMI: Physical Abuse	282	1.56	.68	1.33	1-5
CMI: Sexual Abuse	282	1.10	.40	1.00	1-4
CRPBI Maternal					
Warm/Involved	281	2.53	.44	2.65	1.2-3
Harsh/Overcontrol	281	1.83	.48	1.80	1-3
Lax Discipline	281	1.60	.44	1.60	1-3
CRPBI Paternal					
Warm/Involved	278	2.24	.56	2.35	1-3
Harsh/Overcontrol	278	1.80	.53	1.70	1-3
Lax Discipline	278	1.61	.53	1.40	1-3
NRI Conflict					
Sibling	266	2.40	.97	2.40	1-5
Same-Sex Friend	278	1.78	.68	1.80	1-4
Opposite-Sex Friend	277	1.65	.64	1.60	1-3.6
Partner	198	2.16	.85	2.00	1-4.4
NRI Quality of Relationship					
Sibling	266	3.53	.85	3.71	1-5
Same-Sex Friend	278	3.68	.76	3.71	1.1-5
Opposite-Sex Friend	277	3.40	.83	3.43	1-5
Partner	199	3.71	.97	4.00	1-5
BDI	282	12.03	9.09	10	0-51
SRS					
Risky Sexual Behavior	281	12.51	49.04	1	0-750.5
Uncommitted Partners	281	.62	1.89	0	0-21.9
Anal Sexual Risk Behavior	281	.56	3.25	0	0-48
Intent to Engage	282	1.18	4.06	0	0-48
Impulsive Sexual Behavior	281	.72	1.74	0	0-20

TABLE II
OBLIMIN ROTATION OF 4-FACTOR SOLUTION FOR ORIGINAL CMI ITEMS

Item	Physical Abuse	Sexual Abuse	Sexual Exposure	Emotional Abuse/Neglect
18. Hit with a fist	.828	-.012	.056	-.040
22. Thrown	.826	.075	.078	-.077
21. Beaten up	.800	-.025	.103	-.053
20. Physically restrained	.736	.006	.140	-.049
13. Threatened with serious bodily harm by household member	.720	-.006	.012	.168
23. Other incidence of physical abuse	.650	.046	.029	-.053
14. Threatened with abandonment by caretaker(s)	.598	-.058	.112	.186
19. Hit with an object	.592	-.010	-.036	.079
4. Told wished dead*	.577	.077	-.280	.117
12. Intentionally frightened by someone*	.409	.146	.030	.388
28. Touched sexually by a relative/caretaker/adult	.091	.917	-.074	.008
34. Asked to keep a sexual secret by relative/caretaker/adult	-.089	.915	.052	.066
29. Attempted touch by relative/caretaker/adult	-.149	.903	.050	.107
30. Attempted sexual intercourse by relative/caretaker/adult	.088	.812	.037	-.054
25. Adult exposed themselves in a sexual way	.033	.810	.290	.048
26. Kissed by relative/caretaker/adult	.017	.767	-.307	.002
24. Approached flirtatiously/seductively by adult/relative	.052	.760	.335	.016
35. Other incidence of sex abuse*	-.027	.597	.315	.056
27. Attempted kiss by relative/caretaker/adult*	.108	.494	-.284	-.096
31. Allowed to watch sex act. of relative/caretaker/adult	.203	.065	.660	-.035
33. Involved in pornographic materials	.108	.059	.646	-.058
32. Forced to dress like the opposite sex	.084	.135	.539	-.020
11. Witness caretakers/family self-destructive/suicide acts*	.068	-.064	.484	.357
7. Rejected when had problems, or sought affection	.104	.017	-.171	.730
3. Little amount of nurturance, love, attention given	.008	.091	.019	.719
2. Money was not spent on needs	-.085	.102	.192	.657
1. Illness or injuries were left untreated	-.075	-.081	-.047	.651
6. Siblings were preferred or given more privileges	.009	-.009	-.280	.634
16. Had to assume responsibilities in home above age	.056	.002	.227	.528
9. Often attacked verbally*	.322	.048	-.262	.528
5. Told not as good as other kids	.208	.006	-.145	.514
17. Not allowed to play/befriend children	.008	.056	.091	.509
8. Often called bad/unworthy of love*	.412	-.009	-.171	.454
10. Witness serious fighting btw adults in home*	.218	-.051	.173	.373
15. Abandoned by an important family member*	.259	-.023	.198	.327

Note. $N = 274$. Loadings of $|\geq .40|$ and greater are presented in boldface, * denotes item removed.

Table III
OBLIMIN ROTATION OF 5-FACTOR SOLUTION FOR
REDUCED CMI & MATERNAL CRPBI

	Warm/ Involved	Harsh/ Over- control	Physical Abuse	Sexual Abuse	Lax Discipline
CRPBI 20. Made feel like most important person in life	.760	.019	-.034	-.002	.022
CRPBI 7. Believed in showing her love for me	.742	.138	.036	-.004	.050
CRPBI 79. Said I made her happy	.723	-.058	.041	-.060	.026
CRPBI 25. Listened to my ideas/opinions	.720	-.189	.017	.022	.008
CRPBI 39. Became very involved in my life	.718	.103	.048	-.063	-.167
CRPBI 74. Spent all free time with kids	.702	.103	-.052	.004	.004
CRPBI 55. Seemed proud of what I did	.690	-.129	.087	.027	.115
CRPBI 37. Comforts me when I am afraid	.690	.010	.049	-.073	-.007
CRPBI 70. Did not show that she loved me	-.683	-.012	-.104	-.010	-.069
CRPBI 38. Enjoys staying home with me	.660	.072	.000	.082	-.065
CRPBI 1. Made feel better after talking over worries	.655	-.126	.008	.049	-.110
CRPBI 19. Understood my problems/worries	.644	-.170	-.043	.030	-.099
CRPBI 43. Praised me	.633	-.093	.043	.043	.067
CRPBI 56. Life centered on kids	.630	.175	.116	-.021	.040
CRPBI 61. Helped me find things I wanted	.622	-.002	-.100	-.077	-.023
CRPBI 67. Asked for my ideas on how to do things	.608	-.118	-.131	-.050	.131
CRPBI 16. Spent little time with me	-.600	-.032	-.161	-.043	.065
CRPBI 52. Did not seem to enjoy doing things together	-.597	.153	-.162	.050	-.028
CRPBI 4. Was not patient with me	-.572	.252	.063	-.070	.100
CRPBI 22. Forgot to help me when I needed it	-.561	.032	-.144	-.061	.088
CRPBI 21. Worried about me when I was away	.556	.145	-.053	.051	.020
CRPBI 49. Let me help decide how to do things working on	.550	.012	-.028	-.077	.173
CRPBI 2. Gave up things for me	.540	.054	.005	.039	.046
CRPBI 53. Was less friendly if I disagreed*	-.526	.484	-.002	-.089	.107
CRPBI 76. Made me feel not loved*	-.524	.071	-.229	-.115	-.108
CRPBI 26. Asked me to tell all details when away*	.493	.376	.117	-.132	.007
CMI3. Little amount of nurturance, love, attention*	.479	.042	.404	.056	.114
CMI7. Rejected when had problems/sought affection*	.476	-.087	.335	-.016	-.034
CRPBI 73. Liked me as I was*	.458	-.299	-.015	-.039	-.053
CRPBI 31. Let me tell her if my ideas were better*	.452	-.187	-.087	-.033	.121
CMI6. Siblings were preferred/given more privileges*	.390	-.214	.155	-.076	-.092
CRPBI 58. Acted as though I was in the way*	-.362	.243	-.206	-.173	-.005
CRPBI 48. Did not insist I do homework*	-.358	-.147	-.129	.053	.195
CRPBI 13. Enjoyed when I brought friends home*	.353	-.206	.193	.040	.114
CRPBI 5. Made sure knew what I was allowed to do/not do*	.327	.296	.105	-.078	-.142
CMI1. Illness/injury left untreated*	.325	-.152	.249	-.104	.129
CRPBI 10. Reminded of things I not allowed to do	.075	.636	-.026	.021	-.155
CRPBI 87. Repetitive misbehavior talks	-.037	.634	-.176	-.117	-.062
CRPBI 46. Wanted to control what did	-.182	.628	.085	-.035	-.063

Table III (continued)
OBLIMIN ROTATION OF 5-FACTOR SOLUTION FOR
REDUCED CMI & MATERNAL CRPBI

	Warm/ Involved	Harsh/ Over- control	Physical Abuse	Sexual Abuse	Lax Discipline
CRPBI 59. Insisted I do what told	-.072	.607	-.039	-.041	-.192
CRPBI 27. Thought not grateful when disobeyed	-.062	.601	-.009	-.001	.039
CRPBI 88. Frequently faulted me*	-.393	.585	-.099	-.069	.103
CRPBI 28. Long time to forget when did wrong	.009	.578	-.060	-.023	-.215
CRPBI 33. Said I be punished one day	-.018	.575	-.146	.053	.081
CRPBI 64. Always trying to change me*	-.288	.571	.019	-.163	.157
CRPBI 45. Told me suffered for me	-.059	.570	-.113	-.036	.065
CRPBI 89. Nothing to do with until not mad	-.166	.557	-.077	.036	.093
CRPBI 69. Thought any bad behavior would have	-.021	.554	.019	-.182	-.102
CRPBI 81. Told me all was done for me	-.029	.549	.008	-.069	.111
CRPBI 6. Was very strict with me*	.044	.547	-.070	-.007	-.368
CRPBI 63. Said that if I loved her, then I do what she wanted	.073	.539	-.021	.102	.146
CRPBI 57. Did not want us away from home	-.024	.534	.064	.052	-.161
CRPBI 42. Punished me when I was bad*	.079	.525	-.029	.043	-.344
CRPBI 60. Made me obey*	.266	.517	-.067	.056	-.223
CRPBI 51. Said I'd be sorry I wasn't a better child*	-.122	.517	-.255	-.006	.131
CRPBI 23. Believed bad behavior should be punish*	.001	.503	-.047	.132	-.304
CRPBI 71. Wouldn't look at when I disappointed her	-.043	.503	-.151	.002	.076
CRPBI 78. More rules than could remember so punished	-.130	.501	-.169	-.061	-.145
CRPBI 35. Spoke in a cold voice when I offended*	-.236	.487	-.113	.013	-.005
CRPBI 82. Did not let me decide things*	-.306	.464	-.003	-.069	-.052
CRPBI 9. Felt hurt when I did not follow advice*	.309	.461	-.039	.054	-.082
CRPBI 80. Always wanted to know who/what said	-.039	.446	.093	-.063	.039
CRPBI 8. Wanted to know where I was/what doing*	.156	.432	.042	-.084	-.207
CRPBI 34. Thought I was just to be put up with*	-.265	.424	-.233	-.072	.211
CRPBI 65. Changed the rules frequently*	-.147	.420	.034	-.128	.418
CRPBI 17. Did not talk when to me when I displeased her*	-.165	.412	-.013	.116	.198
CRPBI 44. Checked on me to ensure type of friends*	.410	.410	.028	-.023	-.108
CRPBI 62. Asked others what I was doing when away*	.073	.388	-.123	-.115	-.084
CRPBI 15. Did not trust me long after breaking promise*	-.187	.385	.056	.016	-.191
CRPBI 41. Made sure I was prompt*	.364	.374	.109	.071	-.195
CRPBI 83. Changed mind to make easier for her*	-.155	.365	-.016	-.064	.344
CRPBI 77. Not allowed to do things when chores needed*	.030	.358	-.120	-.066	-.319
CRPBI 75. Wanted me home to take care of me*	.290	.342	-.007	-.005	.052
CMI5. Told not as good as other kids*	.319	-.337	.240	.027	-.179
CRPBI 40. Wished she did not have kids*	-.291	.329	-.247	.032	.036
CRPBI 3. Regretted being away as I grew up*	.035	.227	-.017	.060	.063
CMI22. Thrown	-.057	-.012	.806	-.008	-.083
CMI18. Hit with fist	-.037	-.066	.780	.014	-.030

Table III (continued)
OBLIMIN ROTATION OF 5-FACTOR SOLUTION FOR
REDUCED CMI & MATERNAL CRPBI

	Warm/ Involved	Harsh/ Over- control	Physical Abuse	Sexual Abuse	Lax Discipline
CMI21. Beaten up	-.091	-.039	.759	.012	-.062
CMI20. Physically restrained	-.187	-.068	.748	.007	-.098
CMI13. Threatened with serious bodily harm	.108	-.013	.727	-.029	-.038
CMI14. Threatened with abandonment	.092	-.100	.638	.001	-.080
CMI19. Hit with object	.144	-.095	.549	-.051	.071
CMI23. Other incidence of physical abuse	.078	-.007	.532	.180	-.085
CMI16. Had to assume responsibilities in home above age	.072	.011	.498	.014	.106
CMI2. Money not spent on needs*	.189	.027	.444	.048	.131
CMI31. Allowed to watch sex acts of rel/caretaker/adult*	-.175	.087	.425	.298	-.160
CMI17. Not allowed to play/befriend children*	.258	-.057	.352	.033	.166
CMI33. Involved in pornographic materials*	-.153	.022	.316	.247	.026
CMI34. Asked to keep a sexual secret	.050	.035	-.090	.901	.001
CMI29. Attempted touch	.102	-.017	-.093	.885	.020
CMI25. Adult exposed themselves in a sexual way	.019	.094	.168	.854	-.013
CMI28. Touched sexually	.031	-.037	.021	.840	.002
CMI30. Attempted sexual intercourse	-.049	.042	-.032	.840	-.021
CMI24. Approached flirtatiously/seductively	-.031	.091	.212	.791	.005
CMI26. Kissed	.008	.033	-.183	.704	.079
CMI32. Forced to dress like opposite sex*	-.006	-.073	.213	.343	-.193
CRPBI 84. Let me get away without working	.031	-.023	.052	-.045	.630
CRPBI 86. Could be talked into things	.079	-.068	-.002	-.041	.603
CRPBI 24. Stuck to rule without exceptions*	.091	.363	-.117	-.025	-.560
CRPBI 90. Let me do anything*	.033	-.254	-.007	.082	.547
CRPBI 14. Could not say no to anything I wanted	.079	.014	.103	-.079	.530
CRPBI 18. Gave me lots of freedom*	.076	-.330	-.095	.114	.529
CRPBI 32. Excused my bad conduct	.108	-.149	-.183	-.019	.488
CRPBI 68. Could be swayed when I complained	.048	.084	-.126	-.044	.477
CRPBI 47. Allowed me to do what said was wrong*	.197	.059	-.130	-.003	.454
CRPBI 72. Let me spend money my way	-.068	-.152	-.070	.001	.453
CRPBI 85. Gave me the choice of what to do*	.397	-.118	.026	-.058	.414
CRPBI 50. Let me stay up late*	.132	.055	-.075	.076	.411
CRPBI 11. Forgot rules she made*	-.104	.128	.030	.045	.410
CRPBI 30. Did not attend to my misbehavior*	-.177	-.181	-.244	.031	.403
CRPBI 12. Did not find out of misbehavior*	-.324	.169	.178	.095	.397
CRPBI 36. Let me go wherever wanted without asking*	-.145	-.272	-.110	.074	.394
CRPBI 29. Punished behavior randomly*	-.038	.299	.109	-.048	.382
CRPBI 66. Seldom insisted I do anything*	.005	.049	-.198	.109	.354
CRPBI 54. Let me dress how I pleased*	-.038	-.199	.059	.141	.314

Note. $N = 240$. Loadings of $|\geq .40|$ and greater are presented in boldface, * denotes item removed.

TABLE IV
OBLIMIN ROTATION OF 5-FACTOR SOLUTION FOR
REDUCED CMI & PATERNAL CRPBI

	Warm/ Involved	Harsh/ Over- control	Lax Discipline	Sexual Abuse	Physical Abuse
CRPBI 39: Became very involved in my life	.777	.102	-.070	.064	.006
CRPBI 20: Made me feel was most important person in his life	.768	.058	.089	.017	.043
CRPBI 56: His life centered on children	.767	.192	.009	.096	-.025
CRPBI 37: Comforted me when I was afraid	.750	-.052	.005	-.008	.102
CRPBI 7: Believed in showing his love for me	.743	.008	-.035	.065	.045
CRPBI 1: Made feel better after talking about my worries	.742	-.140	.041	.047	-.017
CRPBI 70: Did not show that he loved me	-.741	.084	.119	-.068	-.086
CRPBI 74: Spent all his free time with kids	.727	.121	-.035	.008	-.054
CRPBI 25: Listened to my ideas/opinions	.691	-.121	.091	-.062	.053
CRPBI 19: Understood my problems/worries	.691	-.186	.097	.041	-.034
CRPBI 38: Enjoyed staying home with me	.690	.094	-.026	-.038	.004
CRPBI 16: Spent little time with me	-.689	.047	.087	-.071	-.056
CRPBI 79: Said I made him happy	.687	-.021	.087	-.040	.117
CRPBI 67: Asked for my ideas on how to do things	.662	.032	.207	-.080	.043
CRPBI 76: Made me feel not loved	-.657	.133	.014	.035	-.204
CRPBI 43: Praised me	.649	-.102	.092	.000	.069
CRPBI 49: Let me decide how to do things when working	.633	-.060	.195	.075	.045
CRPBI 55: Seemed proud of what I did	.622	-.064	-.002	.014	.229
CRPBI 52: Did not seem to enjoy doing things together	-.606	.246	.110	.062	-.195
CRPBI 2: Gave up things for me	.587	.066	-.014	.074	.010
CRPBI 61: Helped me find things I wanted	.578	.151	-.044	.031	.044
CRPBI 4: Was not patient with me*	-.529	.323	.038	-.101	.079
CRPBI 85: Gave me work choices*	.511	-.161	.299	.076	-.139
CRPBI 21: Worried about me when I was away*	.509	.268	.118	-.013	.181
CRPBI 22: Forgot to help me when I needed it*	-.507	.075	.208	.047	-.175
CRPBI 31: Let me tell him if my ideas were better*	.507	-.055	.231	-.030	.070
CRPBI 58: Acted as though I was in the way*	-.488	.178	.113	.036	-.298
CRPBI 75: Wanted me home to take care of me*	.480	.334	.062	-.079	.023
CRPBI 13: Enjoyed when I brought friends home*	.479	-.197	.042	.125	.056
CRPBI 5: Made sure I knew what I was allowed to do/not do*	.467	.346	-.003	.039	.077
CRPBI 34: Thought I was just to be put up with*	-.456	.269	.203	.088	-.347
CRPBI 88: Frequently faulted me*	-.449	.394	.052	.116	-.213
CRPBI 73: Liked me as I was*	.427	-.165	.084	-.098	.230
CRPBI 48: Did not insist I do homework*	-.332	-.236	.231	.053	.010
CRPBI 3: Regretted being away as I grew up*	.302	.083	.014	-.072	-.039
CMI6: Siblings were preferred/given more privileges*	.232	-.165	-.090	.019	.224
CRPBI 10: Reminded of things I not allowed to do	.038	.742	.019	-.056	-.043
CRPBI 59: Insisted I do exactly what I was told	-.051	.678	-.187	-.013	-.031
CRPBI 23: Believed bad behavior should be punished	-.039	.672	-.208	.067	-.113

TABLE IV (continued)
OBLIMIN ROTATION OF 5-FACTOR SOLUTION FOR
REDUCED CMI & PATERNAL CRPBI

	Warm/ Involved	Harsh/ Over- control	Lax Discipline	Sexual Abuse	Physical Abuse
CRPBI 87: Repetitive misbehavior talks	.004	.647	.037	.057	-.111
CRPBI 6: Was very strict with me	-.014	.645	-.327	-.021	.044
CRPBI 69: Thought any misbehavior would have	.047	.618	-.162	.082	-.166
CRPBI 46: Wanted to control what I did*	-.318	.611	-.068	-.056	-.033
CRPBI 8: Wanted to know where I was/what doing	.159	.609	-.112	-.095	.122
CRPBI 27: Thought I was not grateful when disobeyed	-.198	.588	.096	.083	-.050
CRPBI 33: Said I would be punished one day*	-.071	.583	.066	.144	-.365
CRPBI 57: Did not want us away from home	.066	.582	.021	-.168	.158
CRPBI 89: Wanted nothing to do with me until he was not mad	-.176	.568	.134	.081	-.157
CRPBI 71: Would not look at me when I disappointed him	-.222	.553	.040	.098	-.105
CRPBI 42: Punished me when I was bad*	.014	.544	-.401	.113	-.103
CRPBI 60: Made me obey	.180	.543	-.173	-.093	-.001
CRPBI 28: Took a long time to forget when I did something	-.159	.536	-.098	.039	-.055
CRPBI 80: Always wanted to know who/what I said*	.052	.534	.074	-.260	.083
CRPBI 9: Felt hurt when I did not follow his advice*	.318	.533	.041	-.030	-.082
CRPBI 78: More rules than could remember so punished often	-.149	.529	-.093	.033	-.195
CRPBI 17: Did not talk when I displeased him*	-.316	.525	.003	.066	.078
CRPBI 77: Not allowed to do things when chores were	.108	.518	-.300	.031	-.044
CRPBI 53: Less friendly if I disagreed*	-.494	.503	.047	.118	-.084
CRPBI 44: Checked on me & my type of friends*	.307	.496	-.076	-.201	.143
CRPBI 35: Spoke to me in a cold voice when offended*	-.344	.495	.020	.085	-.028
CRPBI 15: Did not trust me long after I broke a promise	-.063	.488	-.144	.045	-.102
CRPBI 26: Asked me to tell all details when away*	.370	.467	.190	-.079	.090
CRPBI 62: Asked others what I was doing when away	-.002	.458	.001	-.008	-.109
CRPBI 82: Did not let me decide things for myself*	-.286	.450	-.012	-.062	-.152
CRPBI 81: Told me all he did was done for me*	.151	.448	.102	.034	-.245
CRPBI 64: Always trying to change me*	-.319	.440	.039	-.046	-.245
CRPBI 41: Made sure I was prompt*	.296	.430	-.178	-.075	.169
CRPBI 51: Said I'd be sorry that was not a better child*	-.242	.429	.157	.106	-.369
CRPBI 45: Told me suffered for me*	.068	.427	.067	.118	-.220
CRPBI 63: Told me if I loved him, I would do what he wanted*	.072	.425	.132	-.100	-.168
CRPBI 54: Let me dress how I wanted*	.164	-.318	.255	.079	-.030
CRPBI 84: Let me get away without working	.027	-.036	.653	-.052	.005
CRPBI 32: Excused my bad conduct	.120	-.199	.648	.018	-.058
CRPBI 68: Could be swayed when I complained	.086	-.042	.633	-.094	.031
CRPBI 86: Could be talked into things	.185	-.090	.618	.026	.009
CRPBI 11: Forgot rules he made*	.055	.294	.575	-.117	.045
CRPBI 14: Could not say no to anything I wanted	.233	-.089	.551	-.023	.032
CRPBI 29: Punished my behavior randomly*	-.085	.354	.545	-.116	.097

TABLE IV (continued)
OBLIMIN ROTATION OF 5-FACTOR SOLUTION FOR
REDUCED CMI & PATERNAL CRPBI

	Warm/ Involved	Harsh/ Over- control	Lax Discipline	Sexual Abuse	Physical Abuse
CRPBI 47: Allowed what said was wrong	.177	-.085	.540	.085	-.012
CRPBI 50: Let me stay up late	.177	-.057	.515	.011	-.021
CRPBI 65: Changed the rules frequently*	-.021	.379	.475	-.124	-.170
CRPBI 24: Stuck to rules without exceptions*	.048	.405	-.474	.048	-.046
CRPBI 83: Changed his mind to make it easier for him/her*	-.188	.349	.472	-.105	.036
CRPBI 36: Let me go wherever without asking*	-.070	-.394	.455	.211	-.166
CRPBI 90: Let me do anything*	.186	-.341	.449	.018	-.007
CRPBI 30: Did not attend to my misbehavior*	-.249	-.290	.429	-.040	-.119
CRPBI 18: Gave me lots of freedom*	.187	-.363	.424	.140	-.027
CRPBI 66: Seldom insisted I do anything	-.080	-.007	.422	.111	-.037
CRPBI 72: Let me spend money my way*	.148	-.240	.391	.022	.124
CRPBI 12: Did not find out about my misbehavior*	-.151	-.003	.388	-.039	.101
CMI28: Touched sexually	.087	.076	-.064	.887	.136
CMI34: Asked to keep a sexual secret	.062	.104	-.066	.869	.082
CMI29: Attempted touch	.114	.114	-.063	.864	-.024
CMI30: Attempted sexual intercourse	.052	.038	-.014	.859	.090
CMI25: Adult exposed in a sexual way	.083	.041	-.039	.828	.191
CMI24: Approached flirtatiously/seductively	.008	.072	.049	.744	.225
CMI26: Kissed	-.024	-.021	.029	.601	.113
CMI18: Hit w/ fist	-.042	.050	.099	.074	.772
CMI22: Thrown	-.033	.008	.022	.215	.730
CMI21: Beaten up	-.089	-.007	.073	.087	.714
CMI13: Threatened with serious bodily harm	.126	-.098	-.012	.097	.665
CMI20: Physically restrained	-.048	-.083	.125	.098	.665
CMI14: Threatened with abandonment	.131	-.136	-.062	.018	.621
CMI19: Hit with object	.056	.005	.016	.102	.570
CMI23: Other incidence of physical abuse	-.041	-.101	.037	.145	.561
CMI2: Money not spent on needs	.104	.039	.007	.096	.501
CMI16: Had to assume responsibilities in home above age	.099	-.061	.025	-.049	.480
CMI3: Little amount of nurturance, love, attention*	.287	.018	.034	.070	.463
CMI7: Rejected when had problems, or sought affection*	.293	-.080	-.130	.011	.435
CRPBI 40: Wished he did not have children*	-.333	.140	.044	.038	-.434
CMI1: Illness/injury left untreated*	.067	-.039	-.138	-.079	.410
CMI17: Not allowed to play/befriend children*	.088	.021	-.011	.122	.406
CMI5: Told not as good as other children*	.226	-.085	-.181	-.035	.385
CMI31: Allowed to watch sex acts of relative/caretaker/adult*	-.020	.047	.031	.023	.367
CMI33: Involved in pornographic materials*	-.041	.060	.163	-.002	.210
CMI32: Forced to dress like opposite sex*	-.134	-.011	-.020	-.005	.147

Note. $N = 241$. Loadings of $|\geq .40|$ and greater are presented in boldface, * denotes item removed.

TABLE V
CHILDHOOD MALTREATMENT INVENTORY FINAL ITEM SOLUTION

Physical Abuse (9 items)

- 13: Threatened with serious bodily harm
- 14: Threatened with abandonment
- 16: Had to assume responsibilities in home that were inappropriate for age
- 18: Hit with fist
- 19: Hit with object
- 20: Physically restrained
- 21: Beaten up
- 22: Thrown
- 23: Other incidence of physical abuse

Sexual Abuse (7 items)

- 24: Approached flirtatiously or seductively
 - 25: Adult exposed themselves in a sexual way
 - 26: Kissed
 - 28: Touched sexually
 - 29: Attempted touch
 - 30: Attempted sexual intercourse
 - 34: Asked to keep a sexual secret
-

TABLE VI
CHILD'S REPORT OF PARENTAL BEHAVIOR FINAL ITEM SOLUTION

Warmth/Involvement (20 items)

- 1: Made me feel better after talking over my worries with him/her
- 2: Often gave up something to get something for me
- 7: Believed in showing his/her love for me
- 16: Spent very little time with me
- 19: Understood my problems and worries
- 20: Made me feel like the most important person in his/her life
- 25: Listened to my ideas and opinions
- 37: Comforted me when I was afraid
- 38: Enjoys staying home with me more than going out with his/her friends
- 39: Became very involved in my life
- 43: Often praised me
- 49: Let me help decide how to do things we were working on
- 52: Didn't seem to enjoy doing things with me
- 55: Seemed proud of what I did
- 56: His/her life centered on children
- 61: Told me where to find out more about things I wanted to know
- 67: Asked me what I thought about how we should do things
- 70: Didn't show that he loved me
- 74: Spent all of his/her free time with his/her children
- 79: Said I made him/her happy

Harsh/Overcontrolling (10 items)

- 10: Kept reminding me about things I was not allowed to do
- 27: Thought I was not grateful when didn't obey
- 28: Didn't forget very quickly the things I did wrong
- 57: Did not approve of my spending a lot of time away from home
- 59: Insisted that I must do exactly as I was told
- 69: Thought that any misbehavior was very serious and would have future consequences
- 71: Would avoid looking at me when I'd disappointed him/her
- 78: Had more rule than I could remember so was often punishing me
- 87: Would talk to me again and again about anything bad I did
- 89: Wouldn't have anything to do with me until I found a way to make up after I upset him/her

Lax Discipline (5 items)

- 14: Couldn't say no to anything I wanted
 - 32: Excused my bad conduct
 - 68: Could be talked out of an order, if I complained
 - 84: Let me get away without doing work I had been given to do
 - 86: Could be talked into things easily
-

TABLE VII
INTERNAL CONSISTENCY COEFFICIENTS FOR
CMI, CRPBI, NRI AND SRS FACTORS

Factor	<i>N</i>	Alpha	Items (n)	<i>M</i>	<i>SD</i>
CMI					
Physical Abuse	281	.88	9	14.07	6.17
Sexual Abuse	281	.95	7	7.68	2.78
CRPBI Maternal					
Warm/Involved	267	.94	20	29.36	8.81
Harsh/Overcontrol	275	.84	10	21.75	4.77
Lax Discipline	279	.64	5	12.01	2.17
CRPBI Paternal					
Warm/Involved	267	.95	20	34.92	11.20
Harsh/Overcontrol	274	.87	10	22.03	5.32
Lax Discipline	277	.79	5	11.99	2.66
NRI Conflict					
Sibling	262	.91	5	12.01	4.86
Same-Sex Friend	277	.85	5	8.89	3.40
Opposite-Sex Friend	277	.81	5	8.27	3.18
Partner	189	.88	5	10.77	4.24
NRI Quality of Relationship					
Sibling	264	.82	7	24.78	5.96
Same-Sex Friend	276	.83	7	25.80	5.33
Opposite-Sex Friend	277	.84	7	23.77	5.84
Partner	194	.90	7	26.17	6.64
SRS					
Risky Sexual Behavior	278	.84	4	12.51	49.04
Uncommitted Partners	278	.88	7	.62	1.89
Anal Sexual Risk Behavior	280	.61	2	.56	3.25
Intent to Engage	281	.73	3	1.18	4.06
Impulsive Sexual Behavior	281	.79	2	.72	1.74

TABLE VIII
GENDER DIFFERENCES AMONG INDEPENDENT AND DEPENDENT VARIABLES

	Males (<i>n</i> = 108)		Females (<i>n</i> = 168)		<i>t</i>	Sig. (2-tailed)
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
CMI						
Physical Abuse	1.61	.61	1.53	.73	.96	.337
Sexual Abuse	1.05	.24	1.13	.47	-1.65	.100
CRPBI Maternal						
Warm/Involved	1.47	.40	1.46	.46	-.14	.891
Harsh/Overcontrol	2.20	.47	2.15	.48	-.94	.351
Lax Discipline	2.38	.44	2.42	.45	.66	.508
CRPBI Paternal						
Warm/Involved	1.76	.53	1.76	.58	-.04	.965
Harsh/Overcontrol	2.19	.52	2.21	.54	.31	.761
Lax Discipline	2.48	.50	2.35	.55	-1.93	.055 [†]
NRI Conflict						
Sibling	2.36	.97	2.39	.97	-.23	.816
Same-Sex Friend	1.86	.77	1.71	.61	1.78	.076 [†]
Opposite-Sex Friend	1.77	.69	1.57	.58	2.53	.012*
Partner	2.14	.89	2.17	.84	-.27	.784
NRI Quality of Relationship						
Sibling	3.48	.78	3.59	.88		
Same-Sex Friend	3.62	.68	3.71	.81	-.99	.324
Opposite-Sex Friend	3.39	.83	3.38	.84	-.98	.326
Partner	3.69	.92	3.70	1.01	.12	.907
BDI	11.20	8.59	12.57	9.33	-.11	.916
SRS						
Risky Sexual Behavior	.43	.77	.36	.72	.768	.443
Uncommitted Partners	-.07	.34	-.15	.26	2.11	.036*
Anal Sexual Risk Behavior	-.21	.30	-.19	.29	-.57	.572
Intent to Engage	.06	.46	-.14	.31	4.43	.000***
Impulsive Sexual Behavior	-.05	.32	-.11	.30	1.60	.110

[†] $p < 1.0$, * $p < .05$, ** $p < .01$, *** $p < .001$

TABLE IX
ETHNIC DIFFERENCES AMONG INDEPENDENT AND DEPENDENT VARIABLES

	Caucasian (<i>n</i> = 98)	African American (<i>n</i> = 20)	Hispanic (<i>n</i> = 64)	Asian American (<i>n</i> = 66)	Pacific Islander (<i>n</i> = 10)	Middle Eastern (<i>n</i> = 14)	Bi-racial (<i>n</i> = 9)	<i>F</i>	<i>p</i>
	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)		
CMI									
Physical Abuse	1.45(.7)	1.58(.5)	1.67(.8)	1.62(.6)	1.51(.5)	1.52(.9)	1.80(.9)	.99	.434
Sexual Abuse	1.04(.25)	1.10(.28)	1.20(.59)	1.06(.36)	1.06(.18)	1.15(.57)	1.17(.30)	1.33	.242
CRPBI Maternal									
Warm/Involved	1.43(.4)	1.41(.4)	1.50(.5)	1.54(.4)	1.40(.4)	1.42(.3)	1.45(.5)	.68	.663
Harsh/Overcontrol	2.31(.5)	2.21(.4)	2.01(.5)	2.16(.5)	2.12(.3)	2.19(.6)	1.88(.5)	3.22	.005**
Lax Discipline	2.32(.5)	2.66(.3)	2.60(.4)	2.29(.4)	2.26(.4)	2.26(.5)	2.42(.4)	5.56	.000***
CRPBI Paternal									
Warm/Involved	1.63(.5)	1.67(.5)	1.85(.6)	1.85(.6)	2.07(.6)	1.47(.5)	1.92(.6)	2.88	.010*
Harsh/Overcontrol	2.37(.5)	2.29(.5)	2.03(.5)	2.20(.5)	1.95(.6)	2.12(.6)	1.84(.6)	1.07	.001**
Lax Discipline	2.40(.6)	2.41(.5)	2.57(.5)	2.28(.6)	2.28(.4)	2.14(.6)	2.40(.6)	2.23	.040*
NRI Conflict									
Sibling	2.42(1.0)	2.46(1.1)	2.43(1.0)	2.43(.9)	2.00(1.1)	2.49(.8)	2.13(1.0)	.44	.849
Same-Sex Friend	1.81(.6)	1.81(.6)	1.65(.6)	1.83(.7)	1.80(.8)	1.54(.6)	2.13(.9)	1.22	.298
Opposite-Sex Friend	1.70(.7)	1.72(.6)	1.57(.6)	1.67(.6)	1.74(.6)	1.46(.6)	1.80(.8)	.62	.716
Partner	2.08(.8)	2.24(.8)	2.26(.8)	2.22(1.0)	1.94(.6)	1.85(.9)	1.97(.8)	.56	.764
NRI Quality of Relationship									
Sibling	3.49(.8)	3.42(1.0)	3.59(.8)	3.60(.9)	3.56(.7)	3.84(.7)	3.16(.8)	.77	.594
Same-Sex Friend	3.57(.8)	3.62(.9)	3.84(.7)	3.79(.7)	3.74(.5)	3.63(.9)	3.30(1.0)	1.48	.184
Opposite-Sex Friend	3.17(.8)	3.35(.9)	3.53(.8)	3.62(.8)	3.56(.5)	3.37(1.1)	3.33(1.0)	2.36	.031*
Partner	3.74(.9)	3.68(.8)	3.87(.9)	3.45(1.2)	4.33(.5)	3.88(.8)	3.31(1.4)	1.48	.19
BDI	11.85(8.9)	9.80(7.1)	13.63(11.1)	13.15(8.3)	8.00(5.9)	6.57(6.0)	12.89(8.9)	1.92	.08†
SRS									
Risky Sexual Behavior	.63(.7)	.35(.9)	.35(.7)	.07(.6)	.74(.8)	.26(.9)	.51(.7)	4.65	.000***
Uncommitted Partners	-.04(.3)	-.12(.3)	-.12(.3)	-.25(.1)	-.03(.4)	-.19(.3)	-.05(.3)	3.86	.001**
Anal Sexual Risk Behavior	-.17(.3)	-.30(.0)	-.23(.3)	-.22(.3)	-.00(.6)	-.26(.1)	-.07(.3)	1.92	.077†
Intent to Engage	-.02(.4)	-.16(.4)	-.13(.3)	-.08(.4)	-.05(.3)	-.14(.3)	-.02(.4)	1.47	.190
Impulsive Sexual Behavior	-.03(.4)	.03(.4)	-.07(.3)	-.19(.2)	-.18(.3)	-.16(.2)	.06(.3)	2.56	.020*

† $p < 1.0$, * $p < .05$, ** $p < .01$, *** $p < .001$

TABLE X
AGE DIFFERENCES AMONG INDEPENDENT AND DEPENDENT VARIABLES

	18 years (<i>n</i> = 137) M (SD)	19 years (<i>n</i> = 87) M (SD)	20 years (<i>n</i> = 33) M (SD)	21 years (<i>n</i> = 10) M (SD)	22+ years (<i>n</i> = 15) M (SD)	<i>F</i>	<i>p</i>
CMI							
Physical Abuse	1.54(.6)	1.54(.8)	1.53(.7)	1.81(1.0)	1.84(.9)	1.02	.398
Sexual Abuse	1.04(.2)	1.18(.6)	1.09(.4)	1.04(.1)	1.13(.3)	1.62	.169
CRPBI Maternal							
Warm/Involved	1.49(.4)	1.48(.5)	1.41(.4)	1.30(.3)	1.50(.4)	.57	.683
Harsh/Overcontrol	2.17(.5)	2.17(.5)	2.17(.5)	2.20(.4)	2.20(.5)	.03	.999
Lax Discipline	2.41(.4)	2.41(.5)	2.36(.4)	2.44(.3)	2.39(.5)	.11	.978
CRPBI Paternal							
Warm/Involved	1.78(.6)	1.70(.6)	1.76(.6)	1.85(.6)	1.77(.4)	.37	.830
Harsh/Overcontrol	2.19(.5)	2.24(.5)	2.21(.6)	2.08(.5)	2.11(.5)	.38	.824
Lax Discipline	2.40(.5)	2.37(.5)	2.42(.6)	2.40(.4)	2.40(.6)	.05	.995
NRI Conflict							
Sibling	2.49(1.0)	2.34(.9)	2.29(.8)	2.90(1.1)	1.89(.9)	2.21	.068 [†]
Same-Sex Friend	1.72(.6)	1.77(.7)	1.95(.7)	1.84(.7)	1.96(.8)	1.06	.379
Opposite-Sex Friend	1.66(.6)	1.62(.6)	1.73(.6)	1.92(.8)	1.37(.4)	1.33	.259
Partner	2.10(.8)	2.21(.9)	2.27(.9)	1.82(.8)	2.40(1.1)	.83	.506
NRI Quality of Relationship							
Sibling	3.61(.8)	3.50(.9)	3.48(.8)	3.37(.8)	3.34(1.1)	.65	.631
Same-Sex Friend	3.80(.7)	3.58(.8)	3.54(.8)	3.69(.6)	3.52(.7)	1.62	.168
Opposite-Sex Friend	3.44(.8)	3.38(.9)	3.37(.9)	3.60(.7)	2.93(.7)	1.38	.240
Partner	3.72(1.0)	3.81(1.0)	3.48(1.1)	3.67(.9)	3.64(.9)	.53	.712
BDI	12.75(9.8)	11.71(9.0)	11.48(7.0)	7.30(4.3)	11.67(8.7)	.96	.433
SRS							
Risky Sexual Behavior	.24(.7)	.55(.7)	.42(.7)	.32(.6)	.84(.7)	4.00	.004 ^{**}
Uncommitted Partners	-.16(.3)	-.10(.3)	-.10(.3)	-.05(.4)	-.04(.3)	1.89	.113
Anal Sexual Risk Behavior	-.20(.3)	-.22(.3)	-.23(.2)	-.09(.5)	-.15(.3)	.68	.607
Intent to Engage	-.08(.4)	-.11(.3)	.09(.6)	.09(.5)	-.11(.3)	2.16	.074 [†]
Impulsive Sexual Behavior	-.10(.3)	-.09(.3)	-.05(.3)	.25(.4)	-.09(.3)	3.08	.017 [*]

[†]*p* < 1.0, **p* < .05, ***p* < .01, ****p* < .001

TABLE XI
SEXUAL ORIENTATION DIFFERENCES AMONG INDEPENDENT AND DEPENDENT VARIABLES

	Heterosexual (<i>n</i> = 270) M (SD)	Homosexual (<i>n</i> = 7) M (SD)	Bisexual (<i>n</i> = 5) M (SD)	<i>F</i>	<i>p</i>
CMI					
Physical Abuse	1.55(.7)	1.90(.8)	1.84(1.1)	1.35	.260
Sexual Abuse	1.10(.4)	1.08(.2)	1.11(.2)	.01	.990
CRPBI Maternal					
Warm/Involved	2.53(.4)	2.69(.2)	2.46(.3)	.55	.579
Harsh/Overcontrol	1.83(.5)	1.77(.4)	1.54(.4)	.98	.375
Lax Discipline	1.60(.4)	1.54(.3)	1.72(.6)	.25	.782
CRPBI Paternal					
Warm/Involved	2.25(.6)	2.04(.8)	2.19(.5)	.53	.591
Harsh/Overcontrol	1.80(.5)	1.83(.7)	1.82(.5)	.02	.983
Lax Discipline	1.61(.5)	1.40(.5)	1.52(.5)	.61	.546
NRI Conflict					
Sibling	2.42(1.0)	2.09(1.1)	2.13(.6)	.51	.600
Same-Sex Friend	1.78(.7)	1.66(.9)	2.12(.8)	.75	.474
Opposite-Sex Friend	1.66(.6)	1.69(.8)	1.48(.5)	.20	.821
Partner	2.16(.9)	1.87(.9)	2.27(1.1)	.37	.688
NRI Quality of Relationship					
Sibling	3.54(.9)	3.47(.2)	3.24(1.1)	.21	.810
Same-Sex Friend	3.68(.8)	3.67(.6)	3.94(.6)	.29	.745
Opposite-Sex Friend	3.39(.8)	3.45(.8)	3.54(.6)	.09	.910
Partner	3.70(1.0)	3.52(1.5)	4.57(.3)	1.31	.272
BDI	11.94(9.0)	9.86(9.6)	20.00(12.4)	2.15	.118
SRS					
Risky Sexual Behavior	.38(.7)	.63(.6)	.82(1.2)	1.25	.289
Uncommitted Partners	-.12(.3)	.09(.3)	-.07(.3)	1.85	.159
Anal Sexual Risk Behavior	-.23(.2)	.52(.7)	.19(.6)	34.29	.000***
Intent to Engage	-.06(.4)	-.02(.3)	-.15(.3)	.30	.740
Impulsive Sexual Behavior	-.08(.3)	-.01(.3)	-.04(.3)	.31	.736

† $p < 1.0$, * $p < .05$, ** $p < .01$, *** $p < .001$

TABLE XII
BIVARIATE CORRELATIONS AMONG INDEPENDENT VARIABLES

	<u>CMI</u>		<u>CRPBI Maternal</u>			<u>CRPBI Paternal</u>		
	Physical	Sexual	Warm/ Involved	Harsh/ Overcontrol	Lax Discipline	Warm/ Involved	Harsh/ Overcontrol	Lax Discipline
<u>CMI</u>								
Physical Abuse								
Sexual Abuse	.340**							
<u>CRPBI Maternal</u>								
Warm/Involved	-.342**	-.088						
Harsh/Overcontrol	.257**	.135*	-.207**					
Lax Discipline	.162**	.019	-.006	-.161**				
<u>CRPBI Paternal</u>								
Warm/Involved	-.402**	-.123*	.404**	-.043	-.097			
Harsh/Overcontrol	.387**	.087	-.035	.420**	.043	-.266**		
Lax Discipline	-.063	.030	-.015	.139*	.319**	.252**	-.260**	
<u>NRI Conflict</u>								
Sibling	.176**	-.016	-.068	.152*	.089	-.088	.181**	.098
Same-sex Friend	.192**	-.072	.082	.046	.116	-.084	.209**	-.061
Opposite-sex Friend	.124*	-.040	.013	.085	.053	-.150*	.084	-.021
Partner	.038	-.025	-.035	.134	-.082	-.012	.064	.054
<u>NRI Quality</u>								
Sibling	-.157*	-.063	.328**	.000	-.060	.244**	.005	.086
Same-sex Friend	.048	.034	.120*	.073	.070	-.017	.167**	-.011
Opposite-sex Friend	.089	-.022	.056	.078	.087	-.032	.199**	-.006
Partner	.021	.094	.018	.058	-.011	.075	-.002	.067

N varies from 191 to 282. * $p < .05$, ** $p < .01$

TABLE XII (continued)
BIVARIATE CORRELATIONS AMONG INDEPENDENT VARIABLES

	<u>NRI Conflict</u>				<u>NRI Quality</u>		
	Sibling	Same-sex Friend	Opposite-Sex Friend	Partner	Sibling	Same-sex Friend	Opposite-Sex Friend
<u>NRI Conflict</u>							
Sibling							
Same-sex Friend	.334**						
Opposite-sex Friend	.424**	.673**					
Partner	.180*	.277**	.223**				
<u>NRI Quality</u>							
Sibling	.056	.068	.136*	.043			
Same-sex Friend	.118	.049	.103	.046	.319**		
Opposite-sex Friend	.136*	.124*	.123*	.029	.319**	.739**	
Partner	.048	-.065	-.141*	.157*	.212**	.177*	.138

N varies from 191 to 282. * $p < .05$, ** $p < .01$

TABLE XIII
BIVARIATE CORRELATIONS AMONG INDEPENDENT AND DEPENDENT VARIABLES

	<u>CMI</u>		<u>CRPBI Maternal</u>			<u>CRPBI Paternal</u>		
	Physical Abuse	Sexual Abuse	Warm/Involved	Harsh/Overcontrol	Lax Discipline	Warm/Involved	Harsh/Overcontrol	Lax Discipline
BDI	.391**	.086	-.291**	.198**	.071	-.289**	.260**	-.010
Risky Sexual Behavior	.058	-.095	-.116	-.058	-.089	.021	-.046	-.015
Uncommitted Partners	.117	-.033	-.060	-.064	.017	-.020	.035	-.050
Anal Sexual Risk Behavior	.042	-.050	-.062	.014	-.012	-.013	-.015	.071
Intent to Engage	.088	-.041	.018	.137*	.132*	-.029	.071	.027
Impulsive Sexual Behavior	.203**	.046	-.152*	.133*	.065	-.194**	.117	-.018

N varies from 198 to 282. * $p < .05$, ** $p < .01$

TABLE XIII (continued)
BIVARIATE CORRELATIONS AMONG INDEPENDENT AND DEPENDENT VARIABLES

	<u>NRI Conflict</u>				<u>NRI Quality</u>			
	Sibling	Same-sex Friend	Opposite-Sex Friend	Partner	Sibling	Same-sex Friend	Opposite-Sex Friend	Partner
BDI	.236**	.170**	.149*	.204**	-.118	-.011	-.005	-.051
Risky Sexual Behavior	-.023	-.033	-.147*	.176*	-.108	-.133*	-.158**	.239**
Uncommitted Partners	.068	.060	.095	.064	-.073	-.049	-.021	-.077
Anal Sexual Risk Behavior	-.037	-.054	-.046	.011	.040	.029	.064	.121
Intent to Engage	.152*	.147*	.209**	.050	.031	.065	.042	-.139
Impulsive Sexual Behavior	.140*	.187**	.242**	.112	-.073	-.058	.067	-.120

N varies from 198 to 282. * $p < .05$, ** $p < .01$

TABLE XIV
MAIN EFFECTS REGRESSION ANALYSES ON BDI

Step and Variable	Multiple R	Adjusted R ²	R ² Δ	B	SE B	β	t
1. Step 1:	.074	.002	.005				
Gender				1.36	1.12	.07	1.22
Step 2:	.409	.158	.162				
Gender				1.94	1.04	.10	1.87 [†]
Physical Abuse				5.54	.78	.42	7.12 ^{***}
Sexual Abuse				-1.52	1.35	-.07	-1.13
2. Step 1:	.074	.002	.005				
Gender				1.38	1.13	.07	1.22
Step 2:	.469	.193	.214				
Gender				1.79	1.03	.10	1.74 [†]
Physical Abuse				3.56	.92	.27	3.88 ^{***}
Sexual Abuse				-1.38	1.33	-.06	-1.04
Maternal Warm/Involved				-3.37	1.37	-.16	-2.45 [*]
Paternal Warm/Involved				-1.59	1.08	-.10	-1.48
Maternal Harsh/Overcontrol				.73	1.29	.04	.56
Paternal Harsh/Overcontrol				2.08	1.20	.12	1.73 [†]
Maternal Lax Discipline				.06	1.30	.00	.05
Paternal Lax Discipline				.80	1.14	.05	.70
3. Step 1:	.122	.009	.015				
Gender				2.18	1.31	.12	1.66 [†]
Step 2:	.532	.238	.268				
Gender				2.31	1.18	.13	1.95 [†]
Physical Abuse				3.82	1.03	.28	3.72 ^{***}
Maternal Warm/Involved				-3.52	1.51	-.18	-2.33 [*]
Sibling Conflict				1.16	.65	.13	1.78 [†]
Same-sex Friend Conflict				1.57	1.24	.12	1.27
Opposite-sex Friend Conflict				-.11	1.52	-.01	-.07
Partner Conflict				1.42	.72	.14	1.99 [*]
Sibling Quality				-.13	.79	-.01	-.16
Same-sex Friend Quality				1.27	1.13	.11	1.13
Opposite-sex Friend Quality				-1.13	1.04	-.11	-1.08
Partner Quality				-.73	.63	-.08	-1.15

N varies from 185 to 276. [†] $p < 1.0$, ^{*} $p < .05$, ^{**} $p < .01$, ^{***} $p < .001$

TABLE XV
MAIN EFFECTS REGRESSION ANALYSES ON SRS RISKY SEXUAL BEHAVIOR

Step and Variable	Multiple R	Adjusted R ²	R ² Δ	B	SE B	β	t
1. Step 1:	.203	.034	.041				
Gender				-.02	.09	-.01	-.22
Age				.09	.03	.20	3.33**
Step 2:	.242	.045	.017				
Gender				.01	.09	.01	.09
Age				.09	.03	.20	3.32**
Physical Abuse				.09	.07	.09	1.40
Sexual Abuse				-.25	.12	-.13	-2.11*
2. Step 1:	.206	.035	.042				
Gender				-.03	.09	-.02	-.33
Age				.10	.03	.20	3.34**
Step 2:	.292	.050	.043				
Gender				.00	.09	.00	.01
Age				.09	.03	.20	3.26**
Physical Abuse				.13	.08	.12	1.56
Sexual Abuse				-.24	.12	-.13	-2.04*
Maternal Warm/Involved				-.19	.12	-.11	-1.58
Paternal Warm/Involved				.09	.09	.07	.92
Maternal Harsh/Overcontrol				-.16	.11	-.11	-1.45
Paternal Harsh/Overcontrol				.00	.11	.00	-.04
Maternal Lax Discipline				-.20	.11	-.12	-1.77 [†]
Paternal Lax Discipline				.04	.10	.03	.36
3. Step 1:	.203	.031	.041				
Gender				-.01	.11	-.01	-.12
Age				.08	.03	.20	2.75**
Step 2:	.406	.112	.124				
Gender				-.08	.11	-.06	-.76
Age				.07	.03	.17	2.30*
Sexual Abuse				-.02	.27	.00	-.06
Sibling Conflict				.02	.06	.03	.37
Same-sex Friend Conflict				.00	.11	.00	.00
Opp-sex Friend Conflict				-.15	.14	-.12	-1.08
Partner Conflict				.13	.07	.15	1.94 [†]
Sibling Quality				-.02	.07	-.03	-.31
Same-sex Friend Quality				.05	.10	.05	.50
Opposite-sex Friend Quality				-.19	.10	-.22	-1.98*
Partner Quality				.17	.06	.22	2.86**

N varies from 185 to 275. [†] $p < 1.0$, * $p < .05$, ** $p < .01$, *** $p < .001$

TABLE XVI
MAIN EFFECTS REGRESSION ANALYSES ON SRS
SEXUALLY RISKY BEHAVIOR WITH UNCOMMITTED PARTNERS

Step and Variable	Multiple R	Adjusted R ²	R ² Δ	B	SE B	β	t
1. Step 1:	.127	.012	.016				
Gender				-.08	.04	-.13	-2.11*
Step 2:	.181	.022	.017				
Gender				-.07	.04	-.11	-1.86 [†]
Physical Abuse				.06	.03	.14	2.13*
Sexual Abuse				-.05	.05	-.07	-1.06
2. Step 1:	.136	.015	.018				
Gender				-.08	.04	-.14	-2.25*
Step 2:	.214	.013	.027				
Gender				-.07	.04	-.11	-1.80 [†]
Physical Abuse				.07	.03	.17	2.18*
Sexual Abuse				-.04	.05	-.06	-.88
Maternal Warm/Involved				.00	.05	.00	.04
Paternal Warm/Involved				.03	.04	.05	.68
Maternal Harsh/Overcontrol				-.07	.05	-.11	-1.41
Paternal Harsh/Overcontrol				.02	.04	.03	.38
Maternal Lax Discipline				.00	.05	.00	-.07
Paternal Lax Discipline				-.01	.04	-.02	-.26
3. Step 1:	.127	.011	.016				
Gender				-.08	.04	-.13	-1.74 [†]
Step 2:	.250	.009	.046				
Gender				-.07	.05	-.12	-1.55
Physical Abuse				.06	.04	.14	1.76 [†]
Sibling Conflict				.00	.03	.00	-.01
Same-sex Friend Conflict				-.06	.05	-.14	-1.25
Opp-sex Friend Conflict				.09	.06	.17	1.51
Partner Conflict				.02	.03	.05	.62
Sibling Quality				.01	.03	.04	.50
Same-sex Friend Quality				.03	.04	.07	.61
Opposite-sex Friend Quality				-.04	.04	-.13	-1.12
Partner Quality				-.02	.02	-.06	-.76

N varies from 185 to 275. [†] $p < 1.0$, * $p < .05$, ** $p < .01$, *** $p < .001$

TABLE XVII
MAIN EFFECTS REGRESSION ANALYSES ON SRS
ANAL SEXUAL RISK BEHAVIOR

Step and Variable	Multiple R	Adjusted R ²	R ² Δ	B	SE B	β	t
1. Step 1:	.434	.182	.188				
Gender				.04	.03	.07	1.28
Sexual Orientation				.61	.08	.43	7.92***
Step 2:	.439	.181	.004				
Gender				.05	.03	.08	1.42
Sexual Orientation				.61	.08	.43	7.83***
Physical Abuse				.01	.02	.03	.48
Sexual Abuse				-.05	.04	-.07	-1.17
2. Step 1:	.455	.201	.207				
Gender				.03	.03	.06	1.08
Sexual Orientation				.62	.07	.46	8.38***
Step 2:	.472	.193	.015				
Gender				.03	.03	.05	.93
Sexual Orientation				.62	.07	.46	8.33***
Physical Abuse				.01	.03	.02	.26
Sexual Abuse				-.05	.04	-.07	-1.16
Maternal Warm/Involved				-.01	.04	-.02	-.30
Paternal Warm/Involved				-.01	.03	-.01	-.21
Maternal Harsh/Overcontrol				.01	.04	.01	.15
Paternal Harsh/Overcontrol				.00	.04	.00	-.03
Maternal Lax Discipline				-.02	.04	-.04	-.58
Paternal Lax Discipline				.06	.03	.11	1.69 [†]
3. Step 1:	.485	.227	.235				
Gender				.02	.04	.04	.57
Sexual Orientation				.75	.10	.49	7.47***
Step 2:	.520	.229	.036				
Gender				.03	.04	.05	.69
Sexual Orientation				.74	.10	.48	7.24***
Sibling Conflict				-.02	.02	-.05	-.74
Same-sex Friend Conflict				-.07	.04	-.15	-1.61
Opp-sex Friend Conflict				.09	.05	.19	1.82 [†]
Partner Conflict				.01	.02	.03	.39
Sibling Quality				.01	.02	.02	.29
Same-sex Friend Quality				-.02	.04	-.06	-.59
Opposite-sex Friend Quality				.00	.03	.00	.02
Partner Quality				.04	.02	.14	2.00*

N varies from 185 to 275. [†] $p < 1.0$, * $p < .05$, ** $p < .01$, *** $p < .001$

TABLE XVIII
MAIN EFFECTS REGRESSION ANALYSES ON SRS
INTENT TO ENGAGE IN SEXUALLY RISKY BEHAVIOR

Step and Variable	Multiple R	Adjusted R ²	R ² Δ	B	SE B	β	t
1. Step 1:	.259	.063	.067				
Gender				-.21	.05	-.26	-4.43***
Step 2:	.274	.065	.008				
Gender				-.20	.05	-.25	-4.21***
Physical Abuse				.05	.04	.10	1.53
Sexual Abuse				-.05	.06	-.05	-.80
2. Step 1:	.263	.066	.069				
Gender				-.21	.05	-.26	-4.49***
Step 2:	.359	.099	.059				
Gender				-.21	.05	-.26	-4.45
Physical Abuse				.03	.04	.05	.63
Sexual Abuse				-.05	.06	-.06	-.90
Maternal Warm/Involved				.09	.06	.10	1.47
Paternal Warm/Involved				-.03	.05	-.05	-.69
Maternal Harsh/Overcontrol				.18	.06	.22	3.08**
Paternal Harsh/Overcontrol				-.04	.05	-.06	-.75
Maternal Lax Discipline				.15	.06	.16	2.48*
Paternal Lax Discipline				-.01	.05	-.02	-.26
3. Step 1:	.327	.102	.107				
Gender				-.27	.06	-.33	-4.68***
Step 2:	.448	.150	.094				
Gender				-.27	.06	-.33	-4.71***
Maternal Harsh/Overcontrol				.10	.06	.12	1.66 [†]
Maternal Lax Discipline				.12	.07	.13	1.83 [†]
Sibling Conflict				.04	.03	.11	1.34
Same-sex Friend Conflict				-.03	.06	-.05	-.53
Opp-sex Friend Conflict				.05	.07	.08	.72
Partner Conflict				.04	.03	.09	1.22
Sibling Quality				.03	.04	.06	.79
Same-sex Friend Quality				.04	.05	.08	.79
Opposite-sex Friend Quality				-.03	.05	-.06	-.52
Partner Quality				-.07	.03	-.17	-2.35*

N varies from 185 to 276. [†]p < 1.0, *p < .05, **p < .01, ***p < .001

TABLE XIX
MAIN EFFECTS REGRESSION ANALYSES ON SRS
IMPULSIVE SEXUAL BEHAVIOR

Step and Variable	Multiple R	Adjusted R ²	R ² Δ	B	SE B	β	t
1. Step 1:	.123	.008	.015				
Gender				-.05	.04	-.08	-1.37
Age				.01	.01	.08	1.26
Step 2:	.238	.042	.041				
Gender				-.05	.04	-.07	-1.22
Age				.01	.01	.06	.95
Physical Abuse				.09	.03	.21	3.30**
Sexual Abuse				-.01	.05	-.01	-.21
2. Step 1:	.138	.012	.019				
Gender				-.06	.04	-.10	-1.67†
Age				.02	.01	.08	1.30
Step 2:	.315	.065	.080				
Gender				-.06	.04	-.10	-1.66†
Age				.01	.01	.06	1.06
Physical Abuse				.06	.03	.13	1.65†
Sexual Abuse				-.01	.05	-.01	-.14
Maternal Warm/Involved				.06	.05	.08	1.12
Paternal Warm/Involved				-.09	.04	-.17	-2.37*
Maternal Harsh/Overcontrol				.10	.05	.16	2.13*
Paternal Harsh/Overcontrol				-.02	.04	-.04	-.53
Maternal Lax Discipline				.07	.05	.10	1.42
Paternal Lax Discipline				-.01	.04	-.02	-.30
3. Step 1:	.178	.021	.032				
Gender				-.11	.05	-.17	-2.28
Age				.01	.01	.04	.53
Step 2:	.394	.096	.124				
Gender				-.08	.05	-.13	-1.70†
Age				.02	.01	.08	1.12
Paternal Warm/Involved				-.07	.04	-.13	-1.77†
Maternal Harsh/Overcontrol				.06	.05	.09	1.20
Sibling Conflict				.02	.03	.07	.85
Same-sex Friend Conflict				-.02	.05	-.03	-.32
Opp-sex Friend Conflict				.12	.06	.23	2.03*
Partner Conflict				.00	.03	.01	.15
Sibling Quality				.02	.03	.06	.74
Same-sex Friend Quality				-.06	.04	-.15	-1.41
Opposite-sex Friend Quality				.03	.04	.09	.82
Partner Quality				-.03	.02	-.08	-1.08

N varies from 183 to 275. † $p < 1.0$, * $p < .05$, ** $p < .01$, *** $p < .001$

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APPENDIX A **DEMOGRAPHIC INFORMATION**

1) Gender: 1. Male 2. Female

2) What ethnicity best describes you? (circle *only* one)

- | | |
|---------------------|---------------------|
| 1. Caucasian | 5. Pacific Islander |
| 2. African American | 6. Middle Eastern |
| 3. Hispanic | 7. Native American |
| 4. Asian | 8. Bi-racial |

3) Age (in years): _____

4) Sexual orientation: (circle *only* one)

1. Heterosexual
2. Homosexual (gay/lesbian)
3. Bisexual

5) Number of semesters completed in *any* undergraduate school: _____

6) Number of semesters completed at UIC: _____

7) When you were growing up, did you live *mostly* with your... (please circle either 'Yes' or 'No' to *each* item)

- | | | | | | |
|---|-----|----|--------------------|-----|----|
| 7a. Biological mother? | Yes | No | 7i. Step-brothers? | Yes | No |
| 7b. Biological father? | Yes | No | 7j. Step-sisters? | Yes | No |
| 7c. Biological brothers? | Yes | No | 7k. Half-brothers? | Yes | No |
| 7d. Biological sisters? | Yes | No | 7l. Half-sisters? | Yes | No |
| 7e. Grandmother? | Yes | No | 7m. Foster dad? | Yes | No |
| 7f. Grandfather? | Yes | No | 7n. Foster mom? | Yes | No |
| 7g. Step-father or your mother's partner? | Yes | No | | | |
| 7h. Step-mother or your father's partner? | Yes | No | | | |

8) What is your parent's marital status? (circle *only* one)

1. Married
2. Divorced
3. Separated
4. Widow/widower (a parent passed away), if one of your parents passed away,
 - 4a. Which parent passed away? 1. Mother 2. Father
 - 4b. How old were you when she/he passed? (years) _____

9) If your parents are divorced/separated, how old were you when this happened? (years) _____

10) How many of the following you have...

- | | | | |
|---------------------------|-------|---------------------|-------|
| 10a. Biological brothers? | _____ | 10d. Step-sisters? | _____ |
| 10b. Biological sisters? | _____ | 10e. Half-brothers? | _____ |
| 10c. Step-brothers? | _____ | 10f. Half-sisters? | _____ |

APPENDIX B

NETWORK OF RELATIONSHIPS INVENTORY

Everyone has a number of people who are important in his or her life. These questions ask about your relationships with each of the following people: your mother-figure, your father-figure, a sibling, and peers. We would like you to answer the following questions about these people.
Note: If you do not have a boyfriend or girlfriend, please leave this answer empty.

SAMPLE: How much do you and this person smile at each other?

Little or None	Somewhat	Very Much	Extremely Much	The Most	
1	2	3	4	5	
Mother	1	2	③	4	5
Father	1	②	3	4	5
Sibling	1	②	3	4	5
Boy/Girl Friend	1	2	3	4	5
Same-Sex Friend	1	2	3	④	5
Other-Sex Friend	1	2	③	4	5

1. How much do you and this person get upset with or mad at each other?

Mother	1	2	3	4	5
Father	1	2	3	4	5
Sibling	1	2	3	4	5
Boy/Girl Friend	1	2	3	4	5
Same-Sex Friend	1	2	3	4	5
Other-Sex Friend	1	2	3	4	5

2. How much do you and this person get on each other's nerves?

Mother	1	2	3	4	5
Father	1	2	3	4	5
Sibling	1	2	3	4	5
Boy/Girl Friend	1	2	3	4	5
Same-Sex Friend	1	2	3	4	5
Other-Sex Friend	1	2	3	4	5

Little or None	Somewhat	Very Much	Extremely Much	The Most
1	2	3	4	5

3. How much does this person treat you like you're admired and respected?

Mother	1	2	3	4	5
Father	1	2	3	4	5
Sibling	1	2	3	4	5
Boy/Girl Friend	1	2	3	4	5
Same-Sex Friend	1	2	3	4	5
Other-Sex Friend	1	2	3	4	5

4. How sure are you that this relationship will last no matter what?

Mother	1	2	3	4	5
Father	1	2	3	4	5
Sibling	1	2	3	4	5
Boy/Girl Friend	1	2	3	4	5
Same-Sex Friend	1	2	3	4	5
Other-Sex Friend	1	2	3	4	5

5. How much do you play around and have fun with this person?

Mother	1	2	3	4	5
Father	1	2	3	4	5
Sibling	1	2	3	4	5
Boy/Girl Friend	1	2	3	4	5
Same-Sex Friend	1	2	3	4	5
Other-Sex Friend	1	2	3	4	5

6. How much do you and this person disagree and quarrel?

Mother	1	2	3	4	5
Father	1	2	3	4	5
Sibling	1	2	3	4	5
Boy/Girl Friend	1	2	3	4	5
Same-Sex Friend	1	2	3	4	5
Other-Sex Friend	1	2	3	4	5

Little or None	Somewhat	Very Much	Extremely Much	The Most
1	2	3	4	5

7. How much does this person help you to figure out or fix things?

Mother	1	2	3	4	5
Father	1	2	3	4	5
Sibling	1	2	3	4	5
Boy/Girl Friend	1	2	3	4	5
Same-Sex Friend	1	2	3	4	5
Other-Sex Friend	1	2	3	4	5

8. How much do you share your secrets and private feelings with this person?

Mother	1	2	3	4	5
Father	1	2	3	4	5
Sibling	1	2	3	4	5
Boy/Girl Friend	1	2	3	4	5
Same-Sex Friend	1	2	3	4	5
Other-Sex Friend	1	2	3	4	5

9. How much does this person really care about you?

Mother	1	2	3	4	5
Father	1	2	3	4	5
Sibling	1	2	3	4	5
Boy/Girl Friend	1	2	3	4	5
Same-Sex Friend	1	2	3	4	5
Other-Sex Friend	1	2	3	4	5

10. How much do you and this person argue with each other?

Mother	1	2	3	4	5
Father	1	2	3	4	5
Sibling	1	2	3	4	5
Boy/Girl Friend	1	2	3	4	5
Same-Sex Friend	1	2	3	4	5
Other-Sex Friend	1	2	3	4	5

Little or None	Somewhat	Very Much	Extremely Much	The Most
1	2	3	4	5

11. How much do you and this person hassle or nag one another?

Mother	1	2	3	4	5
Father	1	2	3	4	5
Sibling	1	2	3	4	5
Boy/Girl Friend	1	2	3	4	5
Same-Sex Friend	1	2	3	4	5
Other-Sex Friend	1	2	3	4	5

12. How much do you take care of this person?

Mother	1	2	3	4	5
Father	1	2	3	4	5
Sibling	1	2	3	4	5
Boy/Girl Friend	1	2	3	4	5
Same-Sex Friend	1	2	3	4	5
Other-Sex Friend	1	2	3	4	5

APPENDIX C

CHILD'S REPORT OF PARENTAL BEHAVIOR INVENTORY - FATHER

We are interested in learning more about the different experiences of children and their families. We are therefore asking you to report your experiences during your childhood. If you did not grow up with your real father, but someone took the place of that parent in your life, please describe that person.

Please read each statement on the following pages and check the answer that most closely describes the way your father (or father substitute) acted toward you.
BE SURE TO MARK EACH LINE.

If you think the statement was LIKE your father, check box 1.
If you think the statement was SOMEWHAT LIKE your father, check box 2.
If you think the statement was NOT LIKE your father, check box 3.

Please think back to the time when you were growing up and check the boxes describing the way your father was toward you then.

STATEMENT ABOUT FATHER	LIKE MY FATHER 1	SOMEWHAT LIKE MY FATHER 2	NOT LIKE MY FATHER 3
1. Made me feel better after talking over my worries with him.			
2. Often gave up something to get something for me.			
3. Seemed to regret that I was growing up and was spending more time away from home.			
4. Wasn't patient with me.			
5. Saw to it that I knew exactly what I might or might not do.			
6. Was very strict with me.			
7. Believed in showing his love for me.			
8. Wanted to know exactly where I was and what I was doing.			
9. Felt hurt when I didn't follow his advice.			
10. Kept reminding me about things I was not allowed to do.			
11. Soon forgot a rule he had made.			
12. Usually didn't find out about my misbehavior.			
13. Enjoyed it when I brought friends to my home.			
14. Couldn't say no to anything I wanted.			
15. Didn't trust me again for a long time if I broke a promise.			
16. Spent very little time with me.			
17. Wouldn't talk to me when I displeased him.			

STATEMENT ABOUT FATHER	LIKE MY FATHER 1	SOMEWHAT LIKE MY FATHER 2	NOT LIKE MY FATHER 3
18. Gave me as much freedom as I wanted.			
19. Understood my problems and worries.			
20. Made me feel like the most important person in his life.			
21. Worried about me when I was away.			
22. Forgot to help me when I needed it.			
23. Believed that all my bad behavior should be punished in some way.			
24. Stuck to a rule instead of allowing a lot of exceptions.			
25. Always listened to my ideas and options.			
26. Asked me to tell everything that happened when I was away from home.			
27. Thought I was not grateful when I didn't obey.			
28. Didn't forget very quickly the things I did wrong.			
29. Punished me for doing something one day, but ignored it the next.			
30. Didn't pay much attention to my misbehavior.			
31. Allowed me to tell him if I thought my ideas were better than his.			
32. Excused my bad conduct.			
33. Said some day I would be punished for my bad behavior.			
34. Thought I was just to be "put up with."			
35. Spoke to me in a cold, matter-of-fact voice when I offended him.			
36. Let me go any place I pleased without asking.			
37. Comforted me when I was afraid.			
38. Enjoyed staying at home with me more than going out with his friends.			
39. Became very involved in my life.			
40. Sometimes wished he didn't have any children.			
41. Saw to it that I was on time coming home from school or for meals.			
42. Almost always punished me in some way when I was bad.			
43. Often praised me.			
44. Kept a careful check on me to make sure I had the right kind of friends.			
45. Told me how much he had suffered for me.			
46. Wanted to control whatever I did.			

STATEMENT ABOUT FATHER	LIKE MY FATHER 1	SOMEWHAT LIKE MY FATHER 2	NOT LIKE MY FATHER 3
47. Sometimes allowed me to do things that he said were wrong.			
48. Didn't insist that I do my homework.			
49. Let me help decide how to do things we were working on.			
50. Let me stay up late if I kept asking.			
51. Said that some day I'd be sorry that I wasn't better as a child.			
52. Didn't seem to enjoy doing things with me.			
53. Was less friendly with me if I didn't see things his way.			
54. Let me dress in any way I pleased.			
55. Seemed proud of the things I did.			
56. Made his whole life center about his children.			
57. Did not approve of my spending a lot of time away from home.			
58. Acted as though I were in the way.			
59. Insisted that I must do exactly as I was told.			
60. Saw to it that I obeyed when he told me something.			
61. Told me where to find out more about things I wanted to know.			
62. Asked other people what I did away from home.			
63. Said if I loved him, I'd do what he wanted me to do.			
64. Was always trying to change me.			
65. Frequently changed the rules I was supposed to follow.			
66. Seldom insisted that I do anything.			
67. Asked me what I thought about how we should do things.			
68. Could be talked out of an order, if I complained.			
69. Thought that any misbehavior was very serious and would have future consequences.			
70. Didn't show that he loved me.			
71. Would avoid looking at me when I'd disappointed him.			
72. Allowed me to spend my money in any way I liked.			
73. Wasn't interested in changing me, but liked me as I was.			

STATEMENT ABOUT FATHER	LIKE MY FATHER 1	SOMEWHAT LIKE MY FATHER 2	NOT LIKE MY FATHER 3
74. Spent almost all of his free time with his children.			
75. Wished I would stay at home where he could take care of me.			
76. Made me feel I was not loved.			
77. Gave me certain jobs to do and did not allow me to do anything else until they were done.			
78. Had more rules than I could remember so was often punishing me.			
79. Said I made him happy.			
80. Almost always wanted to know who phoned or wrote to me and what they said.			
81. Told me of all the things he had done for me.			
82. Didn't let me decide things for myself.			
83. Changed his mind to make things easier for himself.			
84. Let me get away without doing work I had been given to do.			
85. Gave me the choice of what to do whenever possible.			
86. Could be talked into things easily.			
87. Would talk to me again and again about anything bad I did.			
88. Was always finding fault with me.			
89. Wouldn't have anything to do with me until I found a way to make up after I had upset him.			
90. Let me do anything I liked to do.			

APPENDIX D

CHILDHOOD MALTREATMENT INVENTORY

As an important part of this study we are interested in the ways that a variety of experiences affect people. In this questionnaire you will be answering questions about some of the most difficult experiences people can have. We are asking you about these things because we feel that they are so important, yet, because they are sensitive, these areas are often not asked about.

In this survey you will answer questions about a range of events that can and do happen to children when they are growing up. In this particular case, you will answer about only your childhood. Given the diversity of people's experiences, it is important to cover a range of questions, and it is possible that all of them may not apply to you.

When you were growing up, who took care of you? One parent, both parents, another relative or guardian? Please use this answer when answering *all* questions involving caretakers. Also, please note that *none* of these questions ask about peer bullying.

As you answer these questions, focus on the time you were growing up, BEFORE you were an adult.

Please circle the number that BEST describes your experience (1 = never, 2 = very rarely, 3 = rarely, 4 = frequently and 5 = very frequently).

Example:

Never	Very Rarely	Rarely	Frequently	Very Frequently
1	2	3	4	5

1. When you were a child, and had an illness or injury or were in obvious pain, how often did your caretaker ignore it?

Never	Very Rarely	Rarely	Frequently	Very Frequently
1	2	3	4	5

2. How often was the family paycheck spent on adult interests, leaving your needs unmet?

Never	Very Rarely	Rarely	Frequently	Very Frequently
1	2	3	4	5

3. How often did you feel that you received very little nurturance, love or attention (for example, being held, being read to, being talked to)?

Never	Very Rarely	Rarely	Frequently	Very Frequently
1	2	3	4	5

4. How often did adults tell you that they wished you were dead or had never been born?
- | | | | | |
|-------|-------------|--------|------------|--------------------|
| Never | Very Rarely | Rarely | Frequently | Very
Frequently |
| 1 | 2 | 3 | 4 | 5 |
5. How often did adults in your household tell you that you were not as good as other children?
- | | | | | |
|-------|-------------|--------|------------|--------------------|
| Never | Very Rarely | Rarely | Frequently | Very
Frequently |
| 1 | 2 | 3 | 4 | 5 |
6. How often were your brothers or sisters clearly preferred over you by your caregivers(s), or were they given more privileges, presents or attention?
- | | | | | |
|-------|-------------|--------|------------|--------------------|
| Never | Very Rarely | Rarely | Frequently | Very
Frequently |
| 1 | 2 | 3 | 4 | 5 |
7. How often were you avoided, ignored or pushed aside when you were having personal problems or troubles, or when you asked for affection?
- | | | | | |
|-------|-------------|--------|------------|--------------------|
| Never | Very Rarely | Rarely | Frequently | Very
Frequently |
| 1 | 2 | 3 | 4 | 5 |
8. How often were you called bad or unworthy of love?
- | | | | | |
|-------|-------------|--------|------------|--------------------|
| Never | Very Rarely | Rarely | Frequently | Very
Frequently |
| 1 | 2 | 3 | 4 | 5 |
9. How often were you attacked verbally (for example, screamed at or insulted)?
- | | | | | |
|-------|-------------|--------|------------|--------------------|
| Never | Very Rarely | Rarely | Frequently | Very
Frequently |
| 1 | 2 | 3 | 4 | 5 |
10. How often did you see serious fighting between adults in your household? (Fighting is defined as involving physical violence or threats of violence or threats of breaking up the household, marriage, etc...)
- | | | | | |
|-------|-------------|--------|------------|--------------------|
| Never | Very Rarely | Rarely | Frequently | Very
Frequently |
| 1 | 2 | 3 | 4 | 5 |
11. How often did you witness a caretaker's or relative's self-destructive or suicide acts?
- | | | | | |
|-------|-------------|--------|------------|--------------------|
| Never | Very Rarely | Rarely | Frequently | Very
Frequently |
| 1 | 2 | 3 | 4 | 5 |
12. How often were you intentionally frightened or scared by someone?
- | | | | | |
|-------|-------------|--------|------------|--------------------|
| Never | Very Rarely | Rarely | Frequently | Very
Frequently |
| 1 | 2 | 3 | 4 | 5 |
13. How often did a household member threaten you with serious bodily harm?
- | | | | | |
|-------|-------------|--------|------------|--------------------|
| Never | Very Rarely | Rarely | Frequently | Very
Frequently |
| 1 | 2 | 3 | 4 | 5 |

14. How often did caretaker(s) threaten you with abandonment?
- | | | | | |
|-------|-------------|--------|------------|--------------------|
| Never | Very Rarely | Rarely | Frequently | Very
Frequently |
| 1 | 2 | 3 | 4 | 5 |
15. How often did an important family member abandon you?
- | | | | | |
|-------|-------------|--------|------------|--------------------|
| Never | Very Rarely | Rarely | Frequently | Very
Frequently |
| 1 | 2 | 3 | 4 | 5 |
16. How often did you have to assume responsibilities in the household that were inappropriate for your age?
- | | | | | |
|-------|-------------|--------|------------|--------------------|
| Never | Very Rarely | Rarely | Frequently | Very
Frequently |
| 1 | 2 | 3 | 4 | 5 |
17. How often were you not allowed to play with or make friends with other children?
- | | | | | |
|-------|-------------|--------|------------|--------------------|
| Never | Very Rarely | Rarely | Frequently | Very
Frequently |
| 1 | 2 | 3 | 4 | 5 |
18. How often were you hit with a fist?
- | | | | | |
|-------|-------------|--------|------------|--------------------|
| Never | Very Rarely | Rarely | Frequently | Very
Frequently |
| 1 | 2 | 3 | 4 | 5 |
19. How often were you hit with an object such as a paddle, brush, whip, etc.?
- | | | | | |
|-------|-------------|--------|------------|--------------------|
| Never | Very Rarely | Rarely | Frequently | Very
Frequently |
| 1 | 2 | 3 | 4 | 5 |
20. How often were you physically restrained, held down, tied up, locked in a closet or a room?
- | | | | | |
|-------|-------------|--------|------------|--------------------|
| Never | Very Rarely | Rarely | Frequently | Very
Frequently |
| 1 | 2 | 3 | 4 | 5 |
21. How often were you beaten up?
- | | | | | |
|-------|-------------|--------|------------|--------------------|
| Never | Very Rarely | Rarely | Frequently | Very
Frequently |
| 1 | 2 | 3 | 4 | 5 |
22. How often were you thrown against a wall or other object, or just thrown?
- | | | | | |
|-------|-------------|--------|------------|--------------------|
| Never | Very Rarely | Rarely | Frequently | Very
Frequently |
| 1 | 2 | 3 | 4 | 5 |
23. In the last several questions, you were asked questions about ways that people are sometimes physically harmed. How often were you physically harmed in some other way that was not asked about?
- | | | | | |
|-------|-------------|--------|------------|--------------------|
| Never | Very Rarely | Rarely | Frequently | Very
Frequently |
| 1 | 2 | 3 | 4 | 5 |

24. How often were you approached in a flirtatious or seductive manner by a relative or caretaker or any other adult?

Never	Very Rarely	Rarely	Frequently	Very Frequently
1	2	3	4	5

25. How often did an adult expose himself or herself to you in a sexual way?

Never	Very Rarely	Rarely	Frequently	Very Frequently
1	2	3	4	5

26. How often did a relative or caretaker or other adult *attempt* to kiss you passionately?

Never	Very Rarely	Rarely	Frequently	Very Frequently
1	2	3	4	5

27. How often did a relative or caretaker or any other adult kiss you passionately?

Never	Very Rarely	Rarely	Frequently	Very Frequently
1	2	3	4	5

28. How often did a relative or caretaker or other adult *attempt* to touch you sexually?

Never	Very Rarely	Rarely	Frequently	Very Frequently
1	2	3	4	5

29. How often did a relative or caretaker or other adult touch you sexually?

Never	Very Rarely	Rarely	Frequently	Very Frequently
1	2	3	4	5

30. How often did a relative or caretaker or other adult *attempt* to have sexual intercourse with you?

Never	Very Rarely	Rarely	Frequently	Very Frequently
1	2	3	4	5

31. How often were you allowed to watch caregivers or other adults engage in any form of sexual relations?

Never	Very Rarely	Rarely	Frequently	Very Frequently
1	2	3	4	5

32. How often were you forced to dress up like a child of the opposite-sex?

Never	Very Rarely	Rarely	Frequently	Very Frequently
1	2	3	4	5

33. How often were you involved with pornographic materials – for example, showing or taking pictures that were sexually stimulating?

Never	Very Rarely	Rarely	Frequently	Very Frequently
1	2	3	4	5

34. How often were you asked to keep a “sexual secret” with a caretaker or relative or other adult?

Never	Very Rarely	Rarely	Frequently	Very Frequently
1	2	3	4	5

35. The questions you have just answered have to do with ways that adults sometimes involve children in activities for the purpose of the adult’s sexual pleasure. How often did you have any other experience of that sort that we haven’t asked about?

Never	Very Rarely	Rarely	Frequently	Very Frequently
1	2	3	4	5

36. As an adult, how often have you had a sexual experience that was not of your own choosing?

Never	Very Rarely	Rarely	Frequently	Very Frequently
1	2	3	4	5

APPENDIX E
BECK DEPRESSION INVENTORY – II

Instructions: This questionnaire consists of 21 groups of statements. Please read each group of statements carefully, and then pick out the one statement in each group that best describes the way you have been feeling during the past two weeks, including today. Circle the number beside the statement you have picked. If several statements in the group seem to apply equally well, circle the highest number for that group. Be sure that you do not choose more than one statement for any group, including Item 16 (Changes in Sleeping Pattern) or Item 18 (Changes in Appetite).

1. Sadness

- 0 I do not feel sad.
- 1 I feel sad much of the time.
- 2 I am sad all the time.
- 3 I am so sad or unhappy that I can't stand it.

2. Pessimism

- 0 I am not discouraged about my future.
- 1 I feel more discouraged about my future than I used to be.
- 2 I do not expect things to work out for me.
- 3 I feel my future is hopeless and will only get worse.

3. Past Failure

- 0 I do not feel like a failure.
- 1 I have failed more than I should have.
- 2 As I look back, I see a lot of failures.
- 3 I feel I am a total failure as a person.

4. Loss of Pleasure

- 0 I get as much pleasure as I ever did from the things I enjoy.
- 1 I don't enjoy things as much as I used to.
- 2 I get very little pleasure from the things I used to enjoy.
- 3 I can't get any pleasure from the things I used to enjoy.

5. Guilty Feelings

- 0 I don't feel particularly guilty.
- 1 I feel guilty over many things I have done or should have done.
- 2 I feel quite guilty most of the time.
- 3 I feel guilty all of the time.

6. Punishment Feelings

- 0 I don't feel I am being punished.
- 1 I feel I may be punished.
- 2 I expect to be punished.
- 3 I feel I am being punished.

7. Self-Dislike
 - 0 I feel the same about myself as ever.
 - 1 I have lost confidence in myself.
 - 2 I am disappointed in myself.
 - 3 I dislike myself.
8. Self-Criticalness
 - 0 I don't criticize or blame myself more than usual.
 - 1 I am more critical of myself than I used to be.
 - 2 I criticize myself for all of my faults.
 - 3 I blame myself for everything bad that happens.
9. Suicidal Thoughts or Wishes
 - 0 I don't have any thoughts of killing myself.
 - 1 I have thoughts of killing myself, but I would not carry them out.
 - 2 I would like to kill myself.
 - 3 I would kill myself if I had the chance.
10. Crying
 - 0 I don't cry any more than I used to.
 - 1 I cry more than I used to.
 - 2 I cry over every little thing.
 - 3 I feel like crying, but I can't.
11. Agitation
 - 0 I am no more restless or wound up than usual.
 - 1 I feel more restless or wound up than usual.
 - 2 I am so restless or agitated that it's hard to stay still.
 - 3 I am so restless or agitated that I have to keep moving or doing something.
12. Loss of Interest
 - 0 I have not lost interest in other people or activities.
 - 1 I am less interested in other people or things than before.
 - 2 I have lost most of my interest in other people or things.
 - 3 It's hard to get interested in anything.
13. Indecisiveness
 - 0 I make decisions about as well as ever.
 - 1 I find it more difficult to make decisions than usual.
 - 2 I have much greater difficulty in making decisions than I used to.
 - 3 I have trouble making any decisions.
14. Worthlessness
 - 0 I do not feel I am worthless.
 - 1 I don't consider myself as worthwhile and useful as I used to.
 - 2 I feel more worthless as compared to other people.
 - 3 I feel utterly worthless.

15. Loss of Energy
- 0 I have as much energy as ever.
 - 1 I have less energy than I used to have.
 - 2 I don't have enough energy to do very much.
 - 3 I don't have enough energy to do anything.
16. Changes in Sleeping Pattern
- 0 I have not experienced any change in my sleeping pattern.
 - 1a I sleep somewhat more than usual.
 - 1b I sleep somewhat less than usual.
 - 2a I sleep a lot more than usual.
 - 2b I sleep a lot less than usual.
 - 3a I sleep most of the day.
 - 3b I wake up 1-2 hours early and can't get back to sleep.
17. Irritability
- 0 I am no more irritable than usual.
 - 1 I am more irritable than usual.
 - 2 I am much more irritable than usual.
 - 3 I am irritable all the time.
18. Changes in Appetite
- 0 I have not experienced any change in my appetite.
 - 1a My appetite is somewhat less than usual.
 - 1b My appetite is somewhat greater than usual.
 - 2a My appetite is much less than before.
 - 2b My appetite is much greater than usual.
 - 3a I have no appetite at all.
 - 3b I crave food all the time.
19. Concentration Difficulty
- 0 I can concentrate as well as ever.
 - 1 I can't concentrate as well as usual.
 - 2 It's hard to keep my mind on anything for very long.
 - 3 I find I can't concentrate on anything.
20. Tiredness or Fatigue
- 0 I am no more tired or fatigued than usual.
 - 1 I get more tired or fatigued more easily than usual.
 - 2 I am too tired or fatigued to do a lot of the things I used to do.
 - 3 I am too tired or fatigued to do most of the things I used to do.
21. Loss of Interest in Sex
- 0 I have not noticed any recent change in my interest in sex.
 - 1 I am less interested in sex than I used to be:
 - 2 I am much less interested in sex now.
 - 3 I have lost interest in sex completely.

APPENDIX F

SEXUAL RISK SURVEY

Instructions: Please read the following statements and record the number that is true for you over the past 6 months for each question. If you do not know for sure how many times a behavior took place, try to estimate the number as close as you can. Thinking about the average number of times the behavior happened per week or per month might make it easier to estimate an accurate number, especially if the behavior happened fairly regularly. If you've had multiple partners, try to think about how long you were with each partner, the number of sexual encounters you had with each, and try to get an accurate estimate of the total number of each behavior.

If the question does not apply to you or you have never engaged in the behavior in the question, mark "0." Please do not leave items blank.

Remember that in the following questions "sex" includes oral, anal, and vaginal sex and that "sexual behavior" includes passionate kissing, making out, fondling, petting, oral-to-anal stimulation, and hand-to-genital stimulation. Please consider only the last 6 months when answering and please be honest.

In the past six months:

1. How many partners have you engaged in sexual behavior with but not had sex with? Q1: _____
2. How many times have you left a social event with someone you just met? Q2: _____
3. How many times have you "hooked up" but not had sex with someone you didn't know or didn't know well? Q3: _____
4. How many times have you gone out to bars/parties/social events with the intent of "hooking up" and engaging in sexual behavior but not having sex with someone? Q4: _____
5. How many times have you gone out to bars/parties/ social events with the intent of "hooking up" and having sex with someone? Q5: _____
6. How many times have you had an unexpected and unanticipated sexual experience? Q6: _____
7. How many times have you had a sexual encounter you engaged in willingly but later regretted? Q7: _____

For the next set of questions, follow the same direction as before. However, for questions 8–23, if you have never had sex (oral, anal or vaginal), answer "0."

8. How many partners have you had sex with? Q8: _____

9. How many times have you had vaginal intercourse without a latex or polyurethane condom? Note: Include times when you have used a lambskin or membrane condom. Q9: _____
10. How many times have you had vaginal intercourse without protection against pregnancy? Q10: _____
11. How many times have you given or received fellatio (oral sex on a man) without a condom? Q11: _____
12. How many times have you given or received cunnilingus (oral sex on a woman) without a dental dam or “adequate protection” (a dental dam is a sheet of plastic or latex which goes over the genitals, to prevent direct fluid contact)? Q12: _____
13. How many times have you had anal sex without a condom? Q13: _____
14. How many times have you or your partner engaged in anal penetration by a hand (“fisting”) or other object without a latex glove or condom followed by unprotected anal sex? Q14: _____
15. How many times have you given or received analingus (oral stimulation of the anal region, “rimming”) without a dental dam or “adequate protection”(again, a dental dam is a sheet of plastic or latex which goes over the genitals, to prevent direct fluid contact)? Q15: _____
16. How many people have you had sex with that you know but are not involved in any sort of relationship with (i.e., “friends with benefits”, “fuck buddies”)? Q16: _____
17. How many times have you had sex with someone you don’t know well or just met? Q17: _____
18. How many times have you or your partner used alcohol or drugs before or during sex? Q18: _____
19. How many times have you had sex with a new partner before discussing sexual history, IV drug use, disease status and other current sexual partners? Q19: _____
20. How many times (that you know of) have you had sex with someone who has had many sexual partners? Q20: _____
21. How many partners (that you know of) have you had sex with who had been sexually active before you were with them but had not been tested for STDs/HIV? Q21: _____
22. How many partners have you had sex with that you didn’t trust? Q22: _____
23. How many times (that you know of) have you had sex with someone who was also engaging in sex with others during the same time period? Q23: _____

Approval Notice
Initial Review – Expedited Review

March 6, 2013

Desia Grace, M.A.
Psychology
53 Tarbell Spring Rd
Concord, MA 01742
Phone: (773) 909-9468

RE: **Protocol # 2013-0160**
“The Differential Roles of Social Support, Parental Styles and Childhood Maltreatment in the Development of Depression and Risky Sexual Behavior (re-submission of Protocol 2009-0023)”

Dear Ms. Grace:

Please note Appendix D is not necessary for this research as no data are being stored in a databank.

Members of Institutional Review Board (IRB) #2 reviewed and approved your research protocol under expedited review procedures [45 CFR 46.110(b)(1)] on March 6, 2013. You may now begin your research

Your research meets the requirement(s) for the following category - Expedited Review Approval Category 45 CFR 46.110(b)(1):

Protocol reviewed under expedited review procedures [45 CFR 46.110] Category: 7

(7) Research on individual or group characteristics or behavior (including but not limited to research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

Please note the following information about your approved research protocol:

<u>Protocol Approval Period:</u>	March 6, 2013 - March 6, 2014
<u>Approved Subject Enrollment #:</u>	282 (analysis of existing data only)
<u>Additional Determinations for Research Involving Minors:</u>	These determinations have not been made for this study since it has not been approved for enrollment of minors.
<u>Performance Sites:</u>	UIC
<u>Sponsor:</u>	None
<u>PAF#:</u>	Not Applicable
<u>Research Protocol(s):</u>	

- a) Social Support, Parenting Behaviors and Maltreatment Research Protocol;01/07/2013

Recruitment Material(s):

- a) No recruitment materials will be used-data analysis only.

Informed Consent(s):

- a) N/A-Data analysis of de-identified data only.

Please note the Review History of this submission:

Receipt Date	Submission Type	Review Process	Review Date	Review Action
02/18/2013	Initial Review	Expedited	03/06/2013	Approved

Please remember to:

→ Use your **research protocol number** (2013-0160) on any documents or correspondence with the IRB concerning your research protocol.

→ Review and comply with all requirements on the enclosure,
"UIC Investigator Responsibilities, Protection of Human Research Subjects"
(<http://tiger.uic.edu/depts/ovcr/research/protocolreview/irb/policies/0924.pdf>)

Please note that the UIC IRB has the right to ask further questions, seek additional information, or monitor the conduct of your research and the consent process.

Please be aware that if the scope of work in the grant/project changes, the protocol must be amended and approved by the UIC IRB before the initiation of the change.

We wish you the best as you conduct your research. If you have any questions or need further help, please contact the OPRS office at (312) 996-1711 or me at (312) 355-0816. Please send any correspondence about this protocol to OPRS at 203 AOB, M/C 672.

Sincerely,

Alison Santiago, MSW, MJ
IRB Coordinator, IRB # 2
Office for the Protection of Research Subjects

Enclosure(s):

1. UIC Investigator Responsibilities, Protection of Human Research Subjects

cc: Robin J. Mermelstein (Faculty Advisor), Psychology, M/C 275
Joe L. Martinez, Psychology, M/C 285

**Approval Notice
Continuing Review**

August 3, 2010

Desia Grace, M.A.
Psychology
1007 West Harrison Street
M/C 285
Chicago, IL 60612
Phone: (773) 909-9468

RE: **Protocol # 2009-0023**
**“The Differential Roles of Social Support, Parental Styles and Childhood Maltreatment
in the Development of Depression and Risky Sexual Behavior”**

Dear Ms. Grace:

Your Continuing Review application was reviewed and approved by the Expedited review process on August 2, 2010. You may now continue your research.

Please note the following information about your approved research protocol:

Please insert a unique footer on all consent documents that includes a brief document name, version number, date, and page numbers (second request).

Protocol Approval Period: August 13, 2010 - August 12, 2011
Approved Subject Enrollment #: 300 (150 subjects enrolled)
Additional Determinations for Research Involving Minors: These determinations have not been made for this study since it has not been approved for enrollment of minors.
Performance Site: UIC
Sponsor: None
Research Protocol:

- b) Differential Roles of Social Support, Parental Styles and Childhood Maltreatment in the Development of Depression and Risky Sexual Behavior

Recruitment Material:

- b) UIC Psychology Student Subject Pool procedures will be followed

Informed Consents:

- b) (no footer)
- c) Written Debriefing Form (no footer)

Your research continues to meet the criteria for expedited review as defined in 45 CFR 46.110(b)(1) under the following specific category:

(7) Research on individual or group characteristics or behavior (including but not limited to research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

Please note the Review History of this submission:

Receipt Date	Submission Type	Review Process	Review Date	Review Action
07/29/2010	Continuing Review	Expedited	08/02/2010	Approved

Please remember to:

→ Use your **research protocol number** (2009-0023) on any documents or correspondence with the IRB concerning your research protocol.

→ Review and comply with all requirements on the enclosure,
"UIC Investigator Responsibilities, Protection of Human Research Subjects"

Please note that the UIC IRB has the prerogative and authority to ask further questions, seek additional information, require further modifications, or monitor the conduct of your research and the consent process.

Please be aware that if the scope of work in the grant/project changes, the protocol must be amended and approved by the UIC IRB before the initiation of the change.

We wish you the best as you conduct your research. If you have any questions or need further help, please contact OPRS at (312) 996-1711 or me at (312) 996-2014. Please send any correspondence about this protocol to OPRS at 203 AOB, M/C 672.

Sincerely,

Sandra Costello
Assistant Director, IRB # 2
Office for the Protection of Research Subjects

Enclosures:

- 1. UIC Investigator Responsibilities, Protection of Human Research Subjects**
- 2. Informed Consent Documents:**
 - a) (no footer)
 - b) Written Debriefing Form (no footer)
- 3. Recruiting Material:**
 - a) UIC Psychology Student Subject Pool procedures will be followed

cc: Gary E. Raney, Psychology, M/C 285
Robin J. Mermelstein, Institute for Health Research and Policy, M/C 528

**Approval Notice
Initial Review (Response To Modifications)**

August 17, 2009

Desia Grace, M.A. Psychology
1007 West Harrison Street
M/C 285
Chicago, IL 60612
Phone: (773) 909-9468

RE: **Protocol# 2009-0023**
**"The Differential Roles of Social Support, Parental Styles and Childhood
Maltreatment in the Development of Depression and Risky Sexual Behavior"**

Dear Ms. Grace:

Your Initial Review application (Response To Modifications) was reviewed and approved by the Expedited review process on August 13, 2009. You may now begin your research.

Please note the following information about your approved research protocol:

Please remember to insert a unique footer on all consent documents, including a brief document name, version number, date, and page numbers.

Protocol Approval Period: August 13, 2009 - August 12, 2010

Approved Subject Enrollment #: 300

Additional Determinations for Research Involving Minors: These determinations have not been made for this study since it has not been approved for enrollment of minors.

Performance Site: UIC

Sponsor: None

Research Protocol:

- a) Differential Roles of Social Support, Parental Styles and Childhood Maltreatment in the Development of Depression and Risky Sexual Behavior

Recruitment Material:

- a) UIC Psychology Student Subject Pool procedures will be followed

Informed Consents:

- a) (no footer)
- b) Written Debriefing Form (no footer)

Your research meets the criteria for expedited review as defined in 45 CFR 46.110(b)(1) under the following specific category:

(7) Research on individual or group characteristics or behavior (including but not limited to. research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

Please note the Review History of this submission:

Receipt Date	Submission Type	Review Process	Review Date	Review Action
01/08/2009	Initial Review	Expedited	01/19/2009	Modifications Required
03/31/2009	Response To Modifications	Expedited	04/06/2009	Modifications Required
05/27/2009	Response To Modifications	Expedited	06/03/2009	Modifications Required
08/10/2009	Response To Modifications	Expedited	08/13/2009	Approved

Please remember to:

→ Use your **research protocol number** (2009-0023) on any documents or correspondence with the IRB concerning your research protocol.
→ Review and comply with all requirements on the enclosure,
"UIC Investigator Responsibilities, Protection of Human Research Subjects"

Please note that the UIC IRB has the prerogative and authority to ask further questions, seek additional information, require further modifications, or monitor the conduct of your research and the consent process.

Please be aware that if the scope of work in the grant/project changes, the protocol must be amended and approved by the UIC IRB before the initiation of the change.

We wish you the best as you conduct your research. If you have any questions or need further help, please contact OPRS at (312) 996-1711 or me at (312) 996-2014. Please send any correspondence about this protocol to OPRS at 203 AOB, M/C 672.

Sincerely,

Sandra K Costello

Sandra Costello

Assistant Director, IRB # 2
Office for the Protection of Research
Subjects

Enclosures:

- 1. UIC Investigator Responsibilities, Protection of Human Research Subjects**
- 2. Informed Consent Documents:**
 - a) (no footer)
 - b) Written Debriefing Form (no footer)

cc: Gary E. Raney, Psychology, M/C 285

Robin J. Mermelstein, Institute for Health Research and Policy, M/C 275

VITA

NAME: Desia Grace

EDUCATION: B.A., Psychology, University of Massachusetts at Amherst, Amherst, Massachusetts, 1998

M.A., Clinical Psychology, University of Illinois at Chicago, Chicago, Illinois, 2006

Ph.D., Clinical Psychology, University of Illinois at Chicago, Chicago, Illinois, 2013

PUBLICATIONS: Keenan, K., Jacob, S., Grace, D., & Gunthorpe, D. (2009). Context Matters: Exploring Definitions of a Poorly Modulated Stress Response. In S. Olson & A. Sameroff (Eds.), *Regulatory Processes in the Development of Behavior Problems: Biological, Behavioral, and Social-Ecological Interactions*. New York, NY: Cambridge University Press.

Keenan, K., Gunthorpe, D., & Grace, D. (2007). Parsing the relations between SES and stress reactivity: Examining individual differences in neonatal stress response. *Infant Behavior & Development*, 30(1), 134-145.

Keenan, K., Grace, D., & Gunthorpe, D. (2003). Examining stress reactivity in neonates: Relations between cortisol and behavior. *Child Development*, 74(6), 1930-1942.

Keenan, K., Gunthorpe, D., & Young (Grace), D. (2002). Patterns of cortisol reactivity in African-American neonates from low-income environments. *Developmental Psychobiology*, 41(3), 256-276.

PRESENTATIONS: Grace, D., Roesch, L., & Hankin, B. L. (2005, April). *An examination of social support networks in the development of psychopathology among adolescents*. Poster presented at the Society for Research in Child Development, Atlanta, GA.

Grace, D., Hankin, B. L., Abramson, L. Y., Hogan, M., & Rose, D. (2004, November). *Pathways from childhood maltreatment to adult depression: Examining the role of parenting behavior in a prospective study*. Poster presented at the Association for Advancement of Behavior Therapy, New Orleans, LA.

Grace, D., Hankin, B. L., Abramson, L. Y., Hogan, M., & Rose, D. (2004, October). *Childhood maltreatment, parental behavior, and adult depression: Examining moderating and direct effect*

processes in a prospective study. Poster presented at the Society of Research in Psychopathology Conference, St. Louis, MO.

Grace, D., Hankin, B. L., Abramson, L. Y., Hogan, M., & Rose, D. (2004, May). *Childhood maltreatment and depression: The role of parenting styles in the family context*. Poster presented at the Society for Life History Research on Psychopathology Conference, Charleston, SC.

Grace, D., & Gunthorpe, D. (2003, August). *Prenatal exposure to stress and neonatal stress reactivity*. Poster presented at the American Psychological Association 111th Annual Convention, Toronto, Canada.

Grace, D., & Gunthorpe, D. (2003, August). *Social support moderates the impact of childhood sexual abuse on adult psychological functioning*. Poster presented at the 8th Annual Victimization of Children & Youth Conference, Portsmouth, NH.

Grace, D., & Gunthorpe, D. (2002, July). *Neonatal factors related to infant readiness*. Poster presented at the Head Start's Sixth National Research Conference, Washington, DC.

Keenan, K., Grace, D., & Gunthorpe, D. (2002, July). *Cortisol and behavioral regulation in the first years of life: Markers of early disruptive behavior problems*. Paper presented at the Meeting of the International Society for Research on Aggression, Montreal, CA.

Keenan, K., Grace, D., & Gunthorpe, D. (2002, November). *Examining relations between biological and behavioral indices of stress reactivity in African-American neonates*. Paper presented at the Meeting of the International Society for Developmental Psychobiology, Orlando, Florida.

Keenan, K., Grace, D., & Gunthorpe, D. (2002, September). *Responsive caregiving in the context of poverty*. Paper presented at the Meeting for the Society of Life History Research, New York City, New York.

Keenan, K., Gunthorpe, D., & Young (Grace), D. (2001, June). *Stability in cortisol reactivity in the first years of life: A marker for early onset psychopathology*. Paper presented at the Meeting of the International Society for Research in Child and Adolescent Psychopathology, Vancouver, CA.