2009

Exploring the relationship between childhood sexual abuse and borderline personality features using social support as a moderating factor

Meredith B. Elzy
University of South Florida

Exploring the Relationship between Childhood Sexual Abuse and Borderline Personality Features Using Social Support as a Moderating Factor

by

Meredith B. Elzy

A thesis submitted in partial fulfillment
of the requirements for the degree of
Master of Arts
Department of Psychology
College of Arts and Sciences
University of South Florida

Major Professor: Bill Kinder, Ph.D.
Vicky Phares, Ph.D.
Jennifer Bosson, Ph.D.
Colleen Clark, Ph.D.

Date of Approval:
January 23, 2009

Keywords: Borderline Personality Disorder, Childhood Trauma, Support Resources

Table of Contents

List of Tables

Exploring the Relationship between Childhood Sexual Abuse and Borderline Personality Features Using Social Support as a Moderating Factor

Meredith B. Elzy

ABSTRACT

The relationship between childhood maltreatment and Borderline Personality Disorder (BPD) is a prominent issue in the etiological research on BPD. This study further explored the relationship between CSA and the development of borderline personality features while evaluating the moderating role of a primary social support source. The Inventory of Altered Self-Capacities (IASC) (Briere, 2000) was used to measure borderline features of participants in this study, a slightly modified version of the Early Sexual Experiences (ESE) questionnaire (Bartoi & Kinder, 1998) was used to evaluate childhood sexual abuse, and the Quality of Relationships Inventory (Pierce, Sarason, & Sarason, 1991) as well as the Unsupportive Social Interactions Inventory (Ingram, Betz, Mindes, Schmitt, & Smith, 2001) was used to measure social support variables. Consistent with previous research in this area, childhood sexual abuse and low social support were both positively correlated with borderline personality features. It was hypothesized that the presence of a supportive relationship at the time the abuse occurred would moderate the relationship between childhood sexual abuse and borderline features. This moderation hypothesis was not supported in the current study, but possible explanations for these findings are explained. Future research is needed in this area to continue and explore this relationship. It is suggested that longitudinal designs will be the

next method of advancing the research in the development of borderline personality disorder and the prevention of the disorder.

Introduction

The relationship between childhood maltreatment and Borderline Personality Disorder (BPD) is a prominent issue in the etiological research on BPD. Despite the magnitude of research in this area, there is still little consensus regarding this relationship. Multiple perspectives have surfaced in response to this question: some emphasize the prevalence of childhood maltreatment in patients with BPD and some minimize the relationship. While a strong emphasis on childhood maltreatment remains, other perspectives are gaining momentum in explaining why some people who are not abused or neglected develop BPD and why some childhood victims do not develop BPD.

Borderline Personality Disorder is described as "a serious mental disorder with a characteristic pervasive pattern of instability in affect regulation, impulse control, interpersonal relationships, and self-image" (Lieb, Zanarini, Schmahl, Linehan, & Bohus, 2004). People who suffer from the disorder show marked disturbances in their daily functioning, and the disorder is believed to impact approximately 1.8% of people in the United States (Swartz, Blazer, & Winfield, 1990). It is also a disorder with substantial social implications as well because it leads psychiatric disorders in the use of community mental health resources (American Psychiatric Association, 2000; Bender, Dolan, Skodal, Sanislow, Dyck, McGlasgan, Shea, Zanarini, Oldham, & Gunderson, 2001).

Researchers are working to discover specific variables that correlate with the development of BPD. Bandelow, Krause, Wedekind, Broocks, Hajak, and Ruther (2005) conducted a study that compared the childhood environment and experiences of a group

of adults diagnosed with BPD (N = 66) to a non-psychiatric control group (N = 109) matched for age and gender. They used logistic regression to analyze the contribution of seven factors in the development of BPD and found several significant differences between the BPD patients and the non-psychiatric controls. They found associations between the development of BPD, childhood sexual abuse and "grossly deranged family environments, characterized by separation from parents, growing up in foster homes, adoption, criminality or violence in the family, inappropriate parental rearing styles, and lack of loving care" (Bandelow, et al., 2005, p. 176).

Childhood Sexual Abuse and BPD

The most prevalent literature regarding the etiology of BPD is in the area of childhood abuse, and more specifically, childhood sexual abuse (CSA). CSA was defined in this study as any unwanted sexual experience (including genital manipulation, oral sex, anal intercourse, vaginal intercourse, forced touch, and violating touch) before the age of 16 or any sexual experiences with someone at least 5 years older than the individual before the age of 16 (Bartoi & Kinder, 1998). Previous researchers have found that childhood sexual abuse is commonly associated with the development of BPD (Katerndahl, Burge, & Kellogg, 2005; McLean & Gallop, 2003; Ogata et al., 1990; Soloff, Lynch, & Kelly, 2002; Trull, 2001; Weaver & Clum, 1993; Zanarini, Yong, & Frankenburg, 2002). One study found that 92.1% of a sample of 290 inpatients with BPD reported some form of childhood maltreatment, with 62.4% of them endorsing sexual abuse victimization (Zanarini, Yong, Frankenburt, Hennen, Reich, Marino, & Vujanovic, 2005). Another team of researchers (Bradley, Jenei, & Westen, 2005) examined the relationship between borderline personality features in adult patients and factors that have

been shown to correlate with its development: family environment, childhood sexual abuse, childhood physical abuse, and a history of parental psychopathology. Based on clinicians' ratings of their patients, these researchers found significant correlations between borderline personality features and family stability, family warmth, relationship with parents, childhood sexual abuse, childhood physical abuse, parental alcohol abuse, and parental anxiety disorders. Furthermore, a stepwise regression demonstrated that 17% of the variance in BPD ratings was accounted for by family environment, lengthy separations, parental psychopathology, and childhood abuse.

Some studies have specifically investigated BPD occurrence among samples of sexual abuse victims. In one sample of 100 women who were victims of childhood sexual abuse, 29.3% met criteria for BPD (Katerndahl, Burge, & Kellogg, 2005). Yen, et.al. (2002) found that 91.6% of the 167 BPD patients in their sample disclosed a specific trauma, with 55.1% of them reporting physical force/ unwanted sexual contact, 36.5% reporting rape, and 13.3% reporting that they witnessed sexual abuse. Fossati, Madeddu, & Maffei (1999) conducted a meta-analysis to examine the effect size between BPD and childhood sexual abuse by using 21 studies that reported on this relationship. They found a moderate effect size (r = .279) between CSA and BPD, therefore concluding that a relationship does exist. However, they believed that the relationship has been over represented in the literature and that other moderating variables may be more significant in the development of BPD (Fossati, et al., 1999). One possibility for the wide range in prevalence rates seen in these examples is the variance in BPD symptom severity among samples.

Other researchers have looked at specific factors regarding sexual abuse victimization and how these are related to BPD symptomatology (Westen et al., 1990; Wyatt & Newcomb, 1992). In the study mentioned above by Zanarini et al., 2005, they found an extremely high proportion of their sample of BPD inpatients to report childhood sexual abuse. The authors emphasized the relationship between the severity of the abuse experienced by this sample and the high prevalence of BPD symptoms. They reported that their sample was a severely abused population: over 50% reported being sexually abused at least once a week for a minimum of one year by two or more perpetrators who were either a family member or a close acquaintance. In addition, 82% of the BPD patients reported chronic abuse patterns and nearly 80% of them reported sexual penetration (Zanarini, et al., 2005). The research that exists in this area highlights the need to look more specifically at the relationship between severity of CSA and severity of BPD traits. In the current study, it is hypothesized that this relationship will appear. However because the participants in this study are not from a clinical population, this relationship will most likely be minimized.

While most existing research leads to a conclusion that a relationship does exist between BPD and CSA, it is also clear that not everyone who is sexually abused as a child will develop BPD (Fossati, Madeddu, & Maffei, 1999; Lieb et al., 2004). There is a relative dearth in the literature regarding potential protective factors despite research showing that between 20-50 percent of children who are sexually abused do not experience negative mental health outcomes (Spaccarelli, 1994). One protective factor that has received some attention in the literature is social support.

Social Support & Childhood Sexual Abuse

A consistent finding in the research on CSA is that victims need social support and resources to help them reduce the stress associated with the abuse (Lovett, 2004; Palmer, et. al., 1999). However, the definition of social support and the degree to which it acts as a protective factor in the development of adult psychopathology is less consistent from one study to another.

Some researchers have looked more generally at resiliency factors for CSA victims by examining multiple variables simultaneously such as abuse characteristics, coping strategies, problem solving-strategies, cognitive appraisals, and social support (Esposito & Clum, 2002; Runtz & Schallow, 1997; Spaccarelli, 1994; Spaccarelli & Kim, 1995). In one such study that used structural equation modeling to examine these factors as mediators and moderators among CSA and child physical abuse victims, 55% of the variance was accounted for by social support. However, they also found that 90% of the variance in the social support construct was not accounted for by the variables in their study (Runtz & Schallow, 1997). In this study they examined the general level of support provided by family and friends. This broad category of support is allowing for the interactions of many other variables and makes it difficult to draw conclusions regarding the importance of social support for this population.

Esposito and Clum (2002) looked at the relationship between CSA, childhood physical abuse, social support, problem-solving skills, and suicidal thoughts and behaviors in a juvenile delinquent population. They found evidence to support their hypothesis that social support would moderate the relationship between childhood maltreatment and suicidal thoughts and behaviors. The authors' predictor variables (CSA,

childhood physical abuse, problem-solving skills, and social support) accounted for 11% of the variance in suicidal severity, with sexual abuse ($\beta = .28$, $p < .01$) and sexual abuse x social support satisfaction ($\beta = -.27$, $p < .01$) demonstrating the largest contributions to the variance. In subsequent one-way ANOVA analyses, participants in the high sexual abuse, low social support group demonstrated significantly more suicidal thoughts and behaviors than participants in the low sexual abuse groups and the group with high sexual abuse, high social support, $F(3, 196) = 7.69$, $p < .01$. Again, social support was measured in a general context in this study, and the authors recognized that their measurement of social support was not indicative of the support the child experienced at the time of the abuse. The results of Esposito and Clum's (2002) study demonstrate a need for continued exploration in the protective features of social support among this population.

Other studies have looked solely at social support as a moderating variable between CSA and adult psychological adjustment without examining individual differences in cognition and coping (Hyman, Gold, & Cott, 2003; Testa, Miller, Downs, & Panek, 1992). As with the other studies mentioned above, Hyman, Gold, and Cott (2003) investigated social support as a global measure of participant's perceived current level of support. They found that social support accounted for 11.7% of the variance in PTSD symptoms among their female outpatient sample indicating that this may act as a protective factor for CSA victims. In a similar analysis, another group of researchers found that positive social support surrounding abuse disclosure moderated the relationship between CSA and decreased psychological functioning (Testa, Miller, Downs, & Panek, 1992). However, this moderation effect was significant for the 203 women in the comparison group and not found for the 272 women who were currently

receiving therapy. The two groups differed on abuse variables, family background, and dysfunction variables, and the statistical analyses conducted did not control for the abuse differences. This may have confounded the results of this study.

This relationship between CSA and social support has important implications for BPD. A majority of the literature on the etiology of BPD continues to emphasize early family environmental factors. The family environment perspective (Levy, 2005) considers the development of BPD in the context of attachment theory by emphasizing the importance of a secure attachment in the development of a healthy self-concept and a positive view of interpersonal relationships. If an infant or child sees others as unreliable and uncaring (i.e., if the mother was unresponsive to the child's needs) this can impact personality development and relationship formation.

In addition to parental attachment, it is believed that the degree of autonomy and acceptance that a child is allowed may also contribute to maladaptive personality traits (Linehan, 1993; Ryan, 2005; Westen, Nakash, Thomas, & Bradley, 2006). For example, if children are given too much autonomy with little supervision and support, they may develop the belief that they are alone and learn that they can only rely on themselves to fulfill their needs. On the opposite end of the spectrum, children may not be allowed enough autonomy and develop a personality that is overly dependent on other people. This dependence impedes the development of self-efficacy and these children will not believe they are capable of achieving their goals. In addition, as they grow older their interpersonal relationships will be impacted because their expectations of other people will be unrealistic. Both of these scenarios could be a basis for developing BPD (Ryan, 2005).

Similarly, in a transactional model that depicts the relationship between emotional dysregulation and family environment, this lack of autonomy may result from what is termed an "invalidating environment" (Fruzzetti, Shenk, & Hoffman, 2005; Linehan, 1993). This type of environment is characterized by children experiencing a lack of voice for their feelings or thoughts due to a perception that they are not listened to or they are ridiculed. It is proposed that an "invalidating environment" exists as a cycle: this environment may cause a child to become more sensitive to the rejection therefore perceiving it more often. It is generally believed that this environment is conducive to the development of BPD (Fruzzetti, et al. 2005; Linehan, 1993).

A victim of childhood sexual abuse may be at increased risk of being in an invalidating environment (Fruzzetti, Shenk, & Hoffman, 2005; Linehan, 1993). Roesler (1994) examined the effect of sexual abuse disclosure on the psychological functioning of 178 victims of CSA and found that a negative reaction to the disclosure, irrespective of when the disclosure took place, was a significant predictor of psychological symptom severity in adulthood. For victims who disclosed as children, the reaction to the disclosure mediated the effect of physical force on psychological symptoms ($\chi^2 = 37.5$, $p<.002$, GFI = .934). The author concluded that validating and supportive messages may be protective factors in the development of psychological functioning. The current study seeks to explore this relationship by asking participants' to evaluate the unsupportive responses (i.e., distancing, bumbling, minimizing, blaming) they received from their primary source of social support during painful, stressful life events (Ingram et. al., 2001).

The present study also seeks to incorporate these aspects of social development by measuring the participant's overall perception of her primary supportive relationship. The perception of the quality of support provided will incorporate attachment, autonomy, and validation through the use of three subscales: support, conflict, and depth (Pierce, Sarason, & Sarason, 1991). In addition, the person who provided the child with the supportive relationship will be identified by the participant rather than the researcher. The deficits in patients with BPD are global in regards to relationship functioning and a lack of effective coping skills. Therefore, it seems logical to examine whether the presence of any primary source of social support at the time the abuse occurred could help protect against the development of borderline personality traits.

While other studies have looked at parental support among sexually abused children (Lovett, 2004; Runtz & Schallow, 1997; Sparccarelli & Kim, 1995) and among BPD patients (Bradley, Jenei, & Westen, 2005; Johnson et al., 2002; Zweig-Frank & Paris, 1991), it is important to recognize that parental support may be impacted by the high prevalence of childhood sexual abuse that occurs within the family. One study (Bandelow, et al., 2005) found that 59.1% of the participants in their sample who were sexually abused as children were abused by a family member (30.3%) or a family acquaintance (28.8%). It is important to look at the social support available to CSA victims beyond the support provided by parents. Even if a parent is unavailable to provide the necessary support, it may be possible that other support sources can compensate for this deficit. No studies to date have looked at the presence of a single participant selected source of primary support for an individual who was sexually abused

as a child. The current study seeks to explore the quality of this primary source of social support and its relationship with the development of borderline personality features.

In summary, the relationship between CSA and BPD appears to exist, but the reasons for the variation in the strength of this relationship in the research remains unknown. It is possible that a less biased definition of social support that allows the participant to select their primary support source may show that social support has a moderating effect on this relationship. The nature of the responses an individual receives from their primary source of support is also important to consider in the development of BPD as an invalidating environment seems to be highly correlated with the disorder. Both of these aspects of social support are evaluated in the current study.

Hypotheses

This study further explores the relationship between CSA and the development of borderline personality features while evaluating the moderating role of a primary social support source. To accomplish this goal, the study tested five hypotheses.

1. It was hypothesized that participants who were victims of childhood sexual abuse would demonstrate more borderline features than those who were not abused.
2. It was hypothesized that participants who report higher levels of support by their primary support source at the time the abuse occurred would report fewer borderline features.
3. It was hypothesized that participants who perceive that they received more unsupportive social responses from their primary support source would report more borderline features.

4. Participants who reported both higher levels of support by their primary support source at the time of the abuse and less unsupportive responses would report less borderline features than those who only reported higher levels of support or less unsupportive responses.
5. It was hypothesized that the presence of a supportive relationship at the time the abuse occurred would moderate the relationship between childhood sexual abuse and borderline features.

Method

Participants

Two hundred and ninety females were recruited for participation in this study through the undergraduate research pool in the University of South Florida psychology department. This study was limited to female participants because of the disproportionate number of women identified with Borderline Personality Disorder (American Psychiatric Association, 2000) and CSA as compared to males. The only other inclusion criterion for this study was that participants needed to be between the ages of 18 and 35.

The participants ranged in age from 18 to 35 years old with a mean age of 20.36 *(SD = 2.41)*. The majority of the participants identified themselves as Caucasian (53.3%), while 19.2% of them identified as African American, 15% as Latino (Hispanic), 4.9% as Multiracial, 4.2% as Asian American, and 3.5% as a group other than those listed on the demographic form. Seventeen participants (5.9%) reported the involvement of the department of social services in their family of origin, and three participants (1%) lived in an out-of-home placement at some point during their childhood.

Informed consent was obtained and the information they shared during their participation in this study remained confidential. Course credit was granted to the participants and they were given a list of possible referral sources following the study.

Measures

Demographic items. Information was be gathered regarding the participants' age, ethnic/racial identity, current romantic relationship status, major life experiences during childhood, childhood living situation(s), and a brief history of special academic placements (Appendix A). The questions regarding the final three categories listed above were taken from the demographic section of the William S. Hall Psychiatric Institute Psychological Trauma and Resources Scale (Holmes, et.al., 1997).

Borderline personality traits. In this study, borderline personality features were measured using the Inventory of Altered Self-Capacities (IASC; Briere, 2000). This measure is a 63-item self-report questionnaire comprised of seven scales which assess domains consistent with Borderline Personality Disorder. The scales are Interpersonal Conflicts (IC), Idealization-Disillusionment (ID), Abandonment Concerns (AC), Identity Impairment (II – with a self awareness subscale [II-S] and an identity diffusion subscale [II-D]), Susceptibility to Influence (SI), Affect Dysregulation (AD – with an affect skill deficits [AD-S] subscale and an affect instability [AD-I] subscale), and Tension Reduction Activities (TRA).

This scale is intended to be used for both clinical and research purposes and has demonstrated good psychometric properties with a standardization sample as well as clinical and university validation samples. Alpha coefficients for the clinical sample range from .86 (TRA) to .96 (II), and for the university sample, the range is .82 (TRA) to .93 (AD and AC). The measure was also tested for convergent and discriminant validity by using the PAI Borderline Features (BOR) and the PAI Antisocial Features (ANT)

respectively. The IASC items were found to correlate strongly with the BOR items (r = .80 to .82) and there was no correlation with the ANT items (Briere, 2000).

Childhood sexual abuse. A slightly modified version of the Early Sexual Experiences (ESE) questionnaire (Bartoi and Kinder, 1998) was used to evaluate childhood sexual abuse (Appendix B). This scale contains 16 items that identify and evaluate the experiences of participants who were sexually abused before the age of 16. It provides an objective severity score based on the number of items 1 through 10 endorsed by the participant. In addition to the ten sexual experience items, the twelfth item of the scale identifies participants who identify themselves as childhood sexual abuse victims. Finally, an additional item (13) asks the participant to rank on a scale of 1 to 10 the impact that the abuse experience had on her life. In this study, the objective experience of childhood sexual abuse was operationally defined as the endorsement of one or more of the items 1 through 10 on this scale. The subjective experience of childhood sexual abuse was operationally defined as the participant's score on items 11 and 12. Items 13 and 14 ask the participant about psychological treatment experiences either related to or unrelated to the CSA experience.

In addition to the ESE questionnaire, participants were asked to complete two additional items taken from the Life Stressor Checklist-Revised (LSC-R; McHugo, Caspi, Kammerer, & Mazelis, 2005). These questions were asked to gain information regarding age of onset and the frequency that the sexual abuse occurred (Appendix C).

Social support source. The Quality of Relationships Inventory (QRI) (Pierce, Sarason, & Sarason, 1991) was used to measure social support in this study (Appendix D). This measure was selected because it allows for the evaluation of one source of

support and it allowed for the participant to select the relationship she identified as her primary source of social support. The inventory consists of 25 items that break down into three scales: support (7 items), conflict (12 items), and depth (6 items). The support scale items targeted participant's perception of the availability and reliability of the support source. The conflict scale items measured the amount of conflict that the relationship causes the participant, and the depth scale items examined the participant's perceptions that the relationship is positive and important (Verhofstadt, Buysse, Rosseel, & Peene, 2006). Two separate factor analyses support this three factor structure of the QRI (Pierce, Sarason, & Sarason, 1991; Verhofstadt, Buysse, Rosseel, & Peene, 2006).

When the QRI was used to measure internal consistency across a sample of adolescents and their parents, the average internal consistencies were 0.80 for the support scale, 0.89 for the conflict scale, and 0.69 for the depth scale (Ptacek, Pierce, Eberhardt, & Dodge, 1999). In another study, the internal consistency was similar with Cronbach's alphas ranging from 0.70 to 0.94 for the three scales (Pierce et al., 1997). The QRI also demonstrates an ability to discriminate the relationship specific support from more general social support (Pierce, Sarason, & Sarason, 1991).

The Unsupportive Social Interactions Inventory (USII) (Ingram et al., 2001) was used to measure participants' perceptions of unsupportive responses to their sexual abuse experience(s) (Appendix E). This is a relatively new measure designed to allow for a comprehensive measure of unsupportive social responses following a specific stressor. A factor analysis revealed four domains that the inventory measures: Distancing described as emotional and behavioral disengagement, Bumbling described as uncomfortable, awkward, and perhaps inappropriate responses, Minimizing described as not giving

adequate value to an individual's experience, and Blaming described as providing criticism and finding fault with the individual. This scale has demonstrated good reliability both in regards to total scale with Chronbach's alpha values ranging from .86 to .89 and individual subscales with Chronbach's alpha values ranging from .73 to .85 (Figueiredo, Fries, & Ingram, 2003; Ingram et al., 2001).

Procedures

Questionnaires were distributed in packets to participants in a group setting. To create a safe environment for self-disclosure, participants were spaced apart and asked to remain silent while completing the items. Participants began by signing the informed consent form and these were collected before they began completing the measures contained in their packets. The informed consent forms were then shuffled and kept in a separate pile to ensure participants' confidentiality by shielding their identity from the researcher. The order of the questionnaires was randomized within the packet with the exception of the demographic questionnaire which was given first to all participants. Once participants completed the questionnaires, they turned in their questionnaire packets, were given a list of appropriate referral sources, and thanked for their participation.

Planned Analyses

Initially, descriptive statistics were calculated for each variable. Means, standard deviations, and ranges were calculated for continuous variables (i.e., age, objective CSA experience, subjective CSA experience, perceived childhood social support, unsupportive social responses, and borderline personality features). For categorical variables (i.e., race/ethnicity, and primary source of support), frequencies and percentages were

calculated. Zero-order correlations and analyses of variance (ANOVA's) were performed in order to determine the relationship between demographic variables and the presence of borderline personality features. It was planned that any variables found to be significantly correlated with the criterion variable would be entered in the first step of the hierarchical regression analyses in order to prevent a potentially confounding effect.

Pearson's correlation coefficients were calculated to examine the relationship between the objective CSA experience, the subjective CSA experience, the childhood social support rating, and the unsupportive social responses. It was predicted that the objective and subjective CSA scores would be significantly correlated with one another and that these scores would moderately correlate with the perceived childhood social support rating and the unsupportive social response rating. Correlation coefficients would also be calculated to examine the relationship between each independent variable and the criterion variable, borderline personality features. It was predicted that both CSA scores, childhood social support, and the unsupportive social response ratings would be significantly correlated with borderline personality features.

Hierarchical regression procedures were conducted in order to test whether childhood social support and unsupportive social responses at the time of the abuse moderated the association between the experience of CSA and the criterion variable. Control variables, if identified as necessary, would be entered in the first step; childhood social support, unsupportive social responses, and CSA severity would be entered in the second step; childhood social support X unsupportive social responses, childhood social support X CSA, and unsupportive social responses X CSA would be entered in the third step; and the CSA severity X childhood social support X unsupportive social responses

would be entered in the fourth step. The R2Δ value at the third and fourth steps were expected to be significant, which would confirm the hypothesis that childhood social support at the time of the abuse moderated the relationship between CSA and borderline personality features. Two hierarchical regression analyses would be conducted to examine the variance accounted for by social support in relation to the objective CSA experience compared to the subjective CSA experience.

Results

Borderline Personality Traits

The total scores on the IASC ranged from 66.0 to 281.0 with a mean score of 125.34 *(SD = 41.93)*. Based on clinical T-score conversions found in the IASC user's manual, the mean score for the Interpersonal Conflicts (IC) subscale is indicative of clinical significance *(M = 21.06, SD = 6.65, T-score = 72)* and the mean scores on the Idealization-Devaluation (ID; *M = 18.76, SD = 7.30, T-score = 67*), Abandonment Concerns (AC; *M = 18.61, SD = 8.41, T-score = 66*), Identity Impairment (II; *M = 19.22, SD = 8.50, T-score = 68*), and Affect Dysregulation (AD; *M = 18.89, SD = 8.70, T-score = 68*) subscales are all at a level indicative of some self-capacity disturbance. The mean scores for the Susceptibility to Influence (SI; *M = 15.03, SD = 5.98*) and Tension Reduction Activities (TRA; *M = 13.56, SD = 5.10*) were in the normative range.

Childhood Sexual Abuse

The objective scores from the ESE-R indicated that 39.7% of the participants in this study endorsed at least one incidence of CSA before the age of 16, with 25.1% of them endorsing two or more incidences. The most frequently endorsed item among those participants who were objectively classified as sexually abused was "being touched in a way that made you feel violated" (89.5%) and other frequently endorsed items were "someone at least 5 years older than you ever touch your genitals or breasts" (46.5%), "forced into genital manipulation by anyone of any age" (28.9%), and "touch the genitals of someone at least 5 years older than you" (28.1%). While close to 40% of the

participants were objectively classified as having experienced CSA, only 10% of the participants subjectively identified as victims of CSA as identified by item 12 on the ESE-R. Among those participants who were identified as having experienced CSA by the objective score, only 25.4% of them identified themselves as victims of CSA.

In addition to the ESE-R, CSA information was also gathered using the LSC-R. Frequency data for this scale revealed that 72 participants (24.9%) reported having been touched or forced to touch someone else in a sexual way because they felt forced or threatened. Of these 72 participants, 8 (11.1%) of them reported this happening for the first time between the ages of 0 and 5, 25 (34.7%) between the ages of 6 and 10, 14 (19.4%) between the ages of 11 and 13, 21 (29.2%) between the ages of 13 and 17, and 3 (4.2%) when they were 18 or older. In regards to repetition of the abuse, 44.6% of them said that this experience happened once, 40.0% disclosed that it happened a few times, and 15.4% said that it happened a lot of times.

In response to the second question on the LSC-R which asked participants if they ever felt forced or threatened into oral, anal, or genital sex, 37 participants responded in the affirmative. Of these 37 participants, one (2.8%) participant reported this happening for the first time between the ages of 0 and 5, one (2.8%) participant between the ages of 6 and 10, five (13.9%) participants between the ages of 11 and 13, 16 (44.4%) participants between the ages of 13 and 17, and 13 (36.1%) participants reported being over the age of 18. Forty percent of them reported that it happened once, 36.7% said that the abuse happened a few times, and 23.3% said that it happened a lot of times.

Social Support

The majority of participants identified their mother as their primary source of support (57.4%), and the second most common primary source of support reported was a friend (14.5%) as indicated by their responses on the QRI. Mean scores and standard deviations for the QRI subscales as well as the USII subscales can be found in Table 1. While there is no total score available for the QRI due to the bidirectional nature of the subscales, the mean total score for the USII was 16.68 *(SD = 12.20)*. Overall, the support subscale of the QRI indicated that this sample experienced high levels of social support at the time of the abuse experience or during another stressful time during their childhood (*M = 25.16, SD = 3.82*).

Table 1

Means and Standard Deviations for Social Support Subscales

Subscale	Mean	SD
QRI Support	25.16	3.82
QRI Conflict	22.14	7.04
QRI Depth	21.28	2.95
USII Distancing	1.81	3.42
USII Bumbling	3.44	3.53
USII Minimizing	8.20	5.74
USII Blaming	3.24	4.04

Correlational Analyses

Pearson's correlation coefficients were used to examine the relationship between the objective CSA experience, the subjective CSA experience, the childhood social support ratings, the unsupportive social responses, and borderline personality features (Table 2). As expected, the objective CSA score was positively correlated to the

subjective CSA score ($r = .650, p < .001$) and both scores were positively correlated to the IASC total score (objective: $r = .193, p < .001$; subjective: $r = .228, p < .001$). In regard to social support, the QRI conflict subscale ($r = .280, p < .001$) and the USII total score ($r = .274, p < .001$) were both positively correlated with IASC total scores. The QRI conflict subscale was marginally correlated with CSA objective score ($r = .126, p < .05$), but no other relationships were observed between the CSA and social support variables. These results indicated that objective CSA, subjective CSA, total unsupportive responses, and the QRI conflict subscale were all related to borderline personality features and subsequently entered into the regression analyses discussed below.

In addition to these hypothesized relationships, the relationships between borderline personality features and other demographic variables were also examined to eliminate any potential confounding effects. No significant differences were found among age ($r = -.084$, *ns*), socioeconomic status ($r = .066$, *ns*), or race and ethnicity ($F(5) = .131$, *ns*). Therefore, no demographic variables needed to be controlled for in the regression analyses.

Table 2

Correlation matrix of CSA variables, Social Support Variables, and Borderline Personality Features

	1	2	3	4	5	6	7	8	9	10	11
1. CSA obj.	--	.650***	-.034	.126*	-.099	.045	.044	-.103	-.092	-.057	.193**
2. CSA subj.		--	-.009	.095	-.049	.148*	.050	-.074	-.040	.002	.228***
3. QRI sup			--	-.273**	.665***	-.504**	.238***	.035	-.219**	-.265**	-.069
4. QRI con				--	-.036	.387***	.291***	.192**	.454***	.440***	.280***
5. QRI depth					--	-.347**	-.112	.071	-.067	-.116	-.030
6. USII dist						--	.352***	.202***	.460***	.635***	.122*
7 USII bumb							--	.495***	.264***	.643***	.333***
8 USII min								--	.495***	.799***	.187**
9 USII blam									--	.776***	.160**
10. USII total										--	.274***
11. IASC total											--

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

Regression Analyses

Hierarchical regression procedures were conducted in order to test whether childhood social support and unsupportive social responses at the time of the abuse moderated the association between the experience of CSA and the criterion variable. The QRI conflict subscale, total unsupportive social responses, and CSA severity were entered in the first step and the QRI conflict subscale X unsupportive social responses, QRI conflict subscale X CSA, and unsupportive social responses X CSA were entered in the second step. It was anticipated that the CSA severity X QRI conflict subscale X unsupportive social responses would be entered in the third step. Two hierarchical regression analyses were conducted to examine the variance accounted for by social

support in relation to the objective CSA experience compared to the subjective CSA experience.

In step one of the objective severity analysis, QRI conflict ($\beta = .168$), total unsupportive social responses ($\beta = .194$), and objective CSA ($\beta = .190$) significantly predicted borderline personality features ($R^2 = .136$, $p < .001$). However, in step two, the interactions between objective CSA and the support indices did not account for any additional variance beyond the variables entered in step one ($R^2_{change} = .010$, *ns*). The subjective severity analysis resulted in similar findings. QRI conflict ($\beta = .178$), total unsupportive social responses ($\beta = .185$), and subjective CSA ($\beta = .232$) significantly predicted borderline personality features ($R^2 = .153$, $p < .001$). In step two, the interactions between subjective CSA and the support indices did not account for any additional variance beyond the variables entered in step one ($R^2_{change} = .006$, *ns*). The three way interaction in step three was not conducted due to the insignificant findings for the second step of the analyses.

Discussion

Consistent with previous research in this area, childhood sexual abuse and low social support were both positively correlated with borderline personality features. As hypothesized, both objective and subjective childhood sexual abuse experiences were related to more borderline personality features. Similarly, unsupportive responses and higher levels of conflict in the participants' most supportive relationship were associated with higher levels of these features.

It was hypothesized that the presence of a supportive relationship at the time the abuse occurred would moderate the relationship between childhood sexual abuse and borderline features. This moderation hypothesis was not supported in the current study. Although the results of the regression analysis used to test this hypothesis were not statistically significant, there are several potential explanations for this finding that will be described below.

One notable finding in regards to social support can be found when examining the differences between positive support and negative support. While it was not found that high levels of social support were correlated with lower levels of borderline personality features in this sample, it was discovered that higher levels of unsupportive responses and higher levels of support conflict were both correlated with higher levels of borderline personality features. In brief, it appears that positive social support is unrelated to borderline personality features, while negative social support is related. This could indicate that social support does not act as a protective factor for childhood sexual abuse

victims, but a lack of adequate social support does place these children at higher risk for developing BPD.

This finding could have significant implications in attempts to prevent the development of BPD in childhood sexual abuse victims. It highlights the importance of identifying a child's primary support source, and working with that person to bolster supportive responses and minimize unsupportive responses. Parents, friends, and other important individuals in the child's life may believe that they are adequately responding to the child's experience because they are unaware that their responses are being perceived by the child as unsupportive. Training in supportive responses for the most important individuals in the child's life may be one of the best preventative efforts for BPD.

Previous research has examined the relationship between several correlates of BPD (i.e., CSA, maternal attachment, family environment, parental psychopathology) and borderline personality features. While the results are relatively consistent that these factors correlate with BPD when examined independently, these variables often overlap and it is difficult to differentiate which factors contribute the most to these relationships. One of the goals of the current study was to begin this process by examining whether the presence of a supportive relationship at the time of the CSA would buffer the development of borderline personality features. While this hypothesis was not supported in the present sample of participants, the hypothesized main effects for CSA and social support were supported.

It is plausible that CSA and social support have such a significant impact on borderline personality features independently that they do not contribute any unique

variance when examined together as an interaction. It might also be that CSA and social support are tapping into a similar construct. For example, it has been proposed that the relationship between CSA and BPD may be better explained by other factors such as invalidating responses (Linehan, 1993). If this is true, CSA may be just another example of an invalidating environment and not tapping into a unique construct beyond unsupportive responses. However, the lack of significant correlations between the CSA and social support variables in this study makes this alternative hypothesis unlikely.

Other possible explanations point to specific aspects of the current study that may have impacted the results. For example, it is possible that the range restriction of the current sample in the area of social support could be one reason that the hypothesis was not supported. This particular sample reported high social support scores and low mean scores on the unsupportive responses scale. This contributes to much less statistical power when looking for interaction effects in the regression analysis and may explain the lack of a statistically significant finding. It is possible that this range restriction occurred as a result of asking participants to self-identify their primary source of support. Participants were likely to rate this relationship as supportive unless they feel that they had no person who supported them during the specified time in their life. The design for participants to self select a support person was a novel approach in this area of research. Therefore, this may help explain why the findings of this study are inconsistent with studies that examine a particular family member's response to reported sexual abuse (Roesler, 1994).

This range restriction could be a true reflection of the sample characteristics, or it could be due to a lack of sensitivity among the social support measures utilized in this

study. The bidirectional scoring system of the QRI prohibited the use of a meaningful total score for social support, and this led to the use of individual subscales with a fewer number of items being entered into the analysis. This could cause the measure to have a more limited ability to validly measure the intended construct. While the USII has an established scoring system and good psychometric properties, it is worth noting that this scale is in developmental infancy. In future studies that look at these relationships between CSA, social support, and borderline personality features, it may be beneficial to use more well established measurements for social support.

Similarly, there may be more specific details regarding the CSA experience(s) that contribute to the relationship between these variables. For example, the age at which the abuse occurred might contribute to the availability of social support, the choice of primary support source, the responses surrounding the abuse experience, and the participant's recollection of their support network and responses. It is also possible that the severity of the CSA might be confounded with social support. For example, if the CSA experiences were repetitive, this could impact a participant's social support ratings and this was not examined in the current study.

Strengths and Limitations

In this study, CSA was measured as both an objective experience as well as a subjective experience. It is clear that these two forms of measurement significantly impacted the classification of participants and the subjective rating significantly decreased the number of participants who were identified as experiencing CSA. This is an important finding and should be acknowledged in any research that looks at CSA experiences. The wide variety of definitions for CSA and the plethora of measures used

to evaluate these experiences may be contributing to researchers having less reliable results. By using the subjective and objective measure in this study, it is obvious that even among the same sample, how you define sexual abuse experiences can lead to varied identification.

Another strength of this study was in the use of a scale designed to measure borderline personality features rather than focusing on the diagnosis of BPD. The IASC was sensitive to these traits in a non-clinical population as evidenced by the elevated scores on several of the measure's subscales. The use of a measure designed for the evaluation of borderline personality traits allowed for a wider range of these features as well. It increases the power of the analyses to be able to examine the traits on a continuum versus a categorical diagnosis.

As mentioned previously, this was the first study in this area to allow participants to self-select their primary source of support. While it is possible that this contributed to the range restriction of social support scores in the present sample, it is designed to improve the accuracy of a person's believed social support at the time of inquiry. If participants were only asked about the support they received from their mother at the time of the abuse, this may have led to a wider range of support scores, but it also would have omitted over 40% of the participants' primary source of support. If the goal is to determine the role that support may contribute in this relationship between CSA and BPD, this would be a crucial omission.

In addition to evaluating the level of support received from the primary source of support, this study also evaluated unsupportive responses received at the time of the abuse. In a sample with a wider range of support scores, this could have important

implications for examining the impact of different types of supportive or unsupportive responses following these experiences. This has the potential to expand on the definition of an "invalidating environment" following CSA experiences. It could also help further clarify whether it is appropriate to differentiate between the unique experience of CSA and more general unsupportive responses when examining psychological outcomes.

Although the intentions for the social support measures were as mentioned above, one limitation of the current study was definitely the range restriction in the social support scores. As explained above, there may be several different explanations for the relatively high levels of social support reported in this sample. It may also be a consequence of drawing a sample from a college population where the participants are more likely to come from supportive environments than a random community sample or a clinical sample.

Another limitation of the current study is the use of retrospective reporting. Participants could have less accurate memories due to the time lapse from childhood experiences to their current life stage. It is also plausible that a bidirectionality could exist between the presence of borderline personality features and the perceived memories of social support and CSA. These are common problems for the literature in this area that will most likely only be resolved through the use of longitudinal designs.

Future Directions

The goal of the current study was to begin examining the relationships that may exist between some of the correlates of BPD. While the results did not support all of the hypotheses, they did leave several unanswered questions to be explored through future research in this area. For example, it would be interesting to conduct this study with a

clinical sample of patients with BPD to determine whether the results of this study are generalizable outside of the particular sample used in this study. It might also be interesting to look at other variables that relate to BPD in adulthood to examine what relationships may exist between the correlates themselves. One example mentioned earlier would be to explore the relationship between CSA experiences and invalidating environment experiences.

This study also continues to demonstrate the need for consistency in measuring CSA. The results indicate that participants respond differently when they are asked to examine their experiences objectively and subjectively. By looking at two different measures of CSA, it is also evident that even the objective classification of abuse is dependent on how the abuse is operationally defined by the chosen measure. One future direction that could substantially impact the research in the area of CSA would be to develop a comprehensive assessment of CSA that objectively and subjectively measures specific abuse characteristics. The ESE-R is one step towards moving in this direction.

Finally, the most crucial need in this area of research is longitudinal design studies. In order to truly understand the development of a disorder, it is imperative to be able to track it across time. A plethora of research exists that examines the correlations between BPD and identified risk factors, so the literature supports the use of these types of techniques. This is the research that could truly propel this area and allow for the development of prevention strategies designed for BPD.

References

American Psychiatric Association (2000). *Diagnostic and statistical manual of mental disorders* (4th ed. Text revision). Washington, DC: Author.

Bandelow, B., Krause, J., Wedekind, D., Broocks, A., Hajak, G., & Ruther, E. (2005). Early traumatic life events, parental attitudes, family history, and birth risk factors in patients with borderline personality disorder and healthy controls. *Psychiatry Research, 134,* 169-179.

Bartoi, M. & Kinder, B. (1998). Effects of child and adult sexual abuse on adult sexuality. *Journal of Sex and Marital Therapy*, 24, 75-90.

Bradley, R., Jenei, J., & Westen, D. (2005). Etiology of borderline personality disorder: Disentangling the contributions of intercorrelated antecedents. *The Journal of Nervous and Mental Disease, 193*(1), 24-31.

Briere, J. (2000). *Inventory of altered self-capacities: Professional manual*. Lutz, FL: Psychological Assessment Resources, Inc.

Cohen, J. (1992). A power primer. *Psychological Bulletin*, 112, 155-159.

Esposito, C.L. & Clum, G.A. (2002). Social support and problem-solving as moderators of the relationship between childhood abuse and suicidality: Applications to a delinquent population. *Journal of Traumatic Stress, 15,* 137-146.

Fossati, A., Madeddu, F., & Maffei C. (1999). Borderline personality disorder and childhood sexual abuse: A meta-analytic study. Journal *of Personality Disorders, 13*(3), 268-280.

Fruzzetti, A., Shenk, C., & Hoffman, P. (2005). Family interaction and the development of borderline personality disorder: A transactional model. *Development and Psychopathology, 17*, 1007-1030.

Figueiredo, M., Fries, E., & Ingram, K. (2004). The role of disclosure patterns and unsupportive social interactions in the well-being of breast cancer patients. *Psycho-Oncology, 13*, 96–105.

Green-Bartoi, M., Kinder, B., & Tomianovic, D. (2000). Interaction effects of emotional status and sexual abuse on adult sexuality. *Journal of Sex and Marital Therapy, 26*(1), 1-24.

Hyman, S.M., Gold, S.N., & Cott, M.A. (2003). Forms of social support that moderate PTSD in childhood sexual abuse survivors. *Journal of Family Violence, 18*, 295-300.

Ingram, K., Betz, N., Mindes, E., Schmitt, M., & Smith, N. (2001). Unsupportive responses from others concerning a stressful life event: Development of the unsupportive social interactions inventory. *Journal of Social and Clinical Psychology*, *20*(2), 173-207.

Johnson, J., Cohen, P., Could, M., Kasen, S., Brown, J., & Brook, J. (2002). Childhood adversities, interpersonal difficulties, and risk for suicide attempts during late adolescence and early adulthood. *Archives of General Psychiatry, 59*, 741-749.

Katerndahl, D., Burge, S., & Kellogg, N. (2005). Predictors of development of adult psychopathology in female victims of childhood sexual abuse. *The Journal of Nervous and Mental Disease, 193*(4), 258-264.

Kernberg, O.F. (1984). *Severe personality disorders: Psychotherapeutic strategies*. New Haven, CT: Yale University Press.

Leichsenring, F. (1999). Development and first results of the borderline personality inventory: A self-report instrument for assessing borderline personality organization. *Journal of Personality Assessment, 73*, 45-63.

Levy, K. (2005). The implications of attachment theory and research for understanding borderline personality disorder. *Development and Psychopathology, 17*, 959-986.

Lieb, K., Zanarini, M., Schmahi, C., Linehan, M., & Bohus, M. (2004). Borderline personality disorder. *Lancet, 364*, 453-461.

Linehan, M. (1993). *Cognitive-behavioral treatment of borderline personality disorder*. New York: Guilford Press.

Lovett, B. (2004). Child sexual abuse disclosure: Maternal response and other variables impacting the victim. *Child and Adolescent Social Work Journal, 21*, 355-371.

McHugo, G.J., Caspi, Y., Kammerer, N., & Mazelis, R. (2005). The assessment of trauma history in women with co-occurring substance abuse and mental disorders and a history of interpersonal violence. *The Journal of Behavioral Health Services & Research, 32*(2), 113-127.

McLean, L.M. & Gallop, R. (2003). Implications of childhood sexual abuse for adult borderline personality disorder and complex posttraumatic stress disorder. *American Journal of Psychiatry, 160,* 369-371.

Ogata, S., Silk, K., Goodrich, S., Lohr, N., Westen, D., Hill, E. (1990). Childhood sexual and physical abuse in adult patients with borderline personality disorder. *American Journal of Psychiatry, 147*, 1008-1013.

Pierce, G., Sarason, I., & Sarason, B. (1991). General and relationship-based perceptions of social support: Are two constructs better than one? *Journal of Personality and Social Psychology, 61(*6), 1028-1039.

Pierce, G., Sarason, I., & Sarason, B., Solky-Butzel, J., & Nagle, L. (1997). Assessing the quality of personal relationships. *Journal of Social and Personal Relationships, 14*(3), 339-356.

Pinkerton, J. & Dolan, P. (2007). Family support, social capital, resilience and adolescent coping. *Child and Family Social Work, 12*, 219-228.

Roesler, T.A. (1994). Reactions to disclosure of childhood sexual abuse: The effect on adult symptoms. *The Journal of Nervous and Mental Disease, 182*, 618-624.

Runtz, M.G. & Schallow, J.R. (1997). Social support and coping strategies as mediators of adult adjustment following childhood maltreatment. *Child Abuse and Neglect, 21*, 211-226.

Ryan, R. (2005). The developmental line of autonomy in the etiology, dynamics, and treatment of borderline personality disorders. *Development and Psychopathology, 17*, 987-1006.

Soloff, P., Lynch, K., & Kelly, T. (2002). Childhood abuse as a risk factor for suicidal behavior in borderline personality disorder. *Journal of Personality Disorders, 16*(3), 201-214.

Spaccarelli, S. (1994). Stress, appraisal, and coping in child sexual abuse: A theoretical and empirical review. *Psychological Bulletin, 116*, 340-362.

Spaccarelli, S., & Kim, S. (1995). Resilience criteria and factors associated with resilience in sexually abused girls. *Child Abuse & Neglect, 19*(9), 1171-1182.

Stader, S., Holmes, G., McNulty, G., Forand, A., & Myers, D. (2004). Comparison of scores for abused and nonabused young adults on the psychological trauma and resources scale. *Psychological Reports, 94*, 687-693.

Testa, M., Miller, B.A., Downs, W.R., & Panek, D. (1992). The moderating impact of social support following childhood sexual abuse. *Violence and Victims, 7*, 173-186.

Trull, T. (2001). Structural relations between borderline personality disorder features and putative etiological correlates. *Journal of Abnormal Psychology, 110*(3), 471-481.

Verhofstadt, L., Buysse, A., Rosseel, Y., & Peene, O. (2006). Confirming the three-factor structure of the quality of relationships inventory within couples. *Psychological Assessment, 18*(1), 15-21.

Weaver, T. & Clum, G. (1993). Early family environments and traumatic experiences associated with borderline personality disorder. *Journal of Consulting and Clinical Psychology, 61*(6), 1068-1075.

Weston, D., Ludolph, P., Misle, B., Ruffins, S., & Block, J. (1990). Physical and sexual abuse in adolescent girls with borderline personality disorder. *American Journal of Orthopsychiatry, 60*, 55-66.

Weston, D., Nakash, O., Thomas, C., & Bradley, R. (2006). Clinical assessment of attachment patterns and personality disorder in adolescents and adults. *Journal of Consulting and Clinical Psychology, 74*(6), 1065-1085.

Wyatt, G., & Newcomb, M. (1990). Internal and external mediators of women's sexual abuse in childhood. *Journal of Consulting and Clinical Psychology, 58*(6) 758-767.

Yen, S., Shea, M.T., Battle, C.L., Johnson, D.M., Zlotnick, C., Dolan-Sewell, R., Skodol, A.E., Grilo, C.M., Gunderson, J.G., Sanislow, C.A., Zanarini, M.C., Bender, D.S., Rettew, J.B., & McGlashan, T.H. (2002). Traumatic exposure and posttraumatic stress disorder in borderline, schizotypal, avoidant, and obsessive-compulsive personality disorders: Findings from the Collaborative Longitudinal Personality Disorders Study. *The Journal of Nervous and Mental Disease, 190*(8), 510-518.

Zanarini, M.C., Yong, L., Frankenburg, F.R., Hennen, J., Reich, D.B., Marino, M.F., & Vujanovic, A. (2002). Severity of reported childhood sexual abuse and its relationship to severity of borderline psychopathology and psychosocial impairment among borderline inpatients. *The Journal of Nervous and Mental Disease, 190*(6), 381-387.

Zanarini, Frankenburg, Reich, Hennen, & Silk (2005). Adult experiences of abuse reported by borderline patients and axis II comparison subjects over six years of prospective follow-up. *The Journal of Nervous and Mental Disease, 193*(6), 412-416.

Zweig-Frank, J., & Paris, J. (1991). Parents' emotional neglect and overprotection according to the recollections of patients with borderline personality disorder. *American Journal of Psychiatry, 148*, 648-651.

Appendices

Appendix A

Demographic Information

1. Age in years: _____

2. Preferred ethnic / racial designation:

   ❑ African-American (Black)
   ❑ Asian-American
   ❑ Caucasian (White)
   ❑ Latina (Hispanic)
   ❑ Multiracial
   ❑ Native American (Indian)

   Specify if not listed: _____

3. Current romantic relationship status:

   ❑ Single
   ❑ Married
   ❑ In a relationship
   ❑ Divorced
   ❑ Engaged

4. Check all the experiences you had before the age of 16:

   ❑ Hospitalization for physical illness
   ❑ Hospitalization for psychiatric illness
   ❑ Major accident or injury
   ❑ Handicap or disability
   ❑ Out-of-home placement
   ❑ Death of parent
   ❑ Parental separation or divorce
   ❑ Imprisonment of a parent
   ❑ Death of a sibling
   ❑ Loss of a sibling through separation or divorce
   ❑ Department of Social Services involvement
   ❑ Juvenile justice system involvement
   ❑ Other agency involvement (please specify _____)

5. Which of the following best describes your most typical living situation during each of the following age ranges (check all that apply):

	Birth to 6 Years	7-12 Years	13 Years & Older
With both natural parents	❑	❑	❑
With a natural parent & a step-parent	❑	❑	❑
With a single natural parent	❑	❑	❑
With an adoptive parent	❑	❑	❑

With a foster family	❑	❑	❑
With grandparents or other relatives	❑	❑	❑

6. Number of <u>younger</u> siblings living in the home during each of the following age ranges:

Birth to 6 years	7-12 Years	13 Years & Older
____	____	____

7. Number of <u>older</u> siblings living in the home during each of the following age ranges:

Birth to 6 years	7-12 Years	13 Years & Older
____	____	____

8. Check all special academic placements you had while in school:

❑ None
❑ Advanced Placement
❑ Gifted and Talented
❑ Educationally handicapped
❑ Learning disabled
❑ Homebound
❑ Vocational rehab
❑ Other (please specify _____)

9. While growing up, did you regularly attend a place of worship?

❑ Yes ❑ No

Appendix B

Early Sexual Experiences Survey (Bartoi & Kinder, 1998)

We would like to get an idea about the type of sexual experiences you may have had before the age of 16 (15 and younger). Please answer yes or no to the following questions in terms of that time.

Before the age of 16 (15 and younger)	No	Yes
1. Did you ever touch the genitals of someone at least 5 years older than you?	0	1
2. Did someone at least 5 years older than you ever touch your genitals or breasts (besides for a physical examination)?	0	1
3. Did you engage in oral sex (cunnilingus and/or fellatio) with someone at least 5 years older than you?	0	1
4. Did you engage in vaginal intercourse with someone at least 5 years older than you?	0	1
5. Did you engage in anal intercourse with someone at least 5 years older than you?	0	1
6. Were you forced into genital manipulation that was unwanted by anyone of any age?	0	1
7. Were you forced into oral sex (cunnilingus and/or fellatio) that was unwanted by anyone of any age?	0	1
8. Were you forced into anal intercourse that was unwanted by anyone of any age?	0	1
9. Were you ever touched in a way that made you feel violated?	0	1
10. Did you engage in any unwanted sexual activity while too intoxicated or influenced by drugs to give consent?	0	1
11. Do you consider yourself to be a victim/survivor of childhood sexual abuse?	0	1

12. If you answered "yes" to ANY of the above questions, please rate the extent to which your experience had a negative impact on your life (0 being no negative impact at all, 5 being a moderate negative impact, and 10 being a severe negative impact; CIRCLE ONE) 0 1 2 3 4 5 6 7 8 9 10

13. Did you ever receive psychological treatment?	0	1
14. If yes, was sexual abuse one of the issues covered?	0	1

Appendix C

Adapted from the Life Stressor Checklist-Revised (LSC-R)

1. Were you ever touched or made to touch someone else in a sexual way, because you felt forced in some way or threatened by harm to yourself or someone else?

   Yes ____ No ____

   If NO, please skip to item 2.

   a. How old were you when this (first) happened? (Please circle the age group.)

      0-5 years 6-10 years 11-13 years 14-17 years 18 years or Older

   b. How often did this happen before age 18? (Please circle your response.)

      Never Once A few times A lot

2. Did you ever have sex because you felt forced in some way or threatened by harm to yourself or someone else? (i.e., oral, anal, or genital sex)

   Yes ____ No ____

   If NO, please move on to the next questionnaire.

   c. How old were you when this (first) happened? (Please circle the age group.)

      0-5 years 6-10 years 11-13 years 14-17 years 18 years or Older

   d. How often did this happen before age 18? (Please circle your response.)

      Never Once A few times A lot

Appendix D

Quality of Relationships Inventory (QRI) (Pierce, Sarason, & Sarason, 1991)

Instructions: If you circled *yes* for any item(s) [1-12] on the previous questionnaire, please answer the following questions while thinking about <u>your PRIMARY source of social support during the time period of the incident(s) that you circled yes for on the previous questionnaire</u>. If you circled *no* for all items [1-12] on the previous questionnaire, please answer the following questions while thinking about <u>your PRIMARY source of social support during the most stressful event that you experienced before the age of 16</u>. Please answer each question using the following scale:

1	2	3	4
Not at all	A little	Quite a bit	Very much

Please circle the person you are identifying as your PRIMARY source of support (i.e., the first person you would <u>choose</u> to turn to when you felt the need for support)*:*

Mother Father Sibling Step-mother Step-father Step-sibling

Grandparent Other relative Friend Teacher Therapist/Counselor

Religious Leader Coach Other (Please Specify): _____

1.	To what extent could you turn to this person for advice about problems?	1	2	3	4
2.	How often did you need to work hard to avoid conflict with this person?	1	2	3	4
3.	To what extent could you count on this person for help with a problem?	1	2	3	4
4.	How upset did this person sometimes make you feel?	1	2	3	4
5.	To what extent could you count on this person to give you honest feedback, even if you might not want to hear it?	1	2	3	4
6.	How much did this person make you feel guilty?	1	2	3	4
7.	How much did you have to “give in” in this relationship?	1	2	3	4
8.	To what extent could you count on this person to help you if a family member very close to you died?	1	2	3	4

9.	How much did this person want you to change?	1	2	3	4
10.	How positive a role did this person play in your life?	1	2	3	4
11.	How significant was this relationship in your life?	1	2	3	4
12.	How close did you think your relationship would be with this person 10 years later?	1	2	3	4
13.	How much would you have missed this person if the two of you could not see or talk with each other for a month?	1	2	3	4
14.	How critical of you was this person?	1	2	3	4
15.	If you wanted to go out and do something one evening, how confident were you that this person would be willing to do something with you?	1	2	3	4
16.	How responsible did you feel for this person's well being?	1	2	3	4
17.	How much did you depend on this person?	1	2	3	4
18.	To what extent could you count on this person to listen to you when you were angry at someone else?	1	2	3	4
19.	How much would you have liked this person to change?	1	2	3	4
20.	How angry did this person make you feel?	1	2	3	4
21.	How much did you argue with this person?	1	2	3	4
22.	To what extent could you really count on this person to distract you from your worries when you felt under stress?	1	2	3	4
23.	How often did this person make you feel angry?	1	2	3	4
24.	How often did this person try to control or influence your life?	1	2	3	4
25.	How much more did you give than you get from this relationship?	1	2	3	4

Appendix E

Unsupportive Social Interactions Inventory (Ingram, et al., 2001)

Instructions: Please answer each question when thinking about the typical response you received from your PRIMARY source of social support when you went to him/her to talk about a painful or stressful event in your life. Please rate the same individual that you identified as your PRIMARY source of social support on the previous questionnaire. In choosing your responses, please use the following scale:

0	1	2	3	4
Not at all	A little	Somewhat	Quite a bit	Very much

1.	He/she did not seem to want to hear about it.	0 1 2 3 4
2.	He/she refused to take me seriously.	0 1 2 3 4
3.	He/she changed the subject before I wanted to.	0 1 2 3 4
4.	He/she refused to provide the type of help or support that I was asking for.	0 1 2 3 4
5.	When I was talking about it, he/she didn't give me enough time, or made me feel like I should hurry.	0 1 2 3 4
6.	He/she discouraged me from expressing feelings such as anger, hurt, or sadness.	0 1 2 3 4
7.	He/she did not seem to know what to say, or seemed afraid of saying or doing the "wrong" thing.	0 1 2 3 4
8.	He/she seemed to be telling me what he/she thought I wanted to hear.	0 1 2 3 4
9.	From voice tone, expression, or body language, I got the feeling he/she was uncomfortable talking about it.	0 1 2 3 4
10.	He/she tried to cheer me up when I was not ready to.	0 1 2 3 4

11.	He/she responded with uninvited physical touching (e.g., hugging).	0 1 2 3 4
12.	He/she did things for me that I wanted to do and could have done myself.	0 1 2 3 4
13.	He/she felt that I should stop worrying about the event and just forget about it.	0 1 2 3 4
14.	He/she told me to be strong, to keep my chin up, or that I should not let it bother me.	0 1 2 3 4
15.	He/she felt that I should focus on the present or the future and that I should forget about what had happened and get on with my life.	0 1 2 3 4
16.	He/she felt that it could have been worse or was not as bad as I thought.	0 1 2 3 4
17.	He/she said I should look on the bright side.	0 1 2 3 4
18.	He/she felt that I was overreacting.	0 1 2 3 4
19.	He/she asked "why" questions about my role in the event.	0 1 2 3 4
20.	He/she made "Should or shouldn't have" comments about my role in the event.	0 1 2 3 4
21.	He/she told me that I had gotten myself into the situation in the first place, and now must deal with the consequences.	0 1 2 3 4
22.	He/she was blaming me, trying to make me feel responsible for the event.	0 1 2 3 4
23.	He/she said "I told you so" or similar a comment.	0 1 2 3 4
24.	He/she seemed disappointed in me.	0 1 2 3 4