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The Relationship Between Frequency of Incest and Relational
Outcomes with Family-of-Origin Characteristics as a
Potential Moderating Variable

Kathleen D. Baxter

A thesis submitted to the faculty of
Brigham Young University
in partial fulfillment of the requirements for the degree of
Master of Science

James M. Harper, Chair
Megan F. Oka
Jonathan G. Sandberg
Jeffrey H. Larson

School of Family Life
Brigham Young University
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ABSTRACT

The Relationship Between Frequency of Incest and Relational Outcomes with Family-of-Origin Characteristics as a Potential Moderating Variable

Kathleen Diane Baxter
School of Family Life, BYU
Master of Science

As we examined research on the relational effects of incest on survivors, several researchers noted that some of the negative outcomes may be moderated by certain family characteristic variables. Using RELATE data, we examined a subsample of females and males who reported being survivors of incest in childhood and compared them on key family-of-origin processes such as mother and father's marital satisfaction as well as family violence. We used a path analysis to determine whether family processes, specifically functional parents' marriage and low physical violence, moderate the relationship between incest and marital quality in adulthood. Functional family-of-origin processes significantly moderated the relationship between sexual child abuse and adult marital quality for female survivors ($\beta = -.55, p < .001$) and for male survivors ($\beta = -.43, p < .001$). Therapists who work with survivors of sexual abuse should not only recognize the effects of childhood sexual abuse on individual and relational functioning, but should also recognize the familial context in which the incest occurred as well as the long-term relational effects on an adult survivor.. The results of this study imply that family therapy should be part of the treatment and prevention of sexual abuse.

Keywords: family-of-origin processes, incestuous trauma, marital quality

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First, I need to give thanks to my kind and loving Father in Heaven who has taken me by the hand and led me the way I should go. He made the path clear and put it before me. I have felt His presence throughout this journey and have been fortified and strengthened by Him every step of the way. In moments of doubt He gave me reassurance. He created in me the gifts that are necessary to serve His children in this way and for that I am thankful.

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TABLE OF CONTENTS

List of Tables	vi
List of Figures	vi
Introduction.....	1
Literature Review.....	2
Family Processes in Incest Families.....	2
Parental marital satisfaction.....	2
Violence and conflict.....	3
Long Term Relational Effects in Adult Survivors	5
Relational satisfaction.....	5
Specific Aims	6
Hypotheses	8
Method	9
Procedures	9
Sample Characteristics	9
Childhood sexual abuse frequency	10
Latent variable for family-of-origin dysfunction.....	10
Latent variable for marital quality.....	11
Self-report of conflictual marital interaction.....	12
Report of partner's conflictual marital interaction	13
Analysis.....	13
Results.....	14
Discussion.....	16
Parental Marital Quality	17

Violence and Conflict.....	17
Sexual Abuse Frequency.....	18
Gender Differences	19
Clinical Implications	19
Future Research.....	21
Limitations	22
Conclusion	23
References.....	28

LIST OF TABLES

Table 1. Demographic Information for Participants	24
Table 2. Correlations, Means, and Standard Deviations.....	25
Table 3. Standardized Beta Weights for Males and Females	26

LIST OF FIGURES

Figure 1. Hypothesized Structural Equation Model	27
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Introduction

The harmful effects that sexual trauma has on a survivor have long been evident (Courtois, 1979; Finkelhor, 1990; Kendall-Tackett, Williams, & Finkelhor, 1993; Briere & Elliott, 1994; Brand & Alexander, 2003). Moreover, when a survivor is abused by a family member, there are unique struggles. Research suggests that families in which incestuous trauma occur have similar characteristics and processes outside of the sexual dysfunction (Calof, 1987; Dunn, 1992; Alexander and Schaeffer, 1994; Worling, 1995; Lange, De Beurs, and Dolan, 1999). There is research to suggest that when there is an increase in adverse childhood experiences, there are poorer health outcomes later in life (Foege, 1998), as well as poorer mental health (Chapman, Anda, Felitti, Dube, Edwards, & Whitfield, 2004), and also an increased risk of intimate partner violence (Whitfield, Anda, Dube, & Felitti, 2003). Intimate partner violence is the only relational outcome so far that has been linked to overall adverse childhood experiences in published studies from the ACE project. The purpose of this study is to examine the relationship between frequency of childhood incest and marital quality, with family-of-origin adverse experiences as a moderating variable.

Research on incest has typically punctuated on incest itself, suggesting that dysfunctional relational processes occur as a result of incest. This paper however, takes the position that incest is an additional symptom of a dysfunctional system, rather than an independent cause of long-term relational outcomes. The systems perspective acknowledges that overemphasizing a narrow-band perspective can limit explanatory power (Magnavita, 2012). Due to this punctuation, typically very little research has focused on the possible contribution of adverse family of origin processes and incestuous trauma to poor relational outcomes (Friedrich, Beilke, and Urquiza, 1987; Harter and Neimeyer, 1988; Brand and Alexander, 2003). Research in the

past has typically linked increased psychological symptoms in survivors of childhood trauma (Briere and Elliot, 1994; Feinauer, Mitchell, Harper, and Dane, 1996; Silverman, Reinherz, and Giaconia, 1996, Ray and Jackson, 1997). There is additional research linking incestuous trauma to poor relational outcomes (Weimer, 2006); however, very few studies examine incest trauma in combination with other dysfunctional family-of-origin processes.

A review of the literature showed that there are no published studies of the effects of childhood sexual abuse on adult relationship quality that have controlled for family-of-origin dysfunction. Furthermore, there have been no studies examining the interaction effects of sexual abuse and family-of-origin dysfunction. This paper will review foundational and current studies related to childhood sexual abuse and adult relational outcomes such as marital satisfaction and conflictual interactions with partner, and poor family-of-origin functioning.

Literature Review

Family Processes in Incest Families

Parental marital satisfaction. Research shows that typically there is poor marital satisfaction in families where incest occurs. We suspect that this pattern leaves survivors unsure how to navigate their own romantic relationships toward satisfaction in adulthood. Trepper, Niedner, Mika , and Barrett (1996) found that nearly one-half of both non-offending and offending parents reported a marital relationship in which there was extreme emotional separateness. An additional 40% displayed moderate emotional separateness. Also, 63% of offenders reported having an unhappy marriage. One-third of offenders reported having a very unhappy marriage and another third reported only being satisfied, meaning none of the offenders reported being happy in their marriage. Similarly, 72% of non-offending partners reported having an unhappy marriage. Overall, in this study 82% of marriages/relationships were

observed to be of poor quality (Trepper, Niedner, Mika, & Barrett, 1996). Consistently, incest sibling perpetrators reported heightened parental marital discord within their families (Worling, 1995).

The notion that marital relationships in incestuous families tend to be unhappy ones could be one of the reasons that fathers are the most likely offenders of incest. Statistically, biological fathers perpetrate far more than any other family member. In a study of intact incest families, researchers found that 48% of accused incest offenders were biological fathers, 19% were stepfathers, 4% were brothers, and 3% were mothers of the survivors (Trepper, Niedner, Mika, & Barrett, 1996).

This condition of unhappy parental relationships could explain Calof's (1987) finding that many times a child has been triangulated into their parents' marriage within an incest family. Calof observed that, within incest families, there tends to be parent-child role confusion. This study also found that there was typically boundary confusion in incest families. In his study, Trepper (1996) also found boundary confusion. They found that 60% of incest families did not support privacy for individual members in the family and only 23% allowed for some privacy but typically did not support privacy. This dynamic of extremely open boundaries could be a reason that children are sometimes triangulated into the marriage. Research also shows that in addition to acting in a spouse role, children in incest families sometimes take the parent role also. Typically there is inadequate parenting in incest families, and children tend to take care of their parents' needs (Calof, 1987). Trepper (1996) found that 49% of offending parents were not engaged in early parenting and nurturing of the survivors.

Violence and conflict. Research indicates that there is a link between severity of incestuous abuse and other types of abuse in a family such as emotional, verbal, and physical.

Alexander and Schaeffer (1994) found that women who reported the least severe incest abuse also reported the least amount of family pathology. They also reported little verbal or physical abuse from mother and father. Survivors who reported more severe types of incestuous abuse also reported more physical and verbal abuse in the home. Statistically, abuse variables tended to follow fathers more than any other family member. The authors of the study interpreted this to determine that conflict seems to be characterized by father dominance. This study also found that survivors who endured more severe physical and verbal abuse in the home also demonstrated significantly more pervasive long-term effects (Alexander & Schaeffer, 1994). Similarly, research found that incestuous abuse as compared to nonincestuous sexual abuse was associated with a more negative emotional atmosphere in the family of origin as well as more negative reactions to disclosure of the abuse (Lange, De Beurs, Dolan, Lachnit, Sjollem, & Hanewald, 1999).

Research findings that show similar familial characteristics contributing to sibling-incest perpetration and incest victimization supports our premise, that symptoms have more or at least as much to do with family processes as they do with the actual event of incest. O'Brien (1991) examined the differences between family-of-origin processes of incest offenders and non-incest offenders. Clinicians described families of incest offenders as "severely disturbed," meaning these families demonstrated more family violence and dysfunction during the developmental stages of the offenders than families of non-offenders.

Worling (1995) found that adolescent sibling-incest offenders reported higher parental physical punishment and a more argumentative and negative home environment than non-sibling offenders. They also had greater feelings of parental rejection and less satisfaction with family relationships. Also, according to Worling, sibling-incest offenders were more often survivors of

sexual abuse themselves than non-sibling offenders. Sibling-incest offenders were also more likely to offend if they had access to a younger sibling. This may be fueled by the finding that children who share parents who reject and are abusive turn toward one another for support and nurturance (Dunn, 1992).

Long-Term Relational Effects in Adult Survivors

Relational satisfaction. There is research, as in social learning theory, that may contend if a child did not witness or experience satisfying relationships in childhood, that it would be difficult to navigate satisfying relationships in adulthood. Poor relational satisfaction has consistently presented in romantic relationships of adults who were victimized as children. The nature and symptoms of incest make it difficult to separate whether relational factors are etiology of incest or symptoms of incest. This is what the current study hopes to ascertain. Courtois (1979) found that 79% of female incest survivors had trouble later in life relating to men. Whisman (2006) reported that rape or sexual molestation before the age of 16 years leaves a survivor at heightened risk for marital dissatisfaction and disruption. The study did not indicate however, whether or not the abuse was incestuous.

It has also been found that husbands of incest survivors experience more marital distress than husband of non-incest survivors. Lyon (2001) found that 39 husbands of incest survivors demonstrated higher levels of marital distress when compared to 82 husbands of non-incest survivors. This study also indicated that in order to cope with marital distress, husbands of incest survivors tended to lower their expectations surrounding affection.

The relationship between the survivor and their parents can also be less than satisfactory which may lead to relationship distress in adult relationships. Stroebel (2012) and his team found that during high school, survivors reported being distant from both parents, or distant from father

and close to mother. At the time of the survey in adulthood, survivors reported being angry or estranged from one or both parents. It would be worthwhile to know whether this disconnect between survivors and their parents is due to incest or other familial processes that make close nurturing relationships more difficult. This isolation and lack of familial connection and support later in life could also contribute to the survivor's personal relationship outcomes and satisfaction.

Specific Aims

It is apparent that short-term trauma symptoms and physical effects are significantly statistically associated with incest trauma (Kendall-Tackett, et al., 1993; Briere & Elliott, 1994; Meyerson, et al., 2002). However, some adult symptoms attributed to incest; could just as well be related to adverse family-of-origin processes such as parents in an unhappy marriage and violence among family members. Though there are several studies that indicate symptoms associated with incest, it is difficult within this literature to determine whether the symptoms are related to sexual abuse or to other variables. Finkelhor (1990) explains that this may be due to the fact that symptoms experienced by sexual abuse survivors are not unique to sexual abuse. They may be a product of harmful home life experience. For this reason, research that looks directly at family-of-origin processes in combination with incest trauma and its effects on adult relational outcomes of incest survivors is very limited. There are no articles which have found implications that poor relational outcomes in survivors may not be due to incest trauma alone.

It is hard to explain etiology of symptoms associated with incest because of the heightened dysfunction in families where incest is present (Alexander & Lupfer, 1987; Harter, Alexander, & Neimeyer, 1988). While studying bivariate relationships between coping strategies and abuse characteristics in 101 incest abuse survivors, Brand and Alexander (2003) found that

none of the individual abuse characteristics of survivors were significantly related to adulthood dysfunction outcomes. The current study aims to try and identify effects of incestuous trauma as well as other family processes and the interaction between the two on adult relational outcomes.

Two physicians in conjunction with the Center for Disease Control and Prevention developed the Adverse Childhood Experiences Study (ACE study). The theoretical premise of the ACE study is that the higher the number of adverse childhood experiences an individual has, the more risky behaviors they engage in later in life which, in turn, affects adult physical, mental, and relational health (Foege 1998). The majority of findings connected to this research have focused on an individual's physical health in relation to their ACE score. These findings suggest that the higher the ACE score, the poorer an individual's health can be in their adult life, which can lead to chronic illness and early death (Felittie, et al., 1998). Research has also indicated that a higher ACE score leads to poorer mental health in adulthood (Chapman, et al., 2004; Edwards, Holden, Anda, and Felitti 2003).

Little research has been done with regards to a person's adverse childhood experiences and their adult relational outcomes. Research has been generated from the ACE study regarding sexually risky behaviors. Hillis et al. (2001) studied 5000 women; and found that an increased ACE score, including sexual trauma, increased the likelihood that an individual's first sexual experience had occurred by age 15. They also found that higher ACE scores made it more likely for a person to have more than 30 sexual partners (Hillis, Anda, Filliti, & Marchbanks, 2001). Research has also indicated that an increase in one's ACE score could contribute to the likelihood of intimate partner violence. Whitfield et al. (2003) studied of over 8,500 participants from the ACE study and found that those who witnessed or experienced domestic violence (physical or sexual) in childhood were at two times the risk of being a survivor of intimate

partner violence or being perpetrators themselves. This study also found that the participants who experienced all three forms of violence were at over a three times the risk of victimization or perpetration of intimate partner violence (Whitfield, Anda, Dube, & Felitti, 2003). Though marital satisfaction of survivors was not an outcome in any of these studies, intergenerational family therapy approaches assume that adverse childhood experience likely leads to poor adult relationship satisfaction.

In addition to long-term hardship, family-of-origin processes can explain long-term positive coping strategies of incest survivors. Peters (1988) discovered that the family characteristic of maternal warmth was a stronger predictor of adjustment in adulthood than specific variables of sexual abuse among a community sample of women. There is literature which suggests that the severity of the long-term effects of sexual abuse can be decreased by support that is given by the nonabusive parent (Conte & Schuerman, 1987). This means that family has a lot of influence on how a child copes with and develops in the face of and after childhood trauma. This implies the power of treating the entirety of a family system's dysfunction rather than treating isolated types and cases of abuse independently.

Hypotheses

Figure 1 shows the measurement and structural model for this study. The research question in the present study was: Do family-of-origin processes moderate the relationship between frequency of incest trauma and survivor relational outcomes in adulthood? The conceptual structural equation model is shown in Figure 1, and the hypotheses were as follows:

1. Child sexual abuse frequency will be negatively related to adult marital quality for both males and females.

2. Functional family-of-origin processes, measured by mother's marital satisfaction, father's marital satisfaction, and the lack of family violence, will be positively related to adult marital quality for both males and females.
3. Functional family-of-origin processes, measured by mother's marital satisfaction, father's marital satisfaction, and the lack of family violence, will significantly moderate the relationship between sexual abuse frequency and adult marital quality for both males and females.

Method

Procedures

Individuals completed RELATE online after being introduced to the instrument through a variety of settings. Some participants were requested to take the instrument as part of an undergraduate family studies or sociology class, others completed it as part of a workshop for premarital couples, and some individuals completed the instrument after finding it on the Internet. Additionally, some couples were requested to take the RELATE by their therapist as an assessment tool for therapy.

Sample Characteristics

The sample consisted of 3,677 participants (N=1,383 males; 2,294 females) who utilized a couple questionnaire called the RELATE. The average age of females was 33; 100% were married, 80% were Caucasian (4% African American, 5% Latino, 3% Asian, and less than 1% Native American), 44% reported an annual income of less than \$20,000, and 48% indicated a having a Bachelor Degree or higher. In the male sample, the average age was 37, 100% were married, 83% were Caucasian (4% African American, 4% Latino, 4% Asian, and less than 1% Native American), 37% reported an annual income of \$39,999, and 56% reported receiving a

Bachelor Degree or higher. Table 1 shows complete demographic characteristics for men and women in the sample.

RELATE is an online questionnaire developed to provide feedback to couples regarding their strengths and challenges within their relationship. It contains 276 items including demographic, individual, familial, cultural, and couple variables. Familial items are reported regarding the participants' family of origin. Couple items are rated for self and partner. Items within the RELATE questionnaire use one standard deviation above means on negative characteristic subscales and one standard deviation below the mean scores on positive characteristic subscales to determine the couples' challenge areas (Holman, Busby, Doxey, & Loyer-Carlson, 2010). The RELATE subscales have high construct validity, concurrent validity, and internal consistency (.70-.90) (Busby, Holman, & Taniguchi, 2001).

Measures

Childhood sexual abuse frequency. The sample for this study consists of 3,677 participants who reported they had been sexually traumatized by a family member in childhood. Frequency of childhood sexual abuse was measured using one item from the RELATE (Busby, Holman, & Taniguchi, 2001). Participants were asked "From the following list of family members, select the person who was most sexually abusive toward you?" followed by, "How often was the person you selected in the previous question sexually abusive toward you?" Participants answered using a Likert type scale that ranges from 1 (*very often*) to 4 (*rarely*). Participants were also given the option to mark -1 (*does not apply*).

Latent variable for family-of-origin dysfunction. A latent variable called family-of-origin dysfunction was created using three indicators from RELATE. Participants were asked to respond to the items "My father was happy in his marriage", and "My mother was happy in her

marriage” on a Likert-type scale ranging from 1 (*Strongly disagree*) to 6 (*Strongly agree*). This scale has a test retest reliability of .92 (Busby, Holman, & Taniguchi, 2001). These two items were used as separate indicators of the family-of-origin dysfunction latent variable along with a third indicator which is the subscale, family-of-origin violence also contained in RELATE. The items from this subscale include: “Considering all of your experiences while growing up in your family, how would you rate the general level of violence in your home?” “From the following list of family members, select the person who was most violent toward you: brother, sister, father, mother, step or foster father, step or foster mother, another relative, or no family member was violent toward me.” “How violent toward you was the person you selected in the previous question? How often was your father violent toward your mother?” “How often was your mother violent toward your father?” “How often were you violent in your family?” All six items are answered on a five-point Likert scale ranging from 1 (*never*) to 5 (*very often*), except for the second item where the participant indicates a specific individual. The average response to items was used as the third indicator of the latent variable. The test retest reliability for the family violence scale is .81 (Busby, Holman, & Taniguchi, 2001). The alpha coefficients for family violence in this study were .61 for females and .62 for males. Factor loadings for females were .92 (.90 for males) for mother’s marriage, .92 (.90 for males) for father’s marriage, and .64 (.65 for males) for family violence.

Latent variable for marital quality. As shown in Figure 1, a latent variable called marital quality was created using three subscales from RELATE, marital satisfaction, self-report of conflictual marital interaction and report on partner’s conflictual marital interaction. There are seven items in the measure used to indicate participant’s marital satisfaction. These items are as follows: “In your relationship, how satisfied are you with the following: the physical intimacy

you experience, the love you experience, how conflicts are resolved, the amount of relationship equality you experience, the amount of time you have together, the quality of your communication and your overall relationship with your partner.” These items were rated on a five-point Likert-type scale ranging from 1 (*very dissatisfied*) to 5 (*very satisfied*). The test retest reliability for the marital satisfaction scale is .78 (Busby, Holman, & Taniguchi, 2001). The alpha reliabilities for marital satisfaction in this sample were .92 for females and .91 for males.

Self-report of conflictual marital interaction. Three scales within the RELATE were used to measure conflictual marital interaction. First is the Non-critical Scale which includes the following items: “I don’t censor my complaints at all. I really let my partner have it full force,” “I use a tactless choice of words when I complain,” and “there’s no stopping me once I get started complaining.” The test retest reliability for this scale is .63 (Busby, Holman, & Taniguchi, 2001). Second was the Respect Scales which included the following items: “I have no respect for my partner when we are discussing an issue,” “When I get upset I can see glaring faults in my partner’s personality,” “When my partner complains I feel that I have to “ward off” these attacks,” and “I feel unfairly attacked when my partner is being negative.” The test retest reliability for this scale is .83 (Busby, Holman, & Taniguchi, 2001). The last scale is the Nonwithdrawal Scale which includes the following items: “When we get in an argument I find I want to ignore my partner,” “I have been withdrawing more and more from the relationship,” “I don’t feel like I have the energy to keep fighting for this relationship,” “I don’t want to respond at all to my partner when we argue.” The test retest reliability for this scale is .70 (Busby, Holman, & Taniguchi, 2001). All three scales were scored on a 5-point Likert scale ranging from 1 (*never*) to 5 (*very often*). The alpha reliabilities were .77 for males and .80 for females.

Report of partner's conflictual marital interaction. Three scales within the RELATE were used to report partner's conflictual marital interaction. First is the Noncritical Partner Scale which included the following items: "My partner doesn't censor his or her complaints at all," "She or he really lets me have it full force," "My partner uses tactless choice of words when she or he complains," "There's no stopping my partner once he/she gets started complaining." The test retest reliability for this scale is .77 (Busby, Holman, & Taniguchi, 2001). Second is the Respect Partner Scale which included the following items: "My partner shows no respect for me when we are discussing an issue," "When my partner gets upset, my partner acts like there are glaring faults in my personality," "When I complain, my partner acts like he or she has to "ward off" my attacks," and "My partner acts like he/she is being unfairly attacked when I am being negative." The test retest reliability for this scale is .77 (Busby, Holman, & Taniguchi, 2001). The last scale is the Nonwithdrawal Partner Scale which included the following items: "When we get in an argument my partner wants to ignore me," "My partner has been withdrawing more and more from the relationship," "My partner doesn't feel like he/she has the energy to keep fighting for this relationship," and "My partner doesn't want to respond at all to me when we argue." The test retest reliability of this scale is .80 (Busby, Holman, & Taniguchi, 2001). All three scales are scored on a 5-point Likert scale ranging from 1 (*never*) to 5 (*very often*). The alpha reliabilities for this sample were .86 for males and females. Factor loadings for females and males were .89 and .88 (marital satisfaction), .92 and .90 (own conflictual interaction), and .93 and .93 (partner's conflictual interaction).

Analysis

Structural Equation Modeling using MPlus 3.0 (Muthen & Muthen, 2012) was used to examine both the measurement model and the structural model in Figure 1. First, means and

standard deviations for all variables were calculated. Second, a correlation matrix correlating all variables was created. Third, using confirmatory factor analysis, all indicators were examined to determine how well they load on each latent variable. Measures with low factor loadings were either dropped or separated out as separate variables in the model.

Age, education level, and income were added to the structural model as control variables. Age was added due to prior finding that marital satisfaction differs across the life course depending on age (Umberson et al., 2005). Both education and income level were added due to prior research that increased income and education level contribute to higher marital satisfaction. Multiple group analysis was used to compare the coefficients of the paths in model between women and men. A fully constrained model was compared to a fully unconstrained model, and a Chi-square difference test was used to determine if the models were different from each other. The predictors in the model included frequency of childhood sexual abuse, functional family-of-origin process, and the interaction (moderation effect) of these two variables and the outcome variable was marital quality. Goodness of Fit indices and unstandardized and standardized beta coefficients for paths were examined.

Results

Table 2 shows the correlations, means, and standard deviations for all measured variables in the sample. The means for mother's and father's marital satisfaction were similar (3.52 and 3.67 for males/ 3.14 and 3.39 for females. On a scales from 1 to 5 the mean for family violence for males was 1.91 (SD=.52) and the mean for females was 1.88 (SD=.73). The family violence variable does not include incestuous abuse. On a scale from 1 to 5 the mean for sexual abuse for males is 3.42 (SD=.84) and for females the mean is 3.16 (SD=.92). On a scale from 1 to 5 the mean for marital satisfaction for males is 3.44 (SD=1.02) and 3.38 (SD=1.11) for females.

Correlations were run for all study variables in order to rule out any multi-collinearity problems in the model. As expected all variables within latent variables were highly correlated. For females sexual abuse frequency was correlated to all marital quality variables and also correlated to parents' marital satisfaction. For males sexual abuse frequency is correlated with relationship satisfaction as well as own conflictual interaction. There were no problems with multi-collinearity to report.

Table 3 shows the standardized Beta weight for males and females for each of the paths in the model. Frequency of sexual abuse significantly predicted marital quality for females ($\beta = -.57, p < .001$) as well as for males ($\beta = -.16, p < .05$) so the research hypothesis one was supported. Functional family-of-origin processes also significantly predicted marital quality for females ($\beta = .69, p < .001$) as well as for males ($\beta = .61, p < .001$) which supported hypothesis two. Hypothesis three was also supported since the interaction or moderation between functional family-of-origin processes and sexual abuse frequency was also significant for females ($\beta = -.55, p < .001$) and for males, ($\beta = -.43, p < .001$), meaning that functional family processes buffer the negative effects of childhood sexual abuse on adult marital quality. This finding also means that when family processes are not functional, the effect of sexual abuse frequency on adult marital quality is magnified.

The chi-square fit index for the model was significant ($X^2=589.1, df=36, p<.001$). This is likely due to the large sample. In cases where the sample is large the chi-square is often significant so it is not the best fit index for large samples (Kline, 2010). The other fit indices all indicated that the hypothesized model was a good fit to the data (CFI=.998, RMSEA=.02, SRMR=.023).

To test for gender difference a fully constrained SEM model was compared with a fully unconstrained model. The chi-square difference was 12.97, (df=3) which was significant at the .001 level indicating that there were significant gender differences. We took the fully constrained model and released one path at a time sequentially. The best model appeared to be one in which the only constrained path was from positive family-of-origin functioning to marital quality. We concluded that the path from frequency of sexual abuse to marital quality is stronger for females and that the moderation effect of family-of-origin functioning was also stronger for females.

Discussion

The purpose of this study was to examine the impact of incestuous trauma in combination with other adverse family-of-origin processes on adult marital quality in order to disrupt the punctuation of incest within the literature. Sexual abuse frequency was found to significantly affect adult marital quality for men and women, especially when it was present with other adverse family-of-origin processes such as parents' unsatisfactory marriage as well as family violence. Both negative family of origin processes and sexual abuse frequency contributed to poorer marital quality. When the two occurred together, they further decreased adult marital quality. The presence of functional family of origin processes reduces the risk of poor marital quality for survivors. These results indicate that it is not just incestuous trauma alone that contributes to poor marital quality in survivors, but also the poor familial context in which incest typically occurs.

It is likely that nonfunctional family-of origin processes and child sexual abuse frequency are associated with poor marital quality for several reasons: 1) parents' marital quality may contribute to the triangulation of children into the marriage, 2) it may also leave children ill

equipped to navigate through a healthy marriage in adulthood, 3) the presence of family violence and sexual violence eludes to the fact that there is a lack healthy conflict resolution in these families, and 4) incestuous sexual trauma leads to risky behaviors and can also make it hard for survivors to relate to intimate partners.

Parental Marital Quality

Our findings were consistent with those of Trepper (1996), that many families in which incestuous abuse occurs, contain a less than satisfactory marital relationship. The presence of an unhappy parental marriage for a survivor may shift the role of the child in the family, which may be an inappropriate and exploitive role such as that of incest survivors (Calof, 1987). Our results also indicated that parental marital satisfaction of a survivor was correlated with the survivors' own marital satisfaction later in life. Survivors' with low marital satisfaction tend to have parents who, by report of the survivor, had low marital satisfaction. Further research is needed to identify why this is, although transgenerational theory suggests it is possible that as a child watches his/her parents' unhappy marriage, they adopt this pattern as a blueprint for their own marriage. It is possible that if a child has inappropriate roles within their parents' marriage, they may be unaware of what healthy spousal behaviors in marriage look like.

Violence and Conflict

The current study found that the presence of incestuous trauma was correlated with the presence of other types of violence and conflict within the family, which was consistent with the findings of Alexander and Schaeffer (1994). It is clear that in families where violence and conflict are frequent there is a lack of healthy conflict resolution. This assumption is consistent with Dunn's findings that children with abusive and rejecting parents turn to each other for nurture (1992), which may also contribute to sibling incest. More research is needed to identify

how family-of-origin violence affects adult marital quality specifically, but there is research that indicates that resolving conflict with violence may be a learned behavior that is carried into adulthood (Whitfield, Anda, Dube, & Felitti, 2003). The presence of violence, may contribute to a child's insecure attachment, negative self-image, as well as the child's inability to nurture others, all of which most certainly would affect a marital relationship later in life.

Sexual Abuse Frequency

As with other types of abuse and violence, incestuous abuse certainly contributes to a survivor's well-being, especially in relationships. Our study demonstrated once again that incestuous trauma is correlated with poorer marital outcomes (Walker, Holman, & Busby, 2009; Godbout, Sabourin, & Lussier, 2009 and Lyon, 2001). It is possible that this correlation is due to a survivor's internalized symptoms of incest or outward symptomatic behaviors of incest such as sexually risky behaviors including an increase in number of sexual partners, unhappy pregnancies, abortion, and sexually transmitted diseases (Roode, Dickson, Herbison, & Paul, 2009). Incestuous abuse may also contribute to a survivor's inability to relate to their sexual partners (Whisman, 2006).

Attachment theory would suggest that the inability to relate to one's partner physically may limit intimacy and overall marital quality, since touch is believed to be one important piece of attachment. It is also likely that survivors of incest have developed an anxious or avoidant attachment style as a consequence of the childhood sexual trauma. Cicchetti (1987) estimated that between 70% and 100% of maltreated children exhibit insecure attachment styles. Additionally, adult women who were sexually abused within their families were found to have much higher rates of insecure attachment than the normative sample (Bartholomew and Horowitz, 1991) as well as women who were sexually abused outside the family (Roche, Runtz,

and Hunter, 1999). This could prove to be an additional obstacle for a survivor in developing a secure relationship with their marriage partner. However, research shows that a secure attachment with a survivor's adult partner can significantly improve a survivor's adjustment to incestuous child abuse (Roche, Runtz, and Hunter, 1999).

Gender Differences

Though all results were significant for both males and females, some paths in the model were stronger for females. The most significant difference between males and females was that the negative association of frequency of childhood incestuous abuse and adult marital quality was stronger for females. This may be due to cultural norms in which it is less acceptable for males to vocalize distress or pain than it is for women so it may be that males reported sexual abuse less in this sample. Results indicated that functional family-of-origin processes significantly contributed to marital satisfaction for both males and females. This indicates that while some research has shown family-of-origin processes to have less effect on males than females, our results indicate a significant effect for both genders when sexual abuse is controlled for. Lastly, the moderation of functional family-of-origin processes, while statistically significant for both, was stronger for women than for men. This may be due to the fact that females are socialized to attend more to relational events than males. Male survivors may focus more on just getting past the event whereas female survivors may best heal from sexual abuse in a relational context where there is support and safety in relationships.

Clinical Implications

When a child is abused, the natural instinct is to separate the child from the perpetrator to enable them to begin healing. This is not the easiest solution in the case of incestuous abuse. Family members may be more reluctant to prosecute other family members, the abused child

may or may not want to be separated from the perpetrator; survivors may feel responsible for the demise of the family after divulging the abuse; and several other complications may occur. Due to the survivor's connection to the perpetrator, healing from incest is complicated. How can we as clinicians do our duty to keep the survivor safe while respecting the family and their decisions in the process? As in the realm of literature, the most common practice in treatment of incest survivors and perpetrators has typically been individual focused therapy (Glover, 1999; Stermac and Hucker, 1988; Haaken and Schlaps, 1991; Hetzel-Riggin, Brausch, and Montgomery, 2006). Group therapy is also a form of treatment for incest survivors and perpetrators (Huss, Elhozayed, and Marcus, 2012; Welldon, 1998). However, very little research has been conducted regarding family therapy for incestuous families.

These research findings make a strong case for the use of family therapy in treating families in which incest occurs. This therapy modality can simultaneously treat survivor and perpetrator as well as other family members who may be troubled by unhealthy family processes. Research identifying the benefits of the use of family therapy in incestuous families is limited. Existing research focuses primarily on the use of family therapy for situations of sibling incest (Ballantine, 2012; McNevin, 2010; McNevin, 2011; Haskins, 2003; DiGiorgio-Miller, 1998). All of these forms of family therapy are focused on the incest itself. More research is needed to identify how family treatment may be different in families where a parent is the perpetrator, especially since we know this is more common than sibling incest (Trepper, Niedner, Mika, & Barrett, 1996). Additional research is also needed to incorporate treatment of other dysfunction that presents in these families such as parental marital dissatisfaction and other types of violence and abuse. These comorbid dysfunctional family processes may lead to, but most certainly contribute to the severity of the effects of incest. Jonzon and Linblad (2004), found that survivors

of child sexual abuse who used an active disclosure strategy experienced more physical and violent abuse than survivors who did not. They also found that the more severe the abuse the survivor reported the more negative reactions they received from their social network. We find family therapy a hopeful solution for these families since we know that positive family-of-origin processes contribute to positive coping strategies for incest survivors (Peters, 1988).

Future Research

Future research should discern what additional adverse childhood experiences may contribute to a child's adult marital quality other than parents' marital quality, family violence, and sexual abuse. Future research should also identify how the use of family therapy for child incest survivors contributes to the survivor's marital quality later in life compared to survivors who received individual treatment or no treatment at all. In addition, it would be valuable to identify what the long-term consequences are for siblings of incest survivors who grow up in the same adverse circumstances and how family therapy improves their quality of life.

Important questions are raised regarding the protocol for treatment of families in which incest occurs. It is important to acknowledge that the disclosure of sexual abuse mandates the therapist must report the abuse. This will limit a family's willingness to report the abuse and it could also limit the amount of family members able to attend therapy. Perpetrators may be institutionalized and children may be separated from their parents. More research will be needed in order to insure that the child is safe within the therapy and family settings after disclosure and during the process of treatment. It will also be important to learn how treatment will look different for survivors of childhood incest who engage in family therapy with their parents and siblings in adulthood with the possible inclusion of the survivor's romantic partner.

Limitations

The nature of sexual abuse raises a common problem in the research. The complexity of sexual abuse leads to an underreporting of sexual abuse. Further, the unique challenges of incestuous abuse could limit disclosure even further in order to protect certain family members. There is also general speculation within the research that males tend to report sexual trauma less than women, which may make their rates of abuse look fictionally discrepant to women's abuse rates (Watkins and Bentovim, 1992).

Though this study has made important contributions to research on incestuous family-origin characteristics and adult survivor relational outcomes, there are several limitations that should be considered when interpreting and generalizing these results. One should take care in generalizing the results from this sample to the general population. The procedure used to gather the sample, the relatively high level of education, and the relatively high average income level all most likely indicate that the sample is generally from a higher socioeconomic background than other populations.

It is also important to note that measures used for this study were administered to the survivor, meaning that all results are from the perception of the survivor. Additionally, report of sexual abuse as well as family dysfunction was retrospective. This retrospective form of reporting can elicit multiple problems for researchers. Cicchetti and Rizley (1981) warn of a process by which some survivors by way of coping and a need to avoid painful memories can be amnesic for much of their childhood victimization, and may truthfully report having no recollection of the abuse. These cases could possibly be missing from our data set. It is also possible that those who are abused develop a distorted lens through which they view their family. Newman and Peterson (1996) found that female incest survivors were angrier than other women,

particularly with their parents. These researchers also found that incest survivors who were exposed to other traumas in the home, such as other forms of violence, held even more anger toward their parents. This anger is likely to cloud a survivor's objectivity in reporting. Further research is needed in order to identify and understand the perceptions of perpetrators of incest as well as other family members in order to fully lend to a systems perspective.

Conclusion

The purpose of this study was to examine the relationship between frequency of childhood incest and marital quality, with adverse family-of-origin experiences as a moderating variable. As hypothesized, child sexual abuse frequency was negatively related to marital quality for males and females. Adverse family-of-origin processes were negatively related to marital quality for males and females. Additionally, we found that adverse family-of-origin experiences significantly moderated the relationship between child sexual abuse frequency and marital quality. The results highlight the importance of the practice of family therapy for families in which incestuous abuse occurs. Additionally, research is needed to identify the effects of incest on family members other than survivors as well as to fully understand the benefits of family therapy in these families.

Table 1. Demographic Information for Participants (N=1383 males; 2294 females; Total=3677).

Variables	Females			Males		
	Mean	(S.D.)	Range	Mean	(S.D.)	Range
Age	33.45 yrs	(10.66)	18-73	36.53 yrs	(11.29)	19-77
Number of Children	1.87	(1.72)	0-9	2.01	(2.17)	0-11
	Percentage			Percentage		
Education						
<High School		0.7%			1.2%	
High School Graduate		5.4%			4.5%	
Some College		35.2%			30.0%	
Associate Degree		10.5%			8.6%	
Bachelor Degree		31.1%			29.7%	
Graduate or Professional		16.9%			25.8%	
Missing		0.2%			0.2%	
Income						
<\$20,000		44.1%			17.4%	
\$ 20,000-\$39,999		22.0%			19.5%	
\$ 40,000-\$59,999		13.8%			17.0%	
\$ 60,000-\$79,999		7.8%			13.2%	
\$ 80,000-\$99,999		4.3%			8.4%	
\$100,000-\$119,999		2.2%			6.8%	
\$120,000-\$139,999		1.3%			4.3%	
\$140,000-\$159,999		1.0%			2.6%	
\$160,000-\$199,999		2.7%			9.8%	
\$200,000-\$299,999		0.1%			0.3%	
\$300,00 +		0.0%			0.4%	
Missing		0.7%			0.4%	
Race						
African American		4.5%			4.1%	
Asian		3.2%			3.9%	
Caucasian		80.8%			83.0%	
Native American		0.6%			0.7%	
Latino		4.9%			3.6%	
Mixed		2.4%			1.6%	
Other		3.3%			2.8%	
Missing		0.3%			0.2%	

Table 2. Correlations, Means, and Standard Deviations for All Measured Variables (N=1,383 males; 2294 females for total of 3677)

Variables	1	2	3	4	5	6	7
Family-of-Origin Processes							
1.Mother's Marital Satisfaction	1.0	.83***	.42***	.25***	.19**	.20***	.15*
2.Father's Marital Satisfaction		1.0	.41***	.27***	.16*	.16*	.13*
3.Family Violence	.81***		1.0	.33***	.13*	.19**	.17**
4.Sexual Abuse Frequency	.41***	.40***		1.0	.17*	.19**	.12*
Marital Quality							
5.Relationship Satisfaction	.16**	.14*	.23***		1.0	.71***	.70***
6.Own Conflictual Interaction	.24***	.25***	.18**	.13*		1.0	.77***
7.Partner's Conflictual Interaction	.24***	.23***	.25***	.16**	.65***		1.0
Mean for Males	.22***	.23***	.20**	.05	.72***	.77***	1.0
Mean for Females	3.52	3.67	4.52	4.80	3.44	3.60	3.43
S.D. for Males	3.14	3.39	4.48	4.39	3.38	3.49	3.48
S.D. for Females	1.29	1.22	.59	.56	1.02	.66	.81
	1.41	1.37	.65	.99	1.11	.71	.83

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

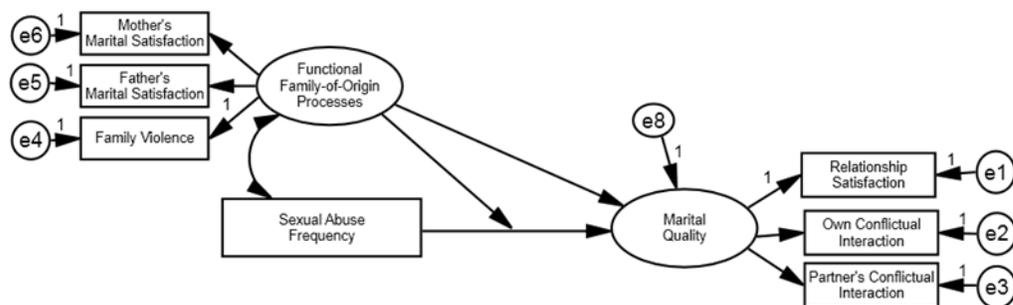
NOTE: Correlations for males are reported in the bottom diagonal, and correlations for females are reported in the top diagonal.

Table 3. Standardized Beta Weights for Males and Females (N=1,383 males; 2294 females for total of 3677)

	Females		Males	
	β	p	β	p
Frequency of Sexual Abuse	.57	<.001	.16	<.05
Functional Family-of-Origin Behavior	.69	<.001	.61	<.001
Interaction	-.55	<.001	-.43	<.001

NOTE: Length of relationship, education of partners, and household income were control variables, but since none of them were statistically significant predictors, they are not included.

Figure 1. Hypothesized Structural Equation Model.



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