

Childhood Emotional Abuse Predicts Late Adolescent Sexual Aggression Perpetration and Victimization

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Childbood physical and sexual abuse are known risk factors for adult sexual aggression perpetration and victimization, but less is known about the role played by childbood emotional abuse. College sophomores were surveyed regarding their childbood physical, sexual, and emotional abuse victimization and their late-adolescent experiences of sexual aggression victimization and perpetration. Controlling for social desirability and childbood physical and sexual abuse, childbood emotional abuse was the strongest predictor of adolescent sexual perpetration for women and the strongest predictor of adolescent sexual victimization for men. Emotional abuse was a marginally reliable predictor of adolescent sexual victimization in women. These results show the importance of childbood emotional abuse victimization as a risk factor for sexual victimization and perpetration in adolescent intimate relationships.

KEYWORDS adolescent dating violence, cycle of violence, emotional abuse, physical abuse, revictimization, sexual abuse, sexual aggression

Two decades ago, Hart and Brassard (1987) argued that psychological maltreatment "is the core issue in child maltreatment" (p. 161). Since that time,

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there has been a growing interest in understanding the effects of childhood psychological and emotional abuse. Although emotional abuse is less well studied than physical or sexual abuse, it is consistently found to be a predictor of negative outcomes in adulthood, including anger and irritability (Teicher, Samson, Polcari, & McGreenery, 2006), depression (Gibb, Chelminski, & Zimmerman, 2007), dissociation (Teicher et al., 2006), eating disorders (Kennedy, Ip, Samra, & Gorzalka, 2007; Witkiewitz & Dodge-Reyome, 2001), marital dissatisfaction (Perry, DiLillo, & Peugh, 2007), and social phobias (Gibb et al., 2007). Moreover, studies that look at multiple types of abuse simultaneously often find that the effects of emotional abuse remain reliable even when controlling for physical and sexual abuse. For example, Spertus, Yehuda, Wong, Halligan, and Seremetis (2003) found that emotional abuse and neglect (jointly) predicted anxiety, depression, posttraumatic stress symptoms, and physical symptoms even when controlling for physical and sexual abuse and lifetime trauma exposure. Some studies have also found that the effect sizes for emotional abuse are as large as, or larger than, the effect sizes for physical or sexual abuse. For example, Gibb et al. (2007) found stronger associations between childhood emotional abuse and later depression than between childhood physical and sexual abuse and depression. Clearly, it is important to consider all forms of childhood maltreatment to fully understand the long-term impact of abuse.

Recently, researchers have noted the importance of taking this broader approach when examining participants' victimization profiles. Failure to account for all types of abuse a participant has experienced might lead to inaccurate conclusions about the unique contribution of specific types of abuse to mental health outcomes and social functioning (Finkelhor, Ormrod, & Turner, 2007). Such information could enhance interventions aimed at reducing revictimization risk. The following review summarizes the many findings that confirm a relationship between childhood physical and sexual abuse and subsequent victimization and perpetration. Then, those studies that specifically addressed the role of emotional abuse are described, while highlighting the emotional components of abusive experiences that might create vulnerability for later victimization and perpetration.

PHYSICAL AND SEXUAL ABUSE PREDICT AGGRESSION PERPETRATION

Childhood physical and sexual abuse have consistently been associated with aggression perpetration in adolescents and adults. Childhood physical abuse has been associated with criminality and violence (Widom, 2000), intimate partner violence (Graves, Sechrist, White, & Paradise, 2005; White & Widom, 2003), and sexual assault perpetration (White & Smith, 2004). Similarly, childhood sexual abuse has been associated with sexual assault

perpetration (Glasser et al., 2001; White & Smith, 2004) and criminality (Freyd et al., 2005).

Given the elevated rates of childhood sexual and physical victimization among pedophiles and child abusers, some theorists have posited a developmental progression from victim to perpetrator (Finkelhor & Araji, 1986). According to this theory, perpetration of abuse develops out of a need for victims to gain mastery over their childhood victimization experiences by adopting the role of the powerful aggressor (Finkelhor & Araji, 1986; Irwin, 1999). More recent theories have become increasing complex, including multiple mediating and moderating variables as well as protective factors that might buffer victims from the negative consequences of childhood maltreatment (Arata, 2002). Dissociation, in particular, has received empirical support as a potential mediator. For example, Becker-Blease and Freyd (2007) studied a sample of convicted sex offenders and reported that high levels of dissociation in response to victimization were related to dissociation during perpetration. The role of emotions might also be important. Lisak, Hopper, and Song (1996) examined several factors that might increase risk for perpetration of abuse among men who report childhood sexual abuse, physical abuse, or both. Results indicated that high levels of gender rigidity and emotional constriction were associated with increased risk for perpetration. Although Lisak et al. did not measure emotional abuse, Goldsmith and Freyd (2005) found that emotional abuse was strongly related to difficulty identifying feelings, suggesting that emotional abuse might be an important underlying factor in emotional constriction that is related to perpetration.

Other findings also support the idea that emotions might play an important role in the cycle of violence. Many studies have demonstrated a connection between childhood abusive experiences and emotional distress such as increased rates of depression, anxiety, and anger (for a review, see Briere & Elliott, 1994). Emotional distress resulting from abusive childhood experiences might be directed inwardly and result in depression, self-hatred, and low self-esteem (Briere & Elliott, 1994). Conversely, emotional distress can be manifested externally in the form of physical, sexual, and emotional aggression (Briere & Elliott, 1994).

In addition to emotional consequences, abusive experiences often result in cognitive distortions. Many researchers have posited that the development of the self is intrinsically tied to social interactions (Roche, Runtz, & Hunter, 1999). It is in the context of interpersonal relationships (especially early attachment relationships with caregivers) that children develop a sense of self (see Riggs, 2010). The experience of childhood sexual abuse is one type of interpersonal interaction that might have deleterious effects on a child's schema of relationship models and thus lead to interpersonal problems in the future (Classen, Field, Kooperman, Nevill-Manning, & Spiegel, 2001). Theorists have proposed that childhood sexual abuse disrupts a developing child's "basic beliefs about safety and trust" in interpersonal relationships thus resulting in a false understanding of elements of satisfying healthy relationships in adolescence and adulthood (Cole & Putnam, 1992). In the instance of perpetration of abuse, victims might have developed a cognitive schema of relationships in which violence is seen as an appropriate method of emotional expression. According to social learning theory, the cycle of violence occurs as physical aggression is modeled by parents and influential members of society (Widom, 1989). Consequently children learn that aggression is an acceptable vehicle through which to express emotions or achieve needs and desires (Bandura, 1973; Widom, 1989).

PHYSICAL AND SEXUAL ABUSE PREDICT AGGRESSION VICTIMIZATION

Revictimization has also been extensively studied and theorized. A particular focus has been the path from childhood sexual abuse victimization to adult sexual assault victimization, although physical abuse has been studied as well. Hosser, Raddatz, and Windzio (2007) found that childhood physical abuse victimization predicted adult physical assault and crime victimization. Studies have consistently found that childhood sexual abuse victimization increased the risk of adult sexual assault victimization (Gidycz, Hanson, & Layman, 1995; Humphrey & White, 2000; Koss & Dinero, 1989; Messman-Moore & Long, 2003; Siegel & Williams, 2003). This finding has been confirmed in at least two meta-analyses (Neumann, Houskamp, Pollock, & Briere, 1996; Roodman & Clum, 2001). As with the "cycle of violence," in which childhood victimization can lead to adult perpetration, dissociation is one of the likely mediational pathways between childhood victimization and adult victimization (Hall, 2003; Svedin, Nilsson, & Lindell, 2004).

Another set of pathways might involve impairment in the ability to recognize risky situations (Wilson, Calhoun, & Bernat, 1999) and betrayal (Gobin & Freyd, 2009). Gobin and Freyd (2009) found an association between the experience of traumas high in betrayal (such as childhood sexual, physical, or emotional abuse by someone emotionally close to the child) and subsequent awareness for betrayals in interpersonal contexts. Specifically, they found that survivors of high betrayal traumas reported lower levels of awareness for infidelity in their romantic partnerships when compared to participants without high betrayal trauma histories. Moreover, there was an association between high betrayal trauma history and response to interpersonal betrayals in adulthood such that high betrayal trauma survivors were more likely to report remaining in a relationship following a betrayal of trust. Decreased awareness for betrayals and remaining in relationships with disloyal partners might heighten revictimization risk.

EMOTIONAL ABUSE AS A PREDICTOR OF AGGRESSION PERPETRATION AND VICTIMIZATION

The theoretical and empirical work discussed previously links childhood physical and sexual abuse with aggression perpetration and victimization as an adult. It is reasonable to ask whether childhood emotional abuse is similarly a risk factor for aggression perpetration or victimization as an adult, especially given the demonstrated importance of emotions as outcomes, mediators, or moderators in many of the studies on physical and sexual abuse. A handful of studies related to this question have been conducted (see Berzenski & Yates, 2010). Their findings suggest that both victimization and perpetration might be more likely among emotional abuse survivors.

The most directly relevant studies measure childhood emotional abuse (along with other types of abuse) and use these childhood trauma variables to predict aggression perpetration or victimization as an adult or adolescent (e.g., see Dodge Reyome, 2010, for a discussion of childhood emotional maltreatment and intimate partner violence). In one study (Crawford & Wright, 2007), childhood emotional abuse and neglect (jointly) predicted relationship aggression (predominantly a measure of general physical aggression, with a few items concerning sexual aggression) in college students. This relationship held, even when controlling for gender, income, parental alcoholism, child sexual abuse, child physical abuse, and neglect (see Riggs & Kaminski, 2010, for a discussion of childhood emotional maltreatment and relational aggression). In another study (Linder & Collins, 2005), researchers found that boundary violations between adolescents and their parents predicted physical victimization and perpetration in later dating relationships (at ages 21 and 23). Boundary violations included behaviors such as being casually seductive and reversing roles. Although this construct has important differences from emotional abuse as conceived by most researchers who study it, it seems related to emotional abuse.

Two studies have looked specifically at sexual assault victimization as the outcome variable. Recruiting from a sample of women receiving outpatient services at a Canadian hospital, Stermac, Reist, Addison, and Millar (2002) found that childhood neglect by mother or father and psychological maltreatment by mother predicted adult sexual assault victimization. Similarly, Messman-Moore and Brown (2004) found more cases of adult rape victimization among participants who had experienced childhood emotional abuse than among those who had not. This finding was still marginally (p = .07) reliable when physical abuse, sexual abuse, and family functioning were statistically controlled.

THIS STUDY

This study was designed to test the hypotheses that childhood emotional abuse would be positively associated with late adolescent sexual aggression victimization as well as perpetration, and that this would be true for both genders. In addition, it assessed whether these results will still hold when controlling for childhood physical and sexual abuse, which are often positively correlated with emotional and psychological abuse. Because self-reports of violence perpetration or victimization might be contaminated by self-presentation response biases (Saunders, 1991), a measure of social desirability was included in data collection and analysis.

METHOD

Participants

Participants were 79 male and 105 female college sophomores attending a large state university on the West Coast. They were part of a larger twowave longitudinal study on sex and dating that was begun the year before (when participants were incoming first-year college students). At the time of original recruitment, all participants were between the ages of 18 and 20, were beginning their first year of college (i.e., not transfer students), and had learned English before the age of 5. At the time of this data collection, most (87%) of the participants were 19 years old (M = 19.04, SD = 0.36, range = 18–20). Just under two thirds (n = 119, 64.7%) of participants identified as European American. The sample also included 25 (13.6%) Asian American, 14 (7.6%) Latina or Latino, 6 (3.3%) African American, and 15 (8.2%) biracial or multiracial participants. Five participants indicated another ethnicity or did not respond to the question.

Measures

CHILDHOOD ABUSE

A 12-item version of the Brief Betrayal Trauma Survey (BBTS; Goldberg & Freyd, 2006) was used to assess retrospective self-reports of childhood physical, sexual, and emotional abuse before the age of 18. The BBTS includes behaviorally specific questions about exposure to a variety of traumas including noninterpersonal trauma, witnessing violence, and direct interpersonal trauma. For each item, the participant indicated how many times the event had happened to him or her: never (coded as 0), 1 or 2 times (coded as 1), or 3 or more times (coded as 2). For this study, responses to six items were analyzed: emotional abuse ("You were emotionally or psychologically mistreated over a significant period of time by someone with whom you were very close [such as a parent or lover]"), physical abuse by someone close ("You were deliberately attacked that severely [so severely as to result in marks, bruises, blood, broken bones, or broken teeth] by someone with whom you were very close"), physical

abuse by someone not close ("You were deliberately attacked that severely by someone with whom you were not close"), sexual abuse by someone close ("You were made to have some form of sexual contact, such as touching or penetration, by someone with whom you were very close [such as a parent or lover]"), and sexual abuse by someone not close ("You were made to have such sexual contact by someone with whom you were not close"). In previous research, good construct validity has been reported for the BBTS and its test–retest reliability has been high (83% for events that occurred during childhood and 75% for adult experiences; Goldberg & Freyd, 2006). Further evidence for the construct validity of the BBTS was provided by DePrince (2001), who found high agreement between scores on the BBTS and responses to a much more extensive trauma questionnaire, the Betrayal Trauma Inventory, which was derived from the wellvalidated Abuse and Perpetration Inventory (Lisak et al., 2000).

ADOLESCENT SEXUAL AGGRESSION PERPETRATION AND VICTIMIZATION

Adolescent sexual aggression experiences were measured using a modified version of the Sexual Experiences Survey (SES; Koss, Gidycz, & Wisniewski, 1987). Reliability and validity data for the SES were reported in Koss and Gidvcz (1985) and Testa, VanZile-Tamsen, Livingston, and Koss (2004). For this study, a superset of the items in the modified version of the SES described by Testa et al. and the original SES (Koss & Oros, 1982) was used. All items were rewritten to be gender neutral. For example, "Have you had sexual intercourse when you didn't want to because a man threatened or used some degree of physical force (twisting your arm, holding you down, etc.) to make you?" was rewritten as, "Have you had sexual intercourse with someone when you didn't want to because they threatened or used some degree of physical force (twisting your arm, holding you down, etc.) to make you?" and "Have you had a man attempt to insert his penis (but intercourse did not occur)" was rewritten as, "Have you been in a situation where someone attempted to have sexual intercourse with you when you didn't want to (but intercourse did not occur)." Participants first answered a version of the SES (SES-V) that measured sexual aggression victimization and then a second version (SES-P) that measured sexual aggression perpetration. For both versions, participants indicated on a scale from 0 (not at all) to 5 (5 or more times) how often they had engaged in behaviorally specific acts of sexual aggression perpetration or victimization. Additional examples of items include "How many times have you fondled, kissed, or touched someone sexually when they didn't want to because you threatened or used some degree of physical force (twisting their arm, holding them down, etc.) to make them?" and "How many times have you had sexual intercourse with someone when you didn't want to because they used their position of authority (boss, teacher, camp counselor,

supervisor) to make you?" Responses were summed to create the final outcome variables.

Social desirability

The Impression Management subscale of the Balanced Inventory of Desirable Responding (Paulhus, 1991) was used to assess social desirability. Construct validity of this scale has been demonstrated by Paulhus (1991). Sample items include "I sometimes drive faster than the speed limit," and "I never swear." Responses were on a scale ranging from 1 (*disagree strongly*) to 7 (*agree strongly*). Coefficient alpha for this scale was .74. In accordance with Paulhus's recommendations for scoring, responses were dichotomized such that the two most socially desirable responses (e.g., *disagree strongly* and *disagree moderately* for the item "I sometimes drive faster than the speed limit") were coded as a one and the other five responses were coded as a zero; these recoded responses were then summed to create the final score.

Procedure

All participants were taking part in the second wave of a two-wave longitudinal study in which they were assessed once in the fall of their first year of college and again in the fall of their second year of college. All measures previously described were included as part of a larger questionnaire packet (with additional measures not analyzed for this study) that participants completed individually in a quiet, private room. The full procedure for this wave of the study included a timed, individually administered computer task and a semistructured one-to-one interview, both of which preceded the administration of the questionnaire. Total administration time was approximately 2 to 3 hours; participants were given snacks, beverages, and breaks throughout the procedure. Participants were paid \$25 plus a bonus based on their performance on the computer task and an additional "scheduling bonus" (for those who arrived on time for their originally scheduled appointment); total compensation was capped at \$40.

RESULTS

Descriptive Statistics and Tests for Gender Differences

Means and standard deviations for all variables are presented in Table 1. Means for social desirability were similar to those previously reported by Paulhus (1991) for a college sample. There were no statistically reliable gender differences in mean levels of social desirability, childhood physical or sexual abuse by someone close, or adolescent sexual aggression perpetration.

	М	en	Wo	men	
Variable	М	SD	М	SD	Т
Social desirability	4.00	3.09	4.04	2.63	0.08
Childhood emotional abuse (close)	0.18	0.50	0.44	0.75	2.83**
Childhood physical abuse (close)	0.15	0.49	0.11	0.40	-0.60
Childhood physical abuse (not close)	0.17	0.41	0.03	0.22	-2.72**
Childhood sexual abuse (close)	0.08	0.32	0.16	0.48	1.41
Childhood sexual abuse (not close)	0.05	0.22	0.12	0.36	1.68^{\dagger}
Adolescent sexual aggression perpetration	0.62	1.83	0.32	1.09	-1.31
Adolescent sexual aggression victimization	1.29	3.55	2.68	4.12	2.44*

TABLE 1 Descriptive Statistics and Tests of Gender Differences

Note: Ns for men ranged from 76 to 79. Ns for women ranged from 104 to 105. Social desirability could range from 0 to 20. Individual abuse items could range from 0 to 2. The possible range for aggression perpetration and victimization was 0 to 75. The *t* statistics provide tests of the gender differences in means. $^{\dagger}p < .10$. $^{*}p < .05$. $^{**}p < .01$.

Women reported more childhood emotional abuse, more adolescent sexual aggression victimization, and (marginally) more childhood sexual abuse from someone they were not close to than did men. Men reported more childhood physical abuse from someone they were not close to than did women.

Social Desirability, Childhood Abuse, and Adolescent Sexual Aggression: Zero-Order Correlations

Zero-order correlations for all variables are presented in Table 2. For women, childhood emotional abuse was positively correlated with both types of physical abuse and with sexual abuse by someone close. For men, childhood emotional abuse was correlated with both types of physical abuse, but was not correlated with either type of sexual abuse (both ps > .50). The difference in the size of the men's correlation between emotional abuse and sexual abuse by someone close (r = .07) was reliably different than the size of the women's correlation between these two variables (r = .39), tested via Fisher's *r*-to-*z* transformation, z =2.18, p = .03.

Childhood emotional abuse was positively correlated with adolescent sexual aggression victimization and perpetration, and this was true for both men and women. The correlation between adolescent sexual aggression victimization and perpetration was stronger in men (r = .68) than in women (r = .22), z = 4.01, p < .001.

Women's social desirability scores were negatively correlated with adolescent sexual aggression perpetration and positively correlated with childhood physical abuse victimization. Men's social desirability scores were (marginally)

2	~	D		D				
	1	2	3	4	5	9	7	8
1. Social desirability		90.	$.17^{\dagger}$.22*	.05	07	28**	06
2. Childhood emotional abuse (close)	14		.44***	.22*	.39***	.01	.19*	.38***
3. Childhood physical abuse (close)	10	.58***		$.40^{***}$.15	.10	.07	.20*
4. Childhood physical abuse (not close)	00	.55***	.52***		.05	.20*	04	.12
5. Childhood sexual abuse (close)	.13	.07	60.	00		.16	.02	.46***
6. Childhood sexual abuse (not close)	15	.03	07	10	06		.10	.11
7. Adolescent sexual aggression perpetration	20^{\dagger}	.35**	.18	.46***	06	08		.22*
8. Adolescent sexual aggression victimization	15	.49***	.15	.34**	.04	04	.68***	
	c							

tercorrelations of All Variables for Women (Above Diagonal) and Men (Below Diagonal)	
TABLE 2 Intercorrelat	

Note: Ns for men range from 75 to 79. Ns for women range from 103 to 105. † p < .10. * p < .05. ** p < .01. ** p < .001.

negatively correlated with adolescent sexual aggression perpetration. Therefore, social desirability was included in the multivariate analyses reported here, to adjust for the possible effects of self-presentation response bias.

Childhood Abuse and Adolescent Sexual Aggression: Regression Analyses

To further explore the zero-order correlations between childhood emotional abuse and adolescent sexual aggression experiences, and to control for correlated variables, four hierarchical multiple regression analyses were conducted. These results are presented in Table 3. Analyses were conducted separately for men and women, first with sexual aggression perpetration and then sexual aggression victimization used as the outcome variable. For all analyses, social desirability and childhood emotional abuse were entered in the first block, with the four childhood physical abuse and sexual abuse variables entered in the second block.

The overall percentage of variance predicted by the final models ranged from 13.8% (regression predicting women's experiences of sexual aggression perpetration) to 31.2% (regression predicting men's experiences of sexual aggression victimization). For each of the four analyses the total variance explained was large enough to be statistically reliable (all *ps* < .05). In general, social desirability was not an important predictor; it was, however, statistically reliable for the prediction of women's reports of their sexual aggression perpetration.

As in the zero-order correlational analyses, childhood emotional abuse was an important predictor of sexual aggression perpetration and victimization, and this was true for both men and women. In general, the relationship between childhood emotional abuse and adolescent sexual aggression was not affected by the addition of childhood physical and sexual abuse into the regression model. In other words, emotional abuse was predictive of adolescent sexual aggression perpetration and victimization, even after controlling for the possible effects of childhood physical and sexual abuse (which were not, in general, predictive of sexual aggression). An exception was the case of men's sexual aggression perpetration. In this model, childhood emotional abuse was a moderately strong predictor of perpetration (B = 1.245, β = .34, t = 3.15, p = .002). Once sexual abuse (and physical abuse) were added to the model, the standardized partial regression coefficient for childhood emotional abuse decreased (from $\beta = .34$ to $\beta = .20$) and was, in the final model, not a statistically reliable predictor (p = .13).

		M	Men			Women	nen	
	Sexual a perpe	Sexual aggression perpetration ^a	Sexual aggression victimization ^b	xual aggression victimization ^b	Sexual ag	Sexual aggression perpetration ^c	Sexual ag victimi	Sexual aggression victimization ^c
Predictor	Step 1	Step 2	Step 1	Step 2	Step 1	Step 2	Step 1	Step 2
Social desirability	13	17	06	10	30**	28**	06	11
Child emotional abuse (close)	.34**	.20	.49***	.54***	.21*	.23*	.39***	$.18^{\dagger}$
Child physical abuse (close)		19		28*		.04		.10
Child physical abuse (not close)		.45***		.19		06		.06
Child sexual abuse (close)		04		.04		07		.37***
Child sexual abuse (not close)		08		07		60.		.05
ΔR^2		$.146^{*}$.058		.012		.133**
Total R^2	$.148^{**}$.294***	.254***	.312***	.125**	.138*	.150***	.283***

TABLE 3 Hierarchical Regressions Predicting Adolescent Sexual Aggression Perpetration and Victimization From Social Desirability and Childhood Physical, Sexual, and Emotional Abuse

Note: Social desirability and childhood emotional abuse were entered in the first block; childhood physical and sexual abuse variables were entered in the second block. Standardized partial regression coefficients (β s) are reported. ${}^{a}n = 76$. ${}^{b}n = 75$. ${}^{c}n = 103$. ${}^{t}p < .10$. ${}^{**}p < .05$. ${}^{***}p < .001$.

DISCUSSION

Previous work has emphasized the deleterious consequences of childhood sexual and physical abuse on adolescent and adult interpersonal functioning, and less attention has been paid to the relative contribution of childhood emotional abuse. This study examined the relationship between childhood emotional abuse and late adolescent sexual aggression victimization and perpetration. As predicted, for both men and women, childhood emotional abuse was positively correlated with adolescent sexual aggression victimization and perpetration. This effect was robust and, in most cases, held even after controlling for childhood sexual and physical abuse and social desirability.

This investigation highlights the importance of emotional abuse as a risk factor for later sexual victimization and perpetration among survivors of childhood maltreatment. The associations between child maltreatment and sexual and physical revictimization have been well substantiated by the literature. However, an overwhelming majority of previous studies have focused on child physical or sexual abuse, while excluding childhood emotional abuse from consideration. Similarly, emotional abuse is rarely measured in cycle of violence investigations that seek to predict adult or adolescent perpetration from childhood victimization (see Berzenski & Yates, 2010). Our findings suggest that childhood emotional abuse is related to both late adolescent sexual aggression perpetration and victimization. Therefore, to adequately assess risk for adolescent sexual aggression, the presence and extent of childhood emotional abuse must be known.

A failure to include emotional abuse in research on the sequelae of child maltreatment could also lead to false conclusions about the relationship between other types of childhood abuse and subsequent perpetration and victimization. For example, interpretation of results might be adversely affected when researchers fail to control for covarying types of abuse, such that difficulties experienced by the survivor might be mistakenly attributed to one type of abuse as opposed to another (Simeon, Guralnik, Schmeidler, Sirof, & Knutelska, 2001). In the data reported above, zero-order correlations suggested that men's physical abuse by someone they were not close to could lead to adolescent sexual aggression victimization. However, this correlation was no longer reliable in the multiple regression analysis, suggesting that risk of revictimization was instead due to (covarying) emotional abuse. Similarly, the pattern of zero-order correlations in women between physical abuse by someone close, sexual abuse by someone close, and adolescent sexual aggression victimization suggested that either of these types of childhood abuse could lead to later revictimization. However, the multiple regression analyses revealed that physical abuse was no longer a reliable predictor, once other types of abuse were controlled for. The important predictors were sexual abuse by someone close and (to a lesser extent) emotional abuse.

Possible Mediating Mechanisms

This study did not include a direct investigation of mechanisms that mediate between childhood maltreatment and adolescent outcomes, but several such mechanisms are possible candidates. One mechanism that has frequently been proposed to increase revictimization risk is dissociation (Becker-Blease & Freyd, 2007; Hall, 2003). Dissociation often develops as a coping mechanism that allows survivors to dismiss information from conscious awareness that is perceived as overwhelming (Kluft, 1990). Although dissociation is successful, in that it defends the survivor from incorporating overwhelming information into his or her conscious awareness, it is dangerous in that it can become adaptive for the survivor and generalize to other dangerous situations in adolescence and adulthood (Noll, Horowitz, Bonanno, Trickett, & Putnam, 2003). This can result in an inability to detect dangerous situations in the future (e.g., Cloitre, 1998). Dissociation might also be a mediator between childhood emotional abuse and sexual aggression perpetration. Adult perpetrators who dissociated during their childhood victimization experiences are more likely to dissociate when perpetrating (Becker-Blease & Freyd, 2007). It could be that their perpetration is facilitated by the dissociated state, which allows for an unawareness of the harmful nature of the abusive actions.

Other cognitive mediators might also play a role. Zurbriggen and Freyd (2004) posited that childhood sexual abuse leads to changes in schemas about relationships and damaged "consensual sex decision mechanisms," resulting in impaired sexual decision making. For example, healthy decision rules such as "If I don't want to have sex, say no" might be absent or damaged in sexual abuse survivors. Emotional abuse might similarly be expected to result in damage to schemas and decision rules related to sexuality and romantic relationships. Such damage could lead to increased risk for sexual aggression perpetration and victimization.

In addition to cognitive mediators, the possibility that emotional mediators could be important in understanding the sequelae of childhood emotional abuse is intriguing. Emotional abuse has been found to predict a variety of emotions, including anger and irritability (Teicher et al., 2006), anxiety and phobias (Gibb et al., 2007; Spertus et al., 2003), and depression (Gibb et al., 2007; Spertus et al., 2003). Emotional disorders such as depression and anxiety might make it difficult for survivors to appreciate risky situations or to stand up for themselves, thus increasing revictimization risk. If emotional abuse interferes with healthy emotional development it might lead to deficits in important emotional skills such as the ability to empathize with others. Because low empathy is a risk factor for sexual aggression perpetration (Dean & Malamuth, 1997; Seto & Barbaree, 1993), such deficits could partially explain the increased levels of sexual aggression perpetration that were found in survivors of emotional abuse. Impaired facility in emotion regulation is another possible mediator. Without the ability to selfregulate and appropriately moderate one's irritation, frustration can lead to anger and aggression toward the person who is the perceived cause of the frustration. It is easy to imagine a situation in a budding romantic relationship in which a frustrated desire for sexual fulfillment, combined with inadequate skills in managing frustration, could lead someone to commit sexual assault. These speculations about possible emotional mediators deserve further thought and study. It could be that, especially for emotional abuse, it would be fruitful to move away from a reliance on cognitive mediators and focus more intently on emotions in developing treatment and intervention protocols.

Limitations and Future Directions

Despite the support found for the connection between childhood emotional abuse and adult sexual aggression perpetration and victimization, limitations of the study must be acknowledged. Rates of childhood sexual, physical, and emotional abuse were obtained via retrospective self-reports. Because memories can fade or change over time, reliance on retrospective reports of childhood traumatic experiences highlights concerns regarding false negatives. Thus, a possible limitation of this study is underreporting of childhood abuse.

Self-reports have additional limitations, including their sensitivity to demand characteristics such as social desirability bias. The inclusion of social desirability as a control variable in the multiple regression analyses helps to mitigate against this bias, but is not guaranteed to adjust for it completely. In addition, because all three types of abuse were measured via self-report, it is possible that the associations between abuse types might be artificially high due to shared method variance. Again, this becomes less of a problem in the multiple regression analyses because all shared method variance is partialed out. However, it would be wise to interpret the zeroorder correlations between abuse types with some caution. Future research that directly compares retrospective self-reports of abuse history with information obtained using other methodologies (e.g., reports from other family members, archival court or child protective services reports, self-reports at the time of the abuse, implicit measures such as physiological or emotional reactivity to abuse-related stimuli) would be welcome. Of course, because of the secrecy that often surrounds childhood abuse (especially childhood sexual abuse), the fact that abuse often goes unreported, and the memory impairment that can accompany trauma (Freyd, 1996), such research is likely to be difficult to conduct.

The use of a college sample limits the generalizability of results. College students have a tendency to display higher levels of functioning than might be observed in community and clinical samples. Thus, it will be important to replicate these findings outside of college samples. It should be noted, however, that other researchers have found support for the detrimental effects of emotional abuse in clinical samples (e.g., Gibb et al., 2007; Simeon et al., 2001; Spertus et al., 2003).

The 12-item BBTS used in this study asked only about emotional abuse committed by someone close to the child. In contrast, for both physical and sexual abuse, separate questions were asked concerning abuse perpetrated by someone close to and not close to the child. It is possible that associations between variables might change if emotional abuse by someone not close was measured and included in analyses. The most recent (14-item) version of the BBTS (available at http://dynamic.uoregon.edu/~jjf/bbts/) includes this additional question about emotional abuse; for future research it would be best to use this expanded instrument.

Emotional abuse might be different from sexual and physical abuse in regards to the likelihood that it can be perpetrated by someone not close to the child. For sexual and physical abuse, potential perpetrators who are not close to the child might not have much access to him or her; however, if they do gain access their abusive actions (e.g., hitting, beating, raping) would presumably inflict the same damage as would identical actions perpetrated by someone close to the child. In contrast, abusive language and harsh criticism conceivably might hurt much less when coming from a stranger than when coming from a beloved caregiver. In addition, emotional abuse might take its heavy toll in part because of the frequency with which it is delivered. Parents and other individuals close to a child can (and often do) inflict emotional abuse day after day for years on end, to an extent that would simply not be possible for strangers or acquaintances. Indeed, researchers have found that the majority of perpetrators of childhood emotional abuse are parents (e.g., Simeon et al., 2001). Future research can continue to explore the association between frequency of emotional abuse and the relationship between the child and the perpetrator. In addition, such research can investigate the effect of emotional abuse "dosage." It could be that part of the damage caused by emotional abuse can be attributed to the massive amounts of it that many maltreated children receive.

One might also speculate that the high level of betrayal inherent in emotional abuse perpetrated by someone close to the victim could contribute to the toxicity of emotional abuse. According to betrayal trauma theory (Freyd, 1996), memory for, awareness of, and processing of traumatic experiences will be impaired depending on the level of betrayal inherent in the event. It is possible that emotional abuse perpetrated by someone close to the victim could increase risk for subsequent victimization and perpetration through the mediating mechanism of memory impairment. Future research should explore the relative contribution of closeness of perpetrator of emotional abuse to outcomes such as adult sexual aggression victimization and perpetration. This study has provided further evidence that childhood emotional abuse is an important predictor of later problems, at least as important as other types of abuse (such as childhood physical or sexual abuse) that are often considered more serious. These results support the assessment of other researchers (e.g., Finkelhor et al., 2007; Hart & Brassard, 1987) who have advocated for a fuller investigation of this hurtful and damaging form of child maltreatment.

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