Microsystem Risk Factors for Adult Sexual Victimization Among Victims of Child Sexual Versus Physical Abuse

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Introduction

- Evidence has consistently shown that victims of child sexual abuse (CSA) are at increased risk of sexual revictimization during adulthood (e.g., Barnes, Noll, Putnam, & Trickett, 2009; Maker, Kemmelmeier, & Peterson, 2001; Messman-Moore & Long, 2000).
- While the revicitimization literature has focused primarily on CSA victims, several studies show that victims of child physical abuse (CPA) are also at increased risk for ASA (e.g., Cloitre, Tardiff, Marzuk, Leon, & Portrera, 1996; Kimerling et al., 2007).
- In their review of the literature, Messman-Moore and Long (2003) identified a number of risk factors that operate in the immediate context of victimization (i.e., microsystem) to increase CSA victims' vulnerability to ASA. Such factors are thought to escalate risk by increasing the likelihood that victims will come into contact with male perpetrators (e.g., through risky sexual behavior) and that perpetrators will perceive the victim as vulnerable to assault (e.g., due to alcohol use, posttraumatic and dissociative symptoms, sexual non-assertiveness).
- Though this model has typically been applied to explain early-to-later sexual victimization, adult victims of CPA report similar difficulties with posttraumatic stress, alcohol use, and risky sexual behavior (Schneider, Baumrind, & Kimerling, 2007; Walsh, Latzman, & Latzman, 2014). Thus, it is possible that microsystem risk factors for ASA apply more broadly to victims of both child sexual and physical abuse.
- Consistent with the empirical and theoretical evidence reviewed above, we hypothesized that increased alcohol use, posttraumatic and dissociative symptoms, risky sexual behavior, and sexual non-assertiveness would serve to increase risk for ASA among victims of both CSA and CPA.

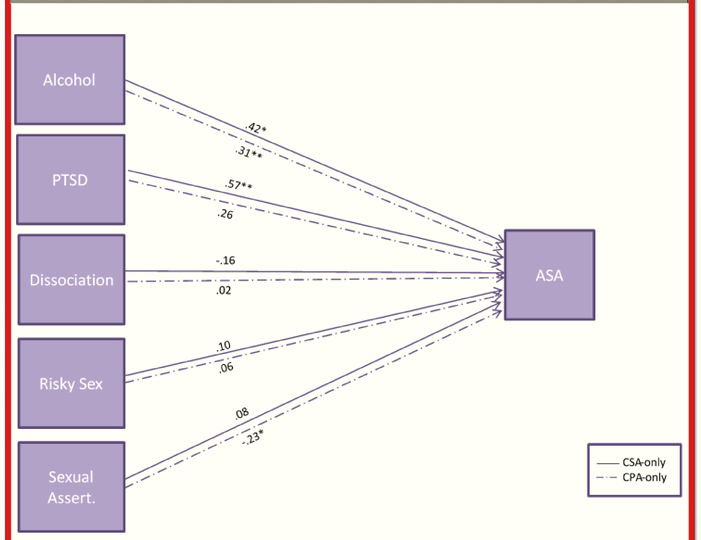
Measures

- **Child sexual and physical abuse.** The sexual and physical abuse subscales of the Computer Assisted Maltreatment Inventory (CAMI; DiLillo et al., 2010) and the Childhood Trauma Questionnaire (CTQ; Bernstein & Fink, 1998) were used to assess participants' child maltreatment experiences. On each of these measures, participants indicated whether they were exposed to various abusive acts prior to age 18. Participants were considered victims of child abuse if they met criteria on either the CAMI or the CTQ. To meet criteria on the CAMI subscales, participants must have endorsed at least one screener question and provided follow-up responses conforming to operational definitions of CSA or CPA commonly used in the literature. To meet criteria on the CTQ subscales, participants must have scored 6 or greater on the CSA subscale and 8 or greater on the CPA subscale. Scores on both of the CTQ subscales range from 5 to 25.
- **Adult sexual assault.** The Modified Sexual Experiences Survey (MSES; Messman-Moore, Long, & Siegfried, 2000) was used to measure unwanted sexual experiences occurring during adulthood. Participants were considered victims of ASA if they endorsed at least one of 14 screener items indicating that they had experienced sexual acts or intercourse against their will due to threats, pressure, or intoxication.
- **Alcohol use.** The Alcohol Use Disorders Identification Test (AUDIT; Saunders et al., 1993) was used to assess frequency of alcohol use, number of drinks typically consumed per drinking occasion, and presence of problems commonly associated with alcohol dependence during the past year. Scores greater than or equal to 8 on a scale ranging from 0 to 40 are indicative of problem drinking.
- **Posttraumatic stress symptoms.** The Posttraumatic Stress Disorder (PTSD) Checklist-Civilian (PCL-C; Blanchard et al., 1996) was used to measure participants' PTSD symptoms during the past month (i.e., consistent with DSM-IV criteria). Item scores were summed, and the total symptom severity score was used in the present analyses. Severity scores range from 17 to 85, with scores greater than or equal to 44 indicating a possible PTSD diagnosis.
- **Dissociative symptoms.** The Dissociative Experiences Scale-II (DES2; Carlson & Putnam, 1993) was used to assess the frequency of participants' dissociative experiences. Participants responded to items, indicating the percentage of time during which they experience dissociation in their daily lives (excluding experiences occurring when under the influence of alcohol or drugs). Item scores were summed, with total scores ranging from 0 to 280.
- **Risky sexual behavior.** Items from Testa et al. (2007) were used to measure factors that have been shown to be associated with risk for sexual victimization (e.g., number of sexual partners, frequency of unprotected sexual activity). Participants indicated the number of times they had engaged in each of these high-risk behaviors.
- **Sexual assertiveness.** The refusal subscale of the Sexual Assertiveness Scale (SAS; Morokoff et al., 1997) was used to assess participants' perceived levels of sexual assertiveness, specifically pertaining to their refusal of unwanted sexual experiences. Participants indicated the percentage of time during which they refuse unwanted advances. Item scores were summed, yielding a total scale score ranging from 6 to 30.

Table 1. Descriptive Statistics for Study Variables

	M (SD) or % Child Sexual Abuse	*M (SD) or % Child Physical Abuse*
1. Alcohol Use (N =195)	3.27 (3.73)	4.49 (4.33)
2. PTSD (N =164)	35.95 (15.89)	27.72 (12)
3. Dissociation (N =196)	27.90 (29.50)	23.96 (21.81)
4. Risky Sexual Behavior (N =193)	9.62 (24.20)	5.34 (12.93)
5. Sexual Assertiveness (N =195)	23.05 (5.43)	24.83 (4.52)
6. ASA Victimization (N =197)	56%	48%

Figure 1. Multiple Group Path Model



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

Acknowledgments

Data collection was supported by the National Institute of Child Health and Human Development grant R01 HD062226-01A2 (PI: DiLillo, University Nebraska-Lincoln).

Participants

- Participants were 198 women (M_{age}= 22, *SD*= 2.24) recruited at four community sites (Lincoln, Nebraska; Omaha, Nebraska; Oxford, Ohio; Jackson, Mississippi) for a larger longitudinal study examining sexual revictimization.
- Participants identified as European American (64%), African American (32%), American Indian (3%), Asian American (6%), Hispanic (5%), and other (2%).
- Only women reporting experiences of either sexual abuse (*n* = 51) or physical abuse (*n* = 147) occurring during childhood (i.e., prior to age 18) were included in the study. Women reporting experiences of both CSA and CPA were excluded.
- A total of 98 participants (50%) reported experiencing sexual victimization during adulthood.
- See Table 1 for descriptive statistics for all study variables.

Results

The associations among alcohol use, PTSD, dissociation, risky sexual behaviors, sexual assertiveness, and adult sexual assault were examined using multiple group path analysis in Mplus 7.2 (Muthén & Muthén, 2014). Multiple group analysis allowed us to determine whether the path model differed across groups in a sample. In the current analyses, the two groups were participants who reported experiencing CSA-only (*n* = 51) and participants who reported experiencing CPA-only (*n* = 147).

Results from the path analysis indicated both common and unique predictors of ASA in the two groups. While alcohol use emerged as a significant risk factor for ASA in both the CSA-only and CPA-only groups, PTSD was a significant risk factor in the CSA-only group. In contrast, sexual assertiveness emerged as a significant risk factor for ASA in the CPA-only group. Dissociation and risky behavior were not significant predictors of ASA in either group (see Figure 1).

Discussion

- Messman-Moore and Long (2003) suggest that microsystem-level risk factors enhance CSA victims' risk for sexual revictimization by increasing their level of contact with potential perpetrators as well as increasing the likelihood that perpetrators will perceive them as vulnerable. Alcohol use likely influences ASA risk through both of these mechanisms. Because adult victims of CSA and CPA generally report increased alcohol use compared to non-victims (Walsh et al., 2014), it is not surprising that alcohol use was predictive of ASA among victims of both types of abuse.
- Though both CSA and CPA victimization have been linked to PTSD symptoms in adulthood (Schneider, Baumrind, & Kimerling, 2007), these symptoms were only predictive of ASA among victims of CSA. Further, sexual non-assertiveness, an established outcome of CSA, was only predictive of ASA among victims of CPA. Together, these findings suggest that though victims of CSA and CPA share common difficulties, the degree to which these factors are predictive of ASA differ.
- Findings from the present study are limited by several factors. First, only retrospective self-report measures were used to assess the study variables. Reporting of child abuse experiences may be subject to bias due to difficulties with recall or underreporting. Future studies using prospective data collection or collection of corroborating information from other sources are needed. Self-report of risk factors may also be subject to bias, as engagement in behaviors such as hazardous alcohol use and risky sexual activity may be viewed as socially undesirable. Additionally, due to the small number of participants in the CSA-only group (*n* = 51), there was insufficient power to test possible mediational mechanisms. Thus, it remains unknown whether the aforementioned risk factors differentially account for the relationship between child abuse and ASA among victims of CSA versus CPA.
- Future research should continue to explore mechanisms that may contribute to sexual victimization among victims of CPA. The risk factors examined in the present study were limited to those previously identified in the literature as risk factors for ASA among CSA victims. However, there may also be risk factors unique to CPA (e.g., brain injury) that serve to increase risk for ASA among this population.