



Is the Risk for Sexual Revictimization Cumulative? A Prospective Examination

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Introduction

It is well established that sexual abuse during childhood or adolescence increases one's risk for sexual assault as an adult (a phenomenon known as revictimization; Messman & Long, 1996). Within adulthood, repeat sexual victimization is also common; about 1 in 4 women who endorse a sexual assault report more than one experience of sexual assault (Daigle, Fisher, & Cullen, 2008). Each victimization experience can have a negative impact on functioning. Indeed, compared to a single victimization, revictimization is associated with increased negative outcomes including posttraumatic stress disorder (PTSD), alcohol abuse, and impaired risk recognition (Messman-Moore & Long, 2003). These outcomes may in turn elevate risk for further victimization, suggesting the possibility of a cycle in which each sexual assault is associated with increased risk of yet another victimization.

Though suggested by prior findings, the possibility that risk for sexual victimization is cumulative has not been examined empirically. We tested this possibility as part of a large prospective study of young adult women. Given that the impact of a single victimization on risk for subsequent victimizations is well-established in the literature, we focused on the impact of multiple victimizations. Extending this work on revictimization and consistent with a cumulative risk model, we hypothesized the following.

- 1) Compared to a single victimization experience, two or more sexual victimization experiences would be associated with significantly greater risk of a subsequent victimization.
- 2) Each additional sexual victimization experience (beyond two victimizations) would be associated with increased risk of further victimization.

Method

Participants and Procedures

- A total of 491 community women ages 18 to 25 were recruited from Nebraska, Ohio, and Mississippi for a multi-site prospective study. Online assessments were completed once every four months for three years. Thus, participants could complete up to 9 assessments.
- Participants were considered in the current analyses if they reported sexual victimization (in childhood or adulthood) on at least one assessment, and they completed at least one additional assessment (giving them an opportunity to report further victimization). A total of 318 participants met this criteria ($M_{age} = 21.9$, $SD = 2.2$).
- The majority of participants in the current analyses were European American (62.6%), followed by African American (34.3%), Hispanic (6.3%), Asian (4.7%), American Indian (3.8%), and other (2.2%). (More than one ethnicity could be endorsed.)
- Although women were recruited from the community at large, 59.7% were full- or part-time students.

Measures

- The Computer Assisted Maltreatment Inventory (DiLillo et al., 2010) was administered at the first wave. Behaviorally specific questions were used to assess for the presence or absence of childhood sexual abuse (CSA), defined as having a sexual experience before the age of 18 that was: (a) against their will, (b) with a family member, or (c) with someone who was five or more years older. Of those included in the current analyses, 193 (60.7%) reported CSA.
- The Modified Sexual Experiences Survey (Messman-Moore, Walsh, & DiLillo, 2010) was administered at each wave to assess for the presence or absence of adult sexual assault (ASA) using behaviorally specific items. At the first wave, ASA was assessed since the age of 18. At subsequent waves, ASA was used to assess recent unwanted sexual experiences (i.e., in the past four months or since the previous assessment).

Analytic Approach

- A multilevel model with a random intercept and a logit link was used to predict the probability that a given participant would report any further ASA during the course of the study. Only waves at which sexual victimization was reported were considered for each person.
- The predictor of interest was the number of sexual victimizations, which was computed by adding the presence or absence of CSA (0, 1) to the number of waves at which ASA had been reported thus far (possible range of 1 to 8).
 - Although up to 9 victimizations could be reported, only three participants reported 7 or more victimizations. Given that estimation based on so few cases may be unreliable, only reports of 1 to 6 sexual victimizations were considered.
- Because our measure of further victimization was inherently tied to the number of additional opportunities to report an assault during the study, the number of remaining assessments completed by each participant was included as a covariate.
- Likelihood ratio tests were used to compare the fit of nested models. These tests revealed that a piecewise effect of number of sexual victimizations (1 vs. 2 or more; number of victimizations above 2) fit significantly better than a linear effect for number of sexual victimizations.

Figure 1. Number of Victimization

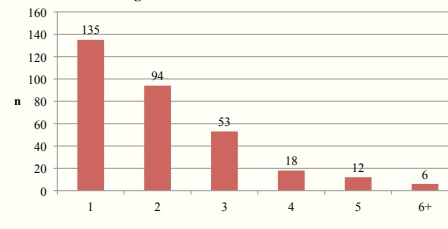
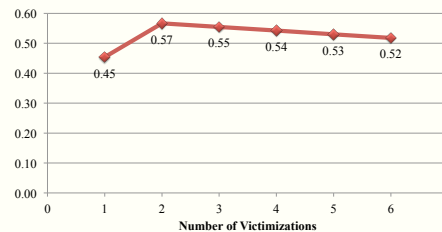


Figure 2. Probability of Reporting Another Victimization



Results

- Of the 318 female victims in the current study, 135 reported only one instance of sexual victimization; 183 reported two or more instances of sexual victimization (see Figure 1).
- Risk for further victimization was significantly higher for two or more victimizations than for one victimization experience ($\beta = .45$, $SE = .17$, $p = .009$).
- However, the number of reported victimizations above two was not a significant predictor for risk of further victimization ($\beta = -.05$, $SE = .11$, $p = .666$).
- The covariate, number of remaining opportunities to report an assault, was a marginally significant predictor of the risk for further victimization ($\beta = -.04$, $SE = .02$, $p = .064$).
- See Figure 2 for estimated probabilities of reporting further victimization, controlling for the number of remaining opportunities to report an assault.

Discussion

Though prior research has documented revictimization from childhood to adulthood (Messman & Long, 1996) and repeat sexual victimization in adulthood (Daigle et al., 2008), this study may be the first to examine the risk of new victimization based on the cumulative number of prior sexual victimizations experienced over a lifetime. Findings suggest that risk for revictimization does extend beyond the first victimization. Specifically, in support of **Hypothesis 1**, compared to individuals with one victimization, the risk for revictimization was significantly increased among those reporting two or more victimizations. However, in contrast to **Hypothesis 2**, subsequent victimizations (beyond two) did not further increase risk for additional victimizations.

Overall, it appears there may indeed be a cycle of increasing risk. Prior research establishes that compared to those without a history of victimization, a single sexual victimization increases risk of subsequent victimization (Messman & Long, 1996). The current study extends this to reveal multiple sexual victimizations further increase risk of subsequent victimizations. This increased risk for at least a third victimization suggests outcomes associated with risk for sexual assault (e.g., PTSD, alcohol use, risk recognition; Messman-Moore & Long, 2003) may continue to worsen after a second victimization. In turn, although research on revictimization typically focuses on differences between individuals with 0, 1, or 2 sexual assaults, the current study suggests the need to extend research on revictimization to at least a third victimization. Finally, although risk for victimization did not increase for individuals reporting more than two prior assaults, the probability of subsequent assaults for these participants was quite high (above 50% during their remaining time in the study). This finding speaks to the ongoing risk faced by women who have experienced multiple sexual assaults. Additional research is needed to examine potential underlying mechanisms and outcomes of repeat victimization.

References

- Daigle, L. E., Fisher, B. S., & Cullen, F. T. (2008). The violent and sexual victimization of college women: Is repeat victimization a problem? *Journal of Interpersonal Violence*, 23, 1296-1313. doi:10.1177/0886260508314293
- DiLillo, D., Hayes-Skelton, S. A., Fortier, M. A., Perry, A. R., Evans, S. E., Messman-Moore, T. L., ... Fauchier, A. (2010). Development and initial psychometric properties of the Computer Assisted Maltreatment Inventory (CAMI): A comprehensive self-report measure of child maltreatment history. *Child Abuse & Neglect*, 34, 305-317. doi:10.1016/j.chabu.2009.09.015
- Messman, T. L., & Long, P. J. (1996). Child sexual abuse and its relationship to revictimization in adult women: A review. *Clinical Psychology Review*, 16, 397-420. doi:10.1016/0272-7358(96)00013-9
- Messman-Moore, T. L., & Long, P. J. (2003). The role of childhood sexual abuse sequelae in the sexual revictimization of women: An empirical review and theoretical reformulation. *Clinical Psychology Review*, 23, 537-571. doi:10.1016/S0272-7358(02)00203-9
- Messman-Moore, T. L., Walsh, K., & DiLillo, D. (2010). Emotion dysregulation and risky sexual behavior in revictimization. *Child Abuse and Neglect*, 34, 967-976. doi:10.1016/j.chabu.2010.06.004

