Survivors of Child Sexual Abuse and Predictors of Adult Re-victimization in the United States: A Forward Logistic Regression Analysis

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Abstract
This study examines the factors that lead to an increased risk of adult sexual re-victimization among childhood sexual abuse survivors. Shame and self-blame, maladaptive coping strategies, and child sexual abuse severity were examined as risk factors for sexual re-victimization, among a sample 114 women, 86.8% of whom where African American. Results indicated that self-blame, and severity in terms of physical force and penetration in childhood sexual abuse, significantly predict adult re-victimization.

Keywords: Sexual Re-victimization, Survivors of Childhood Sexual Abuse, Self-Blame in Sexual Victimization, Severity of Childhood Sexual Abuse.

Introduction
Many studies have documented a link between childhood sexual abuse and adult sexual re-victimization (Arata, 2000; Messman-Moore, Long, & Siegfried, 2000; Neumann, Houskamp, Pollock, & Briere, 1996; Wyatt, Guthrie, & Notgrass, 1992). Despite researchers’ knowledge of the high incidence of sexual re-victimization on child sexual abuse survivors, little attempt has been made to advance theoretical understanding of its causes, the link between childhood sexual victimization and adult re-victimization, or the process by which re-victimization occurs (Polusny & Follette, 1995).

A number of mechanisms have been suggested to explain re-victimization. Four possible responses to child sexual abuse that may be routes to re-victimization are: traumatic sexualization, betrayal, powerlessness, and stigmatization (Finkelhor & Browne, 1985). According to Grauerholz (2000), sexual re-victimization is multifaceted in nature because it involves child and adult sexual abuses as well as personal, interpersonal, and socio-cultural factors. Numerous studies have documented the fact that sexual abuse in childhood has serious and lasting psychological consequences. Long term psychological correlates of childhood sexual abuse include depression, suicidal tendencies, sexual dysfunction, self-mutilation, chronic anxiety, post-traumatic stress disorder, dissociation, memory impairment and somatization (Goodman, Koss & Russo, 1993; Resick, 1993). Impairment in interpersonal functioning has been documented as well (Classen, 2001).

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Most of the research on sexual re-victimization focuses primarily on evidence that child sexual abuse is associated with sexual and physical re-victimization (Classen, 2005; Sorenson, Siegel, Golding & Stein, 1991; Wittebrood & Nieuwbeerta, 2000; Menard, 2000; NCJRS, 2006). This various approaches, however, do not address why persons initially sexually victimized during childhood are at greater risk of being sexually re-victimized as children, adolescents or adults by different offenders (Grauerholz, 2000).

Several models have been proposed to explain how psychological processes triggered by sexual assault increase risk of future victimization. Some researchers have applied attribution theory to explain repeat sexual victimization. According to this theory, victims who explain their victimization with internal, stable, uncontrollable causes might experience distress, substance abuse, or high-risk sexual behavior, which increases their likelihood of re-victimization (Gold, Sinclair & Balge, 1999).

Given that victimization often results in high levels of psychological distress, research that considers why re-victimization occurs would help provide necessary prevention strategies for victims of childhood sexual victimization (Messman-Moore et al. 2000). With data available from the National Data Archive on Child Abuse and Neglect, this study attempts to obtain information that will help to determine which characteristics of child sexual abuse are predictive of re-victimization. This study examines self-blame, maladaptive coping skills and severity of childhood sexual abuse as potential risk factors for sexual re-victimization.

**Literature Review**

Findings of previous studies suggest that a small percentage of the population experiences a relatively large proportion of all crime and that one of the strongest predictors of victimization is previous victimization (Sorenson, Siegel, Golding & Stein, 1991; Wittebrood & Nieuwbeerta, 2000; Menard, 2000). The highest re-victimization rate for crimes other than domestic violence is found among sexual assault survivors who, according to one study, stand a 35 times greater chance of sexual assault than non-victims (NCJRS, 2006). In describing the breadth and depth of disruption due to child sexual abuse, Noll (2005) has characterized victims as being removed from the normal workshop of development and placed on a trajectory of lower academic performance and poor physical and mental health. Abuse theories suggest that cognitive factors such as self-blame and certain coping strategies can lead to further sexual victimization (Filipas & Ullman, 2006). Research also indicates that posttraumatic stress disorder may increase vulnerability to sexual re-victimization (Arata, 2000). Irving (1999) found that victims of child abuse who “positively reappraised” their abusive experiences had a lower re-victimization rate and were better able to cope with new dangerous situations.

**Shame, Self-Blame and Re-victimization**

The emotional experience of shame and the cognitive attributional style of self-blame are predicted to have a significant relation to re-victimization (Feiring, Taska & Lewis, 1998). Negative feelings and thoughts about the self may occur during and following sexual abuse that make a victim feel bad and blameworthy (Finkelhor & Browne, 1985). Shame is hypothesized to be one primary mechanism by which victims of sexual abuse develop behavioral problems that lead to re-victimization. In their work with children and adults who were abused as children, Feiring, Taska, and Lewis (1998) found that shame is an emotion highly characteristic of victims, who tend to denigrate themselves and express
the desire to hide, disappear, or avoid exposure. Victimized women may believe that they have brought the abuse on themselves and that they do not deserve to be loved unconditionally (Filipas & Ullman, 2006). Vicary, Klingaman, and Harkness (1995) stress the importance of studying blame attributions in sexual assault as many teenage girls continue to blame themselves, which can lead to damaging long-term psychological and physical health consequences. Furthermore, certain kinds of abusive men may target women whom they perceive as vulnerable.

Arata (2000) studied undergraduates and found that the association of child sexual abuse with re-victimization was directly mediated by self-blame and post traumatic stress disorder. Two hundred and twenty one women with histories of child sexual abuse participated in a study designed to test a model for predicting adult/adolescent sexual re-victimization and post-assault functioning. Participants completed anonymous questionnaires regarding their sexual victimization history, post sexual assault symptoms and attributions, and consensual sexual behavior. Repeated victimization was defined as having experienced child sexual abuse and a separate incident of adolescent/adult victimization. Repeated victimization was associated with having experienced child sexual abuse involving physical contact, including intercourse and/or penetration. Women with repeated victimization engaged in more self-blame, reported higher levels of posttraumatic symptoms, and reported more high-risk sexual behavior. The results suggested the need for further research on re-victimization as well as suggesting areas for intervention to prevent sexual re-victimization.

Shame is related to an avoidant coping style, as the person who is shame-prone will be motivated to avoid thoughts and situations that elicit this painful emotional state (Feiring, Taska & Lewis, 1998).

Maladaptive Coping Strategies and Re-victimization

Oshri, Tubman and Burnette (2012), found that childhood sexual abuse was a significant precursor to alcohol abuse and dependence symptoms, as well as to co-occurring alcohol use. Similarly, another study found that alcoholic women were more likely to have experienced sexual abuse, had a greater number of different types of sexual abuse experiences, and had endured sexual abuse over a longer period than non-alcoholic women (Miller and colleagues, 1987). Dembo and colleagues’ study (1989), suggested that for male and female youths, sexual victimization had a direct effect on self-derogation and illicit drug use, and an indirect effect on drug use that was mediated by self-derogation. Additionally, Dufour and Nadeau (2001), conducted a study to determine which variables distinguished resilient victims from drug-addicted victims, who were sexually abused during their childhood. They found that drug-addicted women had more self-blame for having been abused, and felt more stigmatized. According to Ompad, Ikeda, Shah, and Fuller (2005), childhood sexual abuse is associated with earlier initiation of injection drug use. Their data emphasized the need to integrate substance abuse prevention with post-victimization services for children and adolescents.

Furthermore, Gidycz, Hanson, and Layman (1995) indicated the need to study coping skills in understanding re-victimization experiences because maladaptive coping may contribute to sexual re-victimization. In a national longitudinal study of 3,006 women (Kilpatrick, Acierno, Resnick, Saunders, and Best, 1997), the researchers concluded that a reciprocal relationship exists between substance abuse and victimization such that criminal victimization leads to substance abuse, creating risk for further victimization. Sinclair &
Gold (1997) have also found a link between avoidance forms of coping, maladaptive coping, and posttraumatic stress disorder symptoms, which can potentially lead to re-victimization.

A victim who is experiencing avoidant symptoms may be prone to making inaccurate or uninformed decisions regarding potential danger because of the fact that the trauma has been denied, minimized, or otherwise not fully integrated (Noll et al., 2003). The reexperiencing symptoms can lead to a repetition compulsion where the failure to accommodate to a traumatic experience may lead to a subconscious drive to reenact the experience to achieve a sense of mastery over the original trauma (Van der Kolk, 1989). Avoidant symptoms are often facilitated, and reexperiencing symptoms are often numbed by alcohol and drug use, which can serve to impair judgment and defensive strategies (Noll et al., 2003).

**Child Sexual Abuse Severity and Re-victimization**

The severity of childhood sexual abuse—the use of force and threats, and whether there is penetration—longer duration of the abuse, and closeness of the relationship between victim and offender are associated with higher risk of re-victimization (Classen, 2005). West, Williams and Siegel (2000) conducted a study of adult sexual re-victimization among 113 African American women with documented histories of childhood sexual abuse. The purpose was to obtain information on the frequency of sexual abuse in both childhood and adulthood and to determine which characteristics of the child sexual abuse were predictive of re-victimization. Thirty percent of the participants were re-victimized and physical force predicted subsequent victimization. In their review of child sexual abuse sequel, Neumann et al. (1996) found that severity and duration have been associated with more negative outcomes, including re-victimization.

**Hypothesis**

Drawing on prior research, a series of hypothesis is developed and tested about the risk factors of sexual re-victimization.

**Hypothesis 1**: Shame and self-blame increase the likelihood of re-victimization among child sexual abuse survivors.

**Hypothesis 2**: Maladaptive coping increases the likelihood of re-victimization among child sexual abuse survivors.

**Hypothesis 3**: The severity of childhood abuse increases the likelihood of re-victimization among child sexual abuse survivors.

**Method**

**Data and Sample**

This study consisted of a secondary analysis of selected variables collected during the last wave of a three-wave prospective study of the consequences of child abuse and sexual assault for adult, adolescent, and child victims (Siegel & Williams, 2001). During the first wave of the study, data were gathered on 206 girls ranging in age from 10 months to 12 years who were victims of reported cases of sexual abuse and who were examined at a municipal hospital in 1973-1975. In 1990 and 1991, follow-up interviews (Wave 2) were conducted to investigate the adult consequences of child sexual abuse. Of the original sample of 206 victims, 136 women, then aged 18 to 30 were located and interviewed. During this wave, a comparison group was identified in order to examine whether child
sexual abuse was associated with delinquency or adult criminality, based on official criminal records. Girls treated at a hospital for reasons other than child sexual abuse were matched to the victims on the basis of race, age, and date of hospital visit. The criminal records data were not included in this data collection. Also, none of the women in the comparison group were interviewed during Wave 2. In 1996 and 1997, another wave of follow-up interviews (Wave 3) was conducted. Using the same criteria as in Wave 2, a new matched comparison group was identified, resulting in an additional 85 girls in the sample.

Of the 174 women interviewed during Wave 3, 60 had not been sexually victimized in childhood (comparison group) and, therefore, were not included in this study because the purpose was to analyze risk factors for re-victimization among women sexually abused in childhood. I examined self-blame, maladaptive coping, and child sexual abuse severity as risk factors for sexual re-victimization among a sample 114 women, 86.8% of whom where African American.

**Measures**

**Dependent Variable**

**Re-victimization**

A dichotomous variable measured whether a person was only a victim of childhood sexual abuse (before 13-years-old), or a victim of both child sexual abuse (before 13 years of age) and sexual abuse anytime after that age.

**Independent Variables**

**Shame and Self-Blame**

A measure of possible problematic sexual behavior and beliefs consisted of a scale constructed from items on Jehu's (1988) Belief Inventory in which women were asked whether the following statements were true or false for them all or most of the time: “you get into trouble because of your sexual behavior;” “you control others through the use of sex;” “you use sex to get something you want or need;” “in your opinion, no man would care for you without a sexual relationship;” “in your opinion, only bad, worthless guys would be interested in you” and “you find yourself in awkward sexual situations.” Responses were summed to create a scale with values ranging from 0 to 6. Higher scores on the scale indicate more shame and self-blame.

**Maladaptive Coping**

Alcohol Dichotomous variables measured whether a woman reported ever having had alcohol problems or alcohol dependency, based on responses to questions from the Michigan Alcohol Screening Test (MAST) (Selzer, 1971). A woman was coded as having had alcohol problems if she responded affirmatively to questions asking whether she ever: tried to cut down on drinking; was annoyed because people complained about her drinking; felt guilty about drinking; missed work or school or was unable to take care of responsibilities because of her drinking; ever went to anyone for help or was in a hospital because of her drinking; or was ever arrested or warned by the police for driving while intoxicated. She was coded as having been dependent on alcohol if she said she had ever: needed a drink in the morning as an eye opener; been unable to stop drinking after one or two drinks; or had blackouts, tremors, DTs, a seizure or a fit due to drinking. In addition, women were asked how often they drank before engaging in sexual relations. Those who
responded “most of the time” were coded 1 on a dichotomous variable in which all others (i.e. those who drank never, rarely or only sometimes before having sex) were coded 0. Responses were summed to create a scale with values ranging from 0 to 3. Higher scores on the scale indicate more maladaptive coping.

Severity of Childhood Sexual Abuse
Separate dichotomous variables measured whether any childhood sexual abuse a woman had experienced before the age of 13 involved:
- a relative as a perpetrator;
- penetration; or
- physical force.

Multivariate Statistical Technique
Forward logistic regression was conducted to determine which independent variables (shame and self-blame; maladaptive coping; relative as a perpetrator; penetration; physical force) were predictors of sexual re-victimization after age 13 among childhood sexual abuse survivors. I utilized the forward stepping method because this investigation was exploratory. Only independent variables that significantly predicted the dependent variable would be included in the model.

There are several issues related to the use of logistic regression. First, there is the issue of the ratio of cases to variables included in the analysis. To address this problem, and given that I worked with a small sample size ($N=114$), I collapsed the six dichotomous variables that measured self-blame. Responses were summed to create a scale with values ranging from 0 to 6. Higher scores on the scale indicate more shame and self-blame. I also collapsed the three dichotomous variables that assessed alcohol related problems (maladaptive coping behavior) into a composite scale with values ranging from 0 to 3. Higher scores on the scale indicate more maladaptive coping. Therefore, I worked with one variable for measuring self-blame, one variable for maladaptive coping behaviors and three dichotomous variables for assessing severity of sexual abuse (penetration, sexual abuse by a relative and physical force). The three measures for severity of abuse where not collapsed because previous research suggested it was worth analyzing them independently. Five independent variables and a sample size of 114 subjects give me reasonable cases to variables ratio: 1:23.

Second, logistic regression relies on a goodness-of-fit test as a means of assessing the fit of the model to the data. All pairs of discrete variables were evaluated to ensure that all cells have expected frequencies greater than 1 and that no more than 20% have frequencies less than 5. Third, as with all varieties of multiple regression, logistic regression is sensitive to high correlations among predictor variables. Fortunately, in this study, multicollinearity is not a problem. Finally, as with multiple regression, resultant logistic regression models are sensitive to outliers. In this case, however, no outliers were detected.

Results
Forward logistic regression was conducted to determine which independent variables (self-blame; alcohol use; relative as a perpetrator, penetration; physical force) were predictors of sexual re-victimization after age 13 among childhood sexual abuse survivors. Data screening indicated there were no outliers to delete. Regression results indicated the
overall model fit of three predictors (self-blame, penetration and physical force) was statistically reliable in predicting sexual re-victimization (-2 Log Likelihood=99.591; Goodness of Fit=6.940; \(x^2(3) =20.936\)). The model correctly classified 79.6% of the cases. Regression coefficients are presented in Table 1. Wald statistics indicated that self-blame, physical force and penetration in CSA significantly predict adult re-victimization. Odds ratio for self-blame indicate little change in the likelihood of re-victimization. Odds ratio for penetration during CSA indicate a significant change in the likelihood of re-victimization.

### Table 1: Regression Coefficients

<table>
<thead>
<tr>
<th></th>
<th>(B)</th>
<th>(Wald)</th>
<th>(df)</th>
<th>(p)</th>
<th>Odds Ratio</th>
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<tr>
<td>Self-Blame</td>
<td>.512</td>
<td>12.104</td>
<td>1</td>
<td>.001</td>
<td>1.668</td>
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<tr>
<td>Penetration</td>
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<td>4.295</td>
<td>1</td>
<td>.038</td>
<td>3.230</td>
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<tr>
<td>Physical Force</td>
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<td>6.336</td>
<td>1</td>
<td>.012</td>
<td>.211</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.676</td>
<td>15.815</td>
<td>1</td>
<td>.000</td>
<td>.187</td>
</tr>
</tbody>
</table>

### Discussion and Conclusion

The results from this study point to a history of child sexual victimization as an important risk factor for later sexual assault. These tentative results suggest that there are probably important etiological differences between childhood sexual abuse victims who later become revictimized and those who do not. Such differences may well relate to factors such the severity of the abuse in terms of penetration, and physical force. Furthermore, there may be many different cultural factors which contribute to these differences.

There may also be several psychological characteristics which contribute to the relationship between child sexual abuse and adult sexual victimization. Lange and colleagues (1999) found that the victim's beliefs, including self-blame, were strongly associated with subsequent distress in adults. This self-attribution process, resulting from their initial victimization experience, may increase the likelihood of a later sexual assault. That is, as a result of their initial sexual assault experience, adult victims may develop distorted perceptions of their physical body (i.e., attractiveness, strength, vulnerability) and/or their sexuality (i.e., body image, sexual vulnerability), which may increase their risk of victimization through specific cognitions and behaviors (Urquiza, Goodlin-Jones, 1994).

Consistent with past findings (Filipas & Ullman, 2006), few women seek formal support for childhood sexual abuse experiences. Educational programs in schools and community outreach programs on childhood sexual abuse and its aftermath may help normalize survivor’s feelings and help them find available resources in their community should they desire it. Clinicians working with sexual violence survivors should be aware of and sensitive to their patient’s unique concerns. Understanding the ways survivors cope with childhood sexual abuse may assist clinicians in halting the patterns that may lead to re-victimization.
Limitations and Future Research

There are two main weaknesses in this study. As this is a secondary data analysis, I am limited to what was collected in the first place. Also, given the extreme sensibility of the topic, the sample size (N=114) is very small. This may affect the generalizability of the results.

As is evident in the results from this study, future research examining child and/or adult sexual victimization should incorporate both family and community-based factors. A broader perspective of victimization needs to also incorporate cultural and ethnic factors. Because of the potential negative short- and long-term sequels associated with sexual victimization and the relative absence of research with women of color, this is an area in dire need of future study. To understand violence perpetrated against women of color – like the majority in the sample of this study, it is important to examine factors such as acculturation, religion, cultural values, and family structure (Urquiza & Goodlin-Jones, 1994).

Socio-cultural values related to sexuality impact important characteristics of sexual victimization, such as what constitutes child sexual assault, definition of adult rape, precursors to victimization and re-victimization, attributions about one's victimization, the assignment of blame or responsibility, the availability and degree of support from associates, development of social-sexual interaction scripts, gender role socialization patterns, and the "familial/ethnic-specific historical context in which the experience is framed" (Wyatt, 1992). Future studies should attempt to account for a broad range of socio-cultural contexts in attempting to understand the experience of victimization and re-victimization.

Childhood sexual abuse has damaging consequences for all victims and for everyone involved in the victim’s life from childhood to adulthood. This may include family members, friends, romantic partners, social services agencies, and so forth. The broader ecological context must be considered when studying how people are affected by childhood sexual abuse. Unfortunately, childhood sexual abuse cannot be undone or erased from the lives of people who experienced it, but understanding the long term sequel and how to adaptively cope with it may protect victims from re-victimization and serve to help them recover from these experiences and live happier, more fulfilling lives.

References


