

# Experiences of Sexual Assault and Financial Stability: Sense of Control as a Potential Mechanism

Violence Against Women

1–22

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## Abstract

This investigation utilized the Midlife in the United States Survey ( $N = 3,258$ ) to assess the relationships between sexual assault, sense of control, and financial stability. Age of first sexual assault and sexual assault revictimization were also considered in analyses of sexual assault survivors' data. Results revealed consistent associations between experiences of sexual assault and revictimization with lower financial stability and suggest that sense of control may be an indirect mechanism linking these variables. Findings have policy relevance and practical implications for practitioners. Restoring sexual assault victims' internal loci of control may promote more positive financial outcomes.

## Keywords

sexual assault, sense of control, perceived constraints, financial stability, trauma, trauma theory

## Introduction

The National Institute of Justice (NIJ) estimates that one in six women will be raped at some point in their lives (Tjaden & Thoennes, 2006). Elliott et al. (2004) estimated that the number was actually more than one-fifth (22%) for American women. The NIJ reports that over half of female victims and almost three-quarters of male victims report that the first incidence of assault occurred before their 18th birthday (Tjaden & Thoennes, 2006), and the groundbreaking adverse childhood experiences study

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(ACES) revealed that 25% of American girls and 20% of American boys were sexually abused during childhood (Felitti et al., 1998). The ACES went on to link childhood trauma to significant medical disorders, like diabetes, heart disease, chronic pain, osteoporosis, and cancer, as well as posttraumatic stress symptoms.

When posttraumatic stress disorder (PTSD) was originally introduced to the *Diagnostic and Statistical Manual of Mental Disorders* (DSM) in 1980, a traumatic event was described as “outside the range of usual human experience” (American Psychiatric Association, 1980). Lamentably, data show that traumatic events are far more usual than unusual. Broadly, trauma describes an overwhelming event that continues to have a negative impact on an individual long after the event has subsided through nightmares, intrusive thoughts, hallucinations, and hypervigilance (APA, 2013). Knowledge and/or perception of significant trauma can pose a threat to psychological integrity and impact one’s worldview, belief in one’s self-worth, belief that the world is benign, and belief in a meaningful and just world (Aldwin et al., 1994; Herman, 2015; Laub & Auerhahn, 1993; Roth & Newman, 1991).

The negative impact of the trauma of sexual assault on mental health was first proposed by Freud (1896) and has since been well documented. Outcomes associated with sexual assault may include depression (Ellis, 1983; Goodman et al., 1993; Kilpatrick & Acierno, 2003; Koss, 1993; Koss et al., 2003; Resick, 1993; Rogers & Gruener, 1997), social maladjustment (Ellis, 1983; Goodman et al., 1993; Resick, 1993), sexual dysfunction (Byrne et al., 1999; Ellis, 1983), anxiety (Ellis, 1983; Goodman et al., 1993; Kilpatrick & Acierno, 2003; Resick, 1993), and PTSD (Goodman et al., 1993; Kilpatrick & Acierno, 2003; Kilpatrick et al., 2007; Resick, 1993; Rogers & Gruener, 1997). Though it is generally agreed upon by practitioners that the intimate nature of sexual abuse and assault carries unique considerations, there is a dearth in the literature examining the long-term outcomes of sexual assault (Bowland et al., 2011). Byrne et al. (1999) hypothesized that sexual assault may extend beyond mental health to have a long-term impact on victims in the areas of financial and employment stability. However, there is not any research on the mechanisms linking the two. Utilizing data from the Midlife in the United States (MIDUS) survey (Ryff et al., 2014), this investigation assessed associations between sexual assault and financial stability, positing sense of control as a novel indirect mechanism.

### *Sexual Assault and Financial Stability*

It is estimated that the lifetime monetary cost of rape is \$122,461.00 per victim, creating an economic burden to the US population of almost \$3.1 trillion, of which government sources pay 32% (Peterson et al., 2017). Costs are often associated with medical expenses, loss of work productivity, criminal justice activities, and property loss and damage. Further health and social costs associated with sexual assault are related to reproductive health issues, like sexually transmitted infections, unwanted pregnancies, fistulas, and chronic pelvic pain, as well as mental health support, like therapy and addiction treatment (Dossa et al., 2014; Goyal et al., 2017; Peterson et al., 2017). Such costs may be substantial and ongoing. There are indirect costs of sexual

assault as well, such as barriers to employment and education, mental health issues of family members impacted by their loved one's assault, and lifestyle adjustments, like safer housing and means of transportation (Browne et al., 1999; Miller et al., 1978; Perez, 2019; Peterson et al., 2017).

In the case of sexual assault, financial stability is typically measured using data on income (e.g., wages, public assistance, pensions, interest, and child support; Byrne et al., 1999; Christy-McMullin, 2005; 2006) and employment status (Byrne et al., 1999; Katerndahl et al., 2019). Lower financial stability is unique in that it may function as both a potential risk factor for, and outcome of, victimization. Byrne et al. (1999) found that women with a history of sexual assault were more likely to decline into poverty than those who did not have a history of sexual assault. Women living below the poverty line were more likely to have a history of sexual assault, as well as experience a new assault after the first wave of their analysis. The same study found that victimization may increase risk of unemployment which, in turn, is associated with lower financial stability. Similarly, victims of rape specifically were more likely to be unemployed and on public assistance than those who had not experienced rape (Miller et al., 1978). Although the current study cannot address the direction of effects or bidirectional influences between experiences of sexual assault and financial stability, the investigators controlled for childhood socioeconomic background in testing the study hypotheses.

### *Sense of Control as an Indirect Mechanism*

Individuals with a strong sense of control, also referred to as perceived control or internal locus of control, believe that their success or failure is dependent on their own actions or inactions. These individuals tend to apply themselves in their work and personal lives, have high life satisfaction, better health, fewer depressive symptoms, and high self-respect (Lachman & Weaver, 1998; Yu et al., 2018). On the other hand, a perception of low control can lead to tension, anxiety, and/or depression (Yu et al., 2018). Janoff-Bulman (1992) found that victims of sexual assault may experience a reduction in the ability to conserve one's worldview, preserve self-efficacy and self-respect, make meaning, perceive goodness, and establish safety in relationships.

Survivors of trauma develop explanations and causal attributions in an effort to establish meaning and develop perceptions of control and predictability to prevent further traumatic events (Hassija & Gray, 2013). In a way, survivors are "gaining control" over the traumatic memories and narrative of control (Bletzer & Koss, 2004, 2006). Sadly, despite the efforts to gain control over the narrative and prevent further assaults, revictimization is likely (Classen et al., 2005; Elliott et al., 2004; Tjaden & Thoennes, 2006; Van Bruggen et al., 2006).

The link between sexual assault and sense of control is complex in that it relies on the victim's subsequent interpretation and reinterpretation of the events surrounding the sexual assault. The meaning that one gives a traumatic event could make the difference between positive and negative outcomes (Janoff-Bulman, 1992; Littleton et al., 2006). Littleton et al. (2006) found that women who did and did not acknowledge

their assault as rape (as opposed to seduction or miscommunication) differed from each other in the areas of coping strategies, disclosure, perceptions of reactions from others upon disclosure, and worldview—indicating that those who did not acknowledge their experience of forced sex as rape had more favorable outcomes. Janoff-Bulman (1992) agrees that the perception of the assault may predict future outcomes, but she suggests that it is the type of blame associated with the event, whether characterological (I am bad) or behavioral (I did bad), that will impact outcomes to a greater extent. In other words, victims of sexual assault who believed that their actions were at least partially responsible for their assault had greater sense of control and more positive outcomes. Therefore, the belief that the perpetrator was solely responsible for the assault, though true, may actually be detrimental to the survivor's future outcomes. Further, the belief that one lacks the ability to influence or control life events may impact all areas of one's life, including financial stability. For example, individuals with lower perceptions of control may be less likely to pursue better paying jobs, advocate for raises, or even maintain employment (Browne et al., 1999; Miller et al., 1978).

### *Age of Sexual Assault as a Consideration*

Developmental theory suggests that childhood trauma and the age of the child at the time of the traumatic event would contribute more strongly to symptom complexity than adulthood trauma (Pynoos et al., 1995). Pynoos et al. (1995) hypothesized that childhood trauma disrupts the child's sense of safety and security, as well as their ability to create safe attachments, referencing Bowlby's theory of attachment (Bowlby, 1988). This disruption could similarly impact the child's sense of control, leading to various negative life outcomes.

### *Sexual Assault Revictimization as a Consideration*

Learned helplessness theory states that deficits can occur in light of uncontrollable circumstances in the areas of motivation, cognition, and emotion (Abramson et al., 1978). Up to 72% of victims of sexual assault report revictimization (Van Bruggen et al., 2006). The NIJ and others have noted that women who were raped as minors were at least twice as likely to be raped in adulthood compared to those who had not been raped as minors (Elliott et al., 2004; Tjaden & Thoennes, 2006). Revictimization predicts an increase in posttraumatic stress symptom complexity in adults (Cloitre et al., 2009).

Ellis et al. (1982) examined the differences in outcomes between single and multi-incidence victimization, finding that victims of multi-incidence sexual assault were more likely to experience poverty. To explain these findings, it has been suggested that victims of multi-incidence rape make poorer decisions or live in more dangerous neighborhoods due to their lower socioeconomic status. However, Byrne et al. (1999) found that the circumstances surrounding the assaults for both single and multi-incidence victimizations were not statistically different. Therefore, revictimization itself could be a predictor of lower financial stability. Repeated inability to protect one's self from trauma—along with the survivor's trauma narrative and subsequent

revisions of the trauma narrative—may cause the individual to experience a pervasive sense of loss of control (i.e., develop an external loci of control) which, in turn, may impact many areas of one's life (Bletzer & Koss, 2004; 2006; Janoff-Bulman, 1992; LaCapra, 1994; Littleton et al., 2006).

### *The Current Study*

While the literature indicates that sexual assault is linked to various negative life outcomes, the mechanisms linking these variables are still unclear. The purpose of this investigation is to examine the association between sexual assault and financial stability, considering sense of control as a potential indirect mechanism connecting these variables. The investigation utilized a secondary dataset from the MIDUS survey (Ryff et al., 2014). The overarching hypotheses associated with this investigation were that experience of sexual assault (measured nominally as yes or no) will be associated with lower financial stability and lower sense of control, though sense of control will be positively associated with financial stability. Additionally, the authors hypothesized that there would be a significant indirect association between sexual assault and financial stability via sense of control. In subsample analyses (i.e., those who have experienced sexual assault), it was hypothesized that experience of sexual assault at younger ages and sexual assault revictimization will be negatively related to financial stability and sense of control, while sense of control will be positively related to financial stability. Moreover, it was hypothesized that there would be significant indirect associations between age of first sexual, sexual assault revictimization, and financial stability via sense of control. While sense of control has been investigated in multiple studies of health, aging, social class, and discrimination (Lachman & Weaver, 1998), the link between sexual assault and sense of control, as well as the role of sense of control as an indirect mechanism in the association between sexual assault and financial stability, has not previously been considered.

## **Methods**

### *Data and Sample*

The paper utilized the third wave of the MIDUS survey (MIDUS 3; Ryff et al., 2014). Between 1995 and 1996, a national probability sample of English-speaking and non-institutionalized adults aged 25 to 74 across 48 states was recruited. MIDUS 3 was the only wave that invited respondents to report multiple instances of sexual assault, as well as an age range of assaults. This information was critical for testing the links between age of first sexual assault and sexual assault revictimization and subsequent outcomes of interest, and thus the MIDUS 3 sample was the focus of analyses.

The third wave of the MIDUS study was collected between 2013 and 2019 and utilized a sample of men and women ( $N = 3,258$ ) between the ages of 39 and 93 ( $M = 63.64$ ). Males made up 45.1% of the sample. The majority of the sample (89.5%) identified as White, 3.7% identified as Black and/or African American,

0.9% identified as Native American or Aleutian Islander, 0.4% identified as Asian or Pacific Islander, and 5.5% identified as Other. About 41.9% of the sample had a bachelor's degree or more, 29% had some college, 23.9% had a high school diploma or general equivalency degree (GED), and 5.2% had less than 12 years of school. Approximately 10.3% of respondents reported a history of sexual assault ( $n_{Men} = 45$ ; 3.4% of men;  $n_{Women} = 257$ ; 15.9% of women).

## Measures

**Sexual assault.** The MIDUS-3 self-questionnaire asks, "Have you ever been sexually assaulted (e.g., forced sexual intercourse or other unwanted sexual contact)? At what age(s) did this happen?" Responses were dummy coded 1 and 0 for those who had and had not experienced sexual assault respectively. For the purpose of this study, age of first sexual assault was the age of first reported occurrence. Sexual assault revictimization was operationalized by summing the total number of times respondents reported an age. Due to the non-normal distribution of this variable, two categories were dummy coded as following: 0 represented those who had been assaulted one time and 1 represented those who had been assaulted more than once, reflecting revictimization ( $n_{assaulted\_one\_time} = 232$ , 76.6%;  $n_{assaulted\_more\_than\_once} = 60$ , 19.8%). This series of questions is part of the MIDUS life experiences portion of the self-administered questionnaire.

**Sense of control.** Sense of control was measured utilizing the "Perceived Constraints" scale, a subscale of Pearlin and Schooler's (1978) "Sense of Mastery" measure that was adapted by Lachman and Weaver (1998). On a 7-point scale, participants were asked how much they agree with eight statements, including, "There is little I can do to change many of the important things in my life," "I often feel helpless in dealing with problems of life," "Other people determine most of what I can and cannot do," and "What happens in my life is often beyond my control." Items were coded so that higher scores indicate greater sense of control. The instrument has been validated several times (e.g., Lachman & Weaver, 1998; Prenda & Lachman, 2001). The "Perceived Constraints" subscale was used as it has a more acceptable Chronbach's Alpha for both those who had and had not been sexually assaulted ( $\alpha = .864$  and  $.877$ , respectively) than the full Sense of control measure.

**Financial stability.** The investigation used several measures to capture financial stability more robustly. Participants reported their pre-tax income for the most recent calendar year; this variable was divided by 10,000 so that its variance was rescaled to better match the other measures. Participants provided subjective experiences with aspects of financial stability, all recoded so that higher scores indicate greater financial stability: Difficulty paying monthly bills (1 = very difficult to 4 = not at all difficult); perceptions of their overall financial situation currently, 10 years in the past, and 10 years in the future on an 11-point scale (0 = the worst possible financial situation to 11 = the

**Table 1.** Factor Loadings for Latent Variables: Financial Stability and Socioeconomic Background.

	Model 1				Model 2			
	Estimate	Standard error	Standard latent variable	p-Value	Estimate	Standard error	Standard latent variable	p-Value
<b>Financial Stability</b>								
Financial situation (current)	.924	.008	112.64	.000	.942	.019	49.854	.000
Difficulty paying bills	.719	.011	62.841	.000	.775	.028	17.839	.000
Control over financial situation	.720	.014	50.186	.000	.723	.041	49.857	.000
<b>Socioeconomic Background</b>								
Father Education	.818	.026	30.997	.000	.750	.093	8.110	.000
Mother Education	.666	.022	30.639	.000	.576	.068	8.469	.000
Ever on welfare	-.186	.022	-8.352	.000	-.294	.086	-3.430	.001
Financial level growing up	-.405	.023	-17.592	.000	-.445	.098	-4.542	.000

best possible financial situation); and perceived control over their financial situation (0 = no control over their financial situation to 10 = very much control over their financial situation). Similar to Martin and Westerhof (2003), a latent variable was constructed to represent current financial stability using three variables: Current financial situation, control over financial situation, and difficulty paying bills. Table 1 shows the factor loadings for the latent variable for financial stability. The variables, income, finances 10 years past, and finances 10 years future, were considered for the latent variable, but factor loadings were poor. Thus, these three variables were treated as observed variables in analyses.

**Control variables.** **Sex.** It has been suggested that negative economic outcomes may be associated more with gender, and the gender wage gap specifically, than the effect of violence against women (Aizer, 2010). Thus, sex was used as a control variable.

**Childhood socioeconomic background.** Socioeconomic background was assessed with information from MIDUS 1 and used as a covariate. Following the example of Gruenewald et al. (2012), a latent childhood socioeconomic disadvantage score was constructed using three indicators: Childhood welfare status (2 = ever on welfare, 0 = never on welfare), highest level of parental education (2 = less than high school, 1 = high school/GED, 0 = some college or higher), and financial level growing up (2 = worse off than others, 1 = about the same as others, 0 = better off than others).

## Data Analysis

Preliminary analyses including frequencies, mean comparisons, and bivariate correlations were conducted using the Statistical Package for Social Sciences (SPSS) version 26 (IBM Corporation, 2019). Financial outcome variables were approximately normally distributed. Next, two structural equation models for path analysis were conducted using MPlus to determine the relationship between experiences of sexual assault, age of first assault, sexual assault revictimization, sense of control, and financial stability, controlling for childhood socioeconomic background and sex (Muthén & Muthén, 1998–2017). Mplus uses the delta method (Bollen & Stine, 1990) as the default for calculating indirect effects. Goodness-of-fit statistics were computed where appropriate.

## Results

### Preliminary Analysis

**Prevalence.** Approximately 10.3% of respondents reported a history of sexual assault ( $n_{\text{Men}} = 45$ ; 3.4% of men;  $n_{\text{Women}} = 257$ ; 15.9% of women). A total of 19.8% of those reporting any sexual assault reported that they had been sexually assaulted more than once. The age of first sexual assault reported for males ranged from 5 to 36 years old, with a median age of 10 (skew = 1.72,  $se = .37$ ). For women, age of first sexual assault ranged from 3 to 60 years old, with a median age of 15 (skew = 1.56,



se = .17). Although both distributions for age were positively skewed with a visible tail, no cases could be identified as outliers. For those reporting an age range ( $n_{\text{Age\_Range}} = 41$ ), the median ages were from 6 to 13 years old ( $\text{skew}_{\text{From}} = 2.32$ ,  $\text{se}_{\text{From}} = .37$ ;  $\text{skew}_{\text{To}} = 2.47$ ,  $\text{se}_{\text{To}} = .37$ ) and lasted an average of 7 years.

**Group differences in financial stability.** Individuals who have experienced sexual assault had lower perceptions of control, made \$17,444.57 less than those who had not experienced sexual assault, and reported having more difficulty paying monthly bills. See Table 2 for mean comparisons of outcomes between those who have and have not experienced sexual assault. Bivariate correlations were used to determine the relationship between experiences of sexual assault, sense of control, and indicators of financial stability (Table 3). Experiences of sexual assault were significantly correlated with sense of control ( $r_{\text{Control}} = -.08$ ,  $p_{\text{Control}} < .001$ ), income ( $r_{\text{Income}} = -.09$ ,  $p_{\text{Income}} < .001$ ), difficulty paying monthly bills ( $r_{\text{Bills}} = -.15$ ,  $p_{\text{Bills}} < .001$ ), financial situation in the past ( $r_{\text{Past}} = -.07$ ,  $p_{\text{Past}} < .001$ ), present ( $r_{\text{Current}} = -.15$ ,  $p_{\text{Current}} < .001$ ), and future ( $r_{\text{Future}} = -.10$ ,  $p_{\text{Future}} < .001$ ), and financial control ( $r_{\text{Financial\_Control}} = -.10$ ,  $p_{\text{Financial\_Control}} < .001$ ).

### Primary Analyses

The measurement models, reported in Table 4, had acceptable fit indices (Hu & Bentler, 1999). The confirmatory factor analyses for current financial stability revealed strong factor loadings for financial variables, and factor loadings mixed in strength for childhood socioeconomic background variables (Table 1). Sense of control was positively associated with all latent and observed financial indicators ( $\beta_{\text{Financial\_Stability}} = .38$ ,  $p_{\text{Financial\_Stability}} < .001$ ;  $\beta_{\text{Income}} = .02$ ,  $p_{\text{Income}} < .001$ ;  $\beta_{\text{Past}} = .06$ ,  $p_{\text{Past}} < .001$ ;  $\beta_{\text{Future}} = .07$ ,  $p_{\text{Future}} < .001$ ) suggesting that individuals with higher perception of control had higher financial stability.

**Sexual assault, control, and financial stability.** A structural equation model was used to identify associations between sexual assault, sense of control, and financial stability with the full sample (depicted in Figure 1). The direct links between sexual assault and all the financial latent and observed variables except for income were significant ( $\beta_{\text{Financial\_Stability}} = -.12$ ,  $p_{\text{Financial\_Stability}} < .001$ ;  $\beta_{\text{Income}} = -.02$ ,  $p_{\text{Income}} = .23$ ;  $\beta_{\text{Past}} = -.15$ ,  $p_{\text{Past}} = .004$ ;  $\beta_{\text{Future}} = -.34$ ,  $p_{\text{Future}} < .001$ ) indicating that those who have experienced sexual assault reported generally lower financial stability. The association between sexual assault and sense of control was negative and significant ( $\beta = -.08$ ,  $p < .001$ ) indicating that those who had been sexually assaulted reported lower sense of control.

The indirect links between sexual assault and financial indicators through sense of control were statistically significant as well ( $\beta_{\text{Financial\_Stability}} = -.22$ ,  $p_{\text{Financial\_Stability}} < .001$ ;  $\beta_{\text{Income}} = -.31$ ,  $p_{\text{Income}} < .001$ ;  $\beta_{\text{Past}} = -.08$ ,  $p_{\text{Past}} < .001$ ;  $\beta_{\text{Future}} = -.22$ ,  $p_{\text{Future}} < .001$ ). Overall, indirect effects through sense of control accounted for between 59% and 94% of the total effects. Effect sizes ( $r^2$  values), total variance accounted

**Table 2.** Comparisons of Mean Outcomes Between Those Who Have and Have Not Experienced Sexual Assault.

	Experienced sexual assault				Did not experience sexual assault				T
	N	Mean	Std. deviation	Std. error mean	N	Mean	Std. deviation	Std. error mean	
Sense of control	301	4.065	1.283	0.074	2604	4.401	1.203	0.02358	4.5320***
Financial situation (past)	298	6.745	2.131	0.123	2577	7.214	1.948	0.03838	-3.627***
Financial situation (future)	297	6.118	2.687	0.156	2562	6.901	2.270	0.04486	-4.829***
Financial situation (current)	295	5.766	2.645	0.154	2569	6.841	2.153	0.04247	-6.727***
Control over financial situation	297	5.872	2.896	0.168	2577	6.744	2.528	0.0498	-4.974***
Income	274	40978.41	45046.56	2721.362	2285	58422.98	5824.02	1218.66	-5.850***
Difficulty paying bills	300	2.680	0.994	0.057	2579	3.124	0.878	0.01729	-7.411***

\*Correlation is significant at the .05 level (2-tailed).

\*\*Correlation is significant at the .01 level (2-tailed).

\*\*\*Correlation is significant at the .001 level (2-tailed).

**Table 3.** Bivariate Correlations Among Variables.

	Ever sexually assaulted	Number of times sexually assaulted	Age of sexual assault	Sense of control	Financial situation (past)	Financial situation (future)	Financial situation (current)	Control over financial situation	Income	Difficulty paying bills
Ever sexually assaulted	—			-.084***	-.072***	-.103***	-.146***	-.103***	-.094***	-.151***
Number of sexual assaults		—	-.272***	-.099	-.031	-.061	-.017	-.108	-.152**	-.044
Age of sexual assault			—	-.095	-.095	.036	-.086	.002	-.010	-.081
Sense of control				—	.115***	.347***	.334***	.362***	.206***	.294***
Financial situation (past)					—	.174***	.331***	.234***	.073***	.196***
Financial situation (future)						—	.675***	.602***	.255***	.469***
Financial situation (current)							—	.648***	.280***	.686***
Control over financial situation								—	.245***	.497***
Income									—	.262***

\*Correlation is significant at the .05 level (2-tailed).

\*\*Correlation is significant at the .01 level (2-tailed).

\*\*\*Correlation is significant at the .001 level (2-tailed).

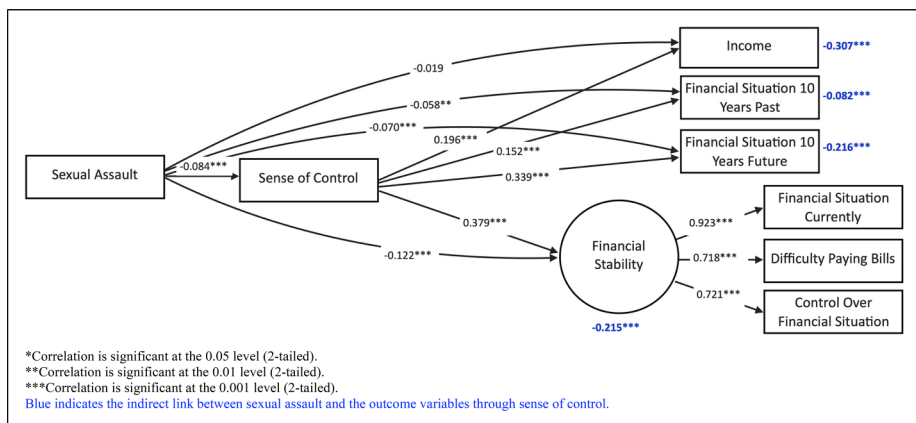
for, were moderate ( $r^2_{\text{Financial\_Stability}} = .17$ ;  $r^2_{\text{income}} = .13$ ;  $r^2_{\text{finances\_past}} = .03$ ;  $r^2_{\text{finances\_future}} = .13$ ).

*Age of first sexual assault, sexual assault revictimization, control, and financial stability.* The subsample of those who had been sexually assaulted was used to address hypotheses

**Table 4.** Fit Statistics for Models One and Two.

	Model 1	Model 2
$\chi^2$	674.073	121.185
Degrees of freedom	49	59
p-Value	.000	.000
CFI	.918	.925
TLI	.871	.875
RMSEA	.066	.060
RMSEA 90% CI lower bound	.062	.045
RMSEA 90% CI upper bound	.071	.075
SRMR	.057	.056

Note. Measures of model fit were:  $\chi^2$  = Chi-square; p-value (< .05 indicates good model fit); CFI = comparative fit index (> .95 indicates good fit; Bentler, 1990); TLI = Tucker–Lewis index (>.95 indicates good fit; Bentler, 1990); RMSEA = root mean square error of approximation (< .05 indicates good fit; Hu & Bentler, 1999); CI = confidence interval (McQuitty, 2004); SRMR = standardized root mean square residual (< .08 indicates good fit).



**Figure 1.** Model one: path model predicting the effects of sexual assault on sense of control and financial stability (control variables not shown).

about associations between age of first sexual assault, sexual assault revictimization, sense of control, and financial stability (Figure 2). The direct links between sense of control and financial indicators were all significant and in the expected directions except for finances 10 years in the past ( $\beta_{\text{Financial\_Stability}} = .45$ ,  $p_{\text{Financial\_Stability}} < .001$ ;  $\beta_{\text{Income}} = .20$ ,  $p_{\text{Income}} < .001$ ;  $\beta_{\text{Past}} = .04$ ,  $p_{\text{Past}} = .493$ ;  $\beta_{\text{Future}} = .48$ ,  $p_{\text{Future}} < .001$ ).

**Age of first sexual assault, control, and financial stability.** None of the associations between age of first sexual assault and the financial latent and observed variables were significant ( $\beta_{\text{Financial\_Stability}} = -.11$ ,  $p_{\text{Financial\_Stability}} = .089$ ;  $\beta_{\text{Income}} = -.03$ ,  $p_{\text{Income}} = .696$ ;  $\beta_{\text{Past}} = -.11$ ,  $p_{\text{Past}} = .118$ ;  $\beta_{\text{Future}} = .02$ ,  $p_{\text{Future}} = .798$ ). The direct link between age of first sexual assault and sense of control was not statistically significant ( $B_{\text{Control}} = -.12$ ,  $p_{\text{Control}} = .072$ ; a path). Similarly, none of the indirect associations between age of first sexual assault and the financial variables were significant ( $\beta_{\text{Financial\_Stability}} = -.01$ ,  $p_{\text{Financial\_Stability}} = .079$ ;  $\beta_{\text{Income}} = -.01$ ,  $p_{\text{Income}} = .105$ ;  $\beta_{\text{Future}} = -.02$ ,  $p_{\text{Future}} = .075$ ,  $\beta_{\text{Past}} = -.00$ ,  $p_{\text{Past}} = .536$ ).

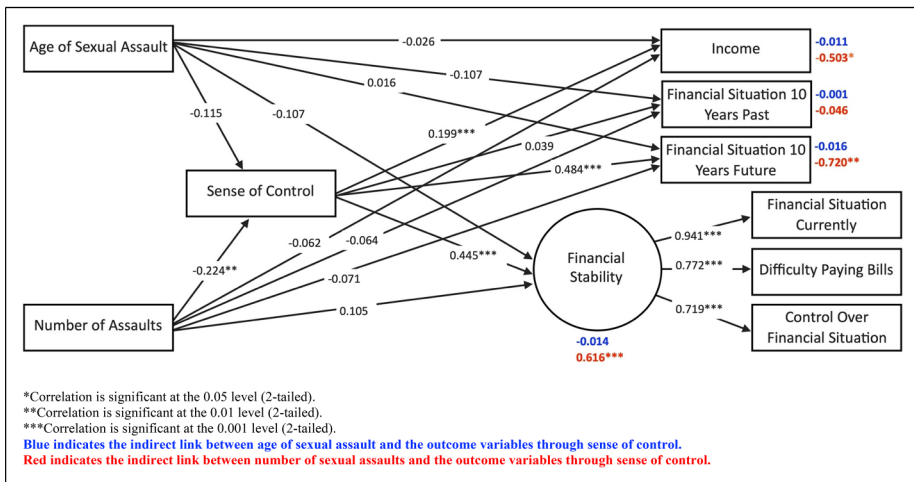
**Sexual assault revictimization, control, and financial stability.** The direct link between sexual assault revictimization and sense of control was negative and significant ( $\beta_{\text{Control}} = -.22$ ,  $p_{\text{Control}} = .004$ ). There were no direct associations between sexual assault revictimization and any of the latent or observed financial variables ( $\beta_{\text{Financial\_Stability}} = .11$ ,  $p_{\text{Financial\_Stability}} = .142$ ;  $\beta_{\text{Income}} = -.06$ ,  $p_{\text{Income}} = .095$ ;  $\beta_{\text{Past}} = -.06$ ,  $p_{\text{Past}} = .440$ ;  $\beta_{\text{Future}} = -.07$ ,  $p_{\text{Future}} = .394$ ; c' paths). However, with the exception of finances 10 years in the past, the indirect associations between sexual assault revictimization and the latent and observed financial indicators through sense of control were statistically significant ( $\beta_{\text{Financial\_Stability}} = -.62$ ,  $p_{\text{Financial\_Stability}} = .009$ ;  $\beta_{\text{Income}} = -.50$ ,  $p_{\text{Income}} = .032$ ;  $\beta_{\text{Future}} = -.72$ ,  $p_{\text{Future}} = .008$ ,  $\beta_{\text{Past}} = -.05$ ,  $p_{\text{Past}} = .508$ ). These findings may suggest that sexual assault revictimization, rather than age of first sexual assault, explains some of the discrepancies between sexual assault and lower financial stability. The proportion of the total effects on financial variables through sense of control accounted for between 86% and 91% of the total effects when there was a significant indirect path ( $r_{\text{Financial\_Stability}}^2 = .22$ ;  $r_{\text{income}}^2 = .15$ ;  $r_{\text{finances\_past}}^2 = .02$ ;  $r_{\text{finances\_future}}^2 = .26$ ).

## Discussion

The aims of this investigation were to: (1) Add to a small body of literature linking the experience of sexual assault with financial stability and test whether sense of control may serve as an indirect mechanism by which these variables are related; and (2) for those who had experienced sexual assault, examine associations between age of first sexual assault and sexual assault revictimization with financial stability and determine whether sense of control may be an indirect mechanism in these associations. The results generally support previous findings suggesting that sexual assault is directly linked to lower financial stability (Byrne et al., 1999; Christy-McMullin, 2005; 2006; Ellis, 1983; Katerndahl et al., 2019; Miller et al., 1978; Peterson et al., 2017). Results from this investigation also suggest that sense of control predicts financial stability both for those who have and have not been sexually assaulted, supporting

previous findings (Janoff-Bulman, 1992; Littleton et al., 2006). Further, the indirect link between sexual assault and financial stability through sense of control was negative and significant. These novel results may assist in explaining findings in previous research indicating a negative relationship between sexual assault and assets (Byrne et al., 1999; Christy-McMullin, 2006, Ellis et al., 1982). The nature of the data (i.e., correlational and largely retrospective) requires that caution be used in interpretation. But, speculating on a causal chain of associations yields a plausible theoretical model wherein experience of sexual assault negatively impacts survivors' sense of control over their lives, which leads to lower financial stability (Janoff-Bulman, 1992). However, this is only one possible explanation.

The second aim of this study and the associated hypotheses considered the associations between age of first sexual assault, sexual assault revictimization, sense of control, and financial stability for the subsample who had experienced sexual assault and received mixed support. Namely, age of first sexual assault did not predict measures of financial stability, nor were any of the hypothesized indirect associations via sense of control found. This was surprising given strong theoretical evidence for developmental and attachment theories (Bowlby, 1988; Pynoos et al., 1995). Rather, it was experience of sexual assault revictimization that predicted lower sense of control. Though sexual assault revictimization was not directly related to measures of financial stability, it was indirectly and negatively related to three of the four measures via sense of control. These results support previous findings indicating that revictimization may lead to lower financial stability and poverty (Byrne et al., 1999; Ellis et al., 1982) and that sense of control is a plausible mechanism connecting the two.



**Figure 2.** Model two: path model predicting the effects of age of assault and number of assaults on sense of control and financial stability (control variables not shown).

The ongoing effort to develop explanations for and causal attributions surrounding one's sexual assault to establish a perception of control and predictability to prevent further assaults may lead the survivor to make judgments about the role she played in the assault (Abramson et al., 1978; Bletzer & Koss, 2004; 2006; Hassija & Gray, 2013; Janoff-Bulman, 1992; LaCapra, 1994; Littleton et al., 2006). Janoff-Bulman (1979; 1992) discusses modifiable behavior in her theory of characterological versus behavioral blame. Victims of sexual assault who believe that they could have prevented their assaults by changing their behavior have more favorable outcomes. However, an individual who experiences revictimization may make many attempts to prevent assault (i.e., fight or flight) until she realizes that her attempts are thwarted and withdraw into a freeze response. The narrative meant to make sense of the event establishes an external locus of control, making it difficult for these victims to believe that their behavior can protect them (Bletzer & Koss, 2004; 2006; Janoff-Bulman, 1992; LaCapra, 1994; Littleton et al., 2006). As stated, this belief may impact all areas of one's life, including financial stability.

There are several strengths associated with this investigation. Both models controlled for sociodemographic background and gender, and the links between sexual assault and financial stability were still significant. Previous literature suggests that socioeconomic variables may function as both potential risk factors for and consequences of victimization (Browne et al., 1999; Byrne et al., 1999; Miller et al., 1978). In addition, literature indicates that financial stability may also be more related to gender than sexual assault (Aizer, 2010). However, the findings in this investigation suggest that sexual assault is a significant predictor of lower financial stability, and these deficiencies are not a function of gender or socioeconomic background. An additional strength is the replication of prior studies linking sexual assault to financial stability and the introduction of novel evidence that sense of control may be an indirect mechanism that explains the associations between sexual assault, sexual assault revictimization, and financial stability. However, as noted above, the nature of the study design and data do not allow for causal claims to be made about these associations, nor can direction of effects be determined. Truly longitudinal data and modeling of associations between the change in these variables would be needed to support such claims.

A considerable limitation of the investigation lies in potential barriers to reporting sexual assault. The investigation was dependent on respondents self-identifying as experiencing "sexual assault," which may cause the actual numbers of sexual assaults to be understated. Koss et al. (1987) found that 42% of college-aged female rape victims have never told anybody about their sexual assaults. Reporting for male victims of sexual assault is even less likely (Barnard, 2018; Sable et al., 2006). Edwards et al. (2014) found that more women self-reported victimization when behavioral descriptions were used rather than labels, like "rape" or "sexual assault." The use of the secondary dataset is restricting, as the question cannot be rephrased using behavioral descriptions, and the nature of the assault(s) and/or the period of time since the assault cannot be considered in the prediction of outcomes. Another limitation related to self-reporting is the use of subjective measures of financial stability. The

only observed financial variable was annual income, which interestingly did not have a strong relationship with perceptions of financial stability.

An additional limitation of this study is in the generalizability of the findings. The sample was predominantly white and not entirely representative of the geographic region from which it was drawn in that it underrepresented other racial and ethnic groups. Small sample sizes for nonwhite racial/ethnic groups precluded the possibility of considering race differences in the findings. Since the literature informs that non-white racial/ethnic groups are more likely to experience sexual assault (Coulter et al., 2017), a more diverse sample could change estimates of both the prevalence of sexual assault and the associations between sexual assault and outcomes.

### *Implications*

Results from this study suggest that there are at least three potential points of intervention to decrease downstream negative effects of sexual assault on sense of control and financial stability. First, if a reduction in one's perception of control has a pervasive impact on many areas of one's life (including financial stability), then sense of control would appear to be an especially appealing target of intervention for sexual assault survivors as there are already existing therapies that are aimed at increasing the client's perception of control. Such therapies include containment, internal family systems (IFS) therapy, body work, and skill mastery (Casement, 1985; Fisher, 2017; Herman, 2015; Schwartz & Sweezy, 2019; Van der Kolk, 2015). Containment is one such practice that may assist in restoring a survivor's perception of control over the trauma narrative (Casement, 1985; Herman, 2015). In containment, a survivor of trauma metaphorically places unwanted memories and feelings into an imagined container to be dealt with at a more opportune time. Only the survivor decides when, how, and under what circumstances to reopen the container. Internal family systems therapy, or IFS therapy, is another recommended intervention that personifies the seemingly fragmented parts of the survivor's internal framework, assists in reorganizing the "selves," and encourages the survivor to "parent" herself (Fisher, 2017; Herman, 2015; Schwartz & Sweezy, 2019; Van der Kolk, 2015). Linehan (2014) and Van der Kolk (2015) further suggest that body work, yoga, and dialectical behavior therapy (DBT) skills may assist individuals in managing the unwanted, unpredictable, and uncontrollable body sensations associated with PTSD, like panic attacks and hypervigilance. Van der Kolk (2015) goes on to suggest that mastering a skill, like art or karate, may assist the survivor in developing the necessary confidence to address other life challenges, like financial management.

Second, interventions could address survivors' financial stability directly or indirectly by scaffolding sense of control to manage finances. Financial literacy courses may assist survivors of sexual assault in acquiring financial management skills and establishing a sense of control over their own economic situation. For example, breaking down a complex financial affair into smaller, more manageable tasks and goals may be beneficial for some survivors. As stated, the costs associated with sexual assault are complex and ongoing, and a paradox exists between agency and victimization in that



sexual assault and the subsequent negative impacts occurred absent choice. However, the survivor's agency should not be diminished. A survivor should be encouraged to practice choice in the areas in which she does have control. In the areas of a survivor's financial situation where she does not have control, outside supports are critical for ongoing positive outcomes.

Results from this analysis reinforce the need for the third implication, policies like the Violence Against Women Act (VAWA, 1994 & rev. 2022), the Victims of Crime Act (VOCA, 1984 & rev. 2005), and other state victim compensation programs, that provide financial support for survivors. In February 2022, VAWA was reauthorized with revised measures to address economic insecurity for victims of violence including sexual assault. Relevant enhancements include a certification of provision of information regarding the Temporary Assistance for Needy Families Program (TANF; Personal Responsibility and Work Opportunity Reconciliation Act, 1996; Section 703) and the authorization of two studies. The first study will evaluate barriers to economic security (Section 704). The second study will consider victims' abilities to pay back student loans (Section 705). While the reauthorization and additional provisions represent progress, there is not a clear plan to clearly address the financial burden of victims of sexual assault nor eliminate barriers to accessing such interventions.

### *Future Directions*

Future research should consider more outcomes that could potentially be impacted by sexual assault through sense of control, like relationship functioning, employment outcomes, and parenting. Researchers should combine observed and subjective measures for a more robust representation of financial stability. To gain a better understanding of how sense of control is impacted by sexual assault, surveys should ask more questions about the nature of the assault and the victim's perception of the assault itself. To address barriers to disclosure, surveys utilizing behavioral descriptions of assault and rape may yield more disclosures than labeling descriptions (i.e., "Have you ever been coerced by somebody to have intercourse while being held down?" vs. "Have you ever been raped?"; Edwards et al., 2014). In light of the findings in this study, investigations should aim at identifying promising therapeutic techniques to restore sense of control. Finally, a more diverse sample, including a larger male sample, will more accurately reflect the prevalence and impact of sexual assault on life outcomes.

### **Conclusion**

The purpose of this investigation was to examine the impact of sexual assault on sense of control and financial stability. Analyses revealed a significant negative relationship between experiences of sexual assault and financial stability through sense of control. The indirect effects via sense of control accounted for a substantial percentage of the total variance. Revictimization, rather than age of first assault, played a more significant role in predicting financial stability. These results add to the findings from

previous literature (e.g., Byrne et al., 1999; Christy-McMullin, 2006, Ellis et al., 1982). Continued research in this area will assist in providing necessary support for victims of sexual assault and promoting more positive outcomes across a lifespan.


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### References

- Abramson, L. Y., Seligman, M. E., & Teasdale, J. D. (1978). Learned helplessness in humans: Critique and reformulation. *Journal of Abnormal Psychology, 87*(1), 49. <https://doi.org/10.1037/0021-843X.87.1.49>
- Aizer, A. (2010). The gender wage gap and domestic violence. *American Economic Review, 100*(4), 1847–1859. <https://doi.org/10.1257/aer.100.4.1847>
- Aldwin, C. M., Levenson, M. R., & Spiro, A. (1994). Vulnerability and resilience to combat exposure: Can stress have lifelong effects? *Psychology and Aging, 9*(1), 34–44. <https://doi.org/10.1037/0882-7974.9.1.34>
- American Psychiatric Association. (1980). *Diagnostic and statistical manual of mental disorders*.
- American Psychiatric Association [APA]. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.).
- Barnard, L. S. (2018). Adult male survivors of sexual assault. In R. B. Gartner (Ed.), *Healing sexually betrayed men and boys: Treatment for sexual abuse, assault, and trauma* (pp. 53–65). Routledge/Taylor & Francis Group.
- Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin, 107*(2), 238–246. <https://doi.org/10.1037/0033-2909.107.2.238>
- Bletzer, K. V., & Koss, M. P. (2004). Narrative constructions of sexual violence as told by female rape survivors in three populations of the southwestern United States: Scripts of coercion, scripts of consent. *Medical Anthropology, 23*(2), 113–156. <https://doi.org/10.1080/01459740490448911>
- Bletzer, K. V., & Koss, M. P. (2006). After-rape among three populations in the Southwest: A time of mourning, a time for recovery. *Violence Against Women, 12*(1), 5–29. <https://doi.org/10.1177/1077801205277352>
- Bollen, K. A., & Stine, R. (1990). Direct and indirect effects: Classical and bootstrap estimates of variability. *Sociological Methodology, 20*(1990), 115–140. <https://doi.org/10.2307/271084>
- Bowland, S., Biswas, B., Kryiakakis, S., & Edmond, T. (2011). Transcending the negative: Spiritual struggles and resilience in older female trauma survivors. *Journal of Religion, Spirituality & Aging, 23*(4), 318–337. <https://doi.org/10.1080/15528030.2011.592121>

- Bowlby, J. (1988). *A secure base: Parent–child attachment and healthy human development*. Basic Books.
- Browne, A., Salomon, A., & Bassuk, S. S. (1999). The impact of recent partner violence on poor women's capacity to maintain work. *Violence Against Women, 5*(4), 393–426. <https://doi.org/10.1177/10778019922181284>
- Byrne, C. A., Resnick, H. S., Kilpatrick, D. G., Best, C. L., & Saunders, B. E. (1999). The socio-economic impact of interpersonal violence on women. *Journal of Consulting and Clinical Psychology, 67*(3), 362. <https://doi.org/10.1037/0022-006X.67.3.362>
- Casement, P. (1985). *On learning from the patient*. Routledge.
- Christy-McMullin, K. (2005). Economic resources and woman abuse. *Journal of Ethnic and Cultural Diversity in Social Work, 14*(3–4), 103–123. [https://doi.org/10.1300/J051v14n03\\_06](https://doi.org/10.1300/J051v14n03_06)
- Christy-McMullin, K. (2006). An evidenced-based approach to a theoretical understanding of the relationship between economic resources, race/ethnicity, and woman abuse. *Journal of Evidence-Based Social Work, 3*(2), 1–30. [https://doi.org/10.1300/J394v03n02\\_01](https://doi.org/10.1300/J394v03n02_01)
- Classen, C. C., Palesh, O. G., & Aggarwal, R. (2005). Sexual revictimization: A review of the empirical literature. *Trauma, Violence, & Abuse, 6*(2), 103–129. <https://doi.org/10.1177/1524838005275087>
- Cloitre, M., Stolbach, B., Herman, J., Kolk, B., Pynoos, R., Wang, J., & Petkova, E. (2009). A developmental approach to complex PTSD: Childhood and adult cumulative trauma as predictors of symptom complexity. *Journal of Traumatic Stress, 22*(5), 399–408. <https://doi.org/10.1002/jts.20444>
- Coulter, R. W., Mair, C., Miller, E., Blossnich, J. R., Matthews, D. D., & McCauley, H. L. (2017). Prevalence of past-year sexual assault victimization among undergraduate students: Exploring differences by and intersections of gender identity, sexual identity, and race/ethnicity. *Prevention Science, 18*(6), 726–736. <https://doi.org/10.1007/s1121-017-0762-8>
- Dossa, N. I., Zunzunegui, M. V., Hatem, M., & Fraser, W. (2014). Fistula and other adverse reproductive health outcomes among women victims of conflict-related sexual violence: A population-based cross-sectional study. *Birth (Berkeley, Calif.), 41*(1), 5–13. <https://doi.org/10.1111/birt.12085>
- Edwards, S. R., Bradshaw, K. A., & Hinsz, V. B. (2014). Denying rape but endorsing forceful intercourse: Exploring differences among responders. *Violence and Gender, 1*(4), 188–193. <https://doi.org/10.1089/vio.2014.0022>
- Elliott, D. M., Mok, D. S., & Briere, J. (2004). Adult sexual assault: Prevalence, symptomatology, and sex differences in the general population. *Journal of Traumatic Stress, 17*(3), 203–211. <https://doi.org/10.1023/B%3AJOTS.0000029263.11104.23>
- Ellis, E. M. (1983). A review of empirical rape research: Victim reactions and response to treatment. *Clinical Psychology Review, 3*(4), 473–490. [https://doi.org/10.1016/0272-7358\(83\)90025-9](https://doi.org/10.1016/0272-7358(83)90025-9)
- Ellis, E. M., Atkeson, B. M., & Calhoun, K. S. (1982). An examination of differences between multiple-and single-incident victims of sexual assault. *Journal of Abnormal Psychology, 91*(3), 221. <https://doi.org/10.1037/0021-843X.91.3.221>
- Felitti, V., Anda, R., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., Coss, M. P., & Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The adverse childhood experiences (ACE) study. *American Journal of Preventive Medicine, 14*(4), 245–257. [https://doi.org/10.1016/S0749-3797\(98\)00017-8](https://doi.org/10.1016/S0749-3797(98)00017-8)
- Fisher, J. (2017). *Healing the fragmented selves of trauma survivors: Overcoming internal self-alienation*. Routledge.

- Freud, S. (1896). The etiology of hysteria. S.E., 3.
- Goodman, L. A., Koss, M. P., & Russo, N. F. (1993). Violence against women: Physical and mental health effects. Part I: Research findings. *Applied and Preventative Psychology*, 2(2), 79–89. [https://doi.org/10.1016/S0962-1849\(05\)80114-3](https://doi.org/10.1016/S0962-1849(05)80114-3)
- Goyal, V., Mengeling, M. A., Booth, B. M., Torner, J. C., Syrop, C. H., & Sadler, A. G. (2017). Lifetime sexual assault and sexually transmitted infections among women veterans. *Journal of Women's Health*, 26(7), 745–754. <https://doi.org/10.1089/jwh.2016.5775>
- Gruenewald, T. L., Karlamangla, A. S., Hu, P., Stein-Merkin, S., Crandall, C., Koretz, B., & Seeman, T. E. (2012). History of socioeconomic disadvantage and allostatic load in later life. *Social Science & Medicine*, 74(1), 75–83. <https://doi.org/10.1016/j.socscimed.2011.09.037>
- Hassija, C. M., & Gray, M. J. (2013). Adaptive variants of controllability attributions among survivors of sexual assault. *International Journal of Cognitive Therapy*, 6(4), 342–357. <https://doi.org/10.1521/ijct.2013.6.4.342>
- Herman, J. L. (2015). *Trauma and recovery: The aftermath of violence—From domestic abuse to political terror*. Basic Books.
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6(1), 1–55. <https://doi.org/10.1080/10705519909540118>
- IBM Corporation. (2019). *IBM SPSS Statistics for Macintosh, Version 26.0*.
- Janoff-Bulman, R. (1979). Characterological versus behavioral self-blame: Inquiries into depression and rape. *Journal of Personality and Social Psychology*, 37(10), 1798–1809. <https://doi.org/10.1037//0022-3514.37.10.1798>
- Janoff-Bulman, R. (1992). *Shattered assumptions: Towards a new psychology of trauma*. The Free Press.
- Katerndahl, D. A., Burge, S. K., Ferrer, R. L., Becho, J., & Wood, R. (2019). Predictors of perceived need for and actual action taking among women in violent relationships. *Journal of Interpersonal Violence*, 34(16), 3344–3371. <https://doi.org/10.1177/0886260516669543>
- Kilpatrick, D. G., & Acierno, R. (2003). Mental health needs of crime victims: Epidemiology and outcomes. *Journal of Traumatic Stress*, 16(2), 119–132. <https://doi.org/10.1023/A:1022891005388>
- Kilpatrick, D. G., Amstadter, A. B., Resnick, H. S., & Ruggiero, K. J. (2007). Rape-related PTSD: Issues and interventions. *Psychiatric Times*, 24(7), 50–58. <https://www.psychiatrictimes.com/view/rape-related-ptsd-issues-and-interventions>
- Koss, M. P. (1993). Rape: Scope, impact, interventions, and public policy responses. *American Psychologist*, 48(10), 1062–1069. <https://doi-org.spot.lib.auburn.edu/10.1037/0003-066X.48.10.1062>
- Koss, M. P., Bailey, J. A., Yuan, N. P., Herrera, V. M., & Lichter, E. L. (2003). Depression and PTSD in survivors of male violence: Research and training initiatives to facilitate recovery. *Psychology of Women Quarterly*, 27(2), 130–142. <https://journals-sagepub-com/doi/pdf/10.1111/1471-6402.00093>
- Koss, M. P., Gidycz, C. A., & Wisniewski, N. (1987). The scope of rape: Incidence and prevalence of sexual aggression and victimization in a national sample of higher education students. *Journal Consulting and Clinical Psychology*, 55(2), 162–170. <https://doi.org/10.1037/0022-006X.55.2.162>
- LaCapra, D. (1994). *Representing the Holocaust: History, theory, trauma*. Cornell University Press.

- Lachman, M. E., & Weaver, S. L. (1998). The sense of control as a moderator of social class differences in health and well-being. *Journal of Personality and Social Psychology, 74*(3), 763. <https://doi.org/10.1037/0022-3514.74.3.763>
- Laub, D., & Auerhahn, N. C. (1993). Knowing and not knowing massive psychic trauma: Forms of traumatic memory. *International Journal of Psycho-Analysis, 74*(2), 287–302. <https://search-ebscohost-com.spot.lib.auburn.edu/login.aspx?direct=true&db=psyh&AN=1993-34499-001&site=ehost-live> and <https://www-proquest-com.spot.lib.auburn.edu/openview/4de54274a5380ecc3839991354d19cd4/1?pqorigsite=gscholar&cbl=1818729>
- Linehan, M. (2014). *DBT? Skills training manual*. Guilford Publications.
- Littleton, H. L., Axson, D., Bretkopf, C. R., & Berenson, A. (2006). Rape acknowledgment and postassault experiences: How acknowledgment status relates to disclosure, coping, world-view, and reactions received from others. *Violence and Victims, 21*(6), 761–778. <https://doi.org/10.1891/vv-v21i6a006>
- Martin, M., & Westerhof, G. J. (2003). Do you need to have them or should you believe you have them? Resources, their appraisal, and well-being in adulthood. *Journal of Adult Development, 10*(2), 99–112. <https://doi.org/10.668-0667/03/0400-0099/0>
- McQuitty, S. (2004). Statistical power and structural equation models in business research. *Journal of Business Research, 57*(2), 175–183. [https://doi.org/10.1016/S0148-2963\(01\)00301-0](https://doi.org/10.1016/S0148-2963(01)00301-0)
- Miller, J., Moeller, D., Kaufman, A., Divasto, P., Pathak, D., & Christy, J. (1978). Recidivism among sex assault victims. *The American Journal of Psychiatry, 135*(9), 1103–1104. <https://doi.org/10.1176/ajp.135.9.1103>
- Muthén, L. K., & Muthén, B. O. (1998-2017). *Mplus user's guide: Eighth edition*. Authors.
- Pearlin, L. I., & Schooler, C. (1978). The structure of coping. *Journal of Health and Social Behavior, 19*(1), 2–21. <https://doi.org/10.2307/2136319>
- Perez, C. C. (2019). *Invisible women: Data bias in a world designed for men*. Abrams.
- Personal Responsibility and Work Opportunity Reconciliation Act of 1996, 104 U.S.C. § 3734 (1996). <https://www.congress.gov/104/plaws/publ193/PLAW-104publ193.pdf>
- Peterson, C., DeGue, S., Florence, C., & Lokey, C. N. (2017). Lifetime economic burden of rape among US adults. *American Journal of Preventive Medicine, 52*(6), 691–701. <https://doi.org/10.1016/j.amepre.2016.11.014>
- Prenda, K. M., & Lachman, M. E. (2001). Planning for the future: A life management strategy for increasing control and life satisfaction in adulthood. *Psychology and Aging, 16*(2), 206. <https://doi.org/10.1037/0882-7974.16.2.206>
- Pynoos, R. S., Steinberg, A. M., & Wraith, R. (1995). A developmental model of childhood traumatic stress. In D. Cicchetti & D. J. Cohen (Eds.), *Wiley series on personality processes. Developmental psychopathology, vol. 2. Risk, disorder, and adaptation* (pp. 72–95). John Wiley & Sons.
- Resick, P. A. (1993). The psychological impact of rape. *Journal of Interpersonal Violence, 8*(2), 223–255. <https://doi.org/10.1177/088626093008002005>
- Rogers, C., & Gruener, D. (1997). Sequelae of sexual assault. *Primary Care Update for OB/GYNs, 4*(4), 143–146. [https://doi.org/10.1016/S1068-607X\(97\)00011-5](https://doi.org/10.1016/S1068-607X(97)00011-5)
- Roth, S., & Newman, E. (1991). The process of coping with sexual trauma. *Journal of Traumatic Stress, 4*(2), 279–297. <https://doi.org/10.1002/jts.2490040209>
- Ryff, C., Almeida, D., Ayanian, J., Binkley, N., Carr, D. S., Coe, C., & Williams, D. (2014). *Midlife in the United States (MIDUS 3), 2013-2014*. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2019-04-30. <https://doi.org/10.3886/ICPSR36346.v7>

- Sable, M. R., Danis, F., Mauzy, D. L., & Gallagher, S. K. (2006). Barriers to reporting sexual assault for women and men: Perspectives of college students. *Journal of American College Health, 55*(3), 157–162. <https://doi.org/10.3200/JACK.55.3.157-162>
- Schwartz, R. C., & Sweezy, M. (2019). *Internal family systems therapy*. Guilford Publications.
- Tjaden, P. G., & Thoennes, N. (2006). *Extent, nature, and consequences of rape victimization: Findings from the National Violence Against Women Survey*. National Institute of Justice.
- Van Bruggen, L. K., Runtz, M. G., & Kadlec, H. (2006). Sexual revictimization: The role of sexual self-esteem and dysfunctional sexual behaviors. *Child Maltreatment, 11*(2), 131–145. <https://doi.org/10.1177/1077559505285780>
- Van der Kolk, B. (2015). *The body keeps the score: Brain, mind, and body in the healing of trauma*. Penguin.
- Victims of Crime Act of 1984, 98 U.S.C. § 6403 (1984 & rev. 2005). <https://www.congress.gov/bill/98th-congress/house-bill/6403>
- Violence Against Women Act of 1994, 117 U.S.C. § 3623 Sections 703-705 (1994 & rev. 2022). <https://www.congress.gov/bill/117th-congress/senate-bill/3623/text#toc-H3C1A93D40D624D5A9FB7A87AFE199118>
- Yu, X., Ren, G., Huang, S., & Wang, Y. (2018). Undergraduates' belief in a just world and subjective well-being: The mediating role of sense of control. *Social Behavior and Personality: An International Journal, 46*(5), 831–840. <https://doi.org/10.2224/sbp.6912>

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