Check for updates

Review Manuscript

Sexual Violence and Shame: A Meta-Analysis

TRAUMA, VIOLENCE, & ABUSE
2026, Vol. 27(1) 240–255
© The Author(s) 2025
Article reuse guidelines:
sagepub.com/journals-permissions
DOI: 10.1177/15248380241308828
journals.sagepub.com/home/tva
Sage

Padideh Hassanpour[1], Sara Buchwald[1,2], Anuj H. P. Mehta[1,3], Simon B. Goldberg[4,5], and Kate Walsh[1,6]

Abstract

Although sexual violence (SV) has been hypothesized to increase shame, the relationship between SV and shame has not been quantified. Addressing this gap is essential for developing targeted interventions for survivors, as shame is a transdiagnostic risk factor for numerous forms of psychopathology and a barrier to service-seeking. This meta-analysis first examines whether individuals exposed to SV demonstrate higher shame than individuals who reported no SV exposure. Second, we assessed the strength of the associations between SV severity and shame severity. Seven databases were searched for studies published from inception to June 2023. Original studies that assessed SV and shame in at least 10 participants were eligible for inclusion. Random effects models examined shame differences between SV survivors and non-SV–exposed individuals and quantified the association between SV severity and shame severity. Meta-analyses of 53 studies (97 effects, $N = 15{,}110$) indicated that individuals exposed versus those not exposed to SV experience higher shame ($g = 0.55$), with medium effects found across SV timing (childhood/adolescence or adulthood) and shame subtypes (trait, body, trauma-related). SV severity was moderately associated with shame ($r = .20$), with strong correlations found between child/adolescent SV severity and trauma-related shame, and small effects found between adolescent/adult SV severity and trauma-related and body shame. Risk of bias ratings, whether contact SV was experienced, sample type, and gender moderated some models. Our findings suggest that shame is a clinically significant correlate of SV. Interventions that address shame may contribute to more positive outcomes for survivors.

Keywords

shame, sexual violence, trauma, multilevel meta-analysis

Sexual violence (SV), defined as any sexual contact or behavior where consent is not obtained or freely given (World Health Organization, 2021), affects 35.6% of women, 18% of transgender and gender-diverse people, and 1% of men globally (Borumandnia et al., 2020; Steele et al., 2023). SV is linked to a range of negative psychological outcomes, including depression, posttraumatic stress disorder (PTSD), and suicidality (Dworkin et al., 2017). SV has been theoretically and empirically linked to shame (Feiring et al., 1996, 2002; MacGinley et al., 2019), a self-conscious emotion characterized by negative self-evaluation and a transdiagnostic risk factor for various forms of psychopathology (Paulus et al., 2016). Shame is a barrier to disclosing SV and seeking medical, social, and legal assistance (Munro, 2014). However, the strength of the association between SV and shame has not been summarized. Comparing individuals exposed to SV with those reporting no SV exposure can help explain whether SV confers a unique risk for shame. Examining whether SV characteristics, including severity and timing, are associated with more severe shame also can contribute to research on SV as a public health concern and inform mental health interventions for survivors.

SV Characteristics and Shame Subtypes

The current study contributes to the research literature by examining how the timing of SV exposure may be associated with shame. Child or adolescent sexual violence (CASV) encompasses contact (unwanted sexual touching, including attempted or completed penetrative and non-penetrative acts) and noncontact abuse (exposure to sexual content like pornography) during childhood and adolescence that are typically

[1]Department of Psychology, University of Wisconsin-Madison, Madison, WI, USA
[2]McLean Hospital, Belmont, MA, USA
[3]Department of Psychology, University of Massachusetts Amherst, MA, USA
[4]Department of Counseling Psychology, University of Wisconsin-Madison, WI, USA
[5]Center for Healthy Minds, University of Wisconsin-Madison, WI, USA
[6]Department of Gender & Women's Studies, University of Wisconsin-Madison, WI, USA

Corresponding Author:
Padideh Hassanpour, Department of Psychology, University of Wisconsin–Madison, Brogden Psychology Building, 1202 West Johnson Street, Madison, WI 53706, USA.
Email: padideh.hassanpour@wisc.edu

perpetrated by a trusted adult (Chouliara et al., 2014). In contrast, adolescent or adult sexual violence (AASV) typically encompasses contact abuse that occurs in adolescence or adulthood by an intimate partner or friend/acquaintance. However, there is no consensus in the CASV literature about the definitive age range for childhood with some studies defining childhood SV as occurring before age 12 and adolescent SV as occurring between 13 and 17 (Miron & Orcutt, 2014), while others combine the two periods to define CASV as occurring up to age 18 (Assink et al., 2019). Similarly, many studies examine adult SV at age 18 or older, but others ask about contact SV from age 14 onwards (Koss et al., 2007).

Despite inconsistencies in measurement, exposure to childhood SV poses a greater risk for psychopathology, including depression and PTSD, compared to exposure during adolescence or adulthood (Dunn et al., 2017, 2018; McCutcheon et al., 2010). CASV occurs during a critical developmental period where brain structure and function, as well as self-esteem and beliefs about the self, are being formed (Dunn et al., 2018). Thus, it is plausible that childhood exposure to SV is associated with the development of more severe, stable shame relative to later adolescent or adult exposure to SV. To our knowledge, no peer-reviewed literature has directly compared shame experiences among those who experience CASV versus AASV. Quantifying and comparing these relationships is crucial for identifying whether SV timing is linked to greater shame, which could point to a need to enhance interventions for CASV survivors. For example, CASV survivors may benefit from interventions that focus on addressing shame rooted in disrupted trust and safety during formative years (Foster & Hagedorn, 2014), while AASV survivors might require addressing shame in the context of adult relationships (DiMauro & Renshaw, 2021), where consent and disclosure may be more prominent.

Theoretical Explanations for Link Between SV and Shame

Finkelhor and Browne's (1985) traumagenic dynamics theory suggests that internalized shame is an affective component of stigmatization arising from society's victim-blaming narratives around SV. This stigmatization has been theorized to lead to negative self-evaluations and feelings of defectiveness, which are central to the experience of trait shame—an enduring and stable form of shame characterized by negative self-attributions across contexts (Tangney, 1990). Feiring et al. (1996) extended this model with stigmatization theory, suggesting that societal factors lead to negative cognitive attributions that contribute to shame specifically related to SV. These cognitive attributions can manifest as internal ("I feel flawed"), stable ("I will always feel flawed"), and global ("I am flawed in all aspects of my life") evaluations of the self (Lewis, 1992; Tracy & Robins, 2004). SV survivors may internalize these negative beliefs, potentially leading to chronic feelings of shame, particularly when confronted with SV reminders. Shame experienced intermittently or in response to transgressed social norms can be socially adaptive by prompting a change in behavior that conforms with social expectations (Schaumberg & Skowronek, 2022). Persistent shame, however, is maladaptive because it prompts social isolation and dysfunctional coping (Ahmadpanah et al., 2017) and has been linked to suicidal ideation, PTSD, and dissociation among individuals exposed to SV (MacGinley et al., 2019). SV-related shame mediates the relationship between non-supportive social reactions to the disclosure of SV and psychological distress (Bhuptani et al., 2019; DeCou et al., 2017).

Shame often is measured as a stable trait or tendency to experience shame across various contexts (Tangney, 1990) and is commonly referred to as "shame proneness", "internalized" or "characterological" shame. Shame also can be experienced at the state level or "in-the-moment," including in daily contexts or in response to specific events or situations (Turner, 2014). Although state shame may be fleeting, certain events or contexts may be highly salient for some individuals and elicit more frequent experiences of shame in response to a particular source. For example, a person who experiences a potentially traumatic event like SV may experience shame in relation to the event (e.g., trauma- or SV-related shame; Aakvaag et al., 2016), in relation to their physical self (e.g., body shame; Miles-McLean et al., 2015), or in relation to a specific behavior during the event (e.g., freezing during SV; Katz & Nicolet, 2020). While some research has used terms like sexual assault-related shame or abuse-related shame to describe shame associated with SV (e.g., Feiring & Taska, 2005), studies often utilize measures that do not distinguish SV-related shame from broader trauma-related shame. Although individuals exposed to childhood sexual abuse (Alix et al., 2020; Feiring & Taska, 2005) and lifetime SV (Aakvaag et al., 2016; Miles-McLean et al., 2015; Watson et al., 2012) report high levels of shame, whether SV timing and characteristics are differentially related to shame experiences is unclear. Clarifying these associations can inform targeted treatments that address shame-related distress among survivors.

Moderators

SV Characteristics. SV characteristics, such as a survivor's their relationship to the perpetrator, may be critical factors that affect psychological outcomes (Blayney & Read, 2018). Increased psychological distress is observed when perpetrators are strangers or family versus friends or acquaintances (Ullman et al., 2006). Other aspects of SV, such as experiencing revictimization (i.e., more than one SV) or more recent SV, have been linked to increased risk for psychopathology (Dunn et al., 2018; Walsh et al., 2012), trauma-related shame (Aakvaag et al., 2016), and body shame (Miles-McLean et al., 2015). Despite evidence linking certain SV characteristics with increased psychological distress, it remains unclear whether these factors are consistently linked to shame among

survivors. Clarifying these links can improve predictive models of post-SV mental health and inform more nuanced prevention and intervention efforts that are responsive to the specific characteristics of the abuse experienced.

Demographic Differences in Associations with Shame. Gender, race/ethnicity, and sample type can influence the magnitude of shame experienced. Although not consistent across all studies (Byers & Glenn, 2012), women and girls experience higher shame after SV, and a greater proportion experience DSM-5 PTSD symptoms reflecting shame and guilt compared to men and boys (Badour et al., 2017). In longitudinal work, girls experienced more shame than boys when abuse was discovered, but shame did not persist more in girls than boys over time (Feiring et al., 2002). Shame also may be interpreted differently across cultures and racial/ethnic groups. Watson et al. (2012) found that White, Asian/Pacific Islander, and Hispanic women had higher body shame than African American women. Contrastingly, Feiring et al.'s (2001) study found no differences in SV-related shame levels among White, African American, and Hispanic youth who had experienced CASV, though more severe abuse predicted higher shame levels in White children. In light of mixed findings, the current review sought to clarify whether gender and race/ethnicity moderate the relationship between SV and shame. Understanding these nuances can lead to the development of identity and culturally affirming interventions that more effectively address the unique needs of survivors. This synthesis also can highlight which groups are underrepresented and guide future studies to improve generalizability.

Studies on SV and shame have included college students (DeCou et al., 2017), community-recruited participants (Aakvaag et al., 2016), incarcerated individuals, and those seeking psychological treatment or support in clinical settings (Kealy et al., 2018). Quantifying whether associations vary by population can help identify which groups are at greater risk of experiencing shame and tailor more effective support to the specific needs of different populations.

Methodological Considerations. Studies vary in the quality of their measurement of SV (e.g., Dworkin et al., 2017). Single items that require survivors to label their experiences as SV underestimate the prevalence of SV relative to measures that employ multiple behaviorally specific items that avoid labeling (Cook et al., 2011). Indeed, 62.7% of individuals who endorse a behaviorally specific act that meets the criteria for rape do not label their experiences as rape (Wilson & Miller, 2016). Using risk of bias tool that assesses whether studies used valid and reliable measures for the central concepts in this review will help clarify whether methodological biases affect the magnitude of the association between SV and shame.

Current Review

This meta-analysis quantitatively summarized associations between SV and shame in two ways using two different types of studies. First, we calculated whether shame was higher among individuals who have and have not experienced SV in studies comparing mean shame scores between SV and non-SV–exposed individuals. Second, we examined the magnitude and direction of the relationship between SV and shame in studies that measured both constructs continuously. For both meta-analyses, we evaluated whether SV timing was differentially associated with certain subtypes of shame. Lastly, we evaluated whether factors such as SV characteristics, demographic differences, and methodological considerations moderated the magnitude of the association between SV and shame.

Methods

Protocol and Registration

A review protocol was developed and prospectively registered online with PROSPERO (CRD42022297401). This meta-analysis followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses guidelines (Moher et al., 2009). Changes to the protocol are noted on PROSPERO.

Timing of SV Exposure

We defined CASV as contact or noncontact victimization of children and adolescents up to 18 years of age in accordance with previous meta-analyses (Assink et al., 2019). AASV was defined as contact SV, which includes attempted or completed rape (i.e., penetrative), sexual coercion, and unwanted sexual touching, since age 14 (Basile et al., 2022; Koss et al., 2007). This decision acknowledges literature defining age cut-offs for SV exposure and allows for comparability across studies, although adolescent SV is included in both categories. Studies that assessed lifetime SV or SV experienced as a child and adult were placed under the "lifetime" SV category and were analyzed separately from CASV and AASV. Studies that did not define when SV occurred were also placed under lifetime SV.

Literature Search and Study Retrieval

The review process commenced in September 2021 and concluded in May 2024. We first consulted a reference librarian to develop the search strategy and terms. A systematic search was originally conducted across four electronic databases (*PsycINFO*, *CINAHL*, *PubMed*, and *ProQuest Dissertations and Theses*) from inception to October 21, 2021, and updated to include three additional databases: *Web of Science*, *Scopus*, and *PsyArXiv*. An updated search with the seven electronic databases was completed on June 6, 2023. *ProQuest* and *PsyArXiv* were searched with the intention of retrieving non-peer-reviewed and unpublished literature. Search terms included a Boolean operator (OR, AND) to distinguish between SV and shame constructs and wildcards (*) to accommodate variations in terminology across studies.

Supplemental Appendix A provides a flow diagram detailing the search strategy and Supplemental Appendix B provides a full list of search terms applied to specific databases.

Once search terms were applied across the seven databases, results were imported into Zotero with duplicates excluded. Abstracts were imported into Covidence. Titles and abstracts were independently coded for inclusion by three authors, with the first author reviewing all studies and the second and third authors each reviewing half the total number of articles. This method was also used for full-text screening. Discrepancies were resolved by the first three authors.

To address publication bias, we searched for unpublished studies (Rosenthal, 1979). Eleven authors were contacted when insufficient information on effect sizes was found. Eight (72%) responded. Three authors were contacted when a full text was unavailable; one responded (33%). We received two unpublished datasets (Laaksonen et al., 2015; Walsh & Lowe, 2017). A manual search of journals from the last decade (2013–2023) from which we had obtained two or more articles from our initial list of eligible studies was also completed (i.e., *Violence Against Women, Psychology of Women Quarterly, Sex Roles, Journal of Sex & Marital Therapy, Child Abuse & Neglect*). We searched similar reviews and their references (MacGinley et al., 2019), but identified no new studies.

Eligibility Criteria

Studies included in the meta-analysis met the following inclusion criteria: (a) quantitative study; (b) measured shame as a continuous variable; (c) measured contact-based SV, dichotomously or continuously and as separate from other abuse-related variables (e.g., physical abuse); (d) included participants who have experienced SV; (e) included original research not present in other studies; (f) included at least 10 participants; (g) article was written or translated into English. When dissertations and published articles by the same author(s) using the same data were discovered, we retained the peer-reviewed version of the article. To avoid validity threats from duplicated data in dissertations and articles, we selected the study that had statistics that could be used to compute the effect size and/or the largest sample size. When sample sizes were comparable, we selected the study that reported multiple effects to provide a more comprehensive dataset.

Data Extraction and Coding

A coding spreadsheet was developed by the research team to extract data. Data extraction was undertaken independently and in duplicate by the first three authors. The first author coded all eligible studies, while the second and third authors each coded 50% of the studies. The first three authors extracted the following data: the study's title, author(s), year of publication, publication status (i.e., peer-reviewed and dissertation/thesis), name of dataset, total number of participants, number of survivors and comparison participants, study design (i.e., cross-sectional, longitudinal; correlational and/or group comparison), mean age and standard deviation, country, sample gender, sample race/ethnicity for U.S. samples, SV measure(s) and shame measure(s) (full name, year, and version), shame subtype, characteristics and timing of SV (time since most recent/only assault, percentage of sample revictimized; percentage of sample whose perpetrators were strangers and/or family members), and focal time-period of SV assessed (i.e., CASV, AASV, and lifetime). Means and standard deviations were recorded for studies that compared shame for SV and non-SV–exposed individuals. Correlations were recorded for studies that assessed associations between SV severity and shame severity. Semi-partial, biserial, unstandardized, and standardized regression coefficients were recorded when zero-order correlations were absent.

We tested three continuous moderators: gender, operationalized as the percentage of the sample who identified as girls/women; race/ethnicity, operationalized as the percentage of the sample who identified as White; and risk of bias ratings. We tested three categorical variables: sample type, operationalized as the majority recruitment setting (>50%) participants were sampled from, with college students coded as the reference group, and other common recruitment settings, including community and help-seeking services; whether CASV included contact SV only (1 = contact-SV only, 0 = mixed contact and noncontact SV assessed); and publication type, operationalized as journals articles or dissertations. Contact-only versus mixed or noncontact SV was assessed as a moderator only for the CASV to shame models, as AASV was operationalized as contact-only SV.

Inconsistent reporting of SV characteristics, such as relationship to perpetrator, revictimization, and time since the most recent/only assault across studies prevented moderator analyses; therefore, extracted demographic data are primarily for descriptive purposes (see Supplemental Appendix C). Interrater reliability was assessed using kappa statistics for categorical variables and intraclass coefficient correlations (ICC) for continuous variables, showing moderate to high agreement (.70–.90) and good to excellent agreement (.75–.90), respectively.

Risk of Bias

The Appraisal Tool for Cross-Sectional Studies (AXIS; Downes et al., 2016) provided a risk of bias and study quality index, with modifications made for the current review (detailed in Supplemental Appendix D). Criterion was rated as present (1) or absent (0). Unpublished datasets without a corresponding written report were excluded due to insufficient information to assess bias. A total (summed) score was computed for each study, with a possible range of 0 to 15.

Higher scores reflect greater study quality and lower risk of bias. Interrater reliability indicated good agreement (ICC = .80) with discrepancies adjudicated by consensus.

Data-Analytic Plan

We describe the study characteristics and risk of bias features for included studies. Next, we calculate the magnitude of the difference in shame severity between individuals with and without SV exposure and analyze relevant moderators. Finally, we assess the magnitude of the relationship between SV severity and shame severity and examine relevant moderators.

Meta-analyses were completed in R software (Version 1.4; R Core Team, 2015) by using the metafor package (Viechtbauer & Cheung, 2010). A standardized mean difference (Hedges' *g*) was calculated for studies that examined the effect of lifetime exposure to any form of SV on all shame subtypes by comparing participants with and without a history of SV. Hedges' *g* was used to account for biased effect sizes due to small samples (Cooper et al., 2009). For studies that assessed the association between SV and shame, we recorded a correlation coefficient (Pearson's *r*). These correlations reflected the effect size between SV severity and shame severity. Most studies provided non-adjusted effects with a Pearson's *r*; one study each provided a partial adjusted effect size (R^2), a point-biserial correlation, or a transformed log score. Seven studies included a standardized regression coefficient that was transformed to Pearson's *r* using the esc package in R (Lüdecke, 2018). Following recommendations (Cooper et al., 2009; Lipsey & Wilson, 2001), correlation coefficients were converted to Fisher's *z* during meta-analyses to stabilize the variance and ensure a normal distribution for analyses. Once analyses were complete, Fisher *z* scores were converted back to zero-order correlations for interpretability. We did not convert studies to one effect size metric given the unique question each set of studies addressed. We conducted overall meta-analyses to quantify the association between SV and shame and specific meta-analyses for different types of SV and shame to address heterogeneity in these variables.

Random Effects Model and Effect Size Dependency

We fit a random effects model to address the substantial heterogeneity observed in sample characteristics, study design, and measurement methods across studies. While a fixed effects model assumes that there is a single true effect size, a random effects model assumes that there is a distribution of effect sizes across studies and allows for variation in estimates.

Meta-analyses assume independence of effect sizes. In this study, several effects reflecting associations between the timing of SV exposure or shame subtypes were derived from within a single study. To avoid dependency concerns, meta-analysts have averaged effect sizes or extracted one effect size per study. This method leads to a loss of valuable information (Assink & Wibbelink, 2016; Cheung, 2014). To address dependency concerns and avoid losing important information, we extracted all relevant effect sizes and built a three-level meta-analytic model. In a three-level meta-analysis, variance is explained by three sources: Level 1 reflects sampling variance of the individual effect sizes, level 2 reflects variance in effect sizes within the same study, and level 3 reflects variance between different studies. Following the recommendations described by Assink and Wibbelink (2016) and Cheung (2014), we tested the significance of a three-level model by applying the Knapp and Hartung (2003) adjustment. This method involves testing each coefficient with a *t*-distribution and testing all model coefficients with an *F*-distribution (i.e., omnibus test). This approach excludes the comparison of an intercept-only model to a model with predictors. We used the maximum likelihood estimation to account for uncertainty in estimating the between-study variance while accounting for the lost degrees of freedom. The restricted maximum likelihood estimator is particularly suitable when dealing with heterogeneous studies and small sample sizes (McNeish, 2017).

Heterogeneity and Moderator Analyses

To assess for heterogeneity, we first used the *Q*-statistic to test the null hypothesis that no heterogeneity existed at level 3. Next, we used a formula outlined by Cheung (2014) to conduct a likelihood ratio test and compare a level 3 model, $\tau^2_{(3)}$, which accounts for variance in measures of shame or the timing of SV exposure, to a level 2 model, $\tau^2_{(2)}$, which accounts for variance in effect sizes within studies, to determine if the inclusion of level 3 would better explain the variance in effect sizes. We did this by conducting two one-sided log-likelihood ratio tests to compare the deviance of the full model with the deviance of a model that excluded one of the variance parameters. If significant variance was found at levels 2 and/or 3, we tested variables as potential moderators of the overall strength of the association between SV and shame. Subgroup analyses were performed with a minimum of $k = 10$, as fewer than 10 studies for tests of heterogeneity have been suggested to be unlikely to yield meaningful findings (Schwarzer et al., 2015). Prior to testing moderators, continuous moderators were centered around their mean, and dummy variables were created for categorical moderators. When reporting heterogeneity, the *Q*-statistic indicates the presence or absence of heterogeneity and the $I^2_{(2)}$ and $I^2_{(3)}$ indicate the proportion of the total variation of the effect size due to level 2 and level 3 between-study heterogeneity. Heterogeneity for univariate models (i.e., only one effect size per study) was explored with the I^2 metric, which quantifies the proportion of variation in study results due to heterogeneity rather than chance.

Heterogeneity was explored for univariate models when significance was found.

Bias and Sensitivity Analyses

Although we aimed to include all relevant studies, it is possible that some were missed due to limitations in our search strategy or the presence of various forms of bias, such as publication bias, subjective reporting bias, or small study effects. To evaluate whether a form of bias was present in the effect sizes analyzed, we implemented multiple approaches tailored to univariate and multilevel models. For univariate meta-analyses, we used the funnel-plot-based trim-and-fill method to impute effect sizes for missing data and determine the overall effect size (Duval & Tweedie, 2000a, 2000b). We examined the asymmetry of funnel plots derived from unconditional models based on uncorrected correlations through weighted regressions and standard errors. An asymmetrical funnel plot suggests a disproportionate representation of studies with either below- or above-average effect sizes. The trim-and-fill method imputes hypothetical effect sizes, restoring symmetry to the plot. Depending on the nature of the asymmetry, these imputations can occur on either side of the plot. We then conducted a classical Egger's test, which is a regression-based approach that assesses the funnel plot's asymmetry (Egger et al., 1997). Egger's test quantifies the probability that the asymmetry is due to chance rather than systemic bias, thus offering a more objective measure.

While traditional methods, such as the Egger's test and trim-and-fill can detect bias for univariate models, they do not account for nonindependence of effect sizes in multilevel models (Nakagawa et al., 2022). Nakagawa and colleagues propose the use of funnel plots where residuals and standard errors are plotted instead of raw effect sizes and sample sizes and the use of a multilevel meta-regression model. The adapted Egger's test differs from the classical Egger's test by accounting for random effects in the model (Assink et al., 2019). These recommendations were followed to account for nonindependence.

To identify outliers, we used influential case diagnostics. Sensitivity tests were conducted by excluding outliers and reanalyzing the data. For univariate models, we used the leave-one-out method, which involves sequentially excluding each study from the meta-analysis and observing whether an individual study has a disproportionate influence on the overall effect size, indicating potential bias. Sensitivity analyses are provided in Supplemental Appendix E.

Results

Study Characteristics

A complete list of included sources is available in Supplemental Appendix F, and data files are available on the Open Science Framework (OSF; https://doi.org/10.17605/OSF.IO/X5NHW). In total, 52 eligible sources describing 53 independent studies (k), 97 effects (l), and 15,110 people were identified for inclusion in the review. These studies were published from 1993 to 2023 (median publication year was 2013) and collected from eight different countries. Two studies were included in the group differences and correlational meta-analyses due to their relevance to both sets of findings. A total of 23 studies ($l=42$ effects) comprising 6,824 people assessed the magnitude of the difference in shame between survivors of SV and non-SV–exposed individuals, while 32 studies ($l=55$) comprising 9,211 people assessed the magnitude of the association between SV severity and shame. Across all studies, 6,422 individuals had experienced SV.

Only one study examined relationships between SV and shame longitudinally, the remainder focused on cross-sectional associations. Most studies came from Western countries, most commonly the United States ($k=40$) and the United Kingdom ($k=5$), and included a majority of White ($k=28$) and women ($k=52$) participants from college settings ($k=29$). Several studies came from master's theses or doctoral dissertations ($k=23$), while the majority were sourced from peer-reviewed journals ($k=29$), with the remaining unpublished datasets ($k=2$). The mean age of participants across studies was 29.86 ($SD=10.25$). A variety of measures capturing nine distinct subtypes of shame with one combined type were assessed across the included studies. They included trait ($k=35$), body ($k=18$), behavioral ($k=5$), SV-related ($k=5$), trauma-related ($k=3$), external ($k=2$), global ($k=1$), context-specific ($k=1$), and sexual ($k=1$) shame.

Risk of Bias

A summary of risk of bias ratings for studies in the current review is provided in Supplemental Appendix D. Risk of bias was low across studies ($M=12.27$, $SD=1.77$). Methodological problems included a lack of reporting of basic data (e.g., demographics, number of participants who experienced SV) and missing justifications for sample size.

Standardized Mean Differences in Shame Between SV and Non-SV–Exposed Individuals

In the meta-analysis examining shame in survivors and non-SV–exposed individuals, 11 meta-analyses were conducted, with the overall model totaling 23 studies encompassing 42 effects. Table 1 includes an overall mean effect for each SV and shame subtype, organized by the most commonly occurring timing of SV and shame subtypes studied to the least frequently examined combinations. Figure 1A provides the summary effects. The overall standardized mean difference for various types of SV and shame ranged from a high of $g=0.62$ for SV (all types) to trait shame to a low of $g=0.37$ for AASV to trait shame. Effects can be interpreted as small (0.2), medium (0.5), or large (0.8; Cohen, 1988). All

Table 1. Standardized Mean Differences in Shame Between SV and Non-SV–Exposed Individuals.

Model	*l*	*k*	*n*	*g* (*SE*)	[95% CI]	Sig mean (*p*)	% Var lev 1	Lev 2 var	% Var lev 2	Lev 3 var	% Var lev 3	I^2	*Q*(*df*)
SV (all types)													
Shame (all subtypes)	42	23	6,824	0.55 (0.12)	[0.30, 0.81]	<.001***	5.27	0.08	21.47	.27	73.27	NA	NA
Trait	25	19	5,550	0.62 (0.18)	[0.23, 1.01]	.003**	2.96	0.33	47.20	.35	49.84	NA	NA
Body	10	6	1,483	0.48 (0.11)	[0.22, 0.73]	.002**	36.56	0	6.47	.04	56.98	NA	NA
Behavioral	4	2	584	0.57 (0.20)	[−0.08, 1.23]	.070	43.11	0	0	.06	64.43	NA	NA
CASV													
Shame (all subtypes)	17	15	2,974	0.57 (0.13)	[0.29, 0.84]	<.001***	13.49	0	0	.21	86.51	NA	NA
Trait[a]	14	14	2,826	0.58 (0.14)	[0.30, 0.85]	<.001***	NA	NA	NA	NA	NA	88.03	82.91 (13)
Body[a]	2	2	440	0.51 (0.15)	[0.20, 0.81]	<.001***	NA	NA	NA	NA	NA	7.24	1.07 (1)
AASV													
Shame (all subtypes)	9	5	2,296	0.45 (0.89)	[0.24, 0.65]	<.001***	27.69	0.01	25.70	.02	46.60	NA	NA
Trait[a]	4	4	1,694	0.37 (0.07)	[0.13, 0.61]	.015*	NA	NA	NA	NA	NA	24.33	4.93 (3)
Body[a]	2	2	415	0.46 (0.28)	[−3.13, 4.06]	.349	NA	NA	NA	NA	NA	79.79	4.94 (1)
Lifetime SV													
Shame (all subtypes)	8	7	2,030	0.41 (0.09)	[0.18, 0.64]	.003**	21.70	0	14.33	.03	59.72	NA	NA

Note. SV = sexual violence; *l* = number of effect sizes; *k* = number of studies; *n* = total number of participants (both SV and non-SV–exposed individuals); *g* = Hedges' *g* (standardized mean difference); *SE* = standard error; CI = confidence interval; Sig = significance; % Var lev 1 = percentage of variance explained at level 1 (sampling variance of extracted effect sizes); Lev 2 var = within-study sampling variance; Lev 3 var = between-study variance; I^2 = percentage of heterogeneity; *Q* = *Q*-statistic; *df* = degrees of freedom; NA = not applicable; CASV = child/adolescent sexual violence; AASV = adult/adolescent sexual violence.

[a]Univariate meta-analyses with only one effect size per study; variance was not accounted for by a three-level model for univariate analyses.

*$p < .05$. **$p < .01$. ***$p < .001$.

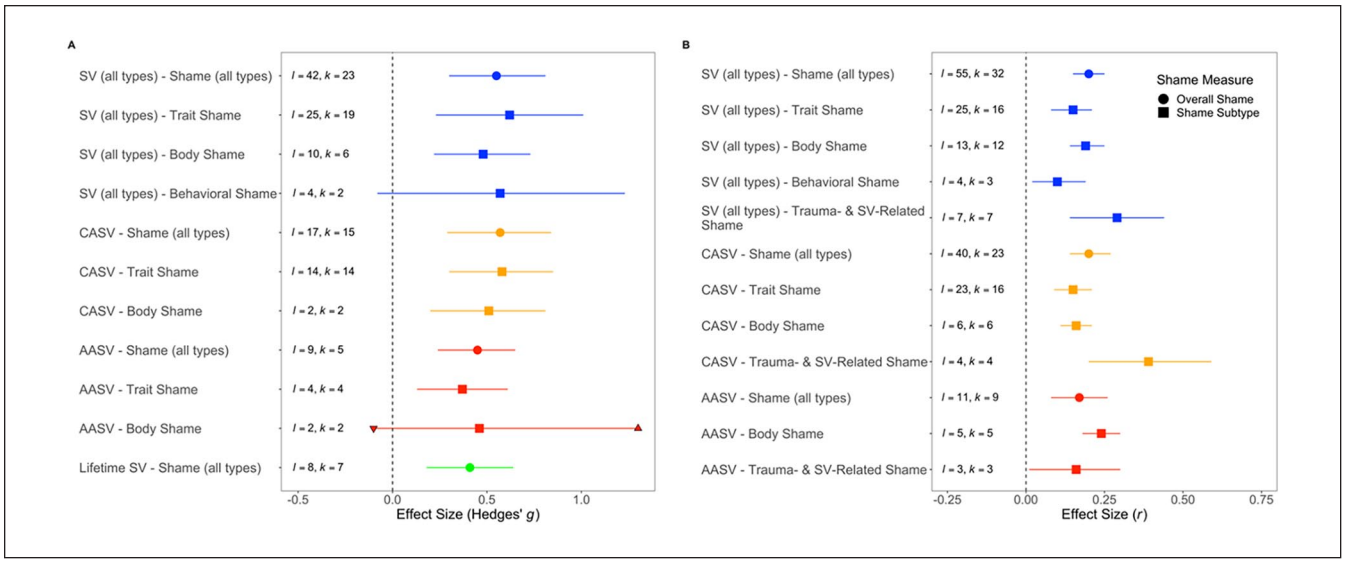


Figure 1. Forest plots of effect sizes for timing of SV exposure and shame. Panel A: Standardized mean differences in shame subtypes between individuals with and without SV exposure. Panel B: Mean effect sizes for associations between timing of SV exposure and shame subtypes. Colors indicate timing of SV exposure: blue for models that include all SV types, yellow for models that include CASV, red for models that include AASV, and green for models that include lifetime SV.

Note. Arrows indicate that the error bars extend beyond the plot range. *l* = number of effects; *k* = number of studies; SV = sexual violence; CASV = child/adolescent SV; AASV = adult/adolescent SV.

SV-to-shame effects were of medium magnitude. Heterogeneity in effect sizes across some models indicated that the effect of SV on shame varies by study. Potential moderators were thus explored.

Assessment of Bias for Studies on Mean Differences in Shame by SV

Two out of eight Egger's tests were significant, which indicated significant bias for mean differences between SV (all types) and shame subtypes (all types) (β = 4.41, $p = .008$) and SV (all types) and trait shame (β = 6.59, $p = .027$; Table 1, Supplemental Appendix G). Trim-and-fill analyses indicated some form of bias in two of four univariate models: CASV to trait shame had underestimation of three effect sizes, and AASV to trait shame had overestimation of two effect sizes. Underestimation suggests that the mean effect may be an underestimation of the true effect, while overestimation is the inverse (Assink et al., 2019). Data and code for the 23 funnel plots from the trim-and-fill analyses are provided on the OSF.

Moderator Analyses

Four moderators were significant (Supplemental Appendix H). Percentage of girls/women was negatively associated with body shame, β = −0.00, 95% CI [0.00, 0.10], $p = .009$, suggesting that associations between SV and body shame were lower in samples that included more girls/women. In the same model, treatment-seeking had positive associations with body shame, β = 0.41, 95% CI [0.10, 0.71], $p = .017$, suggesting higher associations between SV and shame in treatment-seeking samples. In CASV and trait shame analyses, treatment-seeking, β = 0.39, 95% CI [0.05, 0.74], $p = .030$, and combined samples, β = 1.84, 95% CI [1.20, 2.49], $p = .0003$, had positive associations with shame (all types).

Associations Between SV Severity and Shame

The second overall meta-analysis examined associations between SV severity and shame severity and included 12 models ($k = 32$, $l = 55$). Table 2 shows 12 models analyzing the associations between SV severity and shame, organized by broadest SV and shame subtype to more specific. Figure 1B provides the summary effects. Five models were univariate, meaning only one effect size per study was available. Seven models were multilevel, meaning effect sizes were nested within studies. Correlations ranged from $r = .10$ to .37, and all models were significant. Pearson's correlation coefficients (r) were interpreted as small (.15), medium (.25), or large (.35; Gignac & Szodorai, 2016). Associations between one SV severity to shame relationship were large, two were medium, and nine were small. For analyses with a minimum of 10 studies or effects, heterogeneity in effect sizes was noted for six, suggesting that the effect of SV severity on shame was not uniform across studies and may

Table 2. Associations Between SV Severity and Shame.

Model	*l*	*k*	*n*	*z* (*SE*)	[95% CI]	Sig. mean *z* (*p*)	*r*	% Var. lev 1	Lev 2 var	% Var lev 2	Lev 3 var	% Var. lev 3	I^2	*Q* (*df*)
SV (all types)														
Shame (all subtypes)	55	32	9,211	.20 (.02)	[0.15, 0.25]	<.001***	.20	16.12	0	14.18	0.01	69.69	NA	NA
Trait	25	16	4,145	.15 (.02)	[0.08, 0.21]	<.001***	.15	35.72	0	2.88	0	64.27	NA	NA
Body	13	12	3,700	.19 (.02)	[0.14, 0.25]	<.001***	.19	48.85	0	9.76	0	41.38	NA	NA
Behavioral	4	3	989	.10 (.02)	[0.02, 0.19]	.028*	.10	100	0	0	0	0	NA	NA
Trauma- or SV-related[a]	7	7	2,153	.29 (.07)	[0.14, 0.44]	<.001***	.28	NA	NA	NA	NA	NA	91.84	84.41 (6)
CASV														
Shame (all subtypes)	40	23	7,136	.20 (.03)	[0.14, 0.27]	<.001***	.20	14.61	0	9.63	0.01	75.75	NA	NA
Trait	23	16	4,143	.15 (.02)	[0.09, 0.21]	<.001***	.15	39.81	0	0	0	60.18	NA	NA
Body[a]	6	6	2,523	.16 (.02)	[0.11, 0.21]	<.001***	.16	NA	NA	NA	NA	NA	43.87	11.43 (5)
Trauma- or SV-related[a]	4	4	1,255	.39 (.09)	[0.20, 0.59]	<.001***	.37	NA	NA	NA	NA	NA	91.24	31.26 (3)
AASV														
Shame (all subtypes)	11	9	2,900	.17 (.04)	[0.08, 0.26]	.001**	.17	20.26	0	0	0	60.18	NA	NA
Body[a]	5	5	1,011	.24 (.03)	[0.18, 0.30]	<.001***	.24	NA	NA	NA	NA	NA	0	1.76 (4)
Trauma- or SV-related[a]	3	3	898	.16 (.07)	[0.01, 0.30]	.031*	.16	NA	NA	NA	NA	NA	77.88	9.90 (2)

Note. SV = sexual violence; *l* = number of effect sizes; *k* = number of studies; *n* = total number of participants (both SV and non-SV–exposed individuals); *z* = mean effect size; *SE* = standard error; CI = confidence interval; *r* = mean effect size (Pearson's correlation); Sig = significance; % Var lev 1 = percentage of variance explained at level 1 (sampling variance of extracted effect sizes); Lev 2 var = within-study sampling variance; Lev 3 var = between-study variance; I^2 = percentage of heterogeneity; *Q* = *Q*-statistic; *df* = degrees of freedom; NA = not applicable; CASV = child/adolescent sexual violence; AASV = adult/adolescent sexual violence.

[a]Univariate meta-analyses with only one effect size per study; variance was not accounted for by a three-level model for univariate analyses.

*$p < .05$. **$p < .01$. ***$p < .001$.

be influenced by other factors. Potential moderators were further explored.

Assessment of Bias for Studies Assessing SV Severity and Shame

One of twelve Egger's tests was significant, indicating significant bias for links between CASV and body shame ($\beta = 4.72$, $p = .044$; Table 2, Supplemental Appendix G). Trim-and-fill analyses indicated that two and one effect sizes, respectively, were underestimated for the following two of four univariate models: SV (all types) to trauma- and SV-related shame link and CASV to trauma- and SV-related shame link.

Moderator Analyses

Only two moderators were significant (Supplemental Appendix H). Higher study quality scores were associated with larger associations between AASV and shame (all types), $\beta = 0.05$, 95% CI [0.00, 0.10], $p = .028$, indicating that stronger associations between AASV and shame were evident in less biased studies. Contact SV was significant and negative for the model from CASV to shame (all types), $\beta = -0.15$, 95% CI [−0.29, −0.01], $p = .037$, suggesting that contact CASV was associated with lower shame relative to noncontact CASV. Publication type was not a moderator as no dissertations were available for inclusion.

Discussion

This meta-analysis quantified relationships between SV (CASV, AASV, lifetime) and shame (trait, body, behavioral, trauma- and SV-related) across varied samples (treatment-seeking, college, community), over three decades (1993–2023), and within eight countries.

Do SV Survivors Experience Higher Shame Than Individuals Who Report No SV?

Consistent with prior literature suggesting that SV exerts negative effects on an individual's sense of self-worth and identity (Feiring & Taska, 2005; Herman, 2011; McElvaney et al., 2022), our findings indicate that SV-exposed individuals experienced moderately higher levels of shame than non-exposed individuals. This effect was consistent across SV timing and shame subtypes, suggesting that the experience of SV, rather than when it occurs, is more strongly associated with shame. Societal narratives surrounding SV may perpetuate stigma which can contribute to internalized stigmatization and chronic feelings of low self-worth due to victim-blaming attitudes (Finkelhor & Browne, 1985). Although not measured here, negative social reactions to the disclosure of SV, including disbelief and blame, can reinforce the internalization of shame, discourage further disclosure, and inhibit recovery (Bhuptani et al., 2019; DeCou et al., 2017).

Although medium effect sizes emerged for all shame subtypes, variations were noted, particularly for SV timing and trait shame. Specifically, the association between CASV and shame was higher than the association between AASV and trait shame. As all studies involved a current assessment of shame and a retrospective assessment of SV among adult participants, these findings suggest that early SV exposure may disrupt self-concept during formative years by increasing the likelihood of experiencing shame across a variety of contexts (Alix et al., 2020; Feiring & Taska, 2005). CASV, particularly when experienced chronically, may foster pervasive negative self-attributions (e.g., "I am inherently flawed"; Lewis, 1992; Tracy & Robins, 2004). These findings underscore the importance of developmentally sensitive interventions that address shame's potential impact on self-perception in SV survivors, with the goal of disrupting the internalization of stigma and promoting a healthier self-concept.

Only gender and sample type moderated relationships between SV and shame in this study. Associations between SV and body shame were smaller in samples with more girls/women, aligning with data showing that men, nonbinary, and transgender individuals who have experienced past-year SV experience body image disturbances and decreased body satisfaction (Eisenstadt et al., 2023). This finding conflicts with literature examining gender differences in SV-related shame more broadly (Badour et al., 2017). Results should be interpreted cautiously as a higher proportion of women were included in the reviewed studies, which could reflect limited research on men, nonbinary, and transgender individuals' experiences of SV (Steele et al., 2023). Efforts should be made to recruit men and gender diverse people for studies of SV and shame.

That treatment-seeking samples had higher mean differences in shame between those exposed versus those not exposed to SV when compared to college students fits with work suggesting that seeking treatment is related to greater distress (Mojtabai, 2008). Notably, 80% of the combined samples in this study included participants seeking treatment. Although shame can inhibit treatment-seeking (Munro, 2014), individuals in treatment-seeking samples may have reported higher shame due to more severe psychological distress, which in turn may have encouraged help-seeking. Shame is a transdiagnostic correlate of various forms of psychopathology (Paulus et al., 2016) and thus could be an important clinical target among treatment-seeking survivors.

Is SV Severity Associated With Severity of Shame?

Among the 32 studies assessing associations between SV severity and shame severity, a small-to-medium effect size emerged. Larger effect sizes emerged for analyses examining links between SV and trauma- and SV-related shame, which

reinforces work suggesting that SV survivors may have greater shame that is connected to the distressing aspects of their trauma (Aakvaag et al., 2016; DeCou et al., 2017). Our finding that CASV severity was more strongly associated with trauma- and SV-related shame than AASV severity fits with prior research (Dunn et al., 2017, 2018) and suggests that earlier exposure to SV, particularly during sensitive periods for self-esteem development, heightens the risk for shame compared to later SV exposure. These findings highlight the importance of early intervention with childhood SV survivors to address stigma and promote healing.

A medium effect size emerged for the link between AASV and body shame while a small effect size emerged for CASV and body shame. These findings partially align with prior literature on adult sexual assault (Vidal & Petrak, 2007) and suggest that survivors may perceive their physical self as tainted due to the breach of bodily autonomy. This shame can manifest as feelings of betrayal toward their body for how it responded to the abuse or attracted the abuser (Shin & Salter, 2022), which may be a function of societal messaging and rape myths that blame survivors for their victimization experiences (Krahé, 2016). Survivors may feel ashamed of their body's actions or inactions (Shin & Salter, 2022) which can lead to persistent dissatisfaction with their physical self. Indeed, a growing literature links SV to body dissatisfaction and eating disorders (Malet-Karas et al., 2022). AASV survivors, whose experiences of SV may have occurred closer in time to the research, may exhibit greater body shame than CASV survivors, potentially due to the more recent impact of the physical violation.

In terms of moderation, CASV studies that measured contact SV had smaller effect sizes than those that included all forms of CASV. CASV survivors who experienced contact SV might have lower shame because their experiences are more similar to "real rape" stereotypes involving contact or force (Krahé, 2016). In turn, they may have a greater acknowledgment of the experience as rape or assault and attribute more responsibility for the assault to the perpetrator rather than to themselves (Kahn et al., 2003). In addition, higher quality studies (i.e., those with less bias) yielded stronger effect sizes, reinforcing the need to attend to careful measurement when specifying these associations.

Implications for Measuring Shame

Across all studies, shame was measured according to its source, but there is fluidity and overlap among subtypes (e.g., trait, body, behavioral, trauma-related, and SV-related shame). This complexity of shame complicated efforts to isolate distinct associations between SV timing and severity and shame subtypes. Indeed, our group differences meta-analyses revealed medium effect sizes across SV timing and shame subtypes, suggesting that *whether* one experienced SV was more associated with shame than *when* one experienced SV. That associations were relatively stable among shame subtypes reflects conceptual overlap in these experiences. These findings align with perspectives advocating for a holistic (Rizvi, 2010) and multidimensional (Lear et al., 2022) assessment of shame that reflects both internalized (how one sees oneself) and externalized (how others see them) aspects. In our associational meta-analyses, however, effect sizes between SV timing/severity and shame subtypes ranged from small to large, indicating that the strength of the relationship varies depending on the timing of SV and shame subtype. To address these complexities, future assessments might start with broad dimensions that assess an individual's overall shame profile and include modules for specific subtypes (e.g., trauma-related shame) to clarify the extent to which shame is experienced among SV survivors.

Limitations of the Research Literature and Future Directions

The SV literature is limited by variable age distinctions between CASV (before age 18) and AASV (age 14 or later). Although we categorized the predominant period when SV was experienced, adolescent SV was included in both time periods, which reflects its shared features with both childhood (e.g., perpetrator as an authority figure) and adulthood (e.g., occurring in dating relationships) SV. Despite growing recognition that adolescent SV is distinct from childhood and adulthood SV (Torazzi et al., 2021), we were unable to isolate the specific effects of adolescent SV on shame due to this overlap. Future research should ask about the age at which SV experiences occurred, as well as their duration and frequency, to better understand how the timing of SV is linked to shame and related posttrauma emotions.

Some important moderators could not be examined due to limited variability or data availability. For example, SV characteristics such as relationship to the perpetrator, revictimization, whether injury occurred, and the tactics used are critical correlates of mental health outcomes in survivors (Peter-Hagene & Ullman, 2015) but were often not queried and should be considered in future research. Additionally, only one study in this review was longitudinal, limiting our ability to determine the directionality or temporality of SV and shame, and none assessed state shame. Future longitudinal studies should address these gaps by examining how state and other shame subtypes evolve over time and whether these emotions confer risk for psychopathology among SV survivors.

Although this review included studies from eight countries, most research came from Western nations and was limited in cultural diversity. Cultural factors such as community beliefs about honor, victimization-related stigma, and gender inequality can influence the degree to which shame is experienced among SV survivors. Future research should focus on regions where studies on SV and shame are scarce, such as countries in Asia, Africa, and the Middle East, where collectivism, gender roles, and the high value placed on family

Table 3. Critical Findings.

• SV survivors experience greater shame than individuals not exposed to SV, regardless of SV timing and shame subtype.
• SV severity and shame severity were moderately correlated and more severe CASV was linked to stronger trauma-related shame.

Note. SV = sexual violence; CASV = child/adolescent sexual violence.

Table 4. Implications for Practice, Policy, & Research.

Practice	• Interventions that target shame-related distress may help normalize and reduce survivors' mental health burden.
Policy	• Public service programs that dismantle rape myths and encourage service-seeking could reduce shame and increase survivor service utilization.
Research	• Future studies should sample diverse survivor populations, including racial/ethnic minorities, to assess shame's role across demographics.
	• Research should explore sexual violence characteristics such as relationship to the perpetrator, revictimization, occurrence of penetration or injury, and tactics used, as these may be critical correlates of shame-related distress.

honor may uniquely influence shame. Understanding cultural variations may guide global public health efforts to address SV-related stigma and enhance mental health support provided to survivors across cultures. Similarly, the current review was unable to draw conclusions about SV and shame for different racial and ethnic groups, since most were majority White samples. Given the high rates of SV among Indigenous and multiracial people (Basile et al., 2022), future work should focus on survivors of color.

Finally, the quality of the studies reviewed varied. While the risk of bias scores were generally low across studies, some studies had notable limitations, such as small sample sizes and inconsistent operationalization of SV. For example, some studies used single-item measures of SV, which are known to underestimate the complexity and prevalence of these experiences (Cook et al., 2011). Others did not measure SV in comparison groups, instead assuming that these participants had not experienced SV, which may reflect misclassification. Future studies should measure SV in comparison groups. Additionally, the risk of bias across studies varied, as captured by the AXIS tool, with several studies exhibiting insufficient sample size justifications or missing demographic details. These variations in study quality may have influenced the magnitude of effects observed in the meta-analyses. Future research should prioritize larger and more representative samples and the use of validated multi-item scales to measure SV and shame. Improving the methodological quality of studies could strengthen the reliability of findings and provide more definitive guidance for interventions aimed at reducing shame-related distress among survivors.

The current review did not compare shame between SV survivors and individuals who experienced multiple or other trauma types. Shame may be experienced more strongly after SV in comparison to other trauma types, such as physical trauma (Amstadter & Vernon, 2008). However, SV also co-occurs with other trauma types (Walsh et al., 2015) so in addition to examining differences between trauma types, it will be important to examine whether exposure to multiple trauma types intensifies the experience of shame.

Conclusion

This review summarizes the literature on SV and shame, quantifying the association between the timing of SV exposure (CASV, AASV, lifetime) and shame subtypes (trait, body, behavioral, trauma- and SV-related shame). We identify gaps and suggest future research directions, including the need for more diverse samples, systematic measurement of moderators (e.g., assault characteristics), and longitudinal studies (see also Tables 3 and 4). Findings suggest shame is common post-SV, highlighting the need for therapeutic approaches that foster self-compassion to counter trauma-related shame, address emotional and cognitive correlates like self-criticism, and challenge internalized negative beliefs about self-worth (Westerman et al., 2020). Public service programs that dismantle rape myths and encourage service-seeking could reduce shame and increase survivor service utilization.

Acknowledgments

The authors would like to thank Janet Hyde, Lyn Abramson, and Sara Chadwick who provided methodological consultation and feedback on earlier drafts of the manuscript, reference librarians Leslie Christensen and Steven Baumgart for search term assistance, Freya Joessel for support in data visualization and manuscript feedback, Monireh Mohammadi for assistance with removing article duplicates in Zotero, Stephanie Ward for manuscript feedback, and undergraduate research assistants in the Preventing Interpersonal Violence and Overcoming Trauma (PIVOT) lab who assisted with literature searches for the review (in alphabetical order): Grace Bujan, Theresa Fineout, June Glenney, Claire Kuehn, Autumn Teal, Ariana Williams, and Yan Zhu. The authors would like to thank the researchers who submitted unpublished data or facilitated these requests: M. Rose Barlow, Chris R. Brewin, Martin Dorahy, Aidan J. Flynn, Michele Laaksonen, Alexander Puhalla, Frans Schalkwijk, Eus J. W. van Someren, and Marie-Pier Vaillancourt-Morel.

Data Availability

Data and code supporting the findings of this meta-analysis are available at the Open Science Framework: (https://doi.org/10.17605/OSF.IO/X5NHW). This review was preregistered with PROSPERO (CRD42022297401).

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: SBG was partially supported by the National Center for Complementary & Integrative Health under award K23AT010879 and R24AT012845. The other authors received no financial support for the research, authorship, or publication of this article.

ORCID iDs

Padideh Hassanpour https://orcid.org/0009-0006-2475-0326
Anuj H. P. Mehta https://orcid.org/0000-0001-6886-0064
Simon B. Goldberg https://orcid.org/0000-0002-6888-0126
Kate Walsh https://orcid.org/0000-0002-3996-2683

Supplemental Material

Supplemental material for this article is available online.

References

Aakvaag, H. F., Thoresen, S., Wentzel-Larsen, T., Dyb, G., Røysamb, E., & Olff, M. (2016). Broken and guilty since it happened: A population study of trauma-related shame and guilt after violence and sexual abuse. *Journal of Affective Disorders*, *204*, 16–23. https://doi.org/10.1016/j.jad.2016.06.004

Ahmadpanah, M., Astinsadaf, S., Akhondi, A., Haghighi, M., Sadeghi-Bahmani, D., Nazaribadie, M., Jahangard, L., Holsboer-Trachsler, E., & Brand, S. (2017). Early maladaptive schemas of emotional deprivation, social isolation, shame and abandonment are related to a history of suicide attempts among patients with major depressive disorders. *Comprehensive Psychiatry*, *77*, 71–79. https://doi.org/10.1016/j.comppsych.2017.05.008

Alix, S., Cossette, L., Cyr, M., Frappier, J.-Y., Caron, P.-O., & Hébert, M. (2020). Self-blame, shame, avoidance, and suicidal ideation in sexually abused adolescent girls: A longitudinal study. *Journal of Child Sexual Abuse*, *29*(4), 432–447. https://doi.org/10.1080/10538712.2019.1678543

Amstadter, A. B., & Vernon, L. L. (2008). Emotional reactions during and after trauma: A comparison of trauma types. *Journal of Aggression, Maltreatment & Trauma*, *16*(4), 391–408. https://doi.org/10.1080/10926770801926492

Assink, M., Van Der Put, C. E., Meeuwsen, M. W. C. M., De Jong, N. M., Oort, F. J., Stams, G. J. J. M., & Hoeve, M. (2019). Risk factors for child sexual abuse victimization: A meta-analytic review. *Psychological Bulletin*, *145*(5), 459–489. https://doi.org/10.1037/bul0000188

Assink, M., & Wibbelink, C. J. M. (2016). Fitting three-level meta-analytic models in R: A step-by-step tutorial. *The Quantitative Methods for Psychology*, *12*(3), 154–174. https://doi.org/10.20982/tqmp.12.3.p154

Badour, C. L., Resnick, H. S., & Kilpatrick, D. G. (2017). Associations between specific negative emotions and DSM-5 PTSD among a national sample of interpersonal trauma survivors. *Journal of Interpersonal Violence*, *32*(11), 1620–1641. https://doi.org/10.1177/0886260515589930

Basile, K. C., Smith, S. G., Kresnow, M., Khatiwada, S., & Leemis, R. W. (2022). *The national intimate partner and sexual violence survey: 2016/2017 report on sexual violence*. https://www.cdc.gov/nisvs/documentation/nisvsreportonsexualviolence.pdf?CDC_AAref_Val=https://www.cdc.gov/violenceprevention/pdf/nisvs/nisvsreportonsexualviolence.pdf

Bhuptani, P. H., Kaufman, J. S., Messman-Moore, T. L., Gratz, K. L., & DiLillo, D. (2019). Rape disclosure and depression among community women: The mediating roles of shame and experiential avoidance. *Violence Against Women*, *25*(10), 1226–1242. https://doi.org/10.1177/1077801218811683

Blayney, J. A., & Read, J. P. (2018). Sexual assault characteristics and perceptions of event-related distress. *Journal of Interpersonal Violence*, *33*(7), 1147–1168. https://doi.org/10.1177/0886260515614560

Borumandnia, N., Khadembashi, N., Tabatabaei, M., & Alavi Majd, H. (2020). The prevalence rate of sexual violence worldwide: A trend analysis. *BMC Public Health*, *20*(1), 1835. https://doi.org/10.1186/s12889-020-09926-5

Byers, E. S., & Glenn, S. A. (2012). Gender differences in cognitive and affective responses to sexual coercion. *Journal of Interpersonal Violence*, *27*(5), 827–845. https://doi.org/10.1177/0886260511423250

Cheung, M. W.-L. (2014). Modeling dependent effect sizes with three-level meta-analyses: A structural equation modeling approach. *Psychological Methods*, *19*(2), 211–229. https://doi.org/10.1037/a0032968

Chouliara, Z., Karatzias, T., & Gullone, A. (2014). Recovering from childhood sexual abuse: A theoretical framework for practice and research. *Journal of Psychiatric and Mental Health Nursing*, *21*(1), 69–78. https://doi.org/10.1111/jpm.12048

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed). L. Erlbaum Associates.

Cook, S. L., Gidycz, C. A., Koss, M. P., & Murphy, M. (2011). Emerging issues in the measurement of rape victimization. *Violence Against Women*, *17*(2), 201–218. https://doi.org/10.1177/1077801210397741

Cooper, H., Hedges, L. V., & Valentine, J. C. (Eds.). (2009). *The handbook of research synthesis and meta-analysis* (2nd ed., pp. xvi, 615). Russell Sage Foundation.

DeCou, C. R., Cole, T. T., Lynch, S. M., Wong, M. M., & Matthews, K. C. (2017). Assault-related shame mediates the association between negative social reactions to disclosure of sexual assault and psychological distress. *Psychological Trauma: Theory, Research, Practice, and Policy*, *9*(2), 166–172. https://doi.org/10.1037/tra0000186

DiMauro, J., & Renshaw, K. D. (2021). Trauma-related disclosure in sexual assault survivors' intimate relationships: Associations with PTSD, shame, and partners' responses. *Journal of Interpersonal Violence*, *36*(3–4), NP1986-2004NP. https://doi.org/10.1177/0886260518756117

Downes, M. J., Brennan, M. L., Williams, H. C., & Dean, R. S. (2016). Development of a critical appraisal tool to assess the quality of cross-sectional studies (AXIS). *BMJ Open*, *6*(12), Article e011458. https://doi.org/10.1136/bmjopen-2016-011458

Dunn, E. C., Nishimi, K., Powers, A., & Bradley, B. (2017). Is developmental timing of trauma exposure associated with depressive and post-traumatic stress disorder symptoms in adulthood?. *Journal of Psychiatric Research*, *84*, 119–127. https://doi.org/10.1016/j.jpsychires.2016.09.004

Dunn, E. C., Soare, T. W., Raffeld, M. R., Busso, D. S., Crawford, K. M., Davis, K. A., Fisher, V. A., Slopen, N., Smith, A. D. A. C., Tiemeier, H., & Susser, E. S. (2018). What life course theoretical models best explain the relationship between exposure to childhood adversity and psychopathology symptoms: Recency, accumulation, or sensitive periods? *Psychological Medicine*, *48*(15), 2562–2572. https://doi.org/10.1017/S0033291718000181

Duval, S., & Tweedie, R. (2000a). A nonparametric "trim and fill" method of accounting for publication bias in meta-analysis. *Journal of the American Statistical Association*, *95*(449), 89–98. https://doi.org/10.1080/01621459.2000.10473905

Duval, S., & Tweedie, R. (2000b). Trim and fill: A simple funnel-plot–based method of testing and adjusting for publication bias in meta-analysis. *Biometrics*, *56*(2), 455–463. https://doi.org/10.1111/j.0006-341X.2000.00455.x

Dworkin, E. R., Menon, S. V., Bystrynski, J., & Allen, N. E. (2017). Sexual assault victimization and psychopathology: A review and meta-analysis. *Clinical Psychology Review*, *56*, 65–81. https://doi.org/10.1016/j.cpr.2017.06.002

Egger, M., Smith, G. D., Schneider, M., & Minder, C. (1997). Bias in meta-analysis detected by a simple, graphical test. *BMJ*, *315*(7109), 629–634. https://doi.org/10.1136/bmj.315.7109.629

Eisenstadt, B. E., Murchison, G. R., Soulliard, Z. A., & Gordon, A. R. (2023). Body image and high-risk weight and shape control behaviors among transgender and nonbinary young adults: The role of sexual assault. *LGBT Health*, *10*(8), 586–594. https://doi.org/10.1089/lgbt.2022.0324

Feiring, C., Coates, D. L., & Taska, L. S. (2001). Ethnic status, stigmatization, support, and symptom development following sexual abuse. *Journal of Interpersonal Violence*, *16*(12), 1307–1329. https://doi.org/10.1177/088626001016012005

Feiring, C., Taska, L., & Lewis, M. (1996). A process model for understanding adaptation to sexual abuse: The role of shame in defining stigmatization. *Child Abuse & Neglect*, *20*(8), 767–782. https://doi.org/10.1016/0145-2134(96)00064-6

Feiring, C., Taska, L., & Lewis, M. (2002). Adjustment following sexual abuse discovery: The role of shame and attributional style. *Developmental Psychology*, *38*(1), 79–92. https://doi.org/10.1037/0012-1649.38.1.79

Feiring, C., & Taska, L. S. (2005). The persistence of shame following sexual abuse: A longitudinal look at risk and recovery. *Child Maltreatment*, *10*(4), 337–349. https://doi.org/10.1177/1077559505276686

Finkelhor, D., & Browne, A. (1985). The traumatic impact of child sexual abuse: A conceptualization. *American Journal of Orthopsychiatry*, *55*(4), 530–541. https://doi.org/10.1111/j.1939-0025.1985.tb02703.x

Foster, J., & Hagedorn, W. (2014). A qualitative exploration of fear and safety with child victims of sexual abuse. *Journal of Mental Health Counseling*, *36*(3), 243–262. https://doi.org/10.17744/mehc.36.3.0160307501879217

Gignac, G. E., & Szodorai, E. T. (2016). Effect size guidelines for individual differences researchers. *Personality and Individual Differences*, *102*, 74–78. https://doi.org/10.1016/j.paid.2016.06.069

Herman, J. L. (2011). Posttraumatic stress disorder as a shame disorder. In R. L. Dearing & J. P. Tangney (Eds.), *Shame in the therapy hour* (pp. 261–275). American Psychological Association.

Kahn, A. S., Jackson, J., Kully, C., Badger, K., & Halvorsen, J. (2003). Calling it rape: Differences in experiences of women who do or do not label their sexual assault as rape. *Psychology of Women Quarterly*, *27*(3), 233–242. https://doi.org/10.1111/1471-6402.00103

Katz, C., & Nicolet, R. (2022). "If only I could have stopped it": Reflections of adult child sexual abuse survivors on their responses during the abuse. *Journal of Interpersonal Violence*, *37*(3–4), NP2076–NP2100. https://doi.org/10.1177/0886260520935485

Kealy, D., Rice, S. M., Ogrodniczuk, J. S., & Spidel, A. (2018). Childhood trauma and somatic symptoms among psychiatric outpatients: Investigating the role of shame and guilt. *Psychiatry Research*, *268*, 169–174. https://doi.org/10.1016/j.psychres.2018.06.072

Knapp, G., & Hartung, J. (2003). Improved tests for a random effects meta-regression with a single covariate. *Statistics in Medicine*, *22*(17), 2693–2710. https://doi.org/10.1002/sim.1482

Koss, M. P., Abbey, A., Campbell, R., Cook, S., Norris, J., Testa, M., Ullman, S., West, C., & White, J. (2007). Revising the SES: A collaborative process to improve assessment of sexual aggression and victimization. *Psychology of Women Quarterly*, *31*(4), 357–370. https://doi.org/10.1111/j.1471-6402.2007.00385.x

Krahé, B. (2016). Societal responses to sexual violence against women: Rape myths and the "real rape" stereotype. In *Women and children as victims and offenders: Background, prevention, reintegration: Suggestions for succeeding generations* (Vol. I, pp. 671–700). Springer International Publishing/Springer Nature.

Lewis, M. (1992). *Shame: The exposed self*. Free Press.

Lear, M. K., Lee, E. B., Smith, S. M., & Luoma, J. B. (2022). A systematic review of self-report measures of generalized shame. *Journal of Clinical Psychology*, *78*(7), 1288–1330. https://doi.org/10.1002/jclp.23311

Lipsey, M. W., & Wilson, D. B. (2001). *Practical meta-analysis*. SAGE publications, Inc.

Lüdecke, D. (2018). *esc: Effect size computation for meta-analysis* (0.4.1) [Computer software]. Zenodo. https://doi.org/10.5281/ZENODO.1249217

MacGinley, M., Breckenridge, J., & Mowll, J. (2019). A scoping review of adult survivors' experiences of shame following sexual abuse in childhood. *Health & Social Care in the Community*, *27*(5), 1135–1146. https://doi.org/10.1111/hsc.12771

Malet-Karas, A., Bernard, D., Piet, E., & Bertin, E. (2022). Disordered eating as a repercussion of sexual assault: A consequence to consider. *Eating and Weight Disorders-Studies on Anorexia, Bulimia and Obesity*, *27*(6), 2095–2106. https://doi.org/10.1007/s40519-021-01356-5

McCutcheon, V. V., Sartor, C. E., Pommer, N. E., Bucholz, K. K., Nelson, E. C., Madden, P. A., & Heath, A. C. (2010). Age at trauma exposure and PTSD risk in young adult women. *Journal of Traumatic Stress*, *23*(6), 811–814. https://doi.org/10.1002/jts.20577

McElvaney, R., Lateef, R., Collin-Vézina, D., Alaggia, R., & Simpson, M. (2022). Bringing shame out of the shadows: Identifying shame in child sexual abuse disclosure processes and implications for psychotherapy. *Journal of Interpersonal Violence*, *37*(19–20), NP18738–NP18760. https://doi.org/10.1177/08862605211037435

McNeish, D. (2017). Small sample methods for multilevel modeling: A colloquial elucidation of REML and the Kenward-Roger correction. *Multivariate Behavioral Research*, *52*(5), 661–670. https://doi.org/10.1080/00273171.2017.1344538

Miles-McLean, H., Liss, M., Erchull, M. J., Robertson, C. M., Hagerman, C., Gnoleba, M. A., & Papp, L. J. (2015). "Stop looking at me!": Interpersonal sexual objectification as a source of insidious trauma. *Psychology of Women Quarterly*, *39*(3), 363–374. https://doi.org/10.1177/0361684314561018

Miron, L. R., & Orcutt, H. K. (2014). Pathways from childhood abuse to prospective revictimization: Depression, sex to reduce negative affect, and forecasted sexual behavior. *Child Abuse & Neglect*, *38*(11), 1848–1859. https://doi.org/10.1016/j.chiabu.2014.10.004

Moher, D., Liberati, A., Tetzlaff, J., & Altman, D. G. (2009). Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *Annals of Internal Medicine*, *151*(4), 264. https://doi.org/10.7326/0003-4819-151-4-200908180-00135

Mojtabai, R. (2008). Social comparison of distress and mental health help-seeking in the US general population. *Social Science & Medicine*, *67*(12), 1944–1950. https://doi.org/10.1016/j.socscimed.2008.09.059

Munro, M. L. (2014). Barriers to care for sexual assault survivors of childbearing age: An integrative review. *Women's Healthcare*, *2*(4), 19–29.

Nakagawa, S., Lagisz, M., Jennions, M. D., Koricheva, J., Noble, D. W. A., Parker, T. H., Sánchez-Tójar, A., Yang, Y., & O'Dea, R. E. (2022). Methods for testing publication bias in ecological and evolutionary meta-analyses. *Methods in Ecology and Evolution*, *13*(1), 4–21. https://doi.org/10.1111/2041-210X.13724

Paulus, D. J., Vanwoerden, S., Norton, P. J., & Sharp, C. (2016). From neuroticism to anxiety: Examining unique contributions of three transdiagnostic vulnerability factors. *Personality and Individual Differences*, *94*, 38–43. https://doi.org/10.1016/j.paid.2016.01.012

Peter-Hagene, L. C., & Ullman, S. E. (2015). Sexual assault-characteristics effects on PTSD and psychosocial mediators: A cluster-analysis approach to sexual assault types. *Psychological Trauma: Theory, Research, Practice, and Policy*, *7*(2), 162–170. https://doi.org/10.1037/a0037304

R Core Team, R. (2015). *R: A language and environment for statistical computing*.

Rizvi, S. L. (2010). Development and preliminary validation of a new measure to assess shame: The Shame Inventory. *Journal of Psychopathology and Behavioral Assessment*, *32*(3), 438–447. https://doi.org/10.1007/s10862-009-9172-y

Rosenthal, R. (1979). The file drawer problem and tolerance for null results. *Psychological Bulletin*, *86*(3), 638–641. https://doi.org/10.1037/0033-2909.86.3.638

Schaumberg, R. L., & Skowronek, S. E. (2022). Shame broadcasts social norms: The positive social effects of shame on norm acquisition and normative behavior. *Psychological Science*, *33*(8), 1257–1277. https://doi.org/10.1177/09567976221075303

Schwarzer, G., Carpenter, J. R., & Rücker, G. (2015). *Meta-analysis with R*. Springer. https://doi.org/10.1007/978-3-319-21416-0

Shin, H. J., & Salter, M. (2022). Betrayed by my body: Survivor experiences of sexual arousal and psychological pleasure during sexual violence. *Journal of Gender-Based Violence*, *6*(3), 581–595. https://doi.org/10.1332/239868021X16430290699192

Steele, B., Martin, M., Sciarra, A., Melendez-Torres, G. J., Degli Esposti, M., & Humphreys, D. K. (2023). The prevalence of sexual assault among higher education students: A systematic review with meta-analyses. *Trauma, Violence, & Abuse*, *25*(3), 1885–1898. https://doi.org/10.1177/15248380231196119

Tangney, J. P. (1990). Assessing individual differences in proneness to shame and guilt: Development of the self-conscious affect and attribution inventory. *Journal of Personality and Social Psychology*, *59*(1), 102–111. https://doi.org/10.1037/0022-3514.59.1.102

Torazzi, E., Merelli, V., Barbara, G., Kustermann, A., Marasciuolo, L., Collini, F., & Cattaneo, C. (2021). Similarity and differences in sexual violence against adolescents and adult women: The need to focus on adolescent victims. *Journal of Pediatric and Adolescent Gynecology*, *34*(3), 302–310. https://doi.org/10.1016/j.jpag.2020.11.018

Tracy, J. L., & Robins, R. W. (2004). Putting the self into self-conscious emotions: A theoretical model. *Psychological Inquiry*, *15*(2), 103–125. https://doi.org/10.1207/s15327965pli1502_01

Turner, J. E. (2014). Researching state shame with the experiential shame scale. *The Journal of Psychology*, *148*(5), 577–601. https://doi.org/10.1080/00223980.2013.818927

Ullman, S. E., Filipas, H. H., Townsend, S. M., & Starzynski, L. L. (2006). The role of victim-offender relationship in women's sexual assault experiences. *Journal of Interpersonal Violence*, *21*(6), 798–819. https://doi.org/10.1177/0886260506288590

Vidal, M. E., & Petrak, J. (2007). Shame and adult sexual assault: A study with a group of female survivors recruited from an East London population. *Sexual and Relationship Therapy*, *22*(2), 159–171. https://doi.org/10.1080/14681990600784143

Viechtbauer, W., & Cheung, M. W.-L. (2010). Outlier and influence diagnostics for meta-analysis. *Research Synthesis Methods*, *1*(2), 112–125. https://doi.org/10.1002/jrsm.11

Walsh, K., Danielson, C. K., McCauley, J. L., Saunders, B. E., Kilpatrick, D. G., & Resnick, H. S. (2012). National prevalence of posttraumatic stress disorder among sexually revictimized adolescent, college, and adult household-residing women. *Archives of General Psychiatry*, *69*(9), 935–942. https://doi.org/10.1001/archgenpsychiatry.2012.132

Walsh, K., Keyes, K. M., Koenen, K. C., & Hasin, D. (2015). Lifetime prevalence of gender-based violence in US women: Associations with mood/anxiety and substance use disorders. *Journal of Psychiatric Research*, *62*, 7–13. https://doi.org/10.1016/j.jpsychires.2015.01.002

Watson, L. B., Matheny, K. B., Gagné, P., Brack, G., & Ancis, J. R. (2012). A model linking diverse women's child sexual abuse history with sexual risk taking. *Psychology of Women Quarterly*, *37*(1), 22–37. https://doi.org/10.1177/0361684312454535

Westerman, G., McCann, E., & Sparkes, E. (2020). Evaluating the effectiveness of mindfulness and compassion-based programs on shame and associated psychological distress with potential issues of salience for adult survivors of childhood sexual abuse: A systematic review. *Mindfulness*, *11*(8), 1827–1847. https://doi.org/10.1007/s12671-020-01340-7

Wilson, L. C., & Miller, K. E. (2016). Meta-analysis of the prevalence of unacknowledged rape. *Trauma, Violence, & Abuse*, *17*(2), 149–159. https://doi.org/10.1177/1524838015576391

World Health Organization. (2021). *Violence Against Women*. Author. https://www.who.int/news-room/fact-sheets/detail/violence-against-women

Author Biographies

Padideh Hassanpour, MS, is a doctoral student in clinical psychology at the University of Wisconsin–Madison. Her research explores the psychological and contextual factors influencing the recovery and well-being of sexual violence survivors.

Sara Buchwald, BSc, is a child-adolescent clinical post-baccalaureate fellow at Harvard Medical School's McLean Hospital. Her research focuses on the psychological outcomes of unwanted sexual experiences.

Anuj H. P. Mehta, BSc, is a doctoral student in clinical psychology at the University of Massachusetts Amherst. His research examines the presence and nature of therapist effectiveness differences in clinical processes across cultural and clinical contexts.

Simon B. Goldberg, PhD, is an associate professor in the Department of Counseling Psychology and Core Faculty at the Center for Healthy Minds at the University of Wisconsin–Madison. He conducts research on psychotherapy, with a specific emphasis on the effects of and mechanisms underlying meditation- and mindfulness-based interventions.

Kate Walsh, PhD, is a professor in the Departments of Psychology and Gender & Women's Studies at the University of Wisconsin–Madison. Her research examines the intersection of trauma exposure, mental health conditions, and substance misuse with a particular focus on risk factors for and outcomes of sexual violence.