

## The Trauma of Cyber-Sexual Assault: Heightened Dimensions of Emotional Dysregulation Among Survivors

Kelley R. Holladay, Jacksonville University  
W. Bryce Hagedorn, University of Central Florida  
David Boote, University of Central Florida  
and  
David T Lardier, University of New Mexico

### Abstract

While cyber-sexual assault (CBSA) is prevalent, little research explores how it influences mental health outcomes. In this study, we explore cyber-sexual assault survivors' varying levels of emotional dysregulation in relation to depression and posttraumatic stress. Using latent class analysis, this study examined the association cluster group membership (i.e., high PTSD and high depression; moderate PTSD and moderate depression; low PTSD and low depression) had on levels of emotional dysregulation symptomology in this sample. These three distinct cluster groups emerged, and we examined how each of the three groups influenced the five constructs of emotional dysregulation. Findings indicate that those CBSA survivors with high depression and PTSD were more at risk for experiencing emotional dysregulation across all five constructs. Using this cross-sectional, correlational analysis, our study critically highlights that CBSA may influence distress similar to other forms of sexual abuse, and across the five dimensions of emotional dysregulation.

*Keywords:* Sexual violence, sexual assault, emotional dysregulation, trauma counseling, latent class analysis

## The Trauma of Cyber-Sexual Assault: Heightened Dimensions of Emotional Dysregulation Among Survivors

Sexual assault has shifted into online platforms (e.g., websites; texting; social media; Cyber Civil Rights Initiative, 2012; U-Report). Consequently, online harassment with the intent of causing severe psychological harm has influenced the Internet (Weber et al., 2013). Studies have illuminated the acute traumatic and psychological reaction of online bullying and sexual harassment, and predictive relationship between online sexting behavior and eventual online sexual victimization (Gómez-Guadix, Almendros, et al., 2015). Technology-facilitated abuse allows for accessibility to millions of victims while instantly expanding a negative impact within minutes, and all while remaining anonymous (Henry & Powell, 2015; Yar, 2005). The mental health impacts of online harassment include depression, anxiety, and suicidality, decreased well-being, higher levels of academic problems, mental health issues, and increased substance use (Citron, 2009; Sinclair et al., 2012; Washington, 2015). Regarding cyber-sexual assault, both depression and posttraumatic stress (PTSD) were identified as a response to having online intimate material shared without the pictured individual's consent (Holladay, 2016), similar to outcomes of sexual abuse (Lancaster et al., 2016; Russel & Davis, 2007). Furthermore, difficulty

with emotional regulation responses is a profound outcome for survivors of sexual abuse (Ullman et al., 2014), as well as among cyber-sexual assault survivors (Holladay, 2016). Absent a clear understanding that cyber-sexual assault is sexual abuse, treatment for this group of victims and survivors may be inadequate, prolonging long-term adjustment.

No universal definition of online sexual assault exists (see Walker & Sleath, 2017). The term “revenge porn” has been exchanged for “nonconsensual pornography” (Ruvalcaba & Eaton, 2019) where other terms such as “cyber-aggression” (Marganski & Melander, 2015) and “image-based sexual abuse” (McGlynn & Rackley, 2016) and “technology-facilitated sexual violence” (Henry & Powell; 2014, 2015) are used to describe the abuse. Through the counseling lens, and guided by sexual assault research, we argue that “cyber-sexual assault” depicts the abuse for what it is, an online form of sexual assault. Cyber-sexual assault (CBSA) is the non-consensual sharing of intimate material that has the potential to psychologically and physically harm the victim which is sexual in nature; and which is a form of sexual assault (SA; Holladay, 2016). In this study, we explore cyber-sexual assault survivors varying levels of emotional dysregulation in relation to depression and posttraumatic stress.

CBSA is quite prevalent. Approximately one in 25 Americans are threatened with or have become victims of CBSA (Data & Society Research Institute, 2016; Eaton et al., 2017). One in 12 Americans had experienced at least one “nonconsensual pornography victimization” in their lifetime, while 1 in 20 reported the perpetration of “nonconsensual pornography” (Ruvalcaba & Eaton, 2019). Despite the prevalence of CBSA, initial laws criminalizing “revenge porn” came into existence only recently (Bachman, 2012; for specific examination of revenge porn legislation, see Calvert, 2015). Sexual violence encompasses sexual coercion, psychological intimidation, and sexual harassment (Kilpatrick, 2004). CBSA appears to be a form of sexual violence; therefore, the purpose of this article is to measure the emotional dysregulation levels among survivors of CBSA and to explore the correlation with depression and posttraumatic stress, because these are prevalent mental health concerns among survivors of sexual violence.

### **Emotional Dysregulation and Sexual Abuse**

Difficulties with regulating emotions is a common reaction to sexual abuse (Ullman et al., 2014), and Gratz and Roemer (2004) defined emotion regulation as the awareness of emotions, acceptance of emotions, self-regulation and impulse control behaviors, as well as the flexibility and adaptability for regulating emotions. Emotional dysregulation is a multifaceted construct that, on a spectrum, includes lack or presence of self-regulating behaviors. The inability to use adaptive regulatory strategies (Gross & Thompson, 2007), like practicing goal-directed behaviors under distress (Linehan, 1993), is common. Further, the inability to accept one’s emotional responses (Gratz & Roemer, 2004) as well as identify, name, or express an emotional experience (Feldman et al., 2001) constitutes emotional dysregulation or lack of adequate emotion regulation strategies. Emotional dysregulation further encompasses maladaptive emotion regulation or maladaptive coping skills, and these are “strategies that alleviate distress without actually addressing the source of distress itself” (Najdowski & Ullman, 2011, p. 218). Maladaptive coping (a construct of emotional dysregulation) mediates cumulative trauma and posttraumatic stress disorder (Najdowski & Ullman, 2009).

Sexual assault increases emotional dysregulation among survivors, specifically if the abuse occurred in childhood (Marx et al., 2005; Walsh et al., 2012). Sadly, future sexual victimization is common for those who have been previously sexually victimized (Livingston et al., 2007). Sexual victimization, particularly revictimization, negatively affects emotional dysregulation (Boesch et al., 2001; Cloitre et al., 2005; Walsh et al., 2011; Walsh et al., 2012). Repeated sexual victimization is correlated with emotional dysregulation; while, emotion dysregulation correlates with greater history of childhood sexual assault, increased sexual partners, greater alcohol and drug use during intercourse, exchange of sex for money, and decreased sexual refusal assertiveness among SA survivors (Ullman & Vasquez, 2015). This construct is of interest to us, due to the high frequency for which CBSA survivors reported past sexual abuse. We hypothesized, based on a wealth of sexual assault literature, that emotional dysregulation would be prevalent for victims of cyber-sexual assault.

### **Correlation of Depression and Posttraumatic Stress with Emotional Dysregulation**

Sexual assault survivors face a range of psychological distress, which include difficulties regulating emotions (Najdowski & Ullman, 2011), depression (Russel & Davis, 2007), and posttraumatic stress disorder (Lancaster et al., 2016). These are among the most profound and persistent psychological outcomes of sexual assault. CBSA survivors may also be at high risk for experiencing similar outcomes, though minimal literature exists. For instance, Bates (2017) identified mental health concerns, including posttraumatic stress disorder (PTSD), anxiety, depression, and suicidal thoughts among a sample of women ( $N = 18$ ) that experienced online sexual victimization. Measuring the mental health outcomes of CBSA is necessary to create programming specific to the needs of this population. Access to prevention-intervention programming is also critical to increase CBSA knowledge and potentially decrease risky behaviors associated with risky sexual activities, substance use, and suicidality (Kirkner et al., 2018).

Mental health variables influence distress levels among SA survivors. For example, maladaptive coping, emotion regulation, and characterological self-blame can heighten distress among SA survivors (Ullman et al., 2014). Moreover, Najdowski and Ullman (2009) found that maladaptive coping (a construct of emotional dysregulation) mediates cumulative trauma and posttraumatic stress disorder. They also showed that multiple sexual assaults increased maladaptive coping skills, and that it was likely that both adaptive and maladaptive coping were mediators of PTSD symptoms among these survivors (Najdowski & Ullman, 2011). Further, revictimized women showed greater levels of depression despite applying seemingly adaptive coping skills. Research surrounding individuals with multiple sexual assaults showed those who struggled to develop coping skills had numerous negative outcomes, specifically regarding PTSD symptoms (Najdowski & Ullman, 2011). Conversely, reduced PTSD symptomology for female sexual assault survivors was related to higher levels of adaptive coping (e.g., social support, emotional expression) (Gutner et al., 2006). Fundamentally, emotional dysregulation mediates trauma responses and adjustment (Dvir, Ford, et al., 2014). Given these findings, we will look for correlational relationships among emotional dysregulation with depression and posttraumatic stress for this sample of CBSA survivors.

### **The Current Study**

In the present study, the relationship of CBSA with a victim's experience of emotional dysregulation, depression, and posttraumatic stress was examined. To further explore how

individuals experience cyber-sexual assault this exploratory study used person-centered analysis to consider differences among subgroups of individuals, particularly on how groups of individuals function relative to others within the sample population (Howard & Hoffman, 2017). Latent class analysis (LCA) is a form of person-centered analysis. In this study, LCA helped categorize participants into subgroups while we explored the relationship among the subgroup variables and the measurements that explored CBSA related outcome variables. It was through implementing LCA that we were able to examine individual factors relative to cyber-sexual assault, and subgroups of depression and posttraumatic stress symptomology on outcomes of emotional dysregulation. We hypothesized that CBSA victims with greater depression, and posttraumatic stress would show greater emotional dysregulation. Difficulties with emotional dysregulation is a common outcome of trauma and sexual assault, especially for individuals that have experienced repeated sexual assault (e.g., revictimization; Ullman et al., 2014; Gross & Thompson, 2007). Emotional dysregulation may exacerbate negative mental health outcomes, such as depression and PTSD (Gross & Muñoz, 1995; Prince et al., 2006; Turk et al., 2005). We explored subgroups based on depression and PTSD, and then we assessed the variability in these groups on the variables associated with emotional dysregulation (Gratz & Roemer, 2004).

## Method

### *Recruitment and Participants*

Participants of this study were recruited online through the Cyber Civil Rights Initiative (CCRI; CyberCivilRights.org), the only nonprofit currently addressing CBSA specifically, and through the Rape, Abuse & Incest National Network (RAINN; rainn.org) which within the United States, is the nation's leading sexual violence organization. All of the participants who had experienced CBSA were included in this study ( $N = 97$ ).

For participants who had experienced CBSA ( $N = 97$ , 100%), 54 (55.7%) had also experienced prior sexual assault, whereas 43 (44.3%) participants reported no previous sexual assault history. Regarding the number of lifetime sexual assaults experienced, 47 (48.45%) of the participants responded, and reported a wide range for number of past sexual assaults 1-100 ( $M = 6.53$ ). A few of the non-numerical responses included: "Too many to count - throughout childhood;" "cannot quantify;" "multiple assaults;" and "I lost count." The majority of participants were female ( $n = 91$ , 93.8%). The participants ranged in ages of 19-65 years ( $M = 32.03$ ,  $SD = 9.93$ ), with a collective mode of 23 years ( $n = 13$ , 13.4%). The sample was limited in racial and ethnic diversity, and participants reported as Caucasian/White (64.9%), Hispanic or Latino (8.2%), participants reporting as other (7.2%), Asian (5.2%), African/African American/Black (4.1%) two or more races (1.0%), American Indian or Alaska Native (1.0%), and Native Hawaiian or Pacific Islander (1.0%). Participants reported sexual orientation as (83.5%) mostly straight or heterosexual; (11.3%) bisexual; (2.1%) lesbian, gay, or homosexual; (1.0%) other; and (2.1%) chose not to report.

We recruited participants that experienced CBSA via e-mail through these nonprofit listservs (e.g., CCRI, RAINN). Additionally, CCRI used social media platforms to advertise the research (e.g., Facebook, Twitter). The institutional review board ethics committee affiliated with the authors' university approved this study. Following this, we provided participants an electronic informed consent where they digitally consented to the research before participating in

the survey. To be eligible to participate, participants had to be 18 years and older, and identify as having experienced CBSA. Incentives were not provided. Those participants who agreed to participate were able to proceed with the questionnaire. For this study, sexual assault was defined as, “any type of sexual contact or behavior that occurs without the explicit consent of the recipient (such as rape, attempted rape, unwanted fondling, molestation, and/or child molestation.” In addition, CBSA was defined as, “also known as “revenge porn” or “nonconsensual pornography,” this form of sexual assault occurs when sexually explicit or nude photos/videos are shared online, without the pictured individual’s consent.” After the systematic elimination of cases for incomplete surveys (data missing for more than 20%) a frequency was run for the question, “Have you ever been cyber-sexually assaulted?” to learn what portion of respondents had, in fact, experienced cyber-sexual assault. A portion of the individuals ( $N = 97$ ) who completed the survey responded with “yes.” This means that some individuals ( $N = 48$ ) who reported “no” to the question, “Have you ever been cyber-sexually assaulted?” were removed for not meeting the criteria of having experienced cyber-sexual assault. In total, we retained a total of 97 participants.

### **Procedure**

Participants were provided a 58-question survey (plus 13 demographic questions) in an online survey format. Participants were asked to respond to questions that assessed personal demographics, specifically surrounding their experience of cyber-sexual assault, emotional regulation abilities, in addition to their depressive and posttraumatic stress symptomology. Prior to answering the measurements, sexual assault and CBSA definitions were provided, and we measured these through a dichotomous approach (e.g., yes/no). This study focused specifically on the experience of emotional dysregulation and the correlation with depressive and posttraumatic stress symptoms. Associated  $\alpha$  levels (Cronbach’s  $\alpha$ ) and emotional constructs (as measured by the DERS-16; Bjureberg et al., 2016) are found in Table 1.

Table 1. *DERS-16 Measures of Central Tendency*

| Subscale      | <i>M</i> | <i>SD</i> | Range | Mdn   | Mode | Cronbach $\alpha$ |
|---------------|----------|-----------|-------|-------|------|-------------------|
| Clarity       | 2.65     | 1.21      | 1-5   | 2.00  | 2    | .884              |
| Goals         | 3.58     | 1.21      | 1-5   | 3.67  | 4.67 | .870              |
| Impulse       | 2.64     | 1.38      | 1-5   | 2.00  | 2    | .920              |
| Strategies    | 3.29     | 1.32      | 1-5   | 3.60  | 3.6  | .899              |
| Nonacceptance | 3.30     | 1.33      | 1-5   | 3.33  | 3.33 | .849              |
| Total         | 50.28    | 15.21     | 18-80 | 51.00 | 49   | .942              |

### **Measures**

For this investigation, three variables were included in the LCA in order to identify latent classes (LC), or the correlation of these variables among individuals. Based on strength and statistical properties, the selected measurements helped to identify with confidence distinct mental health outcomes among sexual assault survivors. These measures were designed for use with the Diagnostic and Statistical Manual of Mental Disorders (4<sup>th</sup> ed.) (DSM-IV; American Psychiatric Association, 2000) as the measurements had not yet been validated with the most current version (DSM-5) when the study was conducted. Keep in mind, that CBSA was largely legal just a decade ago, and only five states had laws against ‘revenge porn’ at the time the study

was conducted (2015), and Twitter and Google created a policy in 2015 (Wikipedia, 2021), followed by Facebook in 2017 (Romano, Aja, 18).

**Emotional Dysregulation.** To assess emotional dysregulation, we used the Brief Version of the Difficulties in Emotion Regulation Scale (DERS-16), validated by Bjureberg and colleagues (2016). The DERS-16 assesses emotion regulation difficulties and is comprised of five manifest constructs: (a) clarity (e.g., lack of emotional clarity, 2 items); (b) goals (e.g., difficulties engaging in goal-directed behavior, 3 items); (c) impulse (e.g., impulse control difficulties, 3 items); (d) strategies (e.g., limited access to effective emotion regulation strategies, 3 items); and (e) non-acceptance (e.g., non-acceptance of emotional responses, 5 items). Bjureberg and colleagues (2016) reported that the DERS has been extensively validated, and scores have been associated with posttraumatic stress disorder (Tull et al., 2007) and major depression (Ehring et al. 2010) among several others. Cronbach's  $\alpha$  for the DERS-16 scale with these data was .94. Some example items include, "I have difficulty making sense out of my feelings," and "When I am upset, I feel out of control."

**Impact of Events Revised.** Next, we used the Impact of Events Revised [IES-R] (Weiss & Marmar, 1997) which assesses three domains of posttraumatic stress disorder (PTSD) symptomology as it relates to a traumatic event. The three domains of PTSD aligned to the Diagnostic and Statistical Manual of Mental Disorders (4<sup>th</sup> ed.) (DSM-IV; American Psychiatric Association, 2000), as this was the most current version when the study was conducted. We asked participants to "answer the remainder of the questionnaire related to your cyber-sexual assault experience(s)" at the end of the demographics form. Cronbach's  $\alpha$  for the Impact of Events Scale Revised (IES-R; Weiss & Marmar, 1997) with these data was .93. Some example items include, "Any reminder brought back feelings about it," and "I was jumpy and easily startled."

**Center for Epidemiologic Studies Depression Scale Revised.** Last, the Center for Epidemiologic Studies Depression Scale Revised [CESD-R] (20-items) aligns with diagnostic criteria of the DSM-IV (DSM-IV; American Psychiatric Association, 2000) to measure depression. The CESD-R (Eaton et al., 2004) revisions aligned with the nine symptoms of major depressive episode according to the DSM-IV: (a) *sadness* (dysphoria), (b) *loss of interest* (anhedonia), (c) *appetite*, (d) *sleep*; (e) *thinking/concentration*, (f) *guilt* (worthlessness), (g) *tired* (fatigue), (h) *movement* (agitation), and (i) *suicidal ideation*. We implemented the CESD-R because: (a) it has strong support for the research community measuring depression (Dam & Earleywine, 2010), and (b) has been used in a similar study on sexual assault survivors for measuring depressive symptoms (Najdowski & Ullman, 2011). Cronbach's  $\alpha$  for the Center for Epidemiologic Studies Depression Scale Revised (CESD-R; Eaton et al., 2004) was .96. Some example items include, "I felt depressed," and "I was tired all the time."

## Results

Preliminary analyses were run using SPSS v.23.0. During preliminary analyses, the research team assessed missing data. The largest amount of missing data present for any item was less than 20%, with no evident patterns observed. Data were imputed at the scale level, based on a joint multiple imputation approach, which imputes for the missing values from other

observed values in the data (McNeish, 2017). This approach produces unbiased results, particularly among smaller samples of participants, and when multivariate normality is not strictly upheld (McNeish, 2017). Ten multiple imputations were utilized, which resulted in complete blocks (McGinniss & Harel, 2016).

Following multiple imputations, tests of normality were conducted, and descriptive statistics, Cronbach's  $\alpha$ , and a bivariate correlation matrix were examined. Both univariate skew and kurtosis were found within normal distribution ranges, and no observed issues of multicollinearity were identified, based on the parameter ranges for variance inflation factor ( $<10$ ) as well as tolerance ( $>0.2$ ; Field, 2013). Following preliminary analyses, we proceeded with our main analytic procedures to examine how the participants, largely women with previous sexual assault, experienced levels of depression and posttraumatic stress and the influence on each of the five constructs for emotional dysregulation (i.e., clarity; goals; impulse; strategies; nonacceptance).

For the main analytic procedures, all variables were correlated. Latent Class Analysis (LCA) was used to examine heterogeneity among participants on observed predictors of emotional dysregulation. Analyses were conducted using Latent Gold v.5.1 statistical software (Vermunt & Magidson, 2013). For the purposes of LCA, indexes of depression and PTSD were transformed into quintiles so that data were standardized and maintained ordinal response scales for the purpose of latent class modeling (Vermunt & Magidson, 2013).

Multiple, latent clusters were examined (1 through 6 latent clusters), which is consistent with recommendations put forward by Vermunt and Magidson (2013). Following standard practice, we assessed model-fit to determine the most parsimonious model, capturing the largest amount of total association between indicators. Several model-fit criteria used were: (1) chi-squared statistic ( $\chi^2$ ); (2) the Bayesian Information Criterion (BIC), and (3) the Akaike Information Criterion (AIC). A large  $\chi^2$  and associated degrees of freedom ( $df$ ), and a significant  $p$ -value indicates poor model-to-data fit or more highly negative than maximum precision can indicate, rendering values meaningless (Vermunt & Magidson, 2013). Smaller BIC and AIC, in relation to a smaller  $\chi^2$  and the associated  $df$ , and a nonsignificant  $p$ -value, indicate parsimony in the model or better model-to-data fit (Vermunt & Magidson, 2013). For subsequent analyses, we examined the most parsimonious and best-fitting model. Of note, for simple LCA models with a pair of variables, a sample size as small as 30 may be sufficient to draw out classes (Nylund-Gibson & Choi, 2018). Larger samples of  $> 200$  have more power to detect classes among a larger number of variable indicators (Masyn, 2013); therefore, using two variables is reasonable, particularly when considered alongside the sample size for this study (Nylund-Gibson & Choi, 2018).

Based on the criterion described to assess model-to-data-fit we determined that the three-cluster model provided the best fit to the sample data and was the most parsimonious (see Table 2). Bootstrap procedures were performed to assess optimal model fit estimate (Vermunt & Magidson, 2013). In addition, the bootstrap difference in log-likelihood value (-2LL-difference statistic), with models of different latent classes (Lo, Mendell, & Rubin, 2001; Vermunt & Magidson, 2013), yielded significant  $p$ -value ( $p < .01$ ) between the three cluster and four cluster models. This indicates that there were differences between models. Taken together, given the

associated model fit, we retained the three-cluster model. Here are the fit statistics:  $\chi^2 = 24.12$  (16), bootstrap p-value = .16; BIC = 530; AIC = 495.01. The standard entropy  $R^2$  value is .70, which indicates that three cluster model accounts for 71% of the variance in the scales used. While .8 is as an acceptable value, recent simulation studies indicate that a value of .70 to .80 is reasonable acceptable and showed limited bias in the outcomes (Collier & Leite, 2017).

Table 2. Latent class analysis model fit statistics for the intersection between depression and PTSD

|                  | LL             | BIC(LL)         | AIC(LL)         | Npar      | L <sup>2</sup> | df        | p-value      |
|------------------|----------------|-----------------|-----------------|-----------|----------------|-----------|--------------|
| 1-Cluster        | -249.0472      | 525.0932        | 510.0943        | 6         | 55.2059        | 24        | 0.00029      |
| 2-Cluster        | -238.6472      | 522.2926        | 497.2945        | 10        | 34.4060        | 20        | 0.024        |
| <b>3-Cluster</b> | <b>-233.50</b> | <b>530.0084</b> | <b>495.0111</b> | <b>14</b> | <b>24.1226</b> | <b>16</b> | <b>0.087</b> |
| 4-Cluster        | -230.9965      | 542.9897        | 497.9931        | 18        | 19.1046        | 12        | 0.086        |
| 5-Cluster        | -229.1077      | 557.2112        | 502.2154        | 22        | 15.3269        | 8         | 0.053        |
| 6-Cluster        | -227.8344      | 572.6639        | 507.6688        | 26        | 12.7804        | 4         | 0.012        |

Note. Bold text indicates the preferred model.

BIC Bayesian information criterion, AIC = Akaike information criterion, LL log likelihood, L<sup>2</sup> likelihood ratio chi-square statistic

Individual cases were assigned using modal classification, which is standard procedure in Latent Gold v.5.11 (Vermunt & Magidson, 2013). Complete cases with complete data were included in the model ( $N = 95$ ). See Figure 1 for the profile plot of the means of the scales used to create latent profiles (Vermunt & Magidson, 2013). A total of 23 participants (24.4%) were classified in cluster group one, labeled “High Depression and PTSD” reflecting higher scores in depression ( $M = 63.59$ ,  $SD = 9.50$ ) and higher scores in PTSD ( $M = 75.31$ ,  $SD = 6.41$ ). A total of 23 (24.4%) participants were classified in cluster group two, labeled “Moderate Depression and PTSD” reflecting moderate scores in both depression ( $M = 44.36$ ,  $SD = 14.87$ ) and in PTSD ( $M = 44.84$ ,  $SD = 13.91$ ) relative to cluster one “High Depression and PTSD”. A total of 49 participants (51.1%) were in cluster group three defined as “Low Depression and PTSD” reflecting lower scores in both depression ( $M = 11.22$ ,  $SD = 6.21$ ) and in PTSD ( $M = 40.41$ ,  $SD = 13.32$ ), relative to cluster one “High Depression and PTSD” and cluster two “Moderate Depression and PTSD”.

Figure 1. *Depression and PTSD response probabilities by latent cluster*

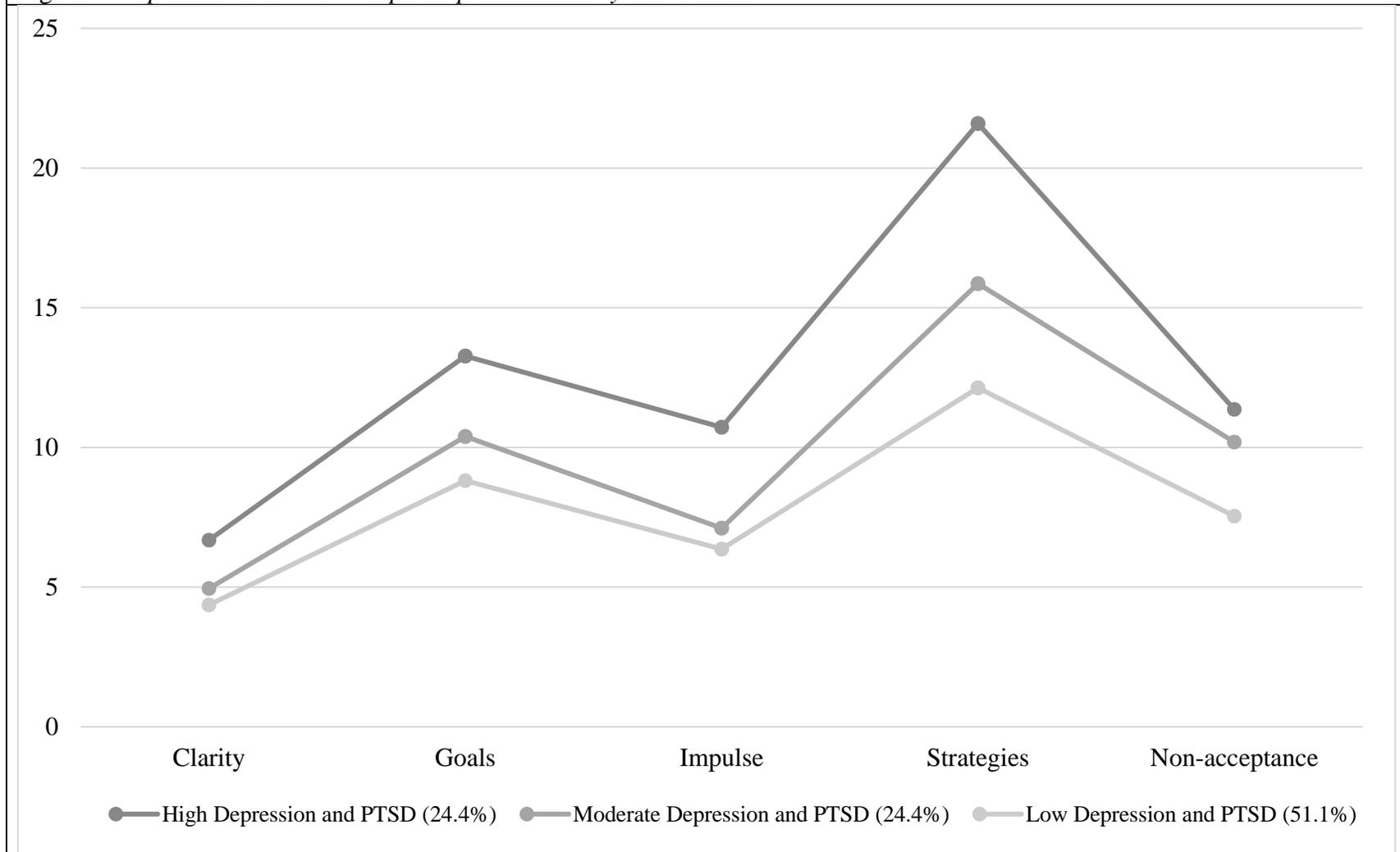


Table 3. MANOVA results between depression and anxiety on dimensions of emotional dysregulation

|  | Clarity             |                | Goals               |     | Impulse             |     | Strategies          |     | Non-Acceptance      |     |
|--|---------------------|----------------|---------------------|-----|---------------------|-----|---------------------|-----|---------------------|-----|
|  | Mean<br>(95%<br>CI) | SE             | Mean<br>(95%<br>CI) | SE  | Mean<br>(95%<br>CI) | SE  | Mean<br>(95%<br>CI) | SE  | Mean<br>(95%<br>CI) | SE  |
| 1. Cluster 1: High Depression and PTSD (24.4%)     | 6.68                | .55            | 13.27               | .43 | 10.72               | .86 | 21.59               | .63 | 11.36               | .85 |
| 2. Cluster 2: Moderate Depression and PTSD (24.4%) | 4.95                | .49            | 10.39               | .66 | 7.11                | .63 | 15.86               | .63 | 10.19               | .44 |
| 3. Cluster 3: Low Depression and PTSD (51.1%)      | 4.36                | .23            | 8.81                | .40 | 6.36                | .44 | 12.14               | .74 | 7.54                | .60 |
| Univariate F (1, 90)                               | 8.04***             | 15.35***       |                     |     | 11.08***            |     | 26.75***            |     | 7.23**              |     |
| Mean difference, <i>p</i> < .05                    | 1 > 2,3             | 1 > 2,3; 2 > 3 |                     |     | 1 > 2,3             |     | 1 > 2,3; 2 > 3      |     | 1 > 2,3; 2 > 3      |     |

Overall MANCOVA: Wilks' Lambda = .54; F (5, 10) = 5.86\*\*\*

Covariate: LGBQ (Queer) Identity and Gender (Male and Female)

\**p* < .05, \*\**p* < .01, \*\*\**p* < .001

Table 3 presents the MANOVA, with LCA clusters as the group factor, and dimensions of emotional dysregulation as the dependent variables. Results indicated that significant differences existed between LCA clusters on dimensions of emotional dysregulation. Post hoc analysis further revealed several additional findings. For example, latent class cluster one “High Depression and PTSD” had significantly greater mean scores on all subdimensions of emotional dysregulation, when compared to cluster groups two and three. However, latent class cluster group two “Moderate Depression and PTSD” had higher mean scores on emotional dysregulation subdimensions, including (1) *goals*, (2) *strategies*, and (3) *non-acceptance*, when compared to cluster group three “Low Depression and PTSD”. Overall, findings indicate that those CBSA survivors with high depression and PTSD were more at risk for experiencing emotional dysregulation, though there was some variation among latent cluster group two as well.

Next, we tested membership of the three cluster groups for differences on demographic characteristics. No differences were noted based on queer identity, gender identity, or race. Therefore, no covariates were included in subsequent analyses.

All of the participants, largely women, had experienced cyber-sexual assault. Higher levels of depression and posttraumatic stress were also high in each of the five constructs for

emotional dysregulation (i.e., clarity; goals; impulse; strategies; nonacceptance). Those that scored moderate levels of depression and PTSD scored high in three of the five constructs for emotional dysregulation: goals, strategies, and non-acceptance. Slightly more than half of our participants scored low across the three areas of interest, which is promising and warrants further exploration of possible mediating factors. The analyses examined levels of emotional regulation in each of the three groups of PTSD and depression level. Findings suggest that emotional dysregulation is especially correlated with higher levels of depression and posttraumatic stress for this sample of survivors of cyber-sexual assault.

## Discussion

Using LCA, this study examined subgroups of emotional dysregulation based on cyber-sexual assault, depression, and posttraumatic stress. Results from this exploratory study mirror sexual violence research exploring emotional dysregulation, with depression and PTSD (Ullman et al., 2014; 2015). For example, participants ( $N = 46$ ) in cluster group one “High Depression and PTSD” and cluster two “Moderate Depression and PTSD” showed higher levels of emotional dysregulation. Slightly more than half (51.1%) of our participants scored low across the three areas of interest; these results are both similar and promising and warrant further exploration of possible mediating factors.

The results indicated that individuals (24.4%) who experienced CBSA and had “high” rates of depression and posttraumatic stress, also experienced “high” rates of emotional dysregulation across each of the five constructs for emotional dysregulation (i.e., clarity; goals; impulse; strategies; nonacceptance). Simply put, emotion dysregulation describes the inability to respond to and manage emotions with flexibility (Carpenter & Trull, 2013). Conversely, emotion regulation abilities illustrate an individual that engages in goal-directed behaviors that are self-evident, and facilitates flexible, adaptable, or delayed emotional reactions versus eliciting strong emotional experiences (Hallion et al., 2018). Those with higher rates of depression and PTSD were more likely to lack of emotional clarity, have difficulties engaging in goal-directed or future oriented behaviors, manifest impulse control difficulties, difficulties utilizing effective emotion regulation strategies, and denied their emotional responses. Meanwhile, those CBSA victims (24.4%) that had moderate levels of depression and PTSD scored high in three of the five constructs listed above for emotional dysregulation: goals, strategies, and non-acceptance. It is well documented that sexual victimization, and revictimization, negatively influence emotional dysregulation (Boeschen et al., 2001; Cloitre et al., 2005; Walsh et al., 2011; Walsh et al., 2012). Maladaptive coping (a construct of emotional dysregulation) mediates cumulative trauma and posttraumatic stress disorder (Najdowski & Ullman, 2009). Emotional dysregulation may exacerbate negative mental health outcomes, such as depression, anxiety, and PTSD (Gross & Muñoz, 1995; Prince et al., 2006; Turk et al., 2005). In this sample, our findings identified emotional dysregulation heightened among individuals who have experienced CBSA.

### *Limitations and Future Research*

This research investigation and implications should be considered being mindful of the following limitations that may reduce generalizability. Individuals with a history of sexual assault show increased difficulties with emotional regulation (Ullman et al., 2014). Therefore, it was likely we would identify a similar correlation with CBSA survivors with previous sexual

assault and higher levels of emotional dysregulation across all five of the constructs. Moreover, for the present study, history of sexual assault was a dichotomous variable, and future research should explore past abuse. Thus, to interpret these data it is important to be mindful that past abuse also increases the outcome variables we studied, similar to cumulative trauma (Briere et al., 2016) possibly influencing these results. Additionally, because this study was cross-sectional in nature, future studies would benefit by exploring these constructs over time, and in relation to when the trauma occurred.

The small sample size and lack of diverse demographics limits generalizability of findings. Regarding our limitations based on sample size in relation to LCA, while acceptable, future studies should attempt to recruit a larger sample to assess for greater variability in classes (Nylund-Gibson & Choi, 2018). The majority of participants were female (93.8%), and mostly Caucasian/White (64.9%). Nationally, one of 71 men (1.4%) and one of five women (20%) are sexually assaulted in their lifetime (Black et al., 2011). Thus, due to limited numbers we could not make group comparisons, however our sample is not that unrepresentative relative to sexual violence rates. Interestingly, findings from this study did not generate information into the intersection of CBSA and demographics, particularly those who identify with the LGBTQIA+ community. Despite recruitment efforts, participation was limited for sexual orientation and affirmation. A large portion of the sample identified as straight or heterosexual (83.5%), and the remaining individuals identified as (11.3%) bisexual; (2.1%) lesbian, or gay; (1.0%) other. Future research would benefit from recruiting a more diverse sample, especially because little is known how marginalized groups experience cyber-sexual assault. Recent studies have shown that racial and ethnic minorities, and those within the LGBTQIA+ community, are more likely to experience rape, physical violence, or stalking (The Report of the U.S Transgender survey, 2015). Specifically, individuals who identify as transgender and gay, lesbian, or bisexual face exorbitant rates of sexual violence, often beginning in childhood, and the same may be true for CBSA.

Another important limitation of this study was selection bias. Individuals who experienced cyber-sexual assault may not have been involved or subscribed to the listserv of CCRI or RAINN, and those that are may be categorically different than those who are not subscribed to these nonprofit agencies. It is likely that individuals who sought these resources were more knowledgeable about what sexual assault and cyber-sexual assault are. Future research would benefit from identifying the route of transmission of sexually explicit material. A limitation of the research was that we did not assess for the type of the cyber assault (e.g., whether a person blackmailed or threatened the victim, was the material posted on a pornography website, whether the material was sent directly to a group of friends, and/or whether the material was shared through social media or text messaging). It is likely that these factors could influence PTSD or depression reactions, just as different types of sexual assault (see [RAINN](#)) and reactions to disclosures can influence PTSD and depression outcomes (Jacques-Tiura et al., 2010; Ullman, 1996). Further, for individuals who are sexually assaulted in person, the mental health consequences of sexual assault are profound, and include PTSD (Black et al., 2011), anxiety, depression, suicidal ideations, and substance use (Campbell et al., 2009). Thus, type of CBSA may influence psychological responses as well.

### ***Conclusion and Counseling Implications***

One in 12 Americans had experienced at least one CBSA in their lifetime (Ruvalcaba & Eaton, 2019). Despite this, limited research currently exists in the counseling literature to explore cyber-sexual assault. The goal of this research was to fill this gap on how cyber-sexual assaults influence victims' psychological responses among each of the five constructs for emotional dysregulation (i.e., clarity; goals; impulse; strategies; nonacceptance). In general, our findings indicate that those CBSA survivors with moderate to higher levels of depression and posttraumatic stress were more at risk for experiencing emotional dysregulation. The counseling implications of studying emotional dysregulation are of significance. Interventions targeting emotion regulation deficits, like goal-oriented behaviors and accepting or processing various emotions is suggested for those survivors of CBSA. Sexual assault survivors report long lasting trauma responses (Ullman & Vasquez, 2015), and subjection to trauma increases maladaptive coping, a tenant of emotional dysregulation. Improving emotional regulation skills as a trauma-informed response is proposed.

This study examined level of emotion dysregulated in each of the three groups of PTSD/depression level. Specifically, correlation occurred across all five constructs of emotional dysregulation (i.e., clarity; goals; impulse; strategies; non-acceptance) with higher levels of depression and posttraumatic stress. Thus, among clinicians, targeting areas of emotional dysregulation may prove a great place to start, as researchers continue learning about the psychological trauma of cyber-sexual assault.

### References

- American Psychiatric Association (2000). *Diagnostic and statistical manual of mental disorders: DSM-IV-TR*. Washington, DC: American Psychiatric Association.
- Holladay, K. (2016). An investigation of the influence of cyber-sexual assault on the experience of emotional dysregulation, depression, post traumatic stress disorder, and trauma guilt. *Electronic Theses and Dissertations, 2004-2019*. 5242. <https://stars.library.ucf.edu/etd/5242>
- Bates, S. (2017). Revenge porn and mental health: A qualitative analysis of the mental health effects of revenge porn on female survivors. *Feminist Criminology, 12*(1), 22-42. <https://doi.org/10.1177/1557085116654565>
- Black, M. C., Basile, K. C., Breiding, M. J., Smith, S .G., Walters, M. L., Merrick, M. T., Stevens, M. R. (2011). The National Intimate Partner and Sexual Violence Survey (NISVS): 2010 summary report. Retrieved from the Centers for Disease Control and Prevention, National Center for Injury Prevention and Control: [http://www.cdc.gov/ViolencePrevention/pdf/NISVS\\_Report2010-a.pdf](http://www.cdc.gov/ViolencePrevention/pdf/NISVS_Report2010-a.pdf)
- Bachman, R. (2012). Measuring rape and sexual assault: Successive approximations to consensus. [https://sites.nationalacademies.org/cs/groups/dbassesite/documents/webpage/dbasse\\_080063.pdf](https://sites.nationalacademies.org/cs/groups/dbassesite/documents/webpage/dbasse_080063.pdf)
- Bjureberg, J., Ljótsson, B., Tull, M. T., Hedman, E., Sahlin, H., Lundh, L. G., Bjärehed, J., DiLillo, D., Messman-Moore, T., Gumpert, C. H., & Gratz, K. L. (2016). Development and Validation of a Brief Version of the Difficulties in Emotion Regulation Scale: The DERS-16. *Journal of psychopathology and behavioral assessment, 38*(2), 284–296. <https://doi.org/10.1007/s10862-015-9514-x>

- Boeschen, L. E., Koss, M. P., Figueredo, A. J., & Coan, J. A. (2001). Experiential avoidance and posttraumatic stress disorder: A cognitive mediational model of rape recovery. *Journal of Aggression, Maltreatment, and Trauma*, 4, 211-245. [http://dx.doi.org/10.1300/J146v04n02\\_10](http://dx.doi.org/10.1300/J146v04n02_10)
- Briere, J., Agee, E., & Dietrich, A. (2016). Cumulative trauma and current posttraumatic stress disorder status in general population and inmate samples. *Psychological Trauma: Theory, Research, Practice and Policy*, 8(4), 439–446. <https://doi.org/10.1037/tra0000107>
- Calvert, Clay (2015). Revenge Porn and Freedom of Expression: Legislative Pushback to an Online Weapon of Emotional and Reputational Destruction, *Fordham Intellectual Property, Media & Entertainment Law Journal*, 673, 1-22. <https://ir.lawnet.fordham.edu/iplj/vol24/iss3/2>
- Campbell, R., Dworkin, E., & Cabral, G. (2009). An ecological model of the impact of sexual assault on women's mental health. *Trauma, Violence & Abuse*, 10(3), 225-246. [10.1177/1524838009334456](https://doi.org/10.1177/1524838009334456)
- Carpenter, R. W., & Trull, T. J. (2013). Components of emotion dysregulation in Borderline Personality Disorder: A review. *Current Psychiatry Reports*, 15(1), 335. <https://doi.org/10.1007/s11920-012-0335-2>
- Citron, D. K. (2009). Law's expressive value in combating cyber gender harassment. *Michigan Law Review*, 108(3), 373-415. <https://repository.law.umich.edu/mlr/vol108/iss3/3>
- Cloitre, M., Miranda, R., Stovall-McClough, K. C., & Han, H. (2005). Beyond PTSD: Emotion regulation and interpersonal problems as predictors of functional impairment in survivors of childhood abuse. *Behavior Therapy*, 36, 119-124. [https://doi.org/10.1016/S0005-7894\(05\)80060-7](https://doi.org/10.1016/S0005-7894(05)80060-7)
- Collier, Zachary K. & Leite, Walter L. (2017). A comparison of three-step approaches for auxiliary variables in latent class and latent profile analysis, *Structural Equation Modeling: A Multidisciplinary Journal*, 24(6), 819-830. <https://doi.org/10.1080/10705511.2017.1365304>
- Cyber Civil Rights Initiative (CCRI; 2016). <https://www.cybercivilrights.org/>
- Dam, N. T. V., & Earleywine, M. (2010). Validation of the center for epidemiologic studies depression scale—revised (CESD-R): Pragmatic depression assessment in the general population. *Psychiatry Research*, 186, 128-132.
- Data & Society Research Institute and the Center for Innovative Public Health Research (2016). New report shows that 4% of U.S. internet users have been a victim of “revenge porn,” *The Center for Innovative Public Health Research (CiPHR)*. <https://datasociety.net/blog/2016/12/13/nonconsensual-image-sharing/>
- Dvir, Y., Ford, J. D., Hill, M., & Frazier, J. A. (2014). Childhood maltreatment, emotional dysregulation, and psychiatric comorbidities. *Harvard review of psychiatry*, 22(3), 149–161. <https://doi.org/10.1097/HRP.0000000000000014>
- Eaton, W. W., Muntaner, C., Ybarra, M., Smith, C. B., Tien, A. Y. (2004). Revision of the Center for Epidemiologic Studies Depression (CESD) scale. In: Maruish, M. (Ed.), *The use of psychological testing for treatment planning and outcomes assessment*. Erlbaum, Mahwah, NJ
- Eaton, A. A., Jacobs, H., & Ruvalcaba, Y. (2017). Nationwide online study of nonconsensual porn victimization and perpetration: A summary report. *Cyber Civil Rights Initiative, Inc. and Florida*

International University, Dept. of Psychology. <https://www.cybercivilrights.org/wp-content/uploads/2017/06/CCRI-2017-Research-Report.pdf>

- Ehring, T., Welboren, R., Morina, N., Wicherts, J., Freitag, J., Emmelkamp, P. (2010). Meta-analysis of psychological treatments for posttraumatic stress disorder in adult survivors of childhood abuse. *Clinical Psychology Review*, 34(8), 645-657. [10.1016/j.cpr.2014.10.004](https://doi.org/10.1016/j.cpr.2014.10.004)
- Feldman Barrett, L., Gross, J., Christensen, T. C., & Benvenuto, M. (2001). Knowing what you're feeling and knowing what to do about it: Mapping the relation between emotion differentiation and emotion regulation. *Cognition and Emotion*, 15, 713-724. <https://doi.org/10.1080/02699930143000239>
- Field, A. (2013). *Discovering statistics using IBM SPSS statistics*. Thousand Oaks, CA: Sage.
- Gómez-Guadix, M., Almendros, C., Borrajo, E., et al. (2015). Prevalence and association of sexting and online sexual victimization among Spanish adults. *Sex Res Soc Policy* 12, 145–154. <https://doi.org/10.1007/s13178-015-0186-9>
- Gratz, K. L., & Roemer, L. (2004). Multidimensional assessment of emotion regulation and dysregulation: Development, factor structure, and initial validation of the difficulties in emotion regulation scale. *Journal of Psychopathology & Behavioral Assessment*, 26(1), 41-54.
- Gross, J. J., & Thompson, R. A. (2007). Emotion regulation: Conceptual foundations. In J. J. Gross (Ed.), *Handbook of emotion regulation* (pp. 3-24). New York, NY: Guilford.
- Gross J.J. & Muñoz R.F (1995). Emotion regulation and mental health. *Clinical Psychology: Science and Practice*, 2, 151–164.
- Gutner, C. A., Rizvi, S. L., Monson, C. M., & Resick, P. A. (2006). Changes in coping strategies, relationship to the perpetrator, and posttraumatic distress in female crime victims. *Journal of Traumatic Stress*, 19, 813–823. [10.1002/jts.20158](https://doi.org/10.1002/jts.20158)
- Hallion, L. S., Steinman, S. A., Tolin, D. F., & Diefenbach, G. J. (2018). Psychometric properties of the Difficulties in Emotion Regulation Scale (DERS) and its short forms in adults with emotional disorders. *Frontiers in Psychology*, 9, 539. <https://doi.org/10.3389/fpsyg.2018.00539>
- Henry, N., & Powell, A. (2014). Beyond the sext: Technology facilitated sexual violence and harassment against adult women. *Australian and New Zealand Journal of Criminology*, 48(1), 1104-1118. <https://doi.org/10.1177/0004865814524218>
- Henry, N., & Powell, A. (2015). Embodied harms: Gender, shame, and technology-facilitated sexual violence. *Violence Against Women*, 21(6) 758-779. <https://doi.org/10.1177/1077801215576581>
- Holladay, K. (2016). "An investigation of the influence of cyber-sexual assault on the experience of emotional dysregulation, depression, post traumatic stress disorder, and trauma guilt." *Electronic Theses and Dissertations, 2004-2019*. 5242. <https://stars.library.ucf.edu/etd/5242>
- Howard, M. C., & Hoffman, M. E. (2017). Variable-centered, person-centered, and person specific approaches: Where theory meets the method. *Organizational Research Methods*, 21(4), 846–876.
- Jacques-Tiura, A. J., Tkatch, R., Abbey, A., & Wegner, R. (2010). Disclosure of sexual assault: Characteristics and implications for posttraumatic stress symptoms among African American and

Caucasian survivors. *Journal of Trauma & Dissociation: The Official Journal of the International Society for the Study of Dissociation (ISSD)*, 11(2), 174–192.  
<https://doi.org/10.1080/15299730903502938>

- Kilpatrick (2004). What is violence against women? Defining and measuring the problem. *Journal of Interpersonal Violence*, 19(11), 1209-1234. DOI:10.1177/0886260504269679
- Kirkner, A., Relyea, M., & Ullman, S. E. (2018). PTSD and problem drinking in relation to seeking mental health and substance use treatment among sexual assault survivors. *Traumatology*, 24(1), 1–7. <https://doi.org/10.1177/0886260504269679>
- Lancaster, C. L., Teeters, J. B., Gros, D. F., & Back, S. E. (2016). Posttraumatic Stress Disorder: Overview of evidence-based assessment and treatment. *Journal of Clinical Medicine*, 5(11), 105. [10.3390/jcm5110105](https://doi.org/10.3390/jcm5110105)
- Linehan, M.M. (1993). *Cognitive-behavioral treatment of borderline personality disorder*. New York, NY, US: Guilford Press.
- Livingston, J. A., Testa, M., & VanZile-Tamsen, C. (2007). The reciprocal relationship between sexual victimization and sexual assertiveness. *Violence Against Women*, 13, 1–16. doi: <http://dx.doi.org/10.1177/1077801206297339>
- Lo, Y., Mendell, N. R., & Rubin, D. B. (2001). Testing the number of components in a normal mixture. *Biometrika*, 88(3), 767-778.
- Marganski, A., & Melander, L. (2015). Intimate partner violence victimization in the cyber and real world: Examining the extent of cyber aggression experiences and its association with in-person dating violence. *Journal of Interpersonal Violence*, 33(7), 1071-1095. [10.1177/0886260515614283](https://doi.org/10.1177/0886260515614283)
- Marx, B. P., Heidt, J. M., & Gold, S. D. (2005). Perceived uncontrollability and unpredictability, self-regulation, and sexual revictimization. *Review of General Psychology*, 9(1), 67–90. <https://doi.org/10.1037/1089-2680.9.1.67>
- Masyn, K. E. (2013). Latent class analysis and finite mixture modeling. In T. D. Little (Ed.), *The Oxford handbook of quantitative methods: Statistical analysis* (pp. 551–611). Oxford University Press.
- McGinniss, J. & Harel, O. (2016). Multiple imputation in three or more stages, *Journal of Statistical Planning and Inference*, 176, 33-51. [10.1016/j.jspi.2016.04.001](https://doi.org/10.1016/j.jspi.2016.04.001)
- McGlynn, C., & Rackley, E. (2016). Not “revenge porn,” but abuse: Let's call it image based sexual abuse. <https://inherentlyhuman.wordpress.com/2016/02/15/not-revenge-porn-but-abuse-lets-call-it-image-based-sexual-abuse/>
- McNeish, D. (2017). Missing data methods for arbitrary missingness with small samples. *Journal of Applied Statistics*, 44(1), 24-39.
- Najdowski, C. J., & Ullman, S. E. (2011). The effects of revictimization on coping and depression in female sexual assault victims. *Journal of Traumatic Stress*, 24(2), 218-221. [10.1002/jts.20610](https://doi.org/10.1002/jts.20610)
- Najdowski, C. J., & Ullman, S. E. (2009). Prospective effects of sexual victimization on PTSD and problem drinking. *Addictive Behaviors*, 34, 965–968. [10.1016/j.addbeh.2009.05.004](https://doi.org/10.1016/j.addbeh.2009.05.004)
- Nylund-Gibson, K., & Choi, A. Y. (2018). Ten frequently asked questions about latent class analysis. *Translational Issues in Psychological Science*, 4(4), 440.

- Price J. L., Monson C. M., Callahan, K., Rodriguez, B. F (2006). The role of emotional functioning in military-related PTSD and its treatment. *Anxiety Disorders*, 20, 661–674. [10.1016/j.janxdis.2005.04.004](https://doi.org/10.1016/j.janxdis.2005.04.004)
- Rape, Abuse & Incest National Network (RAINN). <https://www.rainn.org/types-sexual-violence>
- Rape, Abuse & Incest National Network (RAINN). <https://rainn.org/get-information/statistics/frequency-of-sexual-assault>
- Russell, P. L., & Davis, C. (2007). Twenty-five years of empirical research on treatment following sexual assault. *Best Practices in Mental Health: An International Journal*, 3(2), 21-37.
- Ruvalcaba, Y., & Eaton, A. A. (2019). Nonconsensual pornography among U.S. Adults: A sexual scripts framework on victimization, perpetration, and health correlates for women and men. *Psychology of Violence*. Advance online publication. doi: <http://dx.doi.org/10.1037/vio0000233>
- Sinclair, K. O., Bauman S., Poteat V., Koenig, B., Russell, S., (2012). Cyber and bias-based harassment: Associations with academic, substance use, and mental health problems. *Journal of Adolescent Health*, 50, 521–523. <https://doi.org/10.1016/j.jadohealth.2011.09.009>
- The Report of the U.S. Transgender Survey (2015). <https://www.transequality.org/sites/default/files/docs/USTS-Full-Report-FINAL.PDF>
- Tull, M. T., Barrett, H. M., McMillan, E. S., Roemer, L. (2007). A preliminary investigation of the relationship between emotion regulation difficulties and posttraumatic stress symptoms, *Journal of Behavior Therapy*, 38(3), 303-313. [10.1016/j.beth.2006.10.001](https://doi.org/10.1016/j.beth.2006.10.001)
- Turk C.L., Heimberg, R.G., Luterek, J.A., Mennin, D.S., Fresco, D.M. (2005). Emotion dysregulation in generalized anxiety disorder: A comparison with social anxiety disorder. *Cognitive Therapy and Research*, 29(1), 89–106. <https://doi.org/10.1007/s10608-005-1651-1>
- Ullman, S. E. (1996). Correlates and consequences of adult sexual assault disclosure. *Journal of Interpersonal Violence*, 11(4), 554–571. <https://doi.org/10.1177/088626096011004007>
- Ullman, S. E. & Vasquez, A. L. (2015). Mediators of sexual revictimization risk in adult sexual assault victims, *Journal of Child Sexual Abuse*, 24(3), 300-314. [10.1080/10538712.2015.1006748](https://doi.org/10.1080/10538712.2015.1006748)
- Ullman, S. E., Peter-Hagene, L., Relyea, M., Ehlers, A., & Clark, D. M. (2014). Coping, emotion regulation, and self-blame as mediators of sexual abuse and psychological symptoms in adult sexual assault. *Journal of Child Sex Abuse*, 23(1), 74-93. [10.1080/10538712.2014.864747](https://doi.org/10.1080/10538712.2014.864747)
- U-Report. <https://ureport.in/opinion/3983/>
- Vermunt, J. K., & Magidson, J. (2013). Technical guide for Latent GOLD 5.0: Basic, advanced, and syntax. *Belmont, MA: Statistical Innovations Inc.*
- Walker, K., & Sleath, E. (2017). A systematic review of the current knowledge regarding revenge pornography and non-consensual sharing of sexually explicit media. *Aggression and Violent Behavior*, 36, 9-24. <https://doi.org/10.1016/j.avb.2017.06.010>
- Walsh, K., Dilillo, D., & Messman-Moore, T. (2012). Lifetime sexual victimization and poor risk perception: Does emotion dysregulation account for the links? *Journal of Interpersonal Violence*, 27(15), 3054-3071. [10.1177/0886260512441081](https://doi.org/10.1177/0886260512441081)

- Walsh, K., DiLillo, D., & Scalora, M. (2011). The cumulative impact of sexual revictimization on emotion regulation difficulties: An examination of female inmates. *Violence Against Women, 17*, 1103-1118. [10.1177/1077801211414165](https://doi.org/10.1177/1077801211414165)
- Washington, E. T. (2015). An overview of cyberbullying in higher education. *Adult Learning, 26*(1), 21-27. <https://doi.org/10.1177/1045159514558412>
- Weber, M., Ziegele, M., & Schnauber A., (2013). Blaming the victim: The effects of extraversion and information disclosure on guilt attributions in cyberbullying. *Cyberpsychology, Behavior, and Social Networking, 16*(4), 254-259. [10.1089/cyber.2012.0328](https://doi.org/10.1089/cyber.2012.0328)
- Weiss, D. S., & Marmar, C. R. (1997). The Impact of Event Scale - Revised. In J. Wilson & T. M. Keane (Eds.), *Assessing psychological trauma and PTSD* (pp. 399-411). New York: Guilford.
- Revenge porn. Wikipedia, the free encyclopedia. [https://en.wikipedia.org/wiki/Revenge\\_porn](https://en.wikipedia.org/wiki/Revenge_porn)
- Yar, M. (2005). The novelty of 'cybercrime': An assessment in light of routine activity. *European Journal of Criminology, 2*, 407-427. <https://doi.org/10.1177/147737080556056>