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Relationship between negative social reactions to sexual assault disclosure and mental health outcomes of ethnically diverse female survivors

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RELATIONSHIP BETWEEN NEGATIVE SOCIAL REACTIONS TO SEXUAL ASSAULT DISCLOSURE AND MENTAL HEALTH OUTCOMES OF ETHNICALLY DIVERSE FEMALE SURVIVORS

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DEDICATION

This dissertation is dedicated to my parents. They went far and beyond to support me. Their love and devotion to me have been unimaginable.

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VITA

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ABSTRACT

Negative social reactions that sexual assault survivors receive upon disclosure have been correlated with psychological distress such as posttraumatic stress disorder, depression, and problem drinking. However, the impact of ethnicity in the relationship between unsupportive reactions to assault disclosure and the psychological sequelae remains unclear. Using hierarchical linear regressions and a sample of 665 African-American, Latina, and Caucasian female adult sexual assault survivors, the present study examined the role of ethnicity in that relationship. The results suggest that ethnicity moderates the influence of negative disclosure reactions on psychological symptoms, however, the moderation impact was not similar across races and psychological outcomes. With regard to posttraumatic stress disorder and depression, contrary to expectations, African-Americans were less impacted by negative reactions as compared to Caucasians. However, as predicted, more African-Americans and Latinas reported problem drinking upon receiving unsupportive responses than Caucasians.

Introduction

Sexual assault is a serious human rights violation, as well as a health and public welfare concern. While sexual assault crosses all demographics, females are more likely to be victims of rape (US Department of Justice, 2010). Based on the findings of the National Crime Victimization Survey, one out of every five women 18 years of age and older in the United States (US) has been raped at some point in her life (National Center for Injury Prevention and Control, 2011). Until the 1970s, the majority of investigations focused on the assailant and underestimated the adverse impact of sexual assault on the victims (Resick, 1993). However, the research of the past three decades has shed light on the negative effects of sexual assault on the survivor's physical and psychological well-being.

The correlation between sexual victimization and psychological disorders (e.g., anxiety, depression, substance use) is well documented (Alim et al., 2006; Burnam et al., 1988; Gillespie et al., 2009). For instance, Cavanaugh et al. (2011) examined patterns of violence against women by assessing 1,424 employed females and found that those who experienced sexual assault, whether as a child or as an adult, are more likely to meet criteria for posttraumatic stress disorder (PTSD) and major depressive disorder.

The profound negative impact that sexual assault can have on victims' emotional well-being and social functioning warrants examination of the variables that could affect the recovery of survivors. Among the factors that literature suggests are related to the victim's posttrauma adjustment is social reactions to disclosure of the sexual assault (Ahrens, Stansell, & Jennings, 2010; Ullman, 2010).

Survivors who choose to reveal the sexual assault often are seeking emotional support, safety, and medical assistance. However, not all disclosures are deemed to be helpful in

obtaining the desired assistance and recovery of survivors and negative social reactions (NSR) to disclosures are prevalent and related to poorer recovery (see Ullman, 2010 for a review). Among the factors that could be correlated to harmful consequences of disclosure is the victim's ethnicity as literature suggests that survivors of color receive more negative reactions (Jacques-Tiura, Tkatch, Abbey, & Wegner, 2010).

As ethnic minorities account for the majority of US population growth (US Department of Commerce, 2012), and women continue to suffer from sexual victimization (National Center for Injury Prevention and Control, 2011), the need for understanding the role of ethnicity in post-assault recovery is increasingly evident. Below, a background is provided on the relationship between unsupportive responses upon sexual assault disclosure and development of psychopathology by briefly reviewing past research on social reactions, common sequelae of sexual assault (e.g., PTSD, depression, problem drinking), and the impact of negative reactions on psychological symptoms.

Social Reactions

The concept of social reactions in this study refers to the recipient's specific responses to the sexual assault disclosure by the survivor. The majority of the survivors disclose the assault at some point to at least one person (Starzynski, Ullman, Townsend, Long, & Long, 2007). The disclosure can evoke a range of positive and negative reactions. Common positive responses are emotional support e.g., "Told you it is not your fault," tangible aid e.g., "Helped you get medical care," and information support e.g., "Provided information and discussed options;" (Ullman, 2010).

The impact of positive social reactions on survivors' recovery has produced mixed results. Some studies suggest that the effect of supportive disclosure reactions on post-assault

recovery is insignificant to minimal (Campbell, Ahrens, Sefl, Wasco, & Barnes, 2001; Ullman, 1996). Other research indicates that social support reaffirms the survivor's self-appraisal and protects her against psychological disorders such as PTSD and depression (Bryant-Davis, Ullman, Tsong, & Gobin, 2011; Littleton, 2010).

Common negative reactions include victim blame e.g., "Told you that you were not responsible or cautious enough," distraction e.g., "Told you to go on with your life," stigmatizing responses e.g., "Avoided talking to you or spending time with you," egocentric responses e.g., "Wanted to seek revenge on the perpetrator," and controlling responses e.g., "Tried to take control of what you did/decisions you made;" (Ullman, 2010).

Not all the victims interpret the aforementioned reactions in the same way. That is, a particular response may be viewed as positive by some survivors and negative by others; moreover, a victim may interpret the same reaction differently depending on the nature and history of the relationship between the survivor and the source of the feedback (Ahrens, Cabral, & Abeling, 2009). For example, controlling, egocentric, and distraction responses were considered to be healing when interpreted as a sign of caring and protecting the survivor and hurtful when perceived as a sign of blame and condescension (Ahrens et al., 2009).

Social reactions to the survivor's disclosure may vary by her ethnicity. Jacques-Tiura et al. (2010) compared the disclosure experiences in a sample of 272 African-American and Caucasian adult survivors. The result indicated that African-Americans received more negative responses than Caucasians, particularly from formal support providers (e.g., police, medical personnel). In an earlier study, researchers examined correlates of PTSD symptom severity and negative and positive social reactions in a sample of 323 female sexual assault survivors and found that Latina victims received more negative responses than other ethnic groups (Ullman &

Filipas, 2001). Rape myths and existing stereotypes about minority women such as African-American women are promiscuous or Latinas are hypersexual and passionate can elicit more unsupportive responses for these survivors compared with their Caucasian peers (Bryant-Davis, Chung, & Tillman, 2009).

Sexual Assault and Psychological Symptoms

Sexual violence is a traumatic event that is often associated with various psychological symptoms including PTSD, depression, and problem drinking. The *Diagnostic and Statistical Manual of Mental Disorders* (*DSM-5*) of the American Psychiatric Association (2013) estimates lifelong prevalence of PTSD to be around 8.7%. However, studies indicate elevated rates of PTSD (50% and higher) among sexual assault survivors compared with the national average (Alim et al., 2006). This may be attributed to intrusive nature of rape and its unique characteristics such as perceived life threat (Ullman & Filipas, 2001).

Research suggests that rape and sexual molestation have been linked to more cases of PTSD in women than other types of trauma (Kilpatrick et al., 2003; Rauch & Foa, 2004). These observations are consistent with the findings of Tolin and Foa's (2008) meta-analysis, which showed that sexual assault partially accounts for the high frequency of PTSD observed in women despite their lower exposure to traumatic events than men. Ullman and Filipas (2001) study of sexually violated women showed less education, greater perceived life threat, and more unsupportive responses were related to increase in PTSD symptom severity. Wyatt (1992) compared similarities and differences in incidents of attempted or completed rape in a sample of African-American and Caucasian women. In her study, African-Americans reported slightly more incidents of rape, but there were no significant interracial differences in posttraumatic stress symptoms. Findings of a study that contrasted the effects of partner and nonpartner sexual

assault on women's mental health showed sexual assault was a stronger predictor of PTSD for African-American and Caucasians in comparison to Mexican Americans (Temple, Weston, Rodriguez, & Marshall, 2007).

The association between sexual assault and depression has been extensively researched and established (Alim et al., 2006; Kilpatrick et al., 2003; Resick, 1993). Self-blame, stigma, low self-esteem, and worthlessness are among common experiences of the victims that can lead to depression (Ullman, 2010). In investigating the correlation between different rape tactics (i.e., forced rape, incapacitated rape, and drug-or-alcohol facilitated rape) and development of PTSD and depression, Zinzow et al. (2010) interviewed 3,001 noninstitutionalized English and Spanish speaking women. The results indicated that forced rape (i.e., involves force, threat of force or injury) is positively related to PTSD and depression. Moreover, the findings suggested that even when revictimization history and other rape experiences were controlled, the women who reported forced rape were three times more likely than the nonvictims to meet lifetime criteria for major depressive disorder. These results are consistent with the past research findings that indicate sexual assault increases the risk of depression two to four times (Burnam et al., 1988; Kilpatirck et al., 2003).

In a cross-sectional study of influence of prior rape (occurring at age 18 or older) on current psychological functioning Sachs-Ericsson et al. (2014) utilized data of a sample of 1228 older women between ages of 57 and 85 who have experienced traumatic events. There were 7% who reported forced sex in adulthood and on average 36 years had elapsed since the assault. The findings showed that rape victims have lower self-esteem and more symptoms of depression as compared to nonvictims. In her study of ethnic differences Wyatt (1992) noted that both African-Americans and Caucasian survivors experienced chronic depression, but African-

Americans are less likely to perceive themselves as victims of sexual violence and more likely to hold negative self-perception e.g., "I am ruined" than Caucasians. Likewise, Kaukinen and DeMaris (2005) found no significant ethnic differences between sexual violence and depression. The results suggested that for African-American victims sexual assault in adulthood and for Latina victims childhood sexual abuse increase the risk of depression (Kaukinen & DeMaris, 2005).

A growing number of studies suggest that sexual assault survivors may self-medicate by substance use including alcohol in an attempt to modulate negative emotions that emerge following assault (Booth, Mengeling, Torner, & Sadler, 2011; Ullman, Filipas, Townsend, & Starzynski, 2005). Researchers analyzed data of 2,402 low-income women from Boston, Chicago, and San Antonio that was collected in 1999 and a follow up in 2001 to examine the long-term health consequences of relationship violence in adulthood (Hill, Schroeder, Bradley, Kaplan, & Angel, 2009). After controlling for background factors and baseline frequency, the results indicated that sexual violence predicts increase in frequency of intoxication over two years (Hill et al., 2009)

Booth and colleagues (2011) conducted a study with 1,004 female veterans between 20 to 52 years of age to investigate the association between rape history and subsequent substance use. After adjusting for demographics, their findings showed that women with a history of sexual assault had a higher lifetime prevalence of substance use and problem drinking than those without such a history (64% vs. 44%). Minority survivors of sexual violence have higher rates of problem drinking as compared to Caucasians with African-American victims reported higher use and abuse of alcohol than Latinas (Curtis-Boles, & Jenkins-Monroe, 2000; Kaukinen, & DeMaris, 2005).

Negative Social Reactions and Psychological Symptoms

Unlike positive social reactions, the receipt of negative responses consistently has been associated with poor recovery (Ahrens, 2006; Ullman, Townsend, Filipas, & Starzynski, 2007). For instance, Ullman and colleagues (2007) investigated the effects of several factors on the PTSD symptoms in rape victims. They examined 636 female sexual assault survivors and found that receiving negative social reactions is associated with more PTSD symptom severity. Littleton (2010) examined the impact of social support and negative disclosure reactions on survivors in a sample of female college rape victims. Unsupportive responses in the cross-sectional analyses were related to PTSD and depression, and in longitudinal analyses predicted PTSD symptoms. In the study by Orchowski, Untied, and Gidycz, (2013) of college women and the impact of different types of positive and negative responses to sexual assault disclosure and psychological symptoms, the researchers found that controlling responses associated to more symptoms of PTSD, depression, anxiety, and lower self-worth. In investigating the mechanisms linking social reactions to PTSD and problem drinking, Peter-Hagene and Ullman (2014) examined a large sample ($N = 1863$) of women with unwanted sexual experiences. They found that controlling reactions were positively related to PTSD symptoms and problem drinking. These findings are consistent with the social negativity hypothesis, which posits negative interactions are a stronger predictor of adjustment than social support (Major, Zubek, Cooper, Cozzarelli, & Richards, 1997).

The mechanisms through which NSR affect sexual assault survivors' post-assault adjustment are varied. Unsupportive reactions can lower survivor's perceived control over recovery process and underestimate her abilities to take charge of recovery and reinforce the loss of control she experienced during the assault (Peter-Hagene & Ullman, 2014). Furthermore,

negative responses may confirm and/or increase feelings of self-blame, led to maladaptive coping strategies such as denial and substance use, and decrease survivor's self-esteem and problem-solving capabilities (Littleton, 2010; Orchowski et al., 2013).

Present Study

Despite the accumulated body of evidence that shows the relation between NSR and psychological sequelae, the role of ethnicity in this relationship has been less investigated. This study examined whether ethnicity moderates the relationship between NSR the survivors receive upon sexual assault disclosure and their PTSD symptoms, depression, and problem drinking. Based on the research that demonstrates the values of the collectivistic cultures of African-Americans and Latinos, and their greater reliance on family and kin networks for social support (Bryant-Davis et al., 2011), the current study predicted that NSR will be associated with higher levels of PTSD, depression, and problem drinking for African-American and Latina survivors compared with the Caucasian survivors.

Method

Sample

The present study analyzed data from the first wave of a longitudinal survey study that was conducted in the Chicago metropolitan area. The inclusion criteria for participation in the survey were being a female, 18 years of age or older, and having an unwanted sexual experience since age 14. The subjects were recruited for a 45-minute confidential mail survey through targeted distribution of fliers, advertisements, and notices in locations with high possibility of presence of sexual assault survivors such as rape crisis centers, mental health clinics, and college campuses. Of 1,200 women who requested the survey, 1,084 women (90%), returned their responses and were reimbursed $20 as well as offered a summary of the survey findings (Ullman et al., 2007). This study analyzed data of the African-American, Latina, and Caucasian participants that reported sexual victimization that ranged from unwanted sexual contact to rape who disclosed the assault to at least one person.

Measures

Assault characteristics. The information regarding sexual assault was collected with the Sexual Experience Survey (SES; Koss, Gidycz, & Wisniewski, 1987). The SES is a self-report questionnaire that assesses various levels of sexual victimization, which includes sexual contact, sexual coercion, attempted rape, and rape, since age 14 and on. Koss et al. (1987) utilize a behaviorally specific language on multiple sexually aggressive experiences in a yes/no format, however, refrain from using potentially stigmatizing labels such as rape (e.g., “Have you had sexual intercourse when you didn't want to because a man threatened or used some degree of physical force [twisting your arm, holding you down, etc.] to make you?”)

Koss et al. (1987) assign scores based on the highest severity of the experience (rape = 4,

attempted rape = 3, coercion = 2, contact = 1). SES has a good reliability (α = .73) and 93% test-retest reliability over one week apart (Koss et al., 1987). According to Koss et al. (1987) instructions to avoid multiple entries and elevated scores, the current study classified the sexual assault survivors based on their most severe sexual aggression (mean [*M*] = 3.53, standard deviation [*SD*] = .96, α = .75).

Child sexual assault measure. Survivors also responded to Koss et al. (1987) SES questions with regard to their unwanted sexual experiences before age 14 in order to assess sexual assault in childhood. The sample's childhood sexual experiences were also coded based on severity (*M* = 1.72, *SD* = 1.72, α = .87).

History of stressful life events. Survivors' histories of traumatic events were assessed by Stressful Life Events Screening Questionnaire (SLESQ; Goodman, Corcoran, Turner, Yuan, & Green, 1998). The SLESQ is a 13-item self-report screening measure; in the present study the questions regarding adult and childhood sexual experiences were excluded. The SLESQ inquires for lifetime exposure to a wide range of traumatic events (e.g., "Have you ever have a life-threatening illness? Was physical force or a weapon ever used against you in a robbery or mugging?") and the age they occurred. The SLESQ showed good test-retest reliability, with a median kappa of. 73, adequate convergent validity (with a lengthier interview) with a median kappa of .64, and good discrimination between Criterion A and non-Criterion A events. The summed number of events experienced by each survivor was coded for the analysis (*M* = 3.32, *SD* = 2.11).

Social reactions to assault disclosure. To assess the social reactions the as all survivors experienced following disclosure of the sexual assault, the Social Reaction Questionnaire (SRQ; Ullman, 2000) was administered to the participants. The SRQ is a self-report instrument. Five

subscales assess negative social reaction: victim blame (e.g., "Told you that you could have done more to prevent this experience from occurring"), distraction (e.g., "Told you to stop talking about it"), stigmatizing responses (e.g., "Pulled away from you"), egocentric responses (Expressed so much anger at the perpetrator that you had to calm him/her down"), and controlling responses (e.g., "Made decisions or did things for you") experienced by the victims. Each subscale has six items, which present in randomized order and participants indicate on a 5-point Likert scale (0 = never to 4 = always) how often they received a reaction when disclosing. The SRQ negative reactions have demonstrated good internal reliability (α's = .77 - .86) and high test-retest reliability (Pearson *r*'s = .74 - .81) over an eight-week interval (Ullman 2000). The current study analyzed the total number of the negative reactions the survivors received (*M* = 13.53, *SD* = 7.51, α = .92).

PTSD symptoms. PTSD symptoms were assessed with respect to participants' unwanted sexual experience and their most severe incident if they had more than one in this study. The symptoms were measured with the Posttraumatic Stress Diagnostic Scale (PDS; Foa, 1995), which provides a means of quantifying PTSD symptom severity. The PDS is a self-administered, 17-item questionnaire, which screens both the presence as well as the frequency of the 17 symptoms representing Criteria B (reexperiencing symptoms), C (avoidance symptoms), and D (arousal symptoms) of PTSD as described in the *DSM-IV* (APA, 1994). Participants responded on a 4-point scale (0 = not at all or only one time to 3 = almost always) how often they have experienced the three PTSD symptom clusters in the past month. The PDS has a symptom severity ranging from 0 to 51 with scores within the 1–10 range indicate presence of mild symptoms, 11–20 moderate, 21–35 moderate to severe, and more than 36 denote severe symptoms. The PDS has demonstrated a good internal consistency (*a* = .92) and a high degree

of test-retest reliability (κ = .74) over a 2-week interval (Foa, Cashman, Jaycox, & Perry, 1997). For the purposes of this study, the total number of PTSD symptoms was computed for symptom severity (M = 19.61, SD = 12.44, α = .93).

Depressive symptoms. Participants' depressive symptoms were assessed by using seven items of the 10-item version of the Center for Epidemiologic Studies Depression Scale (CESD-10) that was developed by Andresen, Carter, Malmgren, and Patrick (1994). The original CES-D consists of 20 descriptive statements of depressed mood such as "I felt lonely," and "I was bothered by the things usually don't bother me" (Radloff, 1977). In this study, three questions of the CESD-10, which do not directly assess the presence of depression (e.g., "I was happy") were excluded from the survey. The participants rated on a four-point scale (0 = none of the time to 3 = most of the time) the frequency of their depressive symptoms in the past week. The CESD-10 is highly correlated (r = .97) with the original CES-D, and the latter has already showed internal consistency reliability (Cronbach's alpha = .85) in the general population (Radloff, 1977). The mean of the seven depressive items was used in this study to determine symptom severity (M = 1.65, SD = .70, α = .85).

Problem drinking measure. Problem drinking was assessed by the Michigan Alcoholism Screening Test (MAST; Selzer, 1971). The MAST is a self-report screening instrument for detection of alcohol abuse and dependence and consists of 25 true/false questions. Selzer (1971) assigned items weights of 1, 2, and 5 points based on the amount each item contributes to overall alcohol abuse severity. For instance the questions, "Do you ever feel bad for your drinking," "Have you ever been arrested for drunk driving or driving after drinking," and "Have you ever attended a meeting of Alcoholic Anonymous [AA]?" have a value of 1, 2, and 5 points respectively. A total score of four suggests alcohol-related problem, and a score of

five or above in the MAST indicates presence of alcohol-related problems. Zung (1980) reported a high internal consistency (a = .91) for this measure. In this study, the total of weighted MAST items during the past 12 months was used to assess problem drinking (M = 6.52, SD = 9.83, α = .90).

Analysis of Data

Data analysis occurred in two stages. First, bivariate correlations were conducted to examine the correlations among all study variables (NSR, PTSD symptoms, depression, and problem drinking) with ethnicity. Second, to test for possible moderating effects of ethnicity on the relationship of NSR with psychological symptoms measures, cross-level interaction terms included in three hierarchical linear regression models, specified to examine the unique contributions of each variable entered at specific steps.

Results

Sample Demographics

The demographic characteristics of the sample (N = 665) are detailed in Table 1. African-Americans (45.3%) and Caucasians (48.3%) comprised the majority of the sample, and the rest self-identified as Latina (6.5%). The participants were between 18- to 71-year-old (M = 32.4, SD = 10.8). There were significant differences among the ages of the three ethnic groups. African-Americans and Caucasians were significantly older than Latinas. More than half of the women (58.5%) were single and many (43.1%) reported having at least one child. More African-Americans had children compared to Latinas and Caucasians. Slightly more than half of the sample (51.4%) was employed, though the unemployment was significantly higher in African-Americans than Caucasians. Most of the participants (84.6%) had a high school diploma or a higher level of education with Caucasians being significantly more educated than the other two races. The majority of the sample (72.6%) reported earning less than $30,000 a year with African-Americans significantly more impoverished than Caucasians.

Nearly all of the women (93.6%) had additional traumatic events with African-Americans reporting experiencing more trauma in their lifetime than Caucasians. Furthermore, the majority of the sample had a history of child sexual abuse (58.5%) of which African-Americans were significantly more likely to be victims of child abuse than Caucasians. More than three quarters of women's adult sexual assaults were completed rapes (78.9%) with African-Americans reported significantly higher numbers of completed rape than Latinas. African-American participants of the present sample were less likely to be intoxicated during the assault as compared to the other races; they also reported experiencing significantly more physical violence and perceived life threat than the other ethnic groups.

Bivariate Analyses

Preliminary bivariate analyses revealed a positive relation between African-American identity and PTSD (r =.1, p = <.05) and depressive symptoms (r = .12, p = <.01). There was also a positive correlation between Latina identity and PTSD symptomatology (r = .15, p = <.01). However, there were no significant racial/ethnic differences related to problem drinking.

Moderation Analyses

According to the data analysis strategy above, three hierarchical linear regression models were constructed. The first regression model consisted of NSR as an independent variable in the first step and PTSD symptom severity as the dependent variable. This interaction was statistically significant at level 0.05 ($P < 0.05$) and receiving NSR upon disclosure was strongly related to greater PTSD symptom severity. In the second step the ethnicity variables coded into two dummy variables (African-Americans and Latinas), and the variables were entered with Caucasians as the comparison group with PTSD symptom severity as the dependent variable. The result indicated that ethnicity is related to PTSD symptom severity with African-Americans and Latinas exhibiting significantly higher rates of PTSD symptoms than Caucasians. Finally, in the third step the interaction terms (NSR x African-Americans, NSR x Latinas) were entered with PTSD symptom severity as the dependent variable. The result suggested that higher levels of PTSD symptoms that African-Americans experience upon receiving NSR is significantly less than higher levels of PTSD symptoms Caucasians experience when they receive unsupportive responses (see Table 2).

In Table 3 the values for the correlation coefficient (R Square) of each step is presented. R Square values represent the percentage from the total variation in the dependent variable, PTSD symptom severity, which is explained by the predictor variables. Step 1 explained 14.1%

of the variance in PTSD symptom severity ($R^2 = .141$; $P < .0001$), step 2 explained 16.7% ($R^2 = .167$; $P < .0001$), and step 3 explained 17.3% ($R^2 = .173$; $P < .05$).

In order to test the statistical significance of the inclusion of additional variables in the each step of the hierarchical regressions, the change of R Square for each step compared with the previous one and sequential F-tests were performed (see Table 3). The results indicated that the inclusion of ethnicity in step 2 led to an R Square Change of 0.026, which means 2.6% better predictive capability compared to step 1. Likewise, the addition of NSR and ethnicity interaction in step 3 led to an R Square Change of 0.007, a 0.7% increase in predictive capability compared to step 2. Both increases are statistically significant.

The second regression model consisted of NSR as an independent variable in the first step and depression as the dependent variable. This interaction was statistically significant and receiving NSR upon disclosure was strongly related to depressive symptoms. In the second step the ethnicity variables coded into two dummy variables (African-Americans and Latinas), and the variables were entered with Caucasians as the comparison group with depression as the dependent variable. The result indicated that only being African-American is significantly related to depression. Finally, in the third step the interaction terms (NSR x African-Americans, NSR x Latinas) were entered with depression as the dependent variable. The result suggested that higher levels of depressive symptoms that African-Americans experience upon receiving NSR is significantly less than higher levels of depressive symptoms Caucasians experience when they receive unsupportive responses (see Table 4).

In Table 5 the values for the correlation coefficient (R Square) of each step is presented. Step 1 explained 5.3% of the variance in depressive symptom ($R^2 = .053$; $P < .0001$), step 2 explained 6.4% ($R^2 = .064$; $P < .05$), and step 3 explained 7.5% ($R^2 = .075$; $P < .01$). The results

of R Square change indicated that the inclusion of ethnicity in step 2 led to an R Square Change of 0.011, which means 1.1% better predictive capability compared to step 1. Similarly, the addition of NSR and ethnicity interaction in step 3 led to an R Square Change of 0.011, a 1.1% increase in predictive capability compared to step 2. Both increases are statistically significant (see Table 5).

The third regression model consisted of NSR as an independent variable in the first step and problem drinking as the dependent variable. This interaction was statistically significant and receiving NSR upon disclosure was related to problem drinking. In the second step the ethnicity variables coded into two dummy variables (African-Americans and Latinas), and the variables were entered into the model with Caucasians as the comparison group with problem drinking as the dependent variable. The result indicated that ethnicity is not related to problem drinking. Finally, in the third step the interaction terms (NSR x African-Americans, NSR x Latinas) were entered into the model with problem drinking as the dependent variable. The result suggested that following receiving negative social reactions African-Americans and Latinas experience higher levels of problem drinking than Caucasians (see Table 6).

In Table 7 the values for the correlation coefficient (R Square) of the two regressions are presented. The first regression explained 7.9% of the variance in problem drinking ($R^2 = .079$; $P < .0001$), and the second regression explained 9.7% ($R^2 = .097$; $P < .05$). In order to test the statistical significance of the inclusion of additional variables in the second regression, the change of R Square for the regression was compared with the first regression and sequential F-tests were performed (see Table 7). The results indicated that the inclusion of the NSR and ethnicity interaction in the second regression led to an R Square Change of 0.018, a statistically significant 1.8% increase in predictive capability compared to the first regression.

Results of the final steps of the regression models evaluating the moderating impact of ethnicity on NSR and psychological sequelae are summarized in Table 8. The findings showed that contrary to our predictions for African-Americans unsupportive responses have a lesser impact on increasing PTSD (β = -.183; p = .029) and depressive symptoms (β = -.235; p = .008) compared to Caucasians (see Table 2 and 4). As predicted however, negative reactions to assault disclosure was related to more problem drinking for African-Americans (β = .129; p = .008) and Latinas (β = -.093; p = .046) than for Caucasians (see Table 6).

Discussion

This study investigated whether ethnicity moderates the effect of negative reactions on mental health symptoms in sexual assault survivors. The results suggest that ethnicity moderates this relationship, however, the moderation impact was not uniform across the races or the psychological symptom outcomes. Contrary to the hypotheses, results revealed that higher levels of PTSD or depressive symptoms that African-Americans experience following receiving NSR was significantly less than higher levels that Caucasians experience. Factors that may buffer the impact of negative disclosure reactions for African-Americans are their subscription to the *Strong Black Woman* (SBW) persona, impact of cumulative traumatic experiences, and having a larger informal support network (Fossion et al., 2015; Jones, & Lindahl, 2011; Woods-Giscombé, 2010).

The concept of the SBW was initially developed as a justification for the exploitation of Black women and promotes the idea that they are in need of less care and compassion physically and psychologically as compared to Caucasian women (Harrington, Crowther, & Shipherd, 2010). Over time, SBW's attributes, such as being resilient, self-sufficient, and self-controlled have been adopted by African-Americans to compensate for the negative portrayal of Black women in society (Harrington et al., 2010). SBW emphasizes African-American women's capacity to manifest strength, suppress emotions, and be independent and nurturing (Woods-Giscombé, 2010). This is consistent with gender role studies that indicate African-American women endorse androgynous variables, which contains both traditionally masculine (e.g., strong, independent) and feminine (e.g., warm, nurturing) traits (Littlefield, 2003). African-American women have historically needed both strength and nurturance to survive and having this balance

has been adaptive and healthier than a solely traditionally masculine or traditionally feminine identity (Littlefield, 2003).

Within the context of SBW and its strength-based narrative, African-American women are socialized to be self-reliant and endure life's struggles and survive despite continuing social and economic inequalities (Beauboeuf-Lafontant, 2007). As such, it is socially less acceptable for African-American women to experience or demonstrate a need for other people's validation as compared to Caucasian women; this culturally mandated self-reliance may make African-American women either less vulnerable to receiving adverse reactions or less willing to acknowledge that vulnerability.

Another explanation for the findings could be the impact of cumulative trauma exposure. Trauma exposure and stressful life events, either in childhood or current, are major risk factors for development of PTSD and depression (Holden, Bradford, Hall, & Belton, 2013). Past research also suggests that additional trauma could reactivate intrusive, hyperarousal, and emotional avoidance symptoms in victims with prior trauma exposure and lead to greater psychological distress as opposed to effect of single incident trauma (Fossion et al., 2015; Sundermann, Chu, & DePrince, 2013). Given that African-American survivors of the sample reported having more stressful life events, as well as more childhood and adult sexual abuse than the other ethnic backgrounds, it is probable that these survivors were already experiencing high rates of distress and negative responses played a less significant role for them.

African-Americans hold a broader definition of family that expands beyond nuclear family that also includes extended family and fictive kin (i.e., non-biological or to non-marriage-related individuals who are considered part of extended kin; Jones, & Lindahl, 2011). Research shows the larger informal support network continues to be an important source of support for

African-Americans. For instance, Budescu, Taylor, and McGill (2011) examined the moderating effect of kin social support in African-American women. The findings showed that kin support buffered women from stress and decreased their maladaptive behaviors (i.e., smoking and drinking). The extended network could provide African-American survivors with the opportunity to seek support from other members of their kin if they receive NSR, and therefore negative responses from one member of their network may be less impactful (Bryant-Davis et al., 2011).

The results revealed that African-Americans and Latinas reported higher levels of problem drinking upon receipt of unsupportive reactions than Caucasians. A number of factors may be accounted for this finding. African-Americans and Latinas rely heavily on support of kin relations and networks, and upon receiving NSR, it is more likely for the minority survivors not to voice their needs and use maladaptive coping such as drinking to modulate their distress (Taylor, Chatters, Woodward, & Brown, 2013). Given that there are more African-Americans and Latinas who cohabitate and live near relatives, geographical proximity also may increase the silencing effect of the unsupportive responses and resort to self-medicate for those race groups (Gerstel, 2011). Furthermore, research shows that NSR in combination with less regular social contact are associated with problem drinking among sexual assault survivors (Ullman, Starzynski, Long, Mason, & Long, 2008). African-Americans and Latinas have more interactions with their social networks compared to Caucasians; unsupportive responses are likely to decrease the frequency of their social interactions and thus increase the risk of problem drinking (Gerstel, 2011).

In comparison to Caucasians, African-American and Latina survivors may receive more unsupportive responses and the cumulated NSR effect may lead to problem drinking. The

minorities' extended kin are larger in size and provide more opportunities for disclosure and telling more informal sources is related to more NSR (Ullman et al., 2008). It is also more likely for survivors of color than their Caucasian peers to receive negative responses from formal support providers (Jacques-Tiura et al., 2010). Additionally, African-American and Latina victims reported more PTSD symptoms, more severe adult sexual assault, and greater perceived life threat during the assault, all of which are correlated with receiving more negative reactions (Ullman et al., 2008). The results may also suggest that different subsets of trauma survivors have different coping strategies.

Limitations

This study has a number of strengths and limitations. The strengths include having a large sample of ethnically and socioeconomically diverse adult female sexual-assault survivors. Moreover, nearly half of participants were African-Americans, which may have helped capture the experience of this often underrepresented ethnicity. Significant caveats of this research are its cross-sectional design and non-representative sampling strategy, which precluded establishing a temporal sequence between the variables and restricted the generalizability of the results. Furthermore, reliance on retrospective and self-report methods of data collection made the results susceptible to memory biases associated with recall, distortion, and forgetfulness. The survivors volunteered for the study, which may be because they were functioning at a higher level, coping better, or more motivated to participate than the survivors who did not take part in the survey. Hence, it is possible that data would differ between volunteer and non-volunteer survivors. Finally, most of the study's measures varied in range from 7 days to 12 months, given that sexual assaults occurred at various times before the survey, the measures might not have captured an accurate assessment of survivors immediate post-assault experience.

Directions for Future Research

Despite the limitations of the current study, the findings have a number of implications for clinicians working with survivors and for future research. The results suggest the need for sensitivity of medical personnel as victims be more likely to show up for urgent care whether they disclose the assault or not. The higher rate of PTSD for African-Americans and Latinas speak to the need to do more work to ensure applicability of PTSD focused treatment with ethnic minorities. The results provide further support that unsupportive responses are more likely to lead to problem drinking and thus need for research to determine strategies to decrease negative social reactions. Furthermore, the findings suggest a significant correlation between problem drinking and negative reactions for African-American and Latina survivors; future research should explore attractiveness of alcohol for distressed minority survivors to determine healthier ways to address those needs (likely to be cost and accessibility and does not require trusting others with difficult content).

To advance this line of study, future research should investigate the impact of ethnicity in representative samples of survivors and utilize prospective and longitudinal designs in order to examine causal relations. Furthermore, given the negative social stereotypes about African-Americans and Latinas and their sexuality it would be important to determine if these negative reactions are even more harmful; studies should look at the survivors awareness of these stereotypes and stigmas and determine if they have internalized these messages and if persons in their network (both informal support and helping professionals who are supposed to serve them) have adopted these beliefs (such as the idea that Black and Latina women are promiscuous and therefore unrapable) – this may also relate to the intergenerational trauma of the legacy of social

acceptance or ignoring of the raping of black women whose rapes were historically not prosecuted.

In conclusion, this study builds on prior research because it includes ethnic comparison not only of African-Americans and Caucasians, but additionally, Latinas who have been understudied in the sexual assault literature. It highlights the findings on alcohol and sexual assault, but adds to this literature by revealing the particular consequence of African-Americans and Latinas receipt of negative reactions to their disclosure – given they are less likely to seek psychotherapy, it is especially important that they receive positive, supportive reactions within their social networks.

REFERENCES

Ahrens, C. E. (2006). Being silenced: The impact of negative social reactions on the disclosure of rape. *American Journal Of Community Psychology*, *38*(3-4), 263-274. doi:10.1007/s10464-006-9069-9

Ahrens, C. E., Cabral, G., & Abeling, S. (2009). Healing or hurtful: Sexual assault survivors' interpretations of social reactions from support providers. *Psychology Of Women Quarterly*, *33*(1), 81-94. doi:10.1111/j.1471-6402.2008.01476.x

Ahrens, C. E., Stansell, J., & Jennings, A. (2010). To tell or not to tell: The impact of disclosure on sexual assault survivors' recovery. *Violence And Victims*, *25*(5), 631-648. doi:10.1891/0886-6708.25.5.631

Alim, T. N., Graves, E., Mellman, T. A., Aigbogun, N., Gray, E., Lawson, W., & Charney, D. S. (2006). Trauma exposure, posttraumatic stress disorder and depression in an African-American primary care population. *Journal of the National Medical Association, 98*(10), 1630-1636. Retrieved from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2569763/

American Psychiatric Association (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington DC: Author.

American Psychiatric Association (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington DC: Author.

Andresen, E. M., Malmgren, J. A., Carter, W. B., & Patrick, D. L. (1994). Screening for depression in well older adults: Evaluation of a short form of the CES-D. *American Journal Of Preventive Medicine*, *10*(2), 77-84. Retrieved from: http://www. ajpmonline. org/

Beauboeuf-Lafontant, T. (2007). 'You have to show strength:' An exploration of gender, race, and depression. *Gender & Society*, *21*(1), 28-51. doi:10.1177/0891243206294108

Booth, B. M., Mengeling, M., Torner, J., & Sadler, A. G. (2011). Rape, sex partnership, and substance use consequences in women veterans. *Journal Of Traumatic Stress*, *24*(3), 287-294. doi:10.1002/jts.2064

Bryant-Davis, T., Chung, H., & Tillman, S. (2009). From the margins to the center: Ethnic minority women and the mental health effects of sexual assault. *Trauma, Violence, & Abuse*, *10*(4), 330-357. doi:10.1177/1524838009339755

Bryant-Davis, T., Ullman, S. E., Tsong, Y., & Gobin, R. (2011). Surviving the storm: The role of social support and religious coping in sexual assault recovery of African-American women. *Violence Against Women*, *17*(12), 1601-1618. doi:10.1177/1077801211436138

Budescu, M., Taylor, R. D., & McGill, R. (2011). Stress and African-American women's smoking/drinking to cope: Moderating effects of kin social support. *Journal Of Black Psychology*, *37*(4), 452-484. doi:10.1177/0095798410396087

Burnam, M. A., Stein, J. A., Golding, J. M., Siegel, J. M., Sorenson, S. B., Forsythe, A. B., & Telles, C. A. (1988). Sexual assault and mental disorders in a community population. *Journal of Consulting and Clinical Psychology, 56*(6), 843-850. doi:10.1037/0022-006X.56.6.843

Campbell, R., Ahrens, C. E., Sefl, T., Wasco, S. M., & Barnes, H. E. (2001). Social reactions to rape victims: Healing and hurtful effects on psychological and physical health outcomes. *Violence And Victims*, *16*(3), 287-302.

Cavanaugh, C. E., Messing, J. T., Petras, H., Fowler, B., La Flair, L., Kub, J., . . . Campbell, J. C. (2011). Patterns of violence against women: A latent class analysis. *Psychological Trauma: Theory, Research, Practice, and Policy,* doi:10.1037/a0023314

Curtis-Boles, H., & Jenkins-Monroe, V. (2000). Substance abuse in African-American women. *Journal Of Black Psychology*, *26*(4), 450-469. doi:10.1177/0095798400026004007

Foa, E. B. (1995). *Posttraumatic stress diagnostic scale*. Minneapolis, MN: National Computer Systems.

Foa, E. B., Cashman, L., Jaycox, L., & Perry, K. (1997). The validation of a self-report measure of posttraumatic stress disorder: The Posttraumatic Diagnostic Scale. *Psychological Assessment*, *9*(4), 445-451. doi:10.1037/1040-3590.9.4.445

Fossion, P., Leys, C., Kempenaers, C., Braun, S., Verbanck, P., & Linkowski, P. (2015). Beware of multiple traumas in PTSD assessment: The role of reactivation mechanism in intrusive and hyper-arousal symptoms. *Aging & Mental Health*, *19*(3), 258-263. doi:10.1080/13607863.2014.924901

Gerstel, N. (2011). Rethinking families and community: The color, class, and centrality of extended kin ties. *Sociological Forum*, *26*(1), 1-20. doi:10.1111/j.1573-7861.2010.01222.x

Gillespie, C. F., Bradley, B., Mercer, K., Smith, A. K., Conneely, K., Gapen, M., . . . Ressler, K. J. (2009). Trauma exposure and stress-related disorders in inner city primary care patients. *General Hospital Psychiatry, 31*(6), 505-514. doi:10.1016/j.genhosppsych.2009.05.003

Goodman, L. A., Corcoran, C., Turner, K., Yuan, N., & Green, B. L. (1998). Assessing traumatic event exposure: General issues and preliminary findings for the Stressful Life Events Screening Q uestionnaire. *Journal Of Traumatic Stress*, *11*(3), 521-542. doi:10.1023/A:1024456713321

Harrington, E. F., Crowther, J. H., & Shipherd, J. C. (2010). Trauma, binge eating, and the "strong Black woman." *Journal Of Consulting And Clinical Psychology*, *78*(4), 469-479. doi:10.1037/a0019174

Hill, T. D., Schroeder, R. D., Bradley, C., Kaplan, L. M., & Angel, R. J. (2009). The long-term health consequences of relationship violence in adulthood: An examination of low-income women from Boston, Chicago, and San Antonio. *American Journal Of Public Health*, *99*(9), 1645-1650. doi:10.2105/AJPH.2008.151498

Holden, K. B., Bradford, L., Hall, S. P., & Belton, A. S. (2013). Prevalence and correlates of depressive symptoms and resiliency among African-American women in a community-based primary health care center. *Journal Of Health Care For The Poor And Underserved*, *24*(4), 79-93.

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*, *11*(2), 174-192. doi:10.1080/15299730903502938

Jones, D. J., & Lindahl, K. M. (2011). Coparenting in extended kinship systems: African-American, Hispanic, Asian heritage, and Native American families. In K. M. Lindahl, J. P. McHale (Eds.), *Coparenting: A conceptual and clinical examination of family systems* (pp. 61-79). Washington, DC,: American Psychological Association. doi:10.1037/12328-003

Kaukinen, C., & DeMaris, A. (2005). Age at First Sexual Assault and Current Substance Use and Depression. *Journal Of Interpersonal Violence*, *20*(10), 1244-1270. doi:10.1177/0886260505277732

Kilpatrick, D. G., Ruggiero, K. J., Acierno, R., Saunders, B. E., Resnick, H. S., & Best, C. L. (2003). Violence and risk of PTSD, major depression, substance abuse/dependence, and comorbidity: Results from the national survey of adolescents. *Journal of Consulting and Clinical Psychology, 71*(4), 692-700. doi:10.1037/0022-006X.71.4.692

Koss, M. P., Gidycz, C. A., & Wisniewski, N. (1987). The scope of rape: Incidence and prevalence of sexual aggression and victimization in a national sample of higher education students. *Journal Of Consulting And Clinical Psychology*, *55*(2), 162-170. doi:10.1037/0022-006X.55.2.162

Littlefield, M. B. (2003). Gender role identity and stress in African-American women. *Journal Of Human Behavior In The Social Environment*, *8*(4), 93-104. doi:10.1300/J137v08n04_06

Littleton, H. L. (2010). The impact of social support and negative disclosure

reactions on sexual assault victims: A cross-sectional and longitudinal investigation. *Journal Of Trauma & Dissociation*, *11*(2), 210-227. doi:10.1080/15299730903502946

Major, B., Zubek, J. M., Cooper, M., Cozzarelli, C., & Richards, C. (1997). Mixed messages: Implications of social conflict and social support within close relationships for adjustment to a stressful life event. *Journal Of Personality And Social Psychology*, *72*(6), 1349-1363. doi:10.1037/0022-3514.72.6.1349

National Center for Injury Prevention and Control. (2011). *National intimate partner and sexual violence survey, 2010 Summary Report.* Retrieved from http://www.cdc.gov/violenceprevention/nisvs/

Orchowski, L. M., Untied, A. S., & Gidycz, C. A. (2013). Social reactions to disclosure of sexual victimization and adjustment among survivors of sexual assault. *Journal Of Interpersonal Violence*, *28*(10), 2005-2023. doi:10.1177/0886260512471085

Peter-Hagene, L. C., & Ullman, S. E. (2014). Social reactions to sexual assault disclosure and problem drinking: Mediating effects of perceived control and PTSD. *Journal Of Interpersonal Violence*, *29*(8), 1418-1437. doi:10.1177/0886260513507137

Radloff, L. S. (1977). The CES-D Scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement*, *1*(3), 385-401. doi:10.1177/014662167700100306

Rauch, S. A. M., & Foa, E. B. (2004). Sexual trauma: Impact and recovery. In B. T. Litz (Ed.), *Early intervention for trauma and traumatic loss.* (pp. 216-240). New York, NY: Guilford Press.

Resick, P. A. (1993). The psychological impact of rape. *Journal Of Interpersonal Violence*, *8*(2), 223-255. doi:10.1177/088626093008002005

Sachs-Ericsson, N., Kendall-Tackett, K. A., Sheffler, J., Arce, D., Rushing, N. C., & Corsentino, E. (2014). The influence of prior rape on the psychological and physical health functioning of older adults. *Aging & Mental Health*, *18*(6), 717-730. doi:10.1080/13607863.2014.884538

Selzer, M. L. (1971). The Michigan Alcoholism Screening Test: The quest for a new diagnostic instrument. *The American Journal Of Psychiatry*, *127*(12), 1653-1658. Retrieved from http://ajp.psychiatryonline.org/Issue.aspx?issueID=2788&direction=P&journalID=13

Starzynski, L. L., Ullman, S. E., Townsend, S. M., Long, L. M., & Long, S. M. (2007). What factors predict women's disclosure of sexual assault to mental health professionals?. *Journal Of Community Psychology*, *35*(5), 619-638. doi:10.1002/jcop.20168

Sundermann, J. M., Chu, A. T., & DePrince, A. P. (2013). Cumulative violence

exposure, emotional nonacceptance, and mental health symptoms in a community sample of women. *Journal Of Trauma & Dissociation*, *14*(1), 69-83. doi:10.1080/15299732.2012.710186

Taylor, R., Chatters, L. M., Woodward, A., & Brown, E. (2013). Racial and ethnic differences in extended family, friendship, fictive kin, and congregational informal support networks. *Family Relations: An Interdisciplinary Journal Of Applied Family Studies*, *62*(4), 609-624. doi:10.1111/fare.12030

Temple, J. R., Weston, R., Rodriguez, B. F., & Marshall, L. L. (2007). Differing effects of partner and nonpartner sexual assault on women's mental health. *Violence Against Women*, *13*(3), 285-297. Doi:10.1177/1077801206297437

Tolin, D. F., & Foa, E. B. (2008). Sex differences in trauma and posttraumatic stress disorder: A quantitative review of 25 years of research. *Psychological Trauma: Theory, Research, Practice, and Policy,* (1), 37-85. Doi:10.1037/1942-9681.S.1.37

Ullman, S. E. (1996). Social reactions, coping strategies, and self-blame attributions in adjustment to sexual assault. *Psychology Of Women Quarterly*, *20*(4), 505-526. Doi:10.1111/j.1471-6402.1996.tb00319.

Ullman, S. E. (2000). Psychometric characteristics of the Social Reactions Questionnaire: A measure of reactions to sexual assault victims. *Psychology Of Women Quarterly*, *24*(3), 257-271. Doi:10.1111/j.1471-6402.2000.tb00208.x

Ullman, S. E. (2010). *Talking about sexual assault: Society's response to survivors*. Washington, DC: American Psychological Association.

Ullman, S. E., & Filipas, H. H. (2001). Predictors of PTSD symptom severity and social reactions in sexual assault victims. *Journal Of Traumatic Stress*, *14*(2), 369-389 doi:10.1023/A:1011125220522

Ullman, S. E., Filipas, H. H., Townsend, S. M., & Starzynski, L. L. (2005). Trauma exposure, posttraumatic stress disorder and problem drinking in sexual assault survivors. *Journal Of Studies On Alcohol*, *66*(5), 610-619.

Ullman, S. E., Starzynski, L. L., Long, S. M., Mason, G. E., & Long, L. M. (2008). Exploring the relationships of women's sexual assault disclosure, social reactions, and problem drinking. *Journal Of Interpersonal Violence*, *23*(9), 1235-1257. Doi:10.1177/0886260508314298

Ullman, S. E., Townsend, S. M., Filipas, H. H., & Starzynski, L. L. (2007). Structural models of the relations of assault severity, social support, avoidance coping, self-blame, and PTSD among sexual assault survivors. *Psychology Of Women Quarterly*, *31*(1), 23-37. Doi:10.1111/j.1471-6402.2007.00328.x

United States Department of Commerce. (2012). *U.S. Census Bureau projections show a slower growing, older, more diverse nation a half century from now*. United States Census Bureau. Retrieved from http://www.census.gov/newsroom/releases/archives/population/cb12-243.html

United States Department of Justice. (2010). National crime victimization survey. *Bureau of Justice Statistics.* Retrieved from http://bjs.ojp.usdoj.gov/index.cfm?ty=pbdetail&iid=2217

Woods-Giscombé, C. L. (2010). Superwoman schema: African-American women's views on stress, strength, and health. *Qualitative Health Research*, *20*(5), 668-683. Doi:10.1177/1049732310361892

Wyatt, G. E. (1992). The sociocultural context of African-American and White American women's rape. *Journal Of Social Issues*, *48*(1), 77-91. Doi:10.1111/j.1540-4560.1992.tb01158.x

Zinzow, H. M., Resnick, H. S., Amstadter, A. B., McCauley, J. L., Ruggiero, K. J., & Kilpatrick, D. G. (2010). Drug- or alcohol-facilitated, incapacitated, and forcible rape in relationship to mental health among a national sample of women. *Journal Of Interpersonal Violence*, *25*(12), 2217-2236. doi:10.1177/0886260509354887

Zung, B. J. (1980). Factor structure of the Michigan Alcoholism Screening Test (MAST) in a psychiatric outpatient population. *Journal Of Clinical Psychology*, *36*(4), 1024-1030. doi:10.1002/1097-4679(198010)36:4<1024::AID-JCLP2270360437>3.0.CO;2-O

TABLES

Table 1

Demographics

	Total	African-American	Latina	Caucasian
Race				
Frequency	665	301	43	321
Percent	100	45.3	6.5	48.3
Age*				
Mean	32.9	36.1	25.8	30.9
Standard deviation	10.9	10.9	7.3	10.3
Marital status* %				
Single	58.5	59.9	69.8	55.6
Living together	16.2	13	16.3	19.1
Married	10.9	8	11.6	13.4
Divorced/separated	13.3	17.1	2.3	11.3
Widowed	1.2	2		0.6
Children* %				
Yes	43.1	70.8	32.6	18.7
No	56.9	29.2	67.4	81.3
Employment* %				
Yes	51.4	42.1	55.8	59.2
No	48.6	57.9	44.2	40.8
Education* %				
High school graduate or less	27.5	44.7	32.4	13.6
Some college	38.3	39.2	39.7	37
College graduate or beyond	34.3	16.1	27	49.4
Income* %				
Less than $30,000	72.7	84	67.5	62.9
More than $30,000	17.3	16	32.5	37.1
Total number of stressful life events* %				
3 or less	56.5	46.3	60	65
More than 3	53.7	53.7	40	35
Child sexual abuse severity* %				
No childhood sexual abuse	41.5	28.9	35.7	53.3
Contact only	17.8	15.7	23.8	18.8
Coercion	3.6	2.5	2.4	4.7
Attempted rape	8.4	12.1	9.5	5
Completed rape	28.7	40.7	28.6	18.2

(continued)

	Total	African-American	Latina	Caucasian
Adult sexual abuse severity* %				
Unwanted contact	3	3.7	2.3	2.5
Coercion	9.3	6.6	9.3	11.8
Attempted rape	8.7	7	16.3	9.3
Completed rape	78.9	82.7	72.1	76.3
Experienced physical force during the assault* %	66.3	72.4	55.8	62
Perceived life is in danger during the assault* %	47.4	66.8	38.1	30.2
Intoxicated during the assault* %				
Alcohol	24.3	12.2	25.6	35.3
Drugs	5.9	5.8	2.3	6.6
Both	9.6	11.2	11.6	7.8
None	59.9	70.5	60.5	50

Note. * $P < .0125$. Since three ethnic groups were compared, due to Bonferroni correction for multiple comparisons, the usual P value < .05 for significance level was divided by three (.05/3 = .0125).

Table 2

Coefficients for PTSD Symptom Severity

Step		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	10.884	.971		11.211	.000		
	Negative Social Reactions (NSR)	.619	.063	.375	9.794	.000	1.000	1.000
2	(Constant)	9.258	1.069		8.662	.000		
	Negative Social Reactions (NSR)	.614	.062	.372	9.833	.000	.997	1.003
	African-Americans	2.845	.963	.115	2.955	.003	.948	1.055
	Latinas	7.218	1.967	.142	3.670	.000	.946	1.057
3	(Constant)	7.610	1.304		5.837	.000		
	Negative Social Reactions (NSR)	.736	.083	.446	8.817	.000	.554	1.804
	African-Americans	6.499	1.923	.262	3.380	.001	.236	4.236
	Latinas	7.053	1.962	.139	3.595	.000	.945	1.058
	NSR x African-Americans	-.275	.125	-.183	-2.193	.029	.204	4.899

Note. Non-significant interactions were removed.

Table 3

Model Summary for PTSD

Step	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.375[a]	.141	.139	11.42238	.141	95.918	1	586	.000
2	.408[b]	.167	.162	11.26748	.026	9.111	2	584	.000
3	.417[c]	.173	.168	11.23091	.007	4.810	1	583	.029

a. Predictors: (Constant), Negative Social Reactions (NSR)

b. Predictors: (Constant), Negative Social Reactions (NSR), African-Americans, Latinas

c. Predictors: (Constant), Negative Social Reactions (NSR), African-Americans, Latinas, NSR x African-Americans

Table 4

Coefficients for Depressive Symptoms

Step		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.335	.058		22.960	.000		
	Negative Social Reactions (NSR)	.022	.004	.230	5.729	.000	1.000	1.000
2	(Constant)	1.267	.064		19.925	.000		
	Negative Social Reactions (NSR)	.022	.004	.234	5.845	.000	.999	1.001
	African-Americans	.146	.057	.103	2.585	.010	.999	1.001
3	(Constant)	1.146	.078		14.691	.000		
	Negative Social Reactions (NSR)	.031	.005	.328	6.161	.000	.558	1.793
	African-Americans	.415	.116	.294	3.593	.000	.237	4.219
	NSR x African-Americans	-.020	.008	-.235	-2.664	.008	.204	4.897

Note. Non-significant interactions were removed.

Table 5

Model Summary for Depressive Symptoms

S	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.230[a]	.053	.051	.68337	.053	32.824	1	586	.000
2	.252[b]	.064	.061	.68008	.011	6.683	1	585	.010
3	.274[c]	.075	.070	.67656	.011	7.098	1	584	.008

a. Predictors: (Constant), Negative Social Reactions (NSR)

b. Predictors: (Constant), Negative Social Reactions (NSR), African-Americans

c. Predictors: (Constant), Negative Social Reactions (NSR), African-Americans, NSR x African-Americans

Table 6

Coefficients for Problem Drinking

Step		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.978	.161		6.070	.000		
	Negative Social Reactions (NSR)	.067	.011	.281	6.272	.000	1.000	1.000
2	(Constant)	.981	.160		6.131	.000		
	Negative Social Reactions (NSR)	.053	.012	.222	4.571	.000	.837	1.194
	NSR x African-Americans	.029	.011	.129	2.665	.008	.840	1.191
	NSR x Latinas	.039	.019	.093	1.998	.046	.922	1.084

Note. Non-significant interactions were removed.

Table 7

Model Summary for Problem Drinking

Step	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.281[a]	.079	.077	1.65848	.079	39.344	1	458	.000
2	.312[b]	.097	.091	1.64570	.018	4.570	2	456	.011

a. Predictors: (Constant), Negative Social Reactions (NSR)

b. Predictors: (Constant), Negative Social Reactions (NSR), NSR x African-Americans, NSR x Latinas

Table 8

Summary of Final Steps of Each Regression

Dependent Variable	Step 3	Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
PTSD	(Constant)	7.610	1.304		5.837	.000
	Negative Social Reactions (NSR)	.736	.083	.446	8.817	.000
	African-Americans	6.499	1.923	.262	3.380	.001
	Latinas	7.053	1.962	.139	3.595	.000
	NSR x African-Americans	-.275	.125	-.183*	-2.193	.029
Depressive symptoms	(Constant)	1.146	.078		14.691	.000
	Negative Social Reactions (NSR)	.031	.005	.328	6.161	.000
	African-Americans	.415	.116	.294	3.593	.000
	NSR x African-Americans	-.020	.008	-.235**	-2.664	.008
Problem Drinking	(Constant)	.981	.160		6.131	.981
	Negative Social Reactions (NSR)	.053	.012	.222	4.571	.053
	NSR x African-Americans	.029	.011	.129**	2.665	.008
	NSR x Latinas	.039	.019	.093*	1.998	.046

Note. * $p < .05$. ** $p < .01$

APPENDIX A

Review of the Literature

Table A1

Review of the Literature

Author/ Year	Research Questions/ Objectives	Sample	Instruments	Research Approach	Major Findings
Ahrens (2006)	Examine how the negative reactions rape survivors received led to their decision to stop speaking about the assault	Eight rape survivors who "disclosed within 3 days, and received at least one negative reaction during those initial disclosures, and then ceased disclosing altogether for 9 months or more	Semi-structured interview covering 20 main areas (e.g., the assault, first disclosures, reasons for non-disclosure)	Qualitative	• "Negative reactions from professionals led survivors to question whether future disclosures would be effective" • "Negative reactions from friends and family reinforced feelings of self-blame" • "Negative reactions from either source reinforced uncertainty about whether their experiences qualified as rape"
Ahrens, Cabral, & Abeling (2009)	Examine whether specific support providers engage in specific social reactions more often; sexual assault survivors	103 female sexual assault survivors	Questionnaire for identity of support provider; Social Reaction questionnaire; open-ended questions about the	Quantitative	• "Formal support providers…provided the most tangible aid, but such aid was not always considered healing." • Emotional support is generally considered

	rate social reactions differently depending on the identity of the support provider; survivors' interpretations of the social reactions they received affect their feelings about the reactions		social reactions		healing, but it is context related • "Typically negative reactions, such as blaming, controlling, or distracting reactions…tended to be viewed more positively when interpreted as a sign of caring, an attempt to help survivors heal, or an attempt to protect survivors from future harm…and more negatively when interpreted as a sign of blame, impatience, or condescension" • "Taken together, these results suggest that the same reaction may be viewed differently depending on the identity of the support provider"
Ahrens, Rios-Mandel, Isas, & del Carmen Lopez (2010)	Identify the range of cultural influences that affect Latinas' ability to identify and disclose instances of sexual	65 Latinas, 68.8% of participants knew someone who had been sexually or physically	"Focus group guide, which was created for use in a larger study on Latina's definitions of violacion, abuso sexual, and rapto	Quantitative	• "Results suggested that gender role ideologies, traditional beliefs about marriage, familism, taboos against talking about sex, respect for authority, lack of

	assault and intimate partner violence	abused, and 43.8% had experienced sexual or physical abuse themselves	(three Spanish terms used to refer to rape, sexual abuse, and rape-abduction)"		community resources, and fear of violence operate in different ways to obscure and justify acts of sexual assault and intimate partner violence and to maintain silence when such acts do occur" • The level of acculturation may play an important role in both the acceptance of cultural beliefs and Latinas' understanding of what constitutes sexual assault and intimate partner violence"
Ahrens, Stansell, & Jennings (2010)	Identifying a variety of disclosure patterns, based both on if and when survivors start disclosing and if and when they stop disclosing	103 female sexual assault survivors	Questionnaire to describe assault experience; questionnaire to assess disclosure history; Social Reactions Questionnaire	Quantitative	• "Results revealed four distinct disclosure patterns: nondisclosers, slow starters, crisis disclosers, and ongoing disclosers. Assault characteristics and rape acknowledgment distinguished nondisclosers and slow starters from the other two disclosure groups. Slow starters were also less likely to disclose to

					police and medical personnel and received negative reactions less frequently while nondisclosers experienced more symptoms of depression and posttraumatic stress than other groups"
Alim, et al., (2006)	Describe trauma exposure, PTSD and the comorbidities of depression and alcohol/substance use disorder in a predominantly African-American population	617 primary care patient (96% African-American)	Self-report survey; Life Events Checklist; Structured Clinical Interview for the DSM-IV; Clinician Administered PTSD Scale	Quantitative	• Lifetime prevalence of PTSD (51%) with female subjects (60%) being nearly twice as likely as male subjects (33%) to develop PTSD consistent with gender differences in rates of PTSD previously reported by other investigators • Overall lifetime rate of MDD (35%) with female subjects 44% and male 18%
Andresen, Malmgren, Carter, & Patrick, (1994)	Evaluate a short form (CESD-10) of Center for Epidemiologic Studies Depression Scale (CES-D)	A random sample of 4,250 people	CESD-10; CES-D	Quantitative	• CESD-10 is highly correlated (r = .97) with the original CES-D
Beauboeuf-Lafontant (2007)	Investigate the overlap between depression and	Non-clinical convenience sample of 44	Face-to-face interview	Qualitative	• "The discourse of strength emphasized particular gender

	being strong Black women	working and middle-class Black women			performances for Black women: one's persistence through demonstrable struggle and a presentation” • “These interviewees experienced being strong as an imperative to exhibit an automatic endurance to a life perceived as filled with obstacles, unfairness, and tellingly, a lack of assistance from others” • “The strength discourse focuses on a Black woman's outward behavior, ignoring her actual emotional or physical condition. Being strong is essentially about appearing so, affecting a persona and performance of managing a difficult life with dignity, grace, and composure” • “The traditionally feminine expectation that women should take care of others was typically expanded to

					include family and community to the point” • “Thus, the woman who attempts to be a "24-hour woman" and "do everything and any thing…for these women, then, depression can be understood as the result of such denial and the attendant discrediting of those thoughts, concerns, needs, and aspects of self outside of the strength mandate”
Booth, Mengeling, Torner, & Sadler (2011)	Examine the associations between rape history and substance use disorders	1,004 women veterans	Legal definition of rape; Substance Abuse Outcomes Module; Composite International Diagnostic Interview-Short; Posttraumatic Symptom Scale	Quantitative	• “Adjusting for demographics and sex partnership, rape was consistently associated with lifetime SUD, including lifetime rape, odds ratio (OR) = 2.0” • “More recent occurrences of rape post-military as well as repeated occurrences of rape had strong associations with lifetime SUD and past-year SUD”

					• Lifetime SUD was higher for women with rape history (64% vs. 44%)
Breslau & Anthony (2007)	Examine whether: Women are more susceptible than men to the influence of prior assaultive violence on the PTSD effect of a subsequent trauma; prior assaultive violence influence women's sensitivity to the PTSD effects of subsequent traumatic events of both types, assaultive and nonassaultive; the sensitizing effect of prior assaultive violence gender specific	A representative sample of 1,698 19-23 years old	World Health Organization Composite International Diagnostic Interview	Quantitative	• Relative to other trauma types to which women are exposed, the risk of PTSD is markedly higher following assaultive violence • When assaultive violence precedes a later nonassaultive trauma in women, there is an increased risk of PTSD following the nonassaultive trauma, which may reflect a process of sensitization induced by the earlier assaultive violence trauma
Bryant-Davis, Chung, & Tillman, (2009)	"Explore the experiences of African-American, Asian American, Latina, and Native American female survivors of sexual assault"	N/A	N/A	Literature review	• Rape myths and existing stereotypes about minority women such as African-American women are promiscuous or Latinas are hypersexual and

					passionate can elicit more unsupportive responses for these survivors compared with their Caucasian peers
Bryant-Davis, Ullman, Tsong, & Gobin (2011)	Explore the role of religious coping and social support in the recovery of African-American sexual assault survivors	413 African-American adult women between the ages of 18 and 71 with unwanted sexual experiences since the age of 14	Sexual Experiences Survey; Social Activities Questionnaire of the RAND Health Insurance Experiment, Brief COPE Scale, Center for Epidemiologic Studies–Depression Scale; Posttraumatic Stress Diagnostic Scale	Quantitative	• "African-American women who indicate having more access to and utilization of a social support network report less depression and PTSD than women with less support." • "The sociocultural significance of social networks for African-American women can be understood within the framework of collectivistic cultural principles" • "As sexual assault is a violation based on a social or interpersonal exchange, likewise, social connection is integral to the redress of that violation. Social support may help to diminish shame and to affirm the worth and value of the survivor, as

					well as to play a role in establishing a sense of safety" • "In the current study, African-American sexual assault survivors who endorsed greater use of religious coping also reported higher depressive and PTSD symptoms"
Budescu, Taylor, & McGill (2011)	Investigate the association of stressors with African-American women's use of tobacco and alcohol as coping mechanisms; examine kin social support as a potential moderator of the association of stressors with tobacco and alcohol use	101 African-American women who were primary caregivers of adolescents	Demographics questionnaire; Perceived neighborhood crime questionnaire; Center for Epidemiologic Studies Depression Scale; Relationship stress questionnaire; Drinking to Cope subscale from the Three Dimensional Measure of Drinking Motives; Kinship support questionnaire	Quantitative	• "Women's psychological distress and relationship dissatisfaction were significantly associated with smoking, while perceptions of crime in the neighborhood were marginally related to smoking" • "Kinship support did moderate the association of neighborhood stress on women's drinking…the association of kin support with smoking and drinking are indirect and may be conditioned by other processes"
Burnam et al., (1988)	Examine the association	3,132 household	NIMH Diagnostic Interview Schedule	Quantitative	• Prevalence of any lifetime sexual assault

	between reported sexual assault and psychopathology; examine if certain personal characteristics of those reported sexual assault would predict the likelihood of having a later mental disorder	adults (men & women) representing two Los Angeles communities			13.2% • Lifetime SA reported by women 16.7%, men 9.4% • The risk ratios indicate that onset of major depression, alcohol/substance abuse/dependence, phobia, panic disorder, obsessive-compulsive disorder after assault were higher among the assaulted relative to nonassaulted for the associated disorders • The experience of being sexually assaulted is associated with 2-4 fold increased risk of later onset of depression, substance use disorders, and three types of anxiety disorders
Caetano, Baruah, Ramisetty-Mikler, & Ebama (2010)	Examine trends in overall volume of drinking (average number of drinks per month), drinking 5 or more drinks in a single day, and frequency of intoxication	Data come from the 1991 to 1992 National Longitudinal Alcohol Epidemiologic Survey (*N* = 42,862) and the	Both surveys questionnaires employed the same questions to collect data on drinking variables and demographic variables	Quantitative	• "The mean number of drinks consumed in 1992 was not different from that consumed in 2002 for any of the groups, independent of gender. However, because Black and Hispanic men decreased

	among Caucasians, Blacks, and Hispanics between 1992 and 2002; assess the sociodemographic predictors of volume of drinking, drinking 5 or more drinks in a single day, and frequency of intoxication	2001 to 2002National Epidemiologic Study on Alcohol and Related Conditions (*N* = 43,093)			the mean number of drinks between 1992 and 2002while Caucasian men did not, comparisons within surveys show differences across ethnic groups in 2002 but not in 1992. In2002, Caucasian men have a higher mean consumption than Blacks and Hispanics" • "Among women, the differences across ethnic groups in 1992 are the same in 2002, and Caucasian women also have a higher mean consumption than Black and Hispanic women" • "All ethnic groups in the are less likely than Caucasians to report drinking 5 or more drinks"
Campbell, Ahrens, Sefl, Wasco, & Barnes (2001)	Examine the relationship between victims' perceptions of social reactions and psychological and physical health	102 female rape survivors	A modified version of Ullman's (1996a, 1996b, 1996c) social reactions to rape victims scale; Symptom Checklist 90 Revised, Crime-	Quantitative	• "Cumulative impact of positive social reactions was unrelated to victim recovery, univariate analyses indicated that being believed and being allowed to talk

	outcomes		Related PTS; Epidemiological Studies Depression Scale; Cohen-Hoberman Inventory of Physical Symptoms		about the assault predicted lower distress" • "Negative reactions may have a far more powerful impact on survivors' recoveries than positive reactions"
Cavanaugh et al., (2011)	Examine the patterns of violence against women and associated mental health problems	1,424 employed women between 21 and 71 years of age	Center for Epidemiologic Studies Depression Scale; Primary Care PTSD Screen	Quantitative	• Class 1: low violence • Class 2: high psychological & physical IPV • Class 3: high physical and psychological workplace violence • Class 4: moderate to high childhood abuse • Members in class 2 and class 4 significantly more likely to experience mental health issues compared to class 1 • Women in class 2 were more likely to have positive screens for depression at baseline and PTSD at the six month follow up • Women in class 4 were significantly more likely to have positive screen for depression at

					baseline
Cuevas, Bell, & Sabina (2014)	Examine the impact of various formal and informal help-seeking efforts on levels of psychological distress	242 women who experienced victimization in adulthood from data from the Sexual Assault Among Latinas (N = 2000)	Demographics questionnaire; a shortened version of the Lifetime Trauma and Victimization History; Help-seeking Questionnaire; Brief Acculturation Rating Scale of Trauma Symptom Inventory Mexican Americans-II	Quantitative	• "Formal help-seeking does appear to alleviate these mental health variables" • "When examining specific forms of formal help-seeking, reporting incidents to police was the type of formal help that was significantly associated with decreased psychological distress" • "Specifically, reporting to police was associated with decreased depression, dissociation, and anxiety, suggesting that for Latinas"
Curtis-Boles, & Jenkins-Monroe, (2000)	Examine whether "African-American women with a history of substance abuse, as compared with women without this history, will (a) more frequently report histories of parental substance	30 African-American women with substance abuse histories and 30 non-abusing African-American women	Addiction Severity Index, Life History Interview	Quantitative and qualitative	• "There were no significant differences in reported parental substance abuse between the groups" • "A significantly higher number of non-abusing women versus substance abusing women reported involvement in church

	use and childhood abuse, (b) report less involvement in spiritual practice (while growing up and at pres-ent), (c) demonstrate less consistency in the availability of social support over their lifetime and fewer current supports, and (d) report a greater number of life stress events, including incidents of racism"				at an early age (i.e., before age 7). Conversely, a significantly greater percentage of substance abusing women versus non-abusing women reported having stopped their religious practice at some time in their lives • "80% of the non-abusing and 57% of the substance abusing women identified family members as sources of support, whereas 60% of substance abusing and 10% of non-abusing women identified professional/institutional supports" • "A greater number of traumatic events were also experienced by substance abusing than non-abusing women"
Foa,	Evaluate	264 people	SCID-PTSD; BDI;	Quantitative	• "Internal consistency:

Cashman, Jaycox, & Perry (1997)	Posttraumatic Diagnostic Scale (PTDS)	ages 18-65 who had experienced, witnessed, or been confronted with a high-magnitude stressor within the last month of the assessment	Revised Impact of Events Scale; State-Trait Anxiety Inventory		Alpha was .92 for Total Symptom Severity, .78 for Reexperiencing, .84 for Avoidance, and .84 for Arousal" • "Test-retest reliability of PTSD diagnoses*:* A kappa of .74 was obtained using the retest sample of 110 participants. Percentage agreement between diagnoses at the two time points was 87%, indicating a high degree of reliability" • *"Convergent validity of PTSD diagnoses:* A kappa of .65 between the PTDS and the SCID was obtained, with 82% agreement between the two measures. The sensitivity of the PTDS was .89, whereas its specificity was .75"
Fossion, Leys, Kempenaers, Braun, Verbanck, & Linkowski,	Examine whether "a later stressor will reactivate intrusive memories specifically related to a previous	25 women (38.5%) and 40 men (61.5%). The participants' age ranged	Impact of Event Scale-R	Quantitative	• "The results confirm the role of an additional trauma in the reactivation of traumatic memories, related to an earlier

(2015)	trauma"	from 65 to 80 years old			trauma, in later life. Therefore, this retraumatization mechanism has to be added to the other explanations of these late-life effects, i.e. activities of life review and common losses associated when getting older, feeling of powerlessness and helplessness and cognitive decline"
Gerstel (2011)	Show that focus on marriage and nuclear family ignores the familial practices and experiences of many Americans, particularly those on the lower end of the economic spectrum for whom extended kin are centrally important	N/A	N/A	Literature review	• "Minority individuals—in particular, blacks and Latino⁄as rely on extended kin more than do Caucasians. For example, looking at co-residence, approximately 40% of adult blacks and about a third of Latino⁄as compared to under a fifth of Caucasians share households with relatives other than partners or young children. Similar patterns exist for living near relatives: Over half of blacks and Latino⁄as

					compared to only about a third of Caucasians live within two miles of kin. Similar patterns exist for visiting: these same data show blacks and Latino/as visit kin more frequently than do Caucasians. As for giving and receiving care, blacks and Latino /as are also more likely to rely on their relatives"
Gillespie et al., (2009)	Describe the demographic characteristics, rates and types of trauma exposure, rates of psychopathology and the relationships between subject demographics, developmental timing of trauma exposure and psychopathology	1,600 primary care patients of whom >93% were African-American men and women	Traumatic Events Inventory; PTSD Symptom Scale; Beck Depression Inventory (BDI); Clinician Administered PTSD Scale; Structured Clinical Interview for DSM-IV	Quantitative	• African-American and subjects of other ethnicities with low socioeconomic status were at high risk of exposure to traumatic events and the development of stress-related psychiatric illness • Compared to national averages (7.8%), the lifetime prevalence of PTSD was substantially elevated in this sample (46.2%) • The lifetime prevalence of MDD was also very high (36.7%) in this

					sample and elevated relative to data from the National Comorbidity Survey
Golding (1999)	Examine the magnitude of association of intimate partner violence with mental health problems	N/A	N/A	Meta-analysis	• Across 18 studies, the weighted mean prevalence of depression among battered women was 47.6% which is much higher than rates found in general populations of women, which range from 10.2% to 21.3% • "The mean rate of 17.9% observed among battered women compares to rates of 0.8% to 15.9% (ideation) and 0.1% to 4.3% (attempts) in general populations" • "The mean prevalence of PTSD among battered women of 63.8% compares to estimates of lifetime prevalence in general populations of women of 1.3% to 12.3%"
Goodman, Corcoran, Turner,	Review the psychometric properties of the	First pilot with 265 college women, second	Stressful Life Events Screening Questionnaire	Quantitative	• The screening showed good test-retest reliability and good

Yuan, & Green, (1998)	Stressful Life Events Screening Questionnaire	with 60 women			discrimination between Criterion A and non-Criterion A events
Harrington, Crowther, Shipherd (2010)	Examine factors that may be related to African-American trauma survivors' binge eating and to identify mechanisms of the associations among trauma, SBW ideology, and binge eating	179 African-American female trauma survivors	Demographic form; Life Stressors Checklist–Revised; Sexual Experiences Survey; Binge Eating Scale; Eating Disorder Diagnostic Scales; five-item Mammy stereotype subscale; Courtauld Emotional Control Scale; Difficulties in Emotion Regulation Scale; Silencing the Self Scale; Eating Expectancies Inventory; Eating in Response to Trauma scale; Emotional Eating Scale	Quantitative	• "Historically, the symbol originated as a rationalization/justification for slavery, because African-American women were touted as physically and psychologically stronger and more resilient than Caucasian women" • "Overtime, the image was appropriated within Black communities in response to derogatory images of Black womanhood. By adopting the SBW ideal, African-American women have defined themselves in a positive light. Indeed, the image encompasses many positive attributes, imbues pride steeped in a rich cultural and historical legacy, engenders self-efficacy for confronting challenges, and provides encouragement during

					adversity"
Hassija & Gray (2012)	Examine the relationship between self-blaming attributions provided for traumatic events, negative social reactions, and PTSD symptom severity	68 undergraduate students with a history of interpersonal assault	Questionnaire for demographics; Life events Checklist; Posttraumatic Stress Disorder Checklist; Attributional Style Questionnaire; Social Reactions Questionnaire	Quantitative	• "Results from a statistical mediational analysis suggest that a self-blame may be associated with poorer psychological adjustment by virtue of negative social reactions"
Hill, Schroeder, Bradley, Kaplan, & Angel (2009)	Examine the long-term health consequences of relationship violence in adulthood	A probability sample of 2,402 low-income women; Blacks (43%), Mexicans (24%), other Hispanics (24%), non-Hispanic Caucasians (9%)	Questionnaire regarding frequency of intoxication, relationship violence in childhood; Brief Symptom Inventory; self-rated health; Revised Conflict Tactic Scales	Quantitative	• "Assault and sexual coercion in the past year predicted increases in the frequency of intoxication from baseline to follow-up, net of controls for baseline frequency of intoxication (outcome pretest), violence before the age of 18 years, and all background factors" • "The results showed that minor physical assault and sexual coercion in the past year predicted increases in the frequency of intoxication over 2

					years”
Holden, Bradford, Hall, & Belton (2013)	Determine the prevalence and correlates of depressive symptoms and resiliency among African-American women	290 adult African-American women	Patient Health Questionnaire; Connor- Davidson Resilience Scale; demographic questionnaire	Quantitative	• “Stressful life events (SLE), either in childhood or current, are the most significant environmental risk factors in developing depression” • “Low resilience and high depressive symptoms were associated with unemployment, less than a college education, previous diagnosis of a mental disorder, diagnosis of at least one chronic disease, and lack of health insurance coverage“
Jacques-Tiura, Tkatch, Abbey, & Wegner (2010)	Examine the characteristics of African-American and Caucasian Sexual assault survivors’ disclosure experiences and identify aspects of the disclosure process that are associated with	272 African-American and Caucasian women between the ages of 18 and 49	Modified version of the Sexual Experiences Survey; Trauma Scale; questionnaire	Quantitative	• “African-American participants received more negative responses from others, and more negative responses if they had disclosed to formal service providers, than did Caucasian participants” • “High levels of negative responses were associated with PTSD

	PTSD symptoms				symptoms only for African-American survivors. These negative responses from others may have reinforced distrust in the medical and judicial systems and may have reinforced the belief that formal service providers still hold racist stereotypes, exacerbating African-American survivors' negative affect, feelings of betrayal, and rumination"
Jones & Lindahl (2011)	Examine coparenting in extended kinship systems: African-American, Hispanic, Asians, and native American families	N/A	N/A	Literature review	• "African, Asian, and Native American groups, as well as Latino groups, not only place a supreme value on the family but also value a definition of family that extends beyond the nuclear family to extended family and nonbiological relatives who, through close relationships, are symbolically included within the family

					structure. Oppression has likely strengthened, rather than weakened, the central role of the nuclear and extended family for ethnic minority groups in the United States"
Kaukinen & DeMaris (2005)	Examine the association between childhood, adolescent, and adult sexual assault victimization and current mental health; explore how the association between life course experiences with sexual violence and subsequent mental health may differ by race and ethnicity	Based on data from the female sample (*N*=8,000) from the Violence and Threats of Violence against Women and Men in the United States Survey, 1994-1996	N/A	Quantitative	• "Sexual assault at any point in the life course is a significant correlate of depression. It is also important to note that controlling for experiences with violent victimization, race was not significantly associated with depression" • "The relationship between race and depression is not significant when controls for victimization are included. African-American women's greater risk for victimization may help to explain differences in levels of depression found in population studies"

					• "Among Caucasian women all sexual violence increases the risk of depression and among minority women childhood and adolescent sexual assault heightens depression" • "Among African-American women adult sexual assault increases the risk of depression and for Hispanic and/or Latina women childhood sexual assault heightens depression"
Kilpatrick et al. (2003)	Examine comorbidity of PTSD, MDE, and substance abuse/dependence (SA/D); effects of interpersonal violence as a risk factor in development of above disorders	A probability sample of 4,023 adolescents ages 12-17	National Women's Study (NWS) PTSD Module; NWS Depression Module	Quantitative	• 15.5% of boys and 19.3% of girls had at least one of the three mental health problems. Roughly twice the proportion of girls than boys met criteria for PTSD (6.3% vs. 3.7%) and MDE (13.9% vs. 7.4%). Girls and boys had relatively similar prevalences of SA/D (6.2% vs. 8.2%). For the full sample, nearly three fourths of the PTSD cases had at least one

					comorbid diagnosis, whereas less than two fifths of MDE and SA/D cases had a comorbid diagnosis
Koss, Bailey, Yuan, Herrera, & Lichter (2003)	Summarizes the prevalence, course, moderators and mediators of PTSD and MDD in SA survivors	N/A	N/A	Literature review	• "Childhood sexual abuse has been linked to depression and PTSD, with both retrospective at prospective investigation" • In a 17-year longitudinal study the rate of lifetime depression among survivors of childhood sexual abuse was 52% compared to 27% among nonvictimized women • Cognitive impacts of victimization on self-blame, guilt, shame, and thought processes, and/or understanding the SA in terms of grief and loss can promote depression
Koss, Gidycz, & Wisniewski (1987)	Examine incidence and prevalence of sexual aggression and victimization	6,159 students in 32 US higher education institutes	Self-report questionnaire titled, "National Survey of Inter-Gender	Quantitative	• "The results indicated that, since the age of 14, 27.5% of college women re- ported

	in a national sample of higher education students		Relationships		experiencing and 7.7% of college men reported perpetrating an act that met legal definitions of rape, which includes attempts" • "Internal consistency reliabilities of .74 (for women) and .89 (for men) have been reported for the SES, and the test-retest agreement rate between administrations 1 week apart was 93%"
Kuhlberg, Peña, & Zayas (2010)	Examine the influence of family factors (i.e., parent-adolescent conflict), cultural factors (i.e., familism), and individual factors (i.e., self-esteem; internalizing behaviors)	121 adolescent Latina suicide attempters and 105 non-attempters; 105 parents of suicide attempters (86 mothers, 19 fathers) and 95 parents of non-attempters (78 mothers, 17 fathers)	Rosenberg Self-Esteem Scale; Youth Self-Report, Conflict Behavior Questionnaire; Familism was measured with an attitudinal familism scale	Quantitative	• "Familism was a protective factor against parent-adolescent conflict, and parent-adolescent conflict was in-turn related to higher levels of internalizing behaviors and lower self-esteem" •
Lilly & Graham-	Explore how ethnicity interacts	120 women (European	Posttraumatic Stress Scale for	Quantitative	• "Ethnicity influences the expression of

Bermann (2009)	with multiple demographic, violence, and mental health variables to predict posttraumatic stress following intimate partner violence	American *N*=78; African-American *N*=42) ages between 21 and 55 years old	Family Violence; Beck Depression Inventory; Rosenberg Self-Esteem Scale; Conflict Tactics Scale; Severity of Violence Against Women Scale; Past victimization and living with assailant; demographics questionnaire		posttraumatic stress symptoms" • "African-American women report fewer symptoms of posttraumatic stress despite the presence of more risk factors, such as lower income" • "European American women may be more affected by a long history of abusive relationships, as opposed to African-American women, who are more traumatized by level of recent violence"
Littlefield (2003)	Investigate the relationship between gender role identity and stress in African-American women and whether gender role identity vary by demographic factors in African-American women, and are certain gender role identities more adaptive	Used data from the Norfolk Area Health Study (*N* =481)	Daily Hassles Scale; a condensed version of the Bem Sex Role Inventory; Sociodemographic questionnaire	Quantitative	• "The archetypal gender role for African-American women incorporates both conventional female characteristics associated with nurturing as well as stereotypic male traits associated with economic providing" • "Fewer than 20% of women in the sample were sex typed (i.e., female), indicating that

					the majority of them defined their gender role outside of the conventional definition for women. This supports the notion that gender roles are fluid/flexible for many African-American women" • "The androgynous identity category constituted a large proportion of the sample. It was the most functional identity in that it was associated with the lowest stress level"
Littleton (2010)	Examine the extent to which perceived social support and negative disclosure reactions predicted several post-assault outcomes	262 female college rape victims	SES; Assault characteristics questionnaire; Social Reactions Questionnaire; PTSD Symptom Scale; Coping Strategies Inventory; Posttraumatic Cognitions Inventory; Multidimensional Scale of Perceived	Quantitative	• "Negative disclosure reactions predicted maladaptive coping in both the cross-sectional and longitudinal analyses" • "The longitudinal findings in particular also support the social negativity hypothesis, in that negative reactions emerged as a stronger predictor of adjustment than perceived support"

			Social Support; Center for Epidemiologic Studies–Depression scale		• "Negative disclosure reactions were moderately related to all types of posttrauma cognitions in the cross-sectional analyses and to negative self-cognitions and blame cognitions in longitudinal analyses" • "In the longitudinal analyses, only negative disclosure reactions predicted PTSD symptomatology"
Major, Zubek, Cooper, Cozzarelli, & Richards (1997)	Examine the impact of women's perception of negative (conflict) and positive (support) exchanges with their mothers, partners, and friends before having an abortion on negative (distress) and positive (well-being) indexes of adjustment after the abortion.	615 women between 14-40 who underwent first-trimester abortion of an unintended pregnancy	Clinical interview and questionnaires pre and post abortion	Quantitative	• "Social negativity hypothesis proposes that conflict in social relationships is a more potent predictor of mental health than is support in relationships" • "The affect-matching hypothesis proposes that proposes that perceptions of social support are a stronger predictor of positive indexes of mental health, such as positive well-being, whereas perceptions of social conflict are a stronger

					predictor of negative indexes of mental health, such as distress" • "Neither hypothesis was uniformly supported. However, there was a stronger support for affect-matching hypothesis depended on the nature of relationship in which support and conflict were experienced"
Masuda, Anderson, & Edmonds (2012)	Investigate whether mental health stigma and self-concealment would uniquely and separately predict help-seeking attitudes in African-American college students	175 African-American students (75% female)	Attitudes Toward Seeking Professional Psychological Help; Stigmatizing Attitudes-Believability; Self Concealment Scale	Quantitative	• "Both mental health stigma and self-concealment were negatively associated with help-seeking attitudes. There was a positive association between mental health stigma and self-concealment" • "Having a previous experience of seeking professional psychological services (past help-seeking experience) was associated with having more favorable help-seeking attitudes and lower mental health

					stigma”
National Center for Injury Prevention and Control (2011)	Determine the prevalence and characteristics of sexual violence, stalking, and intimate partner violence; who is most likely to experience these forms of violence; the patterns and impact of the violence experienced by specific perpetrators; the health consequences of these forms of violence	16,507 men and women 18 years of age and older selected by random digit dial telephone	58 items questionnaires including behavior-specific questions that assess sexual violence, stalking, and intimate partner violence over the lifetime and during the 12 months prior to the interview	Quantitative	• “Nearly 1 in 5 women (18.3%) and 1 in 71 men (1.4%) in the United States have been raped at some time in their lives” • “Approximately 1 in 5 Black (22.0%) and Caucasian (18.8%) non-Hispanic women, and 1 in 7 Hispanic women (14.6%) in the United States have experienced rape at some point in their lives" • Men and women who experienced rape or stalking by any perpetrator or physical violence by an intimate partner in their lifetime were more likely to report frequent physical and psychological difficulties than those who did not have these experience
Orchowski, Untied, & Gidycz, (2013).	Examine the predictors of sexual assault disclosure to formal support providers;	374 undergraduate women	Demographic questionnaire, Sexual Experiences Survey; assault	Quantitative	• “Disclosure of sexual victimization most often occurred immediately, or in the first few weeks following an assault”

	document potential variations in social reactions to sexual assault disclosure among different informal support providers; examine the characteristics, predictors, and responses to sexual assault disclosure among college women		characteristics questionnaire; Distress Disclosure Index; Social Provisions Scale; Coping Strategy Indicator; Social Reactions Questionnaire		• "Women most often confided in a female peer. Increased coping via seeking emotional support, strong attachments, and high tendency to disclose stressful information predicted adolescent sexual assault disclosure and disclosure over the 7-month interim. Less acquaintance with the perpetrator predicted disclosure over the follow-up, including experiences of revictimization. Victim and perpetrator alcohol use at the time of the assault also predicted disclosure over the follow-up"
Peter-Hagene, L. C., & Ullman, S. E. (2014)	To test "a mediational model of social reactions to assault disclosure and PTSD symptoms"	1863 female adult sexual assault survivors	Sexual Experiences Survey, Social Reactions Questionnaire, Rape Attribution Questionnaire, Brief COPE, Adaptive social coping, Posttraumatic	Quantitative	• "Social reactions of control, blame, treating the victim differently, and other negative reactions to assault disclosure, are related to avoidant forms of coping" • "Negative social reactions to assault

			Stress Diagnostic Scale		disclosure were associated with less perceived"
Pole, Best, Metzler, & Marmar (2005)	Examine mechanisms by which demographic status (i.e., Hispanic ethnicity) translates into elevated risk for developing a trauma-related psychiatric disorder (i.e., PTSD)	668 police officers	Social Desirability Scale; Critical Incident History Questionnaire; Peritraumatic Dissociative Experiences Questionnaire; Ways of Coping Checklist; Work Environment Inventory; Sources of Support Scale; Symptom Checklist 90— Revised; Mississippi Scale—Civilian Version	Quantitative	• Hispanic officers were similar to the other officers in level of trauma exposure but had elevated rates of PTSD • Greater peritraumatic dissociation, greater wishful thinking and self-blame coping, lower social support, and greater perceived racism explain the elevated PTSD symptoms among Hispanics
Radloff (1977)	Examine reliability and validity of Center for Epidemiologic Studies Depression Scale (CES-D Scale)	Random sample of 1,173 households in Kansas City and 1,673 households in Washington County for 2 interviews.	CES-D Scale	Quantitative	• Internal consistency in general sample was .85 and .90 in the patient sample • Test-retest validities were in the moderate range between .45 to .70 except one
Rauch & Foa (2004)	Examine the impact of adult	N/A	N/A	Literature review	• Women tend to seek informal support rather

	sexual assault on survivors and society; discuss the development of PTSD following SA				than professional help • Discussing the legal, medical, & social support aspects of SA • PTSD s/x may mediate the relationship between trauma/SA and physical health • Prevalence of PTSD following SA is very high compare to other traumas. • In a sample of military men and women who experienced sexual or non-sexual trauma, lower education, female gender and more personal exposure were related to more psychological symptoms • Negative social reactions, e.g., being told they were irresponsible, being patronized, predicted PTSD and depression • No support better than negative support • Positive social responses are related to better post SA

					adjustment: those who felt validated and talked to others about trauma
Resick (1993)	Describe the typical pattern of reaction and recovery among rape victims; review variables that may influence recovery	N/A	N/A	Literature review	• In most cases after an initial strong acute reaction, 3 months, symptoms decrease. However, some victims continue to experience chronic problems • The chronic problems fall under categories of PTSD, depression, loss of self-esteem, social adjustment, sexual functioning, and anxiety disorders
Roberts, Gilman, Breslau, Breslau, & Koenen (2011)	Examine race/ethnic differences in lifetime prevalence of PTSD; examine risk of exposure to traumatic events among different races/ethnicities; examine risk of developing PTSD once exposed to an event	Data from 34,653 adult respondents to the National Epidemiologic Survey on Alcohol and Related Conditions	The National Institute on Alcohol Abuse and Alcoholism Alcohol Use Disorder and Associated Disabilities Interview Schedule DSM-IV	Quantitative	• Blacks had significantly higher prevalence of PTSD than Caucasians and Hispanics [8.7 v. 7.4 & 7.0] • Blacks and Hispanics had lower risk than Caucasians for exposure to any traumatic event except childhood maltreatment • Risk of developing PTSD was significantly higher for Blacks, statistically equivalent for Hispanics, compared

					with Caucasians • "Characteristics of trauma exposure did not account for the relationship between race/ethnicity and conditional risk of PTSD once exposed to an event"
Sachs-Ericsson et al., (2014)	Examine whether a history of rape is associated with current psychological and health problems	1228 women between the ages of 57 to 85	A modified version of the Center for Epidemiologic Studies-Depression scale; Revised UCLA Loneliness Scale; HADS-A; Rosenberg Self-Esteem Scale; additional questionnaire	Quantitative	• "Rape was associated with both psychological and physical health dysfunction. We also found rape to be associated with lower self-esteem, and lower self-esteem partially mediated the association between rape and psychological functioning"
Selzer (1971)	Evaluate Michigan Alcoholism Screening Test (MAST)	116 Caucasian males who admitted to hospital because of alcoholism + 113 Caucasian male (control group)	Michigan Alcoholism Screening Test	Quantitative	• The MAST has a high internal consistency and an effective means to identify alcoholics in the population used in this study
Starzynski, Ullman,	Identify demographic,	1,084 women age 18 or older	Demographic questionnaire;	Quantitative	• Being Caucasian, older age, non-heterosexuals,

Townsend, Long, & Long (2007)	assault, and postassault factors differentiating women who disclosed from those who did not disclose sexual assault to mental health sources	with unwanted sexual experiences since age 14	modified version of the Sexual Experiences Survey; Stressful Life Events Screening Questionnaire; disclosure questionnaire; Social Reactions Questionnaire; Rape Attribution Questionnaire; Brief COPE; Frazier's supplemental perceived control items		having more PTSD symptomatology, behavioral self-blame, and receiving tangible aid were related to disclosure to mental health sources • "While trauma history may be related to mental health care seeking, it is not necessarily related to the dependent variable of whether women disclosed sexual assault to mental health professionals"
Sullivan, Cavanaugh, Ufner, Swan, & Snow (2009)	Examine whether relationships among women's aggression, their victimization, and substance use problems were moderated by race/ethnicity	412 community women (150 African-Americans, 150 Latinas, and 112 Caucasians)	12 item from the Conflict Tactics Scale-2; Alcohol Use Disorder Identification Test; Drug Abuse Screening Test	Quantitative	• "The relationships between victimization and substance use problems were moderated by racial/ethnic group: African-American and Latina women's victimization was related to both their alcohol and drug use problems, while Caucasian women's victimization was unrelated to either their

					alcohol or drug use problems"
Sundermann, Chu, & DePrince, (2013)	"Examine victims' emotional nonacceptance as a partial mediator between cumulative violence exposure and the severity of 3 types of symptoms central to complex trauma responses: depression, dissociation, and posttraumatic stress disorder (PTSD) symptoms"	A non-treatment-seeking community sample of women (*N*= 89; *M* age = 30.70 years)	A two-stage interview strategy adopted from the National Crime Victims Survey; Acceptance and Action Questionnaire; Beck Depression Inventory–Second Edition; Posttraumatic Diagnostic Scale	Quantitative	• "Greater cumulative violence exposure predicted greater mental health symptom severity across symptoms of depression, dissociation, and PTSD. Also…higher levels of emotional nonacceptance among victims predicted greater symptom severity across all symptoms. Finally…greater cumulative violence exposure predicted greater emotional nonacceptance"
Taylor, Chatters, Woodward, & Brown (2013)	Examine differences between African Americans, non-Hispanic Caucasians, and Caribbean Blacks in several measures of family, friendship, fictive kin, and religious congregation-based	3,570 African-Americans, 891 non-Hispanic Caucasians, and 1,621 Blacks of Caribbean descent	Questionnaires to measure the 24 dependent variables, as well as independent demographic and socioeconomic variables	Quantitative	• "African-Americans and Black Caribbeans were more likely to have fictive kin and a larger number of fictive kin in their networks than non-Hispanic Caucasians" • "African-Americans have greater daily contact with family members would provide the opportunity for

	informal support networks				support needs to be voiced and acknowledged" • "In comparison to non-Hispanic Caucasians, African-Americans interacted with their congregation members more frequently, were subjectively closer to their church members, and gave assistance to their church members more often" • "African-Americans and Black Caribbeans had a support advantage relative to non-Hispanic Caucasians for the likelihood of having fictive kin and the size of fictive kin networks"
Temple, Weston, Rodriguez, & Marshall, (2007)	"Contrast the effects of intimate partner and nonpartner sexual assault on women's mental health among a sample of low-income, ethnically diverse community women"	835 women	Severity of Violence Against Women Scales; Perceived Stress Scale; Crime-related Post-Traumatic Stress Disorder Scale	Quantitative	• "In general, sustaining any form of sexual assault was associated with women's reports of increased psychological distress. Current partners' sexual assault was generally more important than past partners' sexual assault as a predictor of

					women's PTSD, stress, and dissociative symptoms, although both were often significant. Conversely, sexual victimization by someone other than a partner was only a predictor of PTSD symptoms"
Tolin & Foa (2008)	Determine whether women and girls are more likely than men and boys to meet diagnostic criteria for PTSD; whether women and girls are more likely than men and boys to experience a traumatic event; whether male and female participants differed in terms of the type of traumatic experience	N/A	N/A	Meta-analyses	• There is nearly twofold increase in PTSD frequency among female participants than among male participants • Female participants are more likely to meet criteria for PTSD despite a lower overall likelihood of PTE • Female participants are more likely than male participants to report experiencing sexual assault and child sexual abuse • Even within the PTE categories more often endorsed by men and boys, women and girls still show an elevated risk of developing PTSD

Ullman (1996)	Investigate the relationship of social reactions to sexual assault disclosure with measures of victim adjustment	A convenience sample of 155 sexually assaulted women	Demographic questionnaire; a question from the Los Angels Epidemiologic Catchment Area; postassault and coping strategy questionnaires; a question to assess self-blame attributions; a checklist of positive and negative social reactions; one question to assess self-rate recovery	Quantitative	• Victim blame, being treated differently, having someone take control related to poor rated self-recovery and more psychological symptoms • "Emotional support and tangible aid were unrelated recovery"
Ullman (1999)	Examine the empirical evidence for the role of support in recovery from mental health and physical health consequences of this crime	N/A	N/A	Literature review	• "Research has shown both positive effects of social support on recovery from sexual assault as well as no significant effect of social support" • "There are a number of factors that research suggests may mediate the effects of social support and negative social reactions on postrape recovery. One factor is likely to be the

					type of support provider disclosed to with certain responses being perceived as appropriate and, therefore, helpful, or inappropriate and unhelpful if they come from particular support providers"
Ullman (2000)	Evaluate psychometric characteristics of a new measure of social reactions to sexual assault victims	323 adult female SA victims	Modified version of SES; Social Activities Questionnaire; a modified version of Inventory of Socially Supportive Behaviors; Social Reactions Questionnaire; part 3 of the Posttraumatic Stress Diagnostic Scale	Quantitative	• "Internal consistency reliability: .93 for emotional support/belief, -86 for treat differently, .80 for distraction/discouraged talking, .83 for taking control, .84 for tangible aid/information support, .80 for victim blame, and .77 for egocentric reactions" • Test-retest reliability statistically significant and at the $p < .001$ level
Ullman (2010)	Integration of three extensive studies and other qualitative and quantitative research to highlight the current knowledge about disclosure of	The studies: (1) Mental Health Provider (MHP) Interview Study with 30 MHP who involved advocating rape	In-person interviews; mail survey	Qualitative/quantitative	• "The concept of social reactions includes both social responses received by victims as well as the absence of particular responses (e.g., lack of social support, absence of negative or positive

	sexual abuse as well as a discussion of secondary trauma and transference	victims; (2) Women's Life Experiences Survey with 1,084 female victims of sexual assault; (3) Life Experiences Interview Project with 60 female survivors of sexual assault			social reactions). The absence of these responses is important to assess and evaluate because victims may perceive them as a positive or negative reaction from the support provider" • "Research shows that, regardless of age or race, victims commonly disclose sexual assault" • "Positive reactions of emotional support, tangible aid, and information support are helpful to survivors whether they come from formal or informal support providers. In contrast, negative reactions of blame, disbelief, and control are harmful from either source and may silence survivors and thwart help-seeking"
Ullman & Filipas (2001)	Examine correlates of social reactions and analyze how social reactions may influence	323 adult sexual assault victims	Sexual Experiences Survey; Social Activities Questionnaire of the Rand Health	Quantitative	• "Being treated differently or stigmatized by others after rape may cause victims to feel as though

	PTSD symptom severity		Insurance Experiment; Social Reactions Questionnaire; Stress Diagnostic Scale		the incident somehow permanently transformed them. Consequently, if rape victims internalize the idea that they are different or less worthy persons because of their assaults, they may develop greater PTSD symptoms" • "The finding that ethnic minority victims received more negative reactions is also of concern, but perhaps to be expected based on research showing more traditional attitudes toward rape"
Ullman, Filipas, Townsend, & Starzynski (2005)	Compare comorbid (PTSD and drinking problems) sexual assault victims with those with PTSD only	PTSD (*N*=279) PTSD + drinking problems (*N*=226) women age 18-68	Modified Sexual Experiences Survey; Stressful Life Events Screening Questionnaire; Social Reactions Questionnaire; Rape Attribution Questionnaire; COPE; Posttraumatic Diagnostic Scale;	Quantitative	• "Disadvantaged socioeconomic status and traumatic life events may place victims at risk for developing comorbid PTSD and drinking problems." • "Comorbid women face more negative social reactions from others and blame themselves more, which makes sense, given that women

			Alcohol Effects questionnaire; Michigan Alcoholism Screening Test		who drink are stigmatized generally as are victims who are symptomatic or judged to be coping poorly" • "Better current social support appears to be a protective factor that may be related to less comorbidity, whereas drinking to cope with distress and believing drinking will reduce tension may put sexual assault victims at risk for developing comorbid PTSD and drinking problems"
Ullman & Najdowski (2011)	Examine relationships between self-blame attributions and social reactions to disclosure in a community sample of adult sexual assault victims"	555 female adult sexual survivors	Sexual Experiences Survey; Rape Attribution Questionnaire; Social Reactions Questionnaire; Brief COPE; Posttraumatic Stress Diagnostic Scale	Quantitative	• "Negative reactions led to greater characterological, but not behavioral, self-blame during the course of the study" • "Positive reactions did not reduce self-blame, neither characterological nor behavioral" • "Positive reactions have little impact on recovery outcomes, whereas negative

					reactions may reinforce a negative sense of self-worth as well as a victim's tendency to blame their character"
Ullman, Starzynski, Long, Mason, & Long (2008)	Longitudinal study to examine relationships between self-blame attributions and social reactions to disclosure in a sample of adult sexual assault survivors	555 female adult sexual assault survivors	Demographic questionnaire; Sexual Experiences Survey; two 5-item subscales of the Rape Attribution Questionnaire; Social Reactions Questionnaire; Brief COPE; Posttraumatic Stress Diagnostic Scale	Quantitative	• "Neither characterological self-blame nor behavioral self-blame prospectively related to negative social reactions over the 1-year follow-up period" • "Greater characterological self-blame predicted receipt of fewer positive reactions over time. This finding may suggest that low self-worth and/or poor psychological functioning, which are both common in victims who attribute assaults to their character may lead others to react less positively to survivors over time" • "Characterological self-blame had a strong

					effect on establishing initial levels of maladaptive personal beliefs related to trauma, which in turn led to greater psychological distress"
Ullman, Townsend, Filipas, & Starzynski (2007)	Examine the effects of preassault, assault, and postassault psychosocial factors on current PTSD symptoms of SA survivors	636 female sexual assault survivors	Modified version of SES; Stressful Life Events Screening Questionnaire; Social Activities Questionnaire; Social Reactions Questionnaire; Rape Attribution Questionnaire; Posttraumatic Stress Diagnostic Scale; Brief COPE	Quantitative	• Higher degrees of assault severity were associated with more negative social reactions and less self-blame, and more PTSD symptoms. • These results suggest that people respond more negatively to victims who experience more violent assaults, perhaps because survivors of more severe assaults disclose to more people, increases the likelihood that they will receive negative reactions, which contribute to survivors' symptoms. • Victims of violent assaults experiences less self-blame because the assault conforms to

					societal stereotypical of what defines real rape
Woods-Giscombé (2010)	Explore women's descriptions of the Superwoman role; perceptions of contextual factors, benefits, and liabilities	48 African-American women	Women participated in 8 focus groups. Focus group discussions included questions such as: When I say the word *stress*, what does it mean for you? What causes stress in your life? Each focus group lasted between 2 and 2.5 hours	Qualitative	• "The Superwoman role is a multidimensional phenomenon encompassing characteristics such as obligation to manifest strength, emotional suppression, resistance to vulnerability and dependence, determination to succeed, and obligation to help others • "One of the most salient benefits of the Superwoman role was survival despite personal obstacles, perceived inadequacy of resources, and unique life experiences attributed to the double jeopardy of being African-American and female" • "The liabilities fell under three major categories: strain in interpersonal relationships, stress-

					related health behav-iors, and embodiment of stress"
Wyatt, (1992)	"Examine historical and sociocultural factors that influence of African-American and Caucasian American women's sexual assault experiences and postassault adjustment"	126 African-American women and 122 Caucasian American women	Face to face interviews; Wyatt Sex History Questionnaire	Quantitative and qualitative	• "No significant ethnic differences in the prevalence of rape incidents were noted." • No significant ethnic disparities with regard to long-term psychological effects such as chronic depression and fear of being left alone
Zinzow et al., (2010)	Examine correlates of PTSD and depression in a community sample of women, with particular emphasis on evaluating the unique effects of lifetime exposure to three specific rape tactics: forcible rape (FR), incapacitated rape (IR), drug- or alcohol-facilitated rape (DAFR)	A representative sample of 3,001 from the National Women's Study-Replication ages 18-86	Demographic information; PTSD and MDE assessed with structured interviews based on DSM-IV; rape experience & rape incident characteristics questionnaires	Quantitative	• Both DAFR and FR associated with increased likelihood of PTSD • "Among the rape tactic variables, only FR was related to increased risk of MDE" • "FR demonstrated significant positive relations with PTSD and MDE and emerged as the strongest predictor of these outcomes" • "Women who reported FR were over three times as likely as

					nonvictims to meet lifetime criteria for both psychiatric disorders, even while accounting for other rape experiences and revictimization history"
Zung (1980)	Define and measure the dimensions of Michigan Alcoholism Screening test (MAST) responses among psychiatric outpatients	87 males and 153 of a psychiatric outpatient clinic	MAST	Quantitative	• "The coefficient of internal consistency reliability (alpha) the MAST was equal to 91%. A coefficient of this magnitude is sometimes but not invariably associated with high content homogeneity'

APPENDIX B

IRB Exemption Notice

PEPPERDINE UNIVERSITY

Graduate & Professional Schools Institutional Review Board

March 11, 2014

Protocol #: P0214D01
Project Title: Relationship Between Negative Social Reactions and Mental Health Outcomes of Ethnically Diverse Female Sexual Assault Survivors

Dear Mr. Hakimi:

Thank you for submitting your application, *Relationship Between Negative Social Reactions and Mental Health Outcomes of Ethnically Diverse Female Sexual Assault Survivors* for exempt review to Pepperdine University's Graduate and Professional Schools Institutional Review Board (GPS IRB). The IRB appreciates the work you and your faculty advisor, Dr. Bryant-Davis have done on the proposal. The IRB has reviewed your submitted IRB application and all ancillary materials. Upon review, the IRB has determined that the above entitled project meets the requirements for exemption under the federal regulations (45 CFR 46 - http://www.nihtraining.com/ohsrsite/guidelines/45cfr46.html) that govern the protections of human subjects. Specifically, section 45 CFR 46.101(b)(2) states:

> (b) Unless otherwise required by Department or Agency heads, research activities in which the only involvement of human subjects will be in one or more of the following categories are exempt from this policy:
>
> **Category (2) of 45 CFR 46.101**, research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: a) Information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and b) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

Your research must be conducted according to the proposal that was submitted to the IRB. If changes to the approved protocol occur, a revised protocol must be reviewed and approved by the IRB before implementation. For any proposed changes in your research protocol, please submit a **Request for Modification Form** to the GPS IRB. Because your study falls under exemption, there is no requirement for continuing IRB review of your project. Please be aware that changes to your protocol may prevent the research from qualifying for exemption from 45 CFR 46.101 and require submission of a new IRB application or other materials to the GPS IRB.

A goal of the IRB is to prevent negative occurrences during any research study. However, despite our best intent, unforeseen circumstances or events may arise during the research. If an unexpected situation or adverse event happens during your investigation, please notify the GPS IRB as soon as possible. We will ask for a complete explanation of the event and your response. Other actions also may be required depending on the nature of the event. Details regarding the timeframe in which adverse events must be reported to the GPS IRB and the appropriate form to be used to report this information can be found in the *Pepperdine University Protection of Human Participants in Research: Policies and Procedures Manual* (see link to "policy material" at http://www.pepperdine.edu/irb/graduate/).

6100 Center Drive, Los Angeles, California 90045 ▪ 310-568-5600

Please refer to the protocol number denoted above in all further communication or correspondence related to this approval. Should you have additional questions, please contact Kevin Collins, Manager of the Institutional Review Board (IRB) at gpsirb@pepperdine.edu. On behalf of the GPS IRB, I wish you success in this scholarly pursuit.

Sincerely,

Thema Bryant-Davis, Ph.D.
Chair, Graduate and Professional Schools IRB

cc: Dr. Lee Kats, Vice Provost for Research and Strategic Initiatives
Mr. Brett Leach, Compliance Attorney
Dr. Thema Bryant-Davis, Faculty Advisor

References

Ahrens, C. E. (2006). Being silenced: The impact of negative social reactions on the disclosure of rape. *American Journal Of Community Psychology*, *38*(3-4), 263-274. doi:10.1007/s10464-006-9069-9

Ahrens, C. E., Cabral, G., & Abeling, S. (2009). Healing or hurtful: Sexual assault survivors' interpretations of social reactions from support providers. *Psychology Of Women Quarterly*, *33*(1), 81-94. doi:10.1111/j.1471-6402.2008.01476.x

Ahrens, C. E., Stansell, J., & Jennings, A. (2010). To tell or not to tell: The impact of disclosure on sexual assault survivors' recovery. *Violence And Victims*, *25*(5), 631-648. doi:10.1891/0886-6708.25.5.631

Ahrens, C. E., Rios-Mandel, L., Isas, L., & del Carmen Lopez, M. (2010). Talking about interpersonal violence: Cultural influences on Latinas' identification and disclosure of sexual assault and intimate partner violence. *Psychological Trauma: Theory, Research, Practice, And Policy*, *2*(4), 284-295. doi:10.1037/a0018605

Alim, T. N., Graves, E., Mellman, T. A., Aigbogun, N., Gray, E., Lawson, W., & Charney, D. S. (2006). Trauma exposure, posttraumatic stress disorder and depression in an African-American primary care population. *Journal of the National Medical Association, 98*(10), 1630-1636. Retrieved from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2569763/

Andresen, E. M., Malmgren, J. A., Carter, W. B., & Patrick, D. L. (1994). Screening for depression in well older adults: Evaluation of a short form of the CES-D. *American Journal Of Preventive Medicine*, *10*(2), 77-84. Retrieved from: http://www. ajpmonline. org/

Beauboeuf-Lafontant, T. (2007). 'You have to show strength': An exploration of gender, race, and depression. *Gender & Society*, *21*(1), 28-51. doi:10.1177/0891243206294108

Booth, B. M., Mengeling, M., Torner, J., & Sadler, A. G. (2011). Rape, sex partnership, and substance use consequences in women veterans. *Journal Of Traumatic Stress*, *24*(3), 287-294. doi:10.1002/jts.2064

Breslau, N., & Anthony, J. C. (2007). Gender differences in the sensitivity to posttraumatic stress disorder: An epidemiological study of urban young adults. *Journal Of Abnormal Psychology*, *116*(3), 607-611. doi:10.1037/0021-843X.116.3.607

Bryant-Davis, T., Chung, H., & Tillman, S. (2009). From the margins to the center: Ethnic minority women and the mental health effects of sexual assault. *Trauma, Violence, & Abuse*, *10*(4), 330-357. doi:10.1177/1524838009339755

Bryant-Davis, T., Ullman, S. E., Tsong, Y., & Gobin, R. (2011). Surviving the storm: The role of social support and religious coping in sexual assault recovery of African-American women. *Violence Against Women*, *17*(12), 1601-1618. doi:10.1177/1077801211436138

Budescu, M., Taylor, R. D., & McGill, R. (2011). Stress and African-American women's smoking/drinking to cope: Moderating effects of kin social support. *Journal Of Black Psychology*, *37*(4), 452-484. doi:10.1177/0095798410396087

Burnam, M. A., Stein, J. A., Golding, J. M., Siegel, J. M., Sorenson, S. B., Forsythe, A. B., & Telles, C. A. (1988). Sexual assault and mental disorders in a community population. *Journal of Consulting and Clinical Psychology, 56*(6), 843-850. doi:10.1037/0022-006X.56.6.843

Caetano, R., Baruah, J., Ramisetty-Mikler, S., & Ebama, M. S. (2010). Sociodemographic predictors of pattern and volume of alcohol consumption across Hispanics, Blacks, and Whites: 10-year trend (1992–2002). *Alcoholism: Clinical And Experimental Research*, *34*(10), 1782-1792. doi:10.1111/j.1530-0277.2010.01265.x

Campbell, R., Ahrens, C. E., Sefl, T., Wasco, S. M., & Barnes, H. E. (2001). Social reactions to rape victims: Healing and hurtful effects on psychological and physical health outcomes. *Violence And Victims*, *16*(3), 287-302.

Cavanaugh, C. E., Messing, J. T., Petras, H., Fowler, B., La Flair, L., Kub, J., . . . Campbell, J. C. (2011). Patterns of violence against women: A latent class analysis. *Psychological Trauma: Theory, Research, Practice, and Policy,* doi:10.1037/a0023314

Cuevas, C. A., Bell, K. A., & Sabina, C. (2014). Victimization, psychological distress, and help-seeking: Disentangling the relationship for Latina victims. *Psychology Of Violence*, *4*(2), 196-209. doi:10.1037/a0035819

Curtis-Boles, H., & Jenkins-Monroe, V. (2000). Substance abuse in African-American women. *Journal Of Black Psychology*, *26*(4), 450-469. doi:10.1177/0095798400026004007

Foa, E. B. (1995). *Posttraumatic stress diagnostic scale*. Minneapolis, MN: National Computer Systems.

Foa, E. B., Cashman, L., Jaycox, L., & Perry, K. (1997). The validation of a self-report measure of posttraumatic stress disorder: The Posttraumatic Diagnostic Scale. *Psychological Assessment*, *9*(4), 445-451. doi:10.1037/1040-3590.9.4.445

Fossion, P., Leys, C., Kempenaers, C., Braun, S., Verbanck, P., & Linkowski, P. (2015). Beware of multiple traumas in PTSD assessment: The role of reactivation mechanism in intrusive and hyper-arousal symptoms. *Aging & Mental Health*, *19*(3), 258-263.

doi:10.1080/13607863.2014.924901

Gerstel, N. (2011). Rethinking families and community: The color, class, and centrality of extended kin ties. *Sociological Forum*, *26*(1), 1-20. doi:10.1111/j.1573-7861.2010.01222.x

Gillespie, C. F., Bradley, B., Mercer, K., Smith, A. K., Conneely, K., Gapen, M., . . . Ressler, K. J. (2009). Trauma exposure and stress-related disorders in inner city primary care patients. *General Hospital Psychiatry, 31*(6), 505-514. doi:10.1016/j.genhosppsych.2009.05.003

Golding, J. M. (1999). Intimate partner violence as a risk factor for mental disorders: A meta-analysis. *Journal Of Family Violence*, *14*(2), 99-132. doi:10.1023/A:1022079418229

Goodman, L. A., Corcoran, C., Turner, K., Yuan, N., & Green, B. L. (1998). Assessing traumatic event exposure: General issues and preliminary findings for the Stressful Life Events Screening Q uestionnaire. *Journal Of Traumatic Stress*, *11*(3), 521-542. doi:10.1023/A:1024456713321

Harrington, E. F., Crowther, J. H., & Shipherd, J. C. (2010). Trauma, binge eating, and the "strong Black woman". *Journal Of Consulting And Clinical Psychology*, *78*(4), 469-479. doi:10.1037/a0019174

Hassija, C. M., & Gray, M. J. (2012). NSRs to assault disclosure as a mediator between self-blame and posttraumatic stress symptoms among survivors of interpersonal assault. *Journal Of Interpersonal Violence*, *27*(17), 3425-3441. doi:10.1177/0886260512445379

Hill, T. D., Schroeder, R. D., Bradley, C., Kaplan, L. M., & Angel, R. J. (2009). The long-term health consequences of relationship violence in adulthood: An examination of low-income women from Boston, Chicago, and San Antonio. *American Journal Of Public Health*, *99*(9), 1645-1650. doi:10.2105/AJPH.2008.151498

Holden, K. B., Bradford, L., Hall, S. P., & Belton, A. S. (2013). Prevalence and correlates of depressive symptoms and resiliency among African-American women in a community-based primary health care center. *Journal Of Health Care For The Poor And Underserved*, *24*(4), 79-93.

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*, *11*(2), 174-192. doi:10.1080/15299730903502938

Jones, D. J., & Lindahl, K. M. (2011). Coparenting in extended kinship systems: African-American, Hispanic, Asian heritage, and Native American families. In K. M. Lindahl, J. P. McHale, K. M. Lindahl (Eds.) , *Coparenting: A conceptual and clinical examination of family systems* (pp. 61-79). Washington, DC, US: American Psychological Association. doi:10.1037/12328-003

Kaukinen, C., & DeMaris, A. (2005). Age at First Sexual Assault and Current Substance Use and Depression. *Journal Of Interpersonal Violence*, *20*(10), 1244-1270. doi:10.1177/0886260505277732

Kilpatrick, D. G., Ruggiero, K. J., Acierno, R., Saunders, B. E., Resnick, H. S., & Best,

C. L. 2003). Violence and risk of PTSD, major depression, substance abuse/dependence, and comorbidity: Results from the national survey of adolescents. *Journal of Consulting and Clinical Psychology, 71*(4), 692-700. doi:10.1037/0022-006X.71.4.692

Koss, M. P., Bailey, J. A., Yuan, N. P., Herrera, V. M., & Lichter, E. L. (2003). Depression and PTSD in survivors of male violence: Research and training initiatives to facilitate recovery. *Psychology of Women Quarterly, 27*(2), 130-142. doi:10.1111/1471-6402.00093

Koss, M. P., Gidycz, C. A., & Wisniewski, N. (1987). The scope of rape: Incidence and prevalence of sexual aggression and victimization in a national sample of higher education students. *Journal Of Consulting And Clinical Psychology*, *55*(2), 162-170. doi:10.1037/0022-006X.55.2.162

Kuhlberg, J. A., Peña, J. B., & Zayas, L. H. (2010). Familism, parent-adolescent conflict, self-esteem, internalizing behaviors and suicide attempts among adolescent Latinas. *Child Psychiatry And Human Development*, *41*(4), 425-440. doi:10.1007/s10578-010-0179-0

Lilly, M. M., & Graham-Bermann, S. A. (2009). Ethnicity and risk for symptoms of posttraumatic stress following intimate partner violence: Prevalence and predictors in European American and African-American women. *Journal Of Interpersonal Violence*, *24*(1), 3-19. doi:10.1177/0886260508314335

Littlefield, M. B. (2003). Gender role identity and stress in African-American women. *Journal Of Human Behavior In The Social Environment*, *8*(4), 93-104. doi:10.1300/J137v08n04_06

Littleton, H. L. (2010). The impact of social support and negative disclosure

reactions on sexual assault victims: A cross-sectional and longitudinal investigation. *Journal Of Trauma & Dissociation*, *11*(2), 210-227. doi:10.1080/15299730903502946

Major, B., Zubek, J. M., Cooper, M., Cozzarelli, C., & Richards, C. (1997). Mixed messages: Implications of social conflict and social support within close relationships for adjustment to a stressful life event. *Journal Of Personality And Social Psychology*, *72*(6), 1349-1363. doi:10.1037/0022-3514.72.6.1349

Masuda, A., Anderson, P. L., & Edmonds, J. (2012). Help-seeking attitudes, mental health stigma, and self-concealment among African-American college students. *Journal Of Black Studies*, *43*(7), 773-786. doi:10.1177/0021934712445806

National Center for Injury Prevention and Control. (2011). *National intimate partner and sexual violence survey, 2010 Summary Report.* Retrieved from http://www.cdc.gov/violenceprevention/nisvs/

Orchowski, L. M., Untied, A. S., & Gidycz, C. A. (2013). Social reactions to disclosure of sexual victimization and adjustment among survivors of sexual assault. *Journal Of Interpersonal Violence*, *28*(10), 2005-2023. doi:10.1177/0886260512471085

Peter-Hagene, L. C., & Ullman, S. E. (2014). Social reactions to sexual assault disclosure and problem drinking: Mediating effects of perceived control and PTSD. *Journal Of Interpersonal Violence*, *29*(8), 1418-1437. doi:10.1177/0886260513507137

Pole, N., Best, S. R., Metzler, T., & Marmar, C. R. (2005). Why Are Hispanics at Greater Risk for PTSD?. *Cultural Diversity And Ethnic Minority Psychology*, *11*(2), 144-161. doi:10.1037/1099-9809.11.2.144

Radloff, L. S. (1977). The CES-D Scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement*, *1*(3), 385-401. doi:10.1177/014662167700100306

Rauch, S. A. M., & Foa, E. B. (2004). Sexual trauma: Impact and recovery. In B. T. Litz, & B. T. Litz (Eds.), *Early intervention for trauma and traumatic loss.* (pp. 216-240). New York, NY: Guilford Press.

Resick, P. A. (1993). The psychological impact of rape. *Journal Of Interpersonal Violence*, *8*(2), 223-255. doi:10.1177/088626093008002005

Roberts, A. L., Gilman, S. E., Breslau, J. J., Breslau, N. N., & Koenen, K. C. (2011). Race/ethnic differences in exposure to traumatic events, development of post-traumatic stress disorder, and treatment-seeking for post-traumatic stress disorder in the United States. *Psychological Medicine: A Journal Of Research In Psychiatry And The Allied Sciences*, *41*(1), 71-83. doi:10.1017/S0033291710000401

Sachs-Ericsson, N., Kendall-Tackett, K. A., Sheffler, J., Arce, D., Rushing, N. C., & Corsentino, E. (2014). The influence of prior rape on the psychological and physical health functioning of older adults. *Aging & Mental Health*, *18*(6), 717-730. doi:10.1080/13607863.2014.884538

Selzer, M. L. (1971). The Michigan Alcoholism Screening Test: The quest for a new diagnostic instrument. *The American Journal Of Psychiatry*, *127*(12), 1653-1658. Retrieved from http://ajp.psychiatryonline.org/Issue.aspx?issueID=2788&direction=P&journalID=13

Starzynski, L. L., Ullman, S. E., Townsend, S. M., Long, L. M., & Long, S. M. (2007). What factors predict women's disclosure of sexual assault to mental health professionals? *Journal Of Community Psychology*, *35*(5), 619-638. doi:10.1002/jcop.20168

Sullivan, T. P., Cavanaugh, C. E., Ufner, M. J., Swan, S. C., & Snow, D. L. (2009). Relationships among women's use of aggression, their victimization, and substance use problems: A test of the moderating effects of race/ethnicity. *Journal Of Aggression, Maltreatment & Trauma*, *18*(6), 646-666. doi:10.1080/10926770903103263

Sundermann, J. M., Chu, A. T., & DePrince, A. P. (2013). Cumulative violence exposure, emotional nonacceptance, and mental health symptoms in a community sample of women. *Journal Of Trauma & Dissociation*, *14*(1), 69-83. doi:10.1080/15299732.2012.710186

Taylor, R., Chatters, L. M., Woodward, A., & Brown, E. (2013). Racial and ethnic differences in extended family, friendship, fictive kin, and congregational informal support networks. *Family Relations: An Interdisciplinary Journal Of Applied Family Studies*, *62*(4), 609-624. doi:10.1111/fare.12030

Temple, J. R., Weston, R., Rodriguez, B. F., & Marshall, L. L. (2007). Differing Effects of Partner and Nonpartner Sexual Assault on Women's Mental Health. *Violence Against Women*, *13*(3), 285-297. doi:10.1177/1077801206297437

Tolin, D. F., & Foa, E. B. (2008). Sex differences in trauma and posttraumatic stress disorder: A quantitative review of 25 years of research. *Psychological Trauma: Theory, Research, Practice, and Policy,* (1), 37-85. doi:10.1037/1942-9681.S.1.37

Ullman, S. E. (1996). Social reactions, coping strategies, and self-blame attributions in adjustment to sexual assault. *Psychology Of Women Quarterly*, *20*(4), 505-526. doi:10.1111/j.1471-6402.1996.tb00319.

Ullman, S. E. (1999). Social support and recovery from sexual assault: A review. *Aggression And Violent Behavior*, *4*(3), 343-358. doi:10.1016/S1359-1789(98)00006-8

Ullman, S. E. (2000). Psychometric characteristics of the Social Reactions Questionnaire: A measure of reactions to sexual assault victims. *Psychology Of Women Quarterly*, *24*(3), 257-271. doi:10.1111/j.1471-6402.2000.tb00208.x

Ullman, S. E. (2010). *Talking about sexual assault: Society's response to survivors*. Washington, D.C: American Psychological Association.

Ullman, S. E., & Filipas, H. H. (2001). Predictors of PTSD symptom severity and social reactions in sexual assault victims. *Journal Of Traumatic Stress*, *14*(2), 369-389 doi:10.1023/A:1011125220522

Ullman, S. E., Filipas, H. H., Townsend, S. M., & Starzynski, L. L. (2005). Trauma Exposure, Posttraumatic Stress Disorder and Problem Drinking in Sexual Assault Survivors. *Journal Of Studies On Alcohol*, *66*(5), 610-619.

Ullman, S. E., & Najdowski, C. J. (2011). Prospective changes in attributions of self-blame and social reactions to women's disclosures of adult sexual assault. *Journal Of Interpersonal Violence*, *26*(10), 1934-1962. doi:10.1177/0886260510372940

Ullman, S. E., Starzynski, L. L., Long, S. M., Mason, G. E., & Long, L. M. (2008). Exploring the relationships of women's sexual assault disclosure, social reactions, and problem drinking. *Journal Of Interpersonal Violence*, *23*(9), 1235-1257. doi:10.1177/0886260508314298

Ullman, S. E., Townsend, S. M., Filipas, H. H., & Starzynski, L. L. (2007). Structural models of the relations of assault severity, social support, avoidance coping, self-blame, and PTSD among sexual assault survivors. *Psychology Of Women Quarterly*, *31*(1), 23-37. doi:10.1111/j.1471-6402.2007.00328.x

United States Department of Commerce. (2012). *U.S. Census Bureau projections show a slower growing, older, more diverse nation a half century from now*. United States Census Bureau. Retrieved from http://www.census.gov/newsroom/releases/archives/population/cb12-243.html

United States Department of Justice. (2010). National crime victimization survey. *Bureau of Justice Statistics.* Retrieved from http://bjs.ojp.usdoj.gov/index.cfm?ty=pbdetail&iid=2217

Woods-Giscombé, C. L. (2010). Superwoman schema: African-American women's views on stress, strength, and health. *Qualitative Health Research*, *20*(5), 668-683. doi:10.1177/1049732310361892

Wyatt, G. E. (1992). The sociocultural context of African-American and White American women's rape. *Journal Of Social Issues*, *48*(1), 77-91. doi:10.1111/j.1540-4560.1992.tb01158.x

Zinzow, H. M., Resnick, H. S., Amstadter, A. B., McCauley, J. L., Ruggiero, K. J., & Kilpatrick, D. G. (2010). Drug- or alcohol-facilitated, incapacitated, and forcible rape in relationship to mental health among a national sample of women. *Journal Of Interpersonal Violence*, *25*(12), 2217-2236. doi:10.1177/0886260509354887

Zung, B. J. (1980). Factor structure of the Michigan Alcoholism Screening Test

(MAST) in a psychiatric outpatient population. *Journal Of Clinical Psychology*, *36*(4), 1024-1030. doi:10.1002/1097-4679(198010)36:4<1024::AID-JCLP2270360437>3.0.CO;2-O