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THE IMPACT OF SEXUAL ASSAULT DISCLOSURE REACTIONS ON INTERPERSONAL FACTORS AND MENTAL HEALTH

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A Thesis

Presented to the

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by

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ABSTRACT

Sexual victimization is experienced by about 20% of women and two percent of men (Black et al., 2011). Disclosure of these incidences is high, with about 90% of survivors speaking out at least once about their assault (Ullman & Peter-Hagene, 2014). Though disclosure rates appear high, common reactions given by formal (e.g. law enforcement) and informal (e.g. a friend) sources are negative and counterintuitive to survivor growth (Ullman & Brecklin, 2002). Often studied with military veterans and suicide, perceived burdensomeness and thwarted belonging are tied to social disconnect and perceived rejection from interpersonal support systems, and often follow stressful life events such as trauma (Hill & Pettit, 2014; Ford & Collins, 2010; Van Orden, Cukrowicz, Witte, & Joiner, 2012). Negative reactions to disclosures, and the consequent rejection, can lead to diminished mental health, including depression and posttraumatic stress disorder (PTSD; Ullman & Peter-Hagene, 2014; Starzynski, Ullman, Filipas, & Townsend, 2005). Furthermore, shame has been researched as a possible emotional response to experiencing a traumatic event (La Bash & Papa, 2014), and this may play a role in people's likelihood of experiencing distress following the receipt of negative social reactions. To explore the underlying processes and outcomes related to negative social reactions upon disclosure, the following hypotheses were proposed. First, the five negative social reactions (i.e., control, blaming, distracting, egocentric, and treating differently) would be positively

associated with psychological distress (i.e., depression and PTSD symptoms). Next, the five negative social reactions subscales were predicted to be positively associated with state shame, perceived burdensomeness, and thwarted belonging. Finally, it was predicted that the relationships between the five negative social reaction subscales and psychological distress would be mediated by state shame, perceived burdensomeness, and thwarted belonging. Though all five negative reactions were associated with PTSD, blame and distraction were not associated with depression. Further, blame and treating differently were associated with perceived burdensomeness, however the other negative reactions and outcome associations varied. Surprisingly, an intervening relationship of the five negative reactions, shame, perceived burdensomeness, thwarted belonging, and psychological distress was not established. Implications of this study may provide important insight into relationships previously not examined with sexual assault and mental health outcomes.

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CHAPTER ONE

BACKGROUND AND INTRODUCTION

Introduction

The term sexual victimization encompasses acts of sexual violence such as rape, sexual coercion, unwanted sexual contact, non-contact sexual experience that was unwanted, and being made to penetrate someone else (Black et al., 2011). Findings from the national study of sexual violence reveal that rape is a common phenomenon experienced by about 20% of women and 1.5% of men, according to reported cases (Black et al., 2011). Additional findings suggest that forms of sexual victimization other than rape are experienced throughout the lifespan by a staggering 45% of women and 23% of men. Most often, these incidences of rape are perpetrated by someone the victim knew, with approximately 13% of perpetrators being family members and 51% being current or former romantic partners. However, approximately 14% of incidences of rape were perpetrated by a stranger, and 41% were a casual acquaintance (Black et al., 2011). Furthermore, the national study of sexual violence revealed that among female victims of rape, the majority of incidences occur before the victim is 25 years old, and a quarter of male victims experience rape around ten years of age. Additionally, 35% of women who were victimized before the age of 18 experienced rape as an adult. Within the United States, about 18% of women surveyed in the national survey of sexual violence had experienced rape, and

45% had experienced some other victimization. Furthermore, within the state of California, approximately 15% of women will experience rape within their lifetime, and 41% will experience other forms of sexual violence.

Consequences of sexual victimization varies from physical health problems to mental health issues (Black et al., 2011). Among women in California who have experienced rape, approximately 19% will experience some type of posttraumatic stress disorder (PTSD) symptoms, and about 15% will need medical care due to injury or assault related circumstances (Black et al., 2011). According to Elklit and Christiansen (2010), PTSD is one of the highest predicted outcomes following sexual trauma. Elkit and Christiansen (2010) evaluated the likelihood of developing PTSD following acute stress disorder (ASD) among 148 women who had experienced rape and were seen at a rape crisis center shortly after their rape. Results indicated that ASD and PTSD symptoms were highly expressed within the sample, with 59% meeting criteria for ASD and 45% meeting full criteria for PTSD after a three-month period. Additionally, the women who reported experiencing hyper-arousal, avoidance, disassociation, and re-experiencing directly following their assault met diagnostic criteria for PTSD at a later point. However, ASD was not predictive of PTSD symptoms despite the relationships discovered. One of the listed limitations was the use of a treatment-seeking sample, as the generalizability of results to the general population and individuals who may not be seeking support services is unknown. An additional issue noted was the extent to which the amount of

support and care the women received through the crisis center may have impacted mental outcomes for the sample and how this impacts generalizability of findings to women who do not receive similar emotional and resource support (Elkilt & Christiansen, 2010).

In a meta-analysis conducted by Brewin, Andrews, and Valentine (2000), risk factors for PTSD in individuals who had experienced trauma was examined. Fourteen risk factors were assessed, with three categories (e.g., severity of the trauma, minimal social support, and overall stress). While some pre-trauma factors were predictive of PTSD, such as previous trauma, education, and adversity experienced during childhood, peri and post-trauma (e.g., trauma severity and lack of social support) factors had more stable and stronger associations with negative mental health outcome severity. Limitations point towards the large amount of studies that focused on pre-trauma risk factors. Additionally, Brewin et al. (2000) suggested that some of the pre-trauma variables could have been influenced by variables not present in the studies, such as mediating variables. Though PTSD is well established as an unfortunate, yet common outcome for sexual victimization and rape, depression is also a frequent and, at times, comorbid outcome.

To determine the influence of sexual victimization on internalizing disorders (e.g., depression and anxiety), Fergusson, Swain-Campbell, and Horwood (2002) utilized data used in the Christchurch Health and Development Study. Approximately 1,050 participants were used, and questions regarding

gender, anxiety, depression, childhood sexual abuse (endorsed at the age of 18 or 21), and adult sexual assault were evaluated. For general reports of depression and anxiety, female participants were over two times more likely to have an internalizing disorder compared to males in the sample (Fergusson et al., 2002). Experiencing sexual assault was up to 8 times more likely in female participants than men, and exposure to sexual assault slightly increased the likelihood that women would experience depression compared to men. Though some of the limitations mentioned included a single item for sexual assault exposure assessment, other measurements (e.g., LEC-5) assess in similar ways.

Disclosure and Social Reactions

Sexual victimization can have a meaningful impact on adjustment and the well-being of targets (Ullman, 1996). Reasons for disclosing sexual victimization can vary, particularly depending on the type of assault and who the assailant was (Banyard et al., 2007). Reasons include whether the target views their situation as “real” (Du Mont, Miller, & Myhr, 2003), the relationship the target has with the perpetrator (Banyard et al., 2007), and the perception that their situation will not be seen as serious enough. Regardless of reason, a vast majority of individuals (about 92%) who experience sexual victimization disclose to one or more person (Ullman & Peter-Hagene, 2014). Negative social reactions can deter targets of sexual victimization from seeking further support and services, which can produce overall consequences for the targets mental health (Ullman & Peter-Hagene, 2014). Negative feelings can follow from an unsupportive reaction to

disclosure, such as shame and psychological distress following a negative disclosure reaction (DeCou, Cole, Lynch, Wong, & Matthews, 2017), and self-blame can exacerbate PTSD symptoms through these negative reactions (Hassija & Gray, 2012).

One factor that may influence and sexual assault survivor's likelihood of developing trauma-related disorders is quality of support received upon disclosure. According to Ullman (2000), seven major types of reactions are experienced by individual who disclose sexual victimization. Positive reactions typically center around providing emotional support and providing tangible aid/support to the individual making the disclosure. When emotional support is provided, the recipient of the disclosure can comfort and listen (Ullman, 2000). Tangible aid/information support can include providing information or help, in turn showing belief for the disclosed information (Ullman, 2000; Ullman & Fillipas, 2001). Conversely, negative social reactions encompass more types of reactions, in addition to being the most prevalent reaction to disclosures (Ullman, 2000; Ullman & Peter-Hagene, 2014). Five types of negative reactions have been established: blaming the victim (i.e., telling the discloser they caused the event), treating the victim differently (i.e., creating social distance between themselves and the victim), distracting the victim (i.e., by telling them to move on with their life), egocentric (i.e., the individual receiving the disclosure making the disclosure about them), and control (i.e., trying to take control of the victim and their decisions).

Orchowski and associates (2013) aimed to evaluate the impacts of social reactions on post sexual assault adjustment. Specifically, the individual types of reactions (e.g., emotional support, tangible aid/support, victim blame, treating differently, distracting, egocentric, and control) were analyzed along with adjustment factors (i.e., psychological distress [PTSD, depression, anxiety], social support, coping strategies, and self-esteem). In an effort to prevent confounds, social desirability and assault severity were also measured. Orchowski and colleagues (2013) utilized a convenience sample of 374 young college women that were recruited as part of a larger study. Results revealed that participants who received controlling reactions to their sexual assault disclosure had higher levels of PTSD, depression, and anxiety symptoms. Furthermore, controlling reactions were also associated with lower feelings of worth. When blaming reactions were received, participants reported lower self-esteem and problem solving related coping skills. Interestingly, when the reaction resulted in being treated differently, participants reported higher levels of self-esteem. Additionally, when emotional support was given as a reaction, individuals were more likely to seek more emotional support from support sources. Though being treated differently is a negative reaction (e.g., Ullman, 2000), Orchowski and colleagues (2013) speculated that the relatively young sample (mean age between 18-19 years old) may have influenced this particular result, as participants may not have viewed differential treatment as harmful and/or this reaction may have forced the individuals to process their assault and being a

posttraumatic growth process. Orchowski and associates (2013) noted that the age and lack of a diverse sample may have limited generalizability, as individuals who do not fit the study demographic (i.e., Caucasian and young) may have different experiences and outcomes from receiving negative social reactions.

Ullman (1996) explored the impact of various social reactions on sexual victimization survivors and their mental health outcomes. Using 155 women in the community who had experienced an assault more than one year ago, a mail survey was conducted to assess the impact of disclosure habits, self-blame, strategies for coping, and social reactions on adjustment following the assault. In regards to the type of reactions received, the majority (80%) received either supportive reactions (e.g., emotional support, being listened to, and belief) or the victim felt the situation was being taken over by the recipient (Ullman, 1996). Seventy percent experienced victim blame following disclosure, followed by tangible aid and distraction. Though positive reactions were experienced by many participants, and may intuitively seem more important to mental health, positive reactions appeared to have little impact on psychological adjustment following an assault (Ullman, 1996). Feeling believed, received emotional support, and received aid did not have a relationship with perceived recovery. However, all negative reactions aside from victim blame predicted poor recovery and heightened negative psychological symptoms (Ullman, 1996). Accordingly, neither behavioral or characteristic self-blame served as significant mediators between negative social reactions and psychological symptoms or recovery.

Additionally, while some positive reactions can immediately improve feelings and recovery experience, negative reactions have a detrimental long-term impact on overall recovery with lessened recovery and heightened negative psychological consequences (i.e., increased self-blame and utilization of avoidance coping strategies). Furthermore, negative reactions to disclosure had a negative relationship with self-blame, and both approach and avoidance coping served as mediators between negative reactions and psychological symptoms (Ullman, 1996).

Though a part of the proposed study aimed to assess negative social reactions as a predictor, these reactions have previously been established as having a crucial role in PTSD experience for those who are interpersonal assault survivors (Hassija & Gray, 2012). To better view the mechanisms of social reactions, Hassija and Gray (2012) evaluated the hypothesis that negative social reactions had an intervening relationship between self-blame and PTSD with 68 primarily female participants. Results indicated that higher levels of self-blame was associated with increased receipt of negative social reactions upon disclosure and PTSD symptom severity. When the mediation model was tested, a direct, positive relationship between self-blame and PTSD symptoms were found, along with a positive direct relationship between self-blame and negative social reactions. And, in accordance with the hypothesis, negative social reactions mediated the relationship between self-blame and PTSD severity. Temporal precedence was listed as a limitation due to the inability to infer

causation. Additional limitations inferred to the college sample limiting generalizability to the general population.

Disclosure of sexual victimization to at least one person is typically common, however most responses are negative (Ullman & Peter-Hagene, 2014). These negative reactions may inhibit further seeking of support and increase the likelihood of developing post trauma psychopathologies (Ullman & Peter-Hagene, 2014; Du Mont, Miller, & Myhr, 2003; Orchowski et al., 2013; Ullman, 1996; Hassija & Gray, 2012). The particular relationship that other constructs have on these reactions varies, however a similar theme of self-blame and impacted recovery factors was seen. Other self-related feelings, such as shame, can have consequences for mental health when an individual experiences trauma (La Bash & Papa, 2014).

Shame

As previously mentioned, negative social reactions can have major impacts on mental health. Shame has been researched as a possible emotional response to experiencing a traumatic event (La Bash & Papa, 2014), and this may play a role in people's likelihood of experiencing distress following the receipt of negative social reactions. Furthermore, shame is thought to be a result of self-blame individuals feel because of their traumatic experience (La Bash & Papa, 2014). Shame can be defined as an aversive emotion that is caused by experiencing an event that challenges and threatens the self and the perceptions of others. La Bash and Papa (2014) evaluated the influence of shame on PTSD

symptom development. Specifically, shame was viewed as a direct influence on other risk factors and the development of PTSD. Via online data collection methods, La Bash and Papa recruited 99 students, with the majority being female, to participate in their study. Findings indicated that risk factors (i.e., previous traumatic experiences and experiencing inter versus impersonal trauma) each increased the likelihood of developing PTSD and of experiencing shame related to the event, with previous traumatic experiences and interpersonal trauma having the strongest relationships. Furthermore, shame related to previous trauma had a mediating relationship between interpersonal trauma and PTSD. La Bash and Papa (2014) go on to further implicate that risk factors are influenced by trauma related shame and fear, and this relationship impacts the severity of PTSD symptoms. Limitations mentioned included cross sectional methods, self-report, and the use of pathway analyses. La Bash and Papa (2014) demonstrated the mediating ability of shame on trauma factors, however shame can also be integrated in models involving negative social reactions.

DeCou and associates (2017) examined the mediating relationship of shame between negative social reactions and mental health outcomes of sexual assault victims. Specifically, abuse specific shame was used to determine the influence of the shame experienced by the assault, and mental health outcomes were measured a psychological distress (i.e., depression, global distress, and PTSD). Of the 207 undergraduate females, that majority of participants (90.9%)

reported they experienced the recipient of their disclosure try to distract from the disclosure, followed by reporting the victim felt the recipient trying to take control of the situation (84.1%), recipients responding egocentrically (80.3%), the victim being treated differently (64.3%), and the recipients receiving victim blame related reactions (55%). Surprisingly, about 72% of the participants also received positive support through offer of tangible aid and support (DeCou et al., 2017). Furthermore, abuse specific shame was a significant intervening variable between negative disclosure reactions and all three variants of psychological distress. The pathways in the relationship were positive, indicating that higher feelings of the negative reaction lead to higher assault specific shame, which lead to higher instances of psychological distress. While this study examined the full relationship of negative social reactions, individual influences of each type were not analyzed as predictors. Within the limitations mentioned by DeCou and colleagues (2017), a call for expanded models to examine this relationship and to explore male victims of assault were established.

Often within the literature, the primary focus is on female victims of sexual violence. Weiss (2010) examined the experiences of men who were victims of unwanted sexual contact. Using the National Crime Victimization Survey, sexual assault narratives and experiences of men (*N* = 94) were compared to women's (*N* = 956). Many of the experiences that men and women encountered were similar, however there were important differences between men and women. Overall, men were more likely to feel demasculinized due to victim blaming

(Weiss, 2010). As with women, men often reported feeling shameful of their experience. Furthermore, within the male victim's narratives, shame was the major factor in why men did not report their assault to the police. While the root of the shame is not specified, speculation of the shame may explain the embarrassment men feel when they are assaulted. Assaults that are perpetrated by women is a threat to the man's masculinity, in turn advancing the shame felt due to the incident (Weiss, 2010). Additional shame may be felt due to the stigmatization of men who are raped being gay. Weiss (2010) argues that this stigma and shame may add to the reluctance of gay men reporting to the police. As with women victims, narratives included expressions of being doubted and not supported, however men only report about half as often as women to authorities. These stigmatizations that influence and exacerbate the shame felt by men may create a problem for victim justice, and may also inhibit growth due to disclosure. The Weiss (2010) study only examined reporting to police, however disclosure habits should be researched as well. Limitations were not directly described, though a need for future research on male experiences that gathers a more in depth exploration of men's experiences were discussed.

Perceived Burdensomeness and Thwarted Belonging

Interpersonal Theory of Suicide (ITS) is a theory of suicidal behavior that encompasses a lack of two essential needs for avoiding suicidal tendencies (Joiner, 2005). These two needs are effectiveness and belonging, however when these needs are thwarted, they become perceived burdensomeness and

thwarted belonging. Joiner (2005) explains that burdensomeness occurs when effectiveness is threated due to an event that is perceived to negatively impact one's social group. Specifically, feeling as though one's social group has been let down due to certain actions influences the perception that one is a burden. Through this burdensomeness, individuals feel their incompetence negatively impacts their social circles. Joiner (2005) also mentions the link between depression and burdensomeness. Depression related symptoms can decrease feelings of effectiveness in social relationships, particularly close or romantic relationships, increasing he perception and feelings of burdensomeness. Though perceived burdensomeness can be harmful to social relationships and increase the risk of suicide or depressive symptoms, belongingness can provide as a protective factor (Joiner, 2005).

Thwarted belonging embodies the feelings of belonging due to being loved or cared about and having meaningful, positive, and frequent interactions with others. In order to feel belonging, social relationships need to be frequent, in person, and elicit the feeling of being cared about (Joiner, 2005). When belonging is thwarted, the negative impact of losing social connections may produce similar feelings to physical pain. Individuals with depression often experience less engaged social interaction due to a lack of nonverbal communication, further establishing the social disconnect (Joiner, 2005). Furthermore, thwarted belongingness is related to feeling isolated and disconnected from important social groups. Feelings of thwarted belonging can

impact individuals far more than burdensomeness, particularly through inhibiting therapeutic help of further social assistance (Joiner, 2005).

According to Van Orden et al. (2010), the ITS describes suicidal behavior in accounts for the influence of perceived burdensomeness and thwarted belonging on suicidal behavior. Most often, these feelings are due to being socially isolated (Van Orden et al., 2010). When we feel thwarted belonging, death becomes more salient and longed for. As social creatures, we have an inherent need for social connection and balanced social integration. According to the ITS, thwarted belonging is comprised of increased loneliness and an absence of caring and positive relationships (Van Orden et al., 2010). Furthermore, the ITS establishes that thwarted belonging is influenced by individual and intrapersonal factors. Perceived burdensomeness, particularly when felt towards family or social relationships, causes the individual to feel expendable and unnecessary. The ITS further explains perceived burdensomeness as individual feelings of self-hatred combined with seeing the self as too flawed to engage with others (Van Orden et al., 2010). If individuals feel they are a burden on multiple individuals or if the one individual the perception is felt towards is extreme, the situation can be dangerous. Combined, perceived burdensomeness and thwarted belonging are highly based within social perceptions and can create isolated feelings for an individual. Feeling like a burden and as though there is a lack of belonging can have negative impacts on social quality of life, and often follow stressful life events such as trauma.

Davis and associates (2014) examined the relationship between ITS based suicide ideation and PTSD. Suicide ideation, via the ITS (Joiner, 2005), consists of high levels of both perceived burdensomeness and thwarted belonging. According to Davis et al. (2014), detachment/estrangement (i.e., symptom of emotional numbing due to PTSD) was indicative of perceived burdensomeness. Three hypotheses were proposed: that PTSD symptoms would have a positive relationship with suicide ideation, detachment/estrangement would have the strongest zero order correlations with suicide ideation, and after controlling for negative response bias and invalid response patterns, depressive symptoms, and type of trauma, detachment/estrangement would have a significant relationship with suicide ideation (Davis et al., 2014). Data were collected from 434 female college students who had experienced a traumatic event. Results indicated a positive relationship between PTSD severity and suicide ideation, indicating that as PTSD symptom severity increased, suicide ideation also increased. Furthermore, detachment/estrangement related PTSD symptoms had high positive correlations with suicide ideation, demonstrating as detachment/estrangement symptoms increased, suicide ideation increased as well (Davis et al., 2014). Additionally, suicide ideation and detachment/estrangement had the strongest relationship out of all of the PTSD symptoms assessed. When all other PTSD symptoms besides detachment/estrangement, trauma type, and negative response bias were controlled for, detachment/estrangement was a significant predictor of suicide

ideation. Further, symptoms related to depression also demonstrated a significant positive relationship with suicide ideation. According to Davis and colleagues (2014), these results have crucial clinical implications. Specifically, when individuals who have experienced trauma are assessed for suicide risk, the presence of detachment/estrangement (or perhaps perceived burdensomeness) should be considered. Davis and associates (2014) presented a few crucial limitations, including modest effects, the need for a culturally and gender diverse sample, and the need for future studies to directly measure perceived burdensomeness and thwarted belonging, rather than basing measures on theoretically related measures.

The Present Study

In summary, when instances of sexual victimization occur, usually individuals disclose their experience to at least one person (Ullman, 2000). Negative reactions to these disclosures can impact mental health more than positive ones (Ullman, 1996), and these negative reactions are most common (Ullman & Peter-Hagene, 2014). Additionally, negative social reactions can influence shame due to the experience of social judgement (La Bash & Papa, 2014). Furthermore, perceived burdensomeness and thwarted belonging are tied to social isolation and withdrawal (Joiner, 2005; Van Orden et al., 2010), possibly increasing avoidant behavior. Frequently, PTSD has been seen as an outcome of trauma related to sexual victimization (Brewin, Andrews, & Valentine, 2000), in addition to depression (Fergusson et al., 2002). Moreover, PTSD, perceived

burdensomeness, thwarted belonging, and shame are related to depression as a consequence, and further as a comorbid occurrence to PTSD (DeCou et al., 2017). The present study presents a model that aims to connect the previously mentioned variables to better understand the impact of sexual victimization disclosures.

Within the DeCou and associates' article (2017), one limitation was the possibility for other models, indicating there could be more to explain these relationships. Although the proposed study is based off of the DeCou and associates (2017) model, the variable of shame will be different (state shame), however it will still be utilized as a mediator. The proposed study will further explore the dynamic nature of mental health distress due to reactions of disclosure. Additionally, the DeCou et al. (2017) article assessed only female survivors, leaving a need in the literature for male participants experiences. Within the Elkilt and Christiansen (2010) article, the sample used was women who were seeking assistance and emotional support. This limitation may be addressed with the proposed study, since the initial disclosure reactions are assessed and the support that followed will be examined.

Orchowski and colleagues (2013) tested individual subcategories of positive and negative reactions as predictors of sexual assault adjustment. One mentioned limitation was the lack of generalizability to the greater community due to the age and lack of diversity of the sample. The proposed study aims to utilize a convenience college sample in addition to recruiting members of the

community to reveal and dissect any differences between the two samples. Furthermore, Orchowski and associates (2013) described conflicting results (i.e., a negative reaction having a positive relationship with self-esteem) and only associations with controlling behavior and negative mental health outcomes. Additionally, the proposed study will explore and add information about each specific type of negative social reaction to the literature, as there are few studies that do so.

La Bash and Papa (2014) used a unidimensional measure of shame by asking if the participant felt shame during their traumatic experience with a single item. While this may have been sufficient for their study, it does not provide a dynamic view of the construct of shame, and it leaves a gap in the ability to draw implications. For the proposed study, state shame was anticipated as an intervening variable. While this measure is focusing on a trait the participant has at the moment they take the survey, it will nonetheless provide a more dynamic and unique view of shame that is not currently present in the literature.

Davis and associates (2014) mentioned limitations that the present study aims to address. Specifically, introducing a more culturally diverse sample to explore any differences present between cultural backgrounds. Further, the Davis et al. (2014) study only included female participants, and the present study aims to include both female and male participants. Additionally, the proposed study would directly measure perceived burdensomeness and thwarted belonging with PTSD and depression symptomology. Including more in depth

measurements allows for an expanding of the understanding of how these constructs relate to one another.

In order to examine the underlying processes that may account for the association between negative social reactions upon disclosure and negative mental health outcomes, the following hypotheses were proposed. First, the five negative social reactions subscales (i.e., control, blaming, distracting, egocentric, and treating differently) would be positively associated with psychological distress (i.e., depression and PTSD symptoms). Second, the five negative social reactions subscales (i.e., control, blaming, distracting, egocentric, and treating differently) would be positively associated with state shame, perceived burdensomeness, and thwarted belonging. Third, I predicted that the relationships between the five negative social reaction subscales and psychological distress would be mediated by state shame, perceived burdensomeness, and thwarted belonging.

CHAPTER TWO

METHODS

Methodology

Participants

Prior to being eligible for participation, all potential participants were prescreened via a pre-screening procedure arranged via an online survey management tool. Specifically, potential participants completed the Life Events Checklist for DSM-5 (LEC-5) to assess whether they had ever experienced a sexual assault or an "other unwanted sexual experience." Initially, 130 college women were recruited, however after removing participant data due to an abundance of skipped responses, 106 undergraduate women's data were utilized. The majority of the sample were seniors (56%), and approximately 76 percent of participants identified as Hispanic. The mean age was 23.9 years old. The majority of participants were in a committed relationship (43%) and most participants made less than $15,000 a year (66%). Detailed demographic information can be found in Table 1.

Measures

Demographics. A questionnaire assessing various socioeconomic and descriptive factors including age, gender, ethnic background, racial background, marital status, and yearly income was utilized.

Life Events Checklist for DSM-5 (LEC-5; Weathers, Blake, Schnurr, Kaloupek, Marx, & Keane, 2013). The LEC-5 was used to assess the participants' experience with potentially traumatic events. The LEC-5 is a 17-item measure which asks respondents to indicate which potentially traumatic experiences they have been exposed to in their lifetime (e.g., natural disaster, sexual assault [rape, attempted rape, made to perform any type of sexual act through force or threat of harm], fire or explosion, other unwanted or uncomfortable sexual contact). In the modified version that will be used in this study, participants will only have the option of selecting if they experienced any of the 17 events listed firsthand or if they have not. Items that will be used to recruit participants are the sexual assault and other unwanted sexual contact items. The LEC was also used as a screening tool following data collection to double check that participants have indeed experienced a type of sexual victimization.

Posttraumatic Stress Disorder Checklist 5 (PCL-5; Weathers, Litz, Palmieri, Marx, & Schnurr, 2010). The PCL-5 is a measurement consisting of 21 items that assess PTSD symptom severity as outlined in the Diagnostic and Statistics Manual, V (DSM-5). Respondents were asked to rate on a 5-point scale, ranging from 0 = *not at all* to 4 = *extremely*. Participants answer the amount of distress experienced within the past 30 days. This distress was measured as a result of PTSD symptoms, with scores ranging from 0 to 80, and clinical cutoff scores for PTSD diagnosis for civilians being a total score of 44. Sample questions include how much they were bothered by "Feeling very upset

when something reminded you of the stressful experience" and "Avoiding memories, thoughts, or feelings related to the stressful experience." Cronbach's alpha was .95, demonstrating strong internal consistency.

Center for Epidemiological Studies Depression Scale, Revised (CESD-R; Eaton, Smith, Ybarra, Muntaner, & Tien, 2004). The CESD-R a 20-item brief measure of symptoms of depression. Respondents indicate how often they have experienced these symptoms over the past week or two on a 5-point scale, ranging from 0 = *not at all or less than one day* to 4 = *nearly every day for two weeks*. Scores of 16 or greater represent individuals who are at higher risk for depression. Sample items include "I could not shake off the blues." And "I felt sad." Cronbach's alpha was high at .95.

State Shame and Guilt Scale (SSGS; Marschall et al., 1994). The shame subscale from the SSGS was used to assess participants state shame. Participants were asked to report their current feelings on 15-items via a five-point Likert scale, with 1 = *not feeling this way at all,* and 5 = *feeling this way very strongly*. Lower scores indicate lower reported feelings of shame. To assess how individuals felt during the moment, shame response choice include "I feel remorse, regret" or "I cannot stop thinking about something bad I have done." Reliability is good, with the alpha for the state shame subscale being .85.

Interpersonal Needs Questionnaire (INQ; Van Orden, Cukrowiczm, Witte, & Joiner, 2012). The INQ is a 15-item measure that assesses individual feelings of perceived burdensomeness and thwarted belonging. The measure consists of

five items that measure perceived burdensomeness, and nine items that measure thwarted belonging. Responses are on a 7-point scale and range from 1 = *not at all true for me* to 7 = *very true for me*. To assess how an individual feels, items such as “These days, the people in my life would be happier without me “, and “These days, I rarely interact with people who care about me”. Higher scores for the burdensomeness subscale indicate higher levels of perceived burdensomeness, and higher scores for the thwarted belonging subscale indicating greater thwarted feelings. Cronbach’s alphas were .95 for perceived burdensomeness and .90 for thwarted belonging, indicating good reliability (Van Orden et al., 2012).

Social Reactions Questionnaire (SRQ; Ullman, 2000). The SRQ is a 48-item measure of perceived reactions to disclosure of sexual victimization experiences. The items are split into 8 categories that include two positive reactions (i.e., belief, aid/info, and emotional support) and negative reactions (i.e., blame, egocentric, distraction, control, and treat differently). Item responses are on a 5-point scale ranging from 0 = *never* to 4 = *always* based on how often disclosure reactions were experienced, and include “Distracted you with other things” and “Focused on his/her own needs and neglected yours”. Higher scores for the positive subscales indicate more frequency of positive reaction, and higher scores for the negative reaction subscales indicate higher perception of reactions being negative. Cronbach’s alpha for the negative reactions subscales ranged from .72 to .82 (see Table 2 for detailed alphas).

Procedure

The study was conducted in two phases: a mass screening phase and the study survey phase. During the mass screening phase, participants were pre-screened for trauma history and recruited via SONA research systems based on their response to the worst experience on the LEC-5 (Weathers et al., 2013). Participant eligibility was contingent on reporting that either a sexual assault or other unwanted sexual contact were the worst traumatic events experienced from the LEC-5. During the study survey phase, participants were presented with a consent form and notified of the sensitive nature of the survey and then provided access to the study surveys online. Measures were presented in the following order, the LEC-5, PCL-5, CESD-R, SSGS, SRQ, and the INQ. A demographic questionnaire was presented last. Following the completion of the study, participants were provided post-study information and awarded credit for their participation they could use in exchange for extra credit in participating psychology courses.

Design

Associations of all hypothesized variables were tested via Pearson correlations using IBM Statistics Package for the Social Sciences (SPSS) version 25. Path analysis was conducted using the AMOS plug-in (version 25) for SPSS version 25 to assess the fit of the hypothesized mediation model (see Figure 1). For the mediation path analysis, the variables were as follows: the predictors were the five negative social reactions (i.e., blame, distraction, control, treat differently,

and egocentric), the mediators were state shame, perceived burdensomeness, and thwarted belonging, and the dependent variables were PTSD and depressive symptom severity.

CHAPTER THREE

RESULTS

Three hypotheses were tested to determine the associations and relationships between negative reactions to sexual assault disclosure, shame, perceived burdensomeness, thwarted belonging, depression, and PTSD.

Hypothesis One

Hypotheses one predicted that the five negative social reactions (i.e., control, blaming, distracting, egocentric, and treating differently) would be positively associated with psychological distress (i.e., depression and PTSD symptoms).

Depression

Social reactions centering around egocentric behavior (r = .28, p < .01), controlling actions (r = .24, p < 05), and being treated differently (r = .26, p =.01) were significantly and positively associated with depression symptoms, and each reaction had small to moderate effect sizes. Blaming reactions and distracting the survivor upon disclosure were not significantly associated with depression symptom severity (see Table 2).

PTSD

The negative social reactions, blame (r = .22, p < .05), egocentric (r = .45, p < .001), distraction (r = .35, p < .001), control (r = .41, p <.001), and treat differently (r = .48, p < .001) were all positively and significantly associated with

PTSD symptoms, with egocentric, control, and treat differently having the strongest effect out of the five reactions.

Hypothesis Two

Next, the five negative social reactions subscales (i.e., control, blaming, distracting, egocentric, and treating differently) were hypothesized to be positively associated with state shame, perceived burdensomeness, and thwarted belonging (see Table 2).

Perceived Burdensomeness

Blame was significantly and positively associated with perceived burdensomeness (r = .43, p < .001). Furthermore, being treated differently was also significantly and positively associated with perceived burdensomeness (r = .29, p <.01). Egocentric disclosure reactions were significantly associated with perceived burdensomeness (r = .28, p <.01). Distraction and control were not associated with perceived burdensomeness (see Table 2).

Thwarted Belonging

Additionally, the social reaction blame was positively associated with thwarted belonging (r = .26, p < .01). Moreover, the social reaction being treated differently was positively associated with thwarted belonging (r = .19, p < .05). The social reactions egocentric, treat differently, and control were not significantly associated with thwarted belonging (see Table 2).

State Shame

Further, blame was positively associated with state shame (r = .27, p < .01). Additionally, treat differently was positively associated with state shame (r = .22, p < .05). Egocentric reactions had a positive association with state shame (r = .26, p < .01). However, controlling reactions were only significantly associated with state shame (r = .26, p < .01).

Hypothesis Three

To test this hypothesis, I used structural equation modeling procedures in SPSS AMOS version 25. For this model, I tested the five negative social reactions to disclosure (i.e., control, blaming, distracting, egocentric, and treating differently) as the primary predictors, perceived burdensomeness, thwarted belonging, and state shame as the three mediating variables, and two variables of psychological distress (i.e., depression and PTSD symptoms) as the outcome variables (see Figure 1). I proposed that the relationships between the five negative social reaction subscales and psychological distress would be mediated by state shame, perceived burdensomeness, and thwarted belonging. Path analyses revealed that the hypothesized mediation model was poor. In terms of absolute fit, the model was unacceptable $\chi^2(14) = 143.13$, (*RMSEA*) = .29. In terms of relative fit, the model was unacceptable as well (*PAGF)* = .25. None of the five negative social reactions were indirectly predictive of depression or PTSD via shame, perceived burdensomeness, or thwarted belonging. Further, any indirect effects that were present were negligible. Additionally, only three

areas of predictability were revealed, however these should be taken with caution as the model was null. Blame was a positive significant predictor of perceived burdensomeness (β = .41, p < .01). Moreover, state shame positively predicted both depression (β = .49, p < .01) and PTSD (β = .67, p < .01). For detailed beta information for all paths assessed, see Table 3.

CHAPTER FOUR

DISCUSSION

Hypotheses Outcomes

Of the three hypotheses tested, many unexpected findings were revealed. For the first hypothesis, all five negative reactions were significantly and positively associated with PTSD. Meaning, as each of these five reactions were increasingly experienced and perceived by the sexual assault survivor, levels of PTSD symptom severity also increased. However, the only negative reactions that had a significant and positive association with depression were egocentric, control, and treat differently. As these three reactions are experienced in higher frequency, the severity of depression increases. The mediation hypothesis of the five negative reactions predicting depression and PTSD via state shame, perceived burdensomeness, and thwarted belonging was not supported, although some paths were statistically significant. Specifically, blame related reactions predicted perceived burdensomeness, state shame predicted both increased depression and PTSD symptoms, however, these results must be interpreted with caution as the overall mediation model was not significant.

General Discussion of Findings

The entirety of hypothesis one was not supported, however the results pertaining to PTSD were as expected and is consistent with some of the literature (Ullman et al., 2007; Ullman & Filipas, 2001). Though these results

were consistent with the predicted hypothesis, only three of the negative reactions (e.g., egocentric, control, and treat differently) were associated with depression. In studies that measured depression as an outcome (DeCou et al, 2017; Hakimi, Bryant-Davis, Ullman, & Gobin, 2016; Ahrens, Stansell, & Jennings, 2010), negative social reactions were combined together, and thus as a whole were associated with depression. Orchowski and colleagues (2013) discovered a similar finding in that controlling reactions lead to higher symptoms of depression; however, the other reactions did not share the same associations.

For hypothesis two, the five negative reactions did not associate as predicted. Of the five, blame and treating differently were the only two that significantly associated with perceived burdensomeness, thwarted belonging, and state shame, though the associations were small to moderate in effect except for blame and perceived burdensomeness. Egocentric reactions only associated with perceived burdensomeness and state shame, and control only associated with shame. Distraction as a social reaction to sexual assault disclosure did not significantly associate with any of the three outcome variables for hypothesis two. Literature is sparse in regards to viewing perceived burdensomeness and thwarted belonging with sexual assault, and the literature on shame and sexual assault reactions focuses more on shame related to the assault (DeCou et al., 2017) or a retrospective single response answer to their assault experience (La Bash & Papa, 2014). However, Ullman and associates (2002) reviewed suicidality in women who were sexual assault survivors, and

suicidal ideation is a tangible construct when viewing the etiology of sexual assault, therefore the inclusion of ITS variables (e.g., perceived burdensomeness and thwarted belonging) into a sexual assault outcome model may be viable with adjustments. Furthermore, the use of a state shame measure may have been inappropriate for the desired model, and the results obtained may be reflective of assessing a current mood state as opposed to emotional consequences of assault-related attributions (e.g., self-blame).

The proposed mediation model was overall unsuccessful. In similar studies (DeCou et al., 2017; Hassija & Gray, 2012; Ahrens et al., 2010), negative social reactions were either grouped into one variable prior to analysis or analyzed in a structural equation model with a combined unobserved variable. Within these three studies, the five negative reactions were combined and when the overall power was sufficient, the negative social reactions had better predictive power. A latent variable to account for the covariance between the five negative reactions was attempted, however due to the small sample size, the model did not run successfully. Though some of the associations in the mediation model were significant (e.g., blame and perceived burdensomeness, shame and depression, shame and PTSD), these results could be erroneous and should be received as preliminary in nature.

Relyea and Ullman (2015) explored the psychometric qualities of the SRQ and how each of the negative reactions were associated. Two types of negative reactions were established: turning against (TA) and unsupportive

acknowledgement (UA). Within the TA type, blaming items, stigmatizing items (e.g., treating differently), and four control items were combined (Relyea & Ullman, 2015). Eccentric, distracting, and three control items comprised the UA category. These two categories provide aggregation of five negative reactions into two types of overall negative reactions. Further, Relyea and Ullman (2015) expressed that though having one scale with the SRQ that was separated into five subscales was sufficient, having two more focused reaction scales accounts for more variance, a better psychometric fit of items, and can have different implications when evaluating sexual assault disclosure outcomes compared to the one SRQ with five sub-categories (Relyea & Ullman, 2015).

This establishment of two types of negative reactions (i.e., UA and TA) may have important applications to the findings of the current study . For example, items within the TA type of reaction had less meaningful associations with recovery and mental health outcomes compared to UA. Additionally, Relyea and Ullman (2015) emphasized the importance of evaluating the overall impact UA reactions on assault survivors due to the frequency of such reactions and their greater association with negative mental health outcomes and coping following an assault. When examining the current study, the high association of blame, treat differently (i.e., stigmatizing), and control support the notion of TA. Additionally, the high correlations between egocentric, distraction, and control align with the UA type of reaction. Reactions relating to UA was identified by Relyea and Ullman (2015) as being the most experienced, and the endorsement

of two UA types of reactions (e.g., distraction and control) are highest in the current study (see Table 2).

Perceived burdensomeness had the strongest association with the blaming reaction. Further, thwarted belonging was not strongly associated with any of the five negative reactions, though blame was the strongest (see Table 2). Though there is not an expansive amount of literature on these associations, Nwankwo (2017) emphasized the strong impact self-blame has on suicide ideation due to isolation from a social group. Furthermore, Wesselmann, Williams, and Wirth (2014) identified that within groups where an individual is perceived as being a burden, the individual is ostracized more. Though perceived burdensomeness is indeed perceived (Joiner, 2005), perhaps negative social interactions due to blaming are perceived as ostracizing, therefore reinforcing perceptions and feelings of burdensomeness and thwarting an individual's sense of belonging because they feel they are being distanced from the group.

Limitations

The current study has many limitations. Primarily, the study was low in power. A secondary power analysis was conducted post hoc via G Power determined the initial estimate of 130 participants was low, and a more optimal sample size of about 300 to 400 participants would have provided a more accurate and higher power overall model. Typically with structural equation modeling, a ratio of 10 participants per item is a standard for achieving accurate representations of reality. However, a sample of between 300 to 400 is an

adequate sample even for complex models if the 10 to one ratio is unrealistic. Parallel with low power, an additional limitation was the risk of beta errors in the results. Additionally, the inclusion of attention checks was anticipated, however in the final study was omitted. Further, assessing if the sexual assault survivors had disclosed their assault prior and to whom would have provided important information regarding the accuracy of disclosure reactions. Finally, the use of an assault specific shame measure may have provided better insight and predictability specific to how sexual assault survivors feel their assault influenced their views of the self.

Implications and Future Directions

The results of the current study provide important information regarding the relationships between negative social reactions, ITS variables, shame, and mental health distress. Despite the lack of a full mediation model, the current study presented an exploration into combining a different theory (e.g., ITS of suicide) into the sexual assault literature. Additionally, the moderate to strong association between receiving a blaming reaction upon disclosure and perceived burdensomeness, in addition to the predictive relationship between blame and perceived burdensomeness may provide an important look into how receiving these types of reactions may impact sexual assault victims. Though established as a factor related to trauma, state shame was not a successful mediator nor predictor within the current study. Utilizing a different shame measure (e.g., a measure of assault-related shame) may be a more appropriate from of

assessment for use in future studies. Further research should be conducted with a more robust sample to determine more conclusive outcomes and relationships. Additionally, exploring negative reactions as a singular predictor could provide a better theoretical fit when assessing disclosure reactions in the context of the present study. Moreover, future research should include the responses of male sexual victimization survivors to highlight outcomes and experiences of men who are victims and to evaluate how men fit within a model that incorporates perceived burdensomeness and thwarted belonging.

Within the Relyea and Ullman (2015) article, special mention was made regarding the potential of TA being more hurtful and UA reactions being both hurtful and encouraging of healing. Additionally, TA reactions were emphasized as being more useful in research as “negative” reactions, whereas UA reactions are more closely related to the survivor’s social support. Both of these reactions should be researched further within the context of perceived burdensomeness and thwarted belonging to explore the possible social ramifications of UA and TA reactions. Moreover, exploring the relationship of these two reactions and the ITS variables in the context of meaning making of the assault may be fruitful and important.

APPENDIX A

MODEL

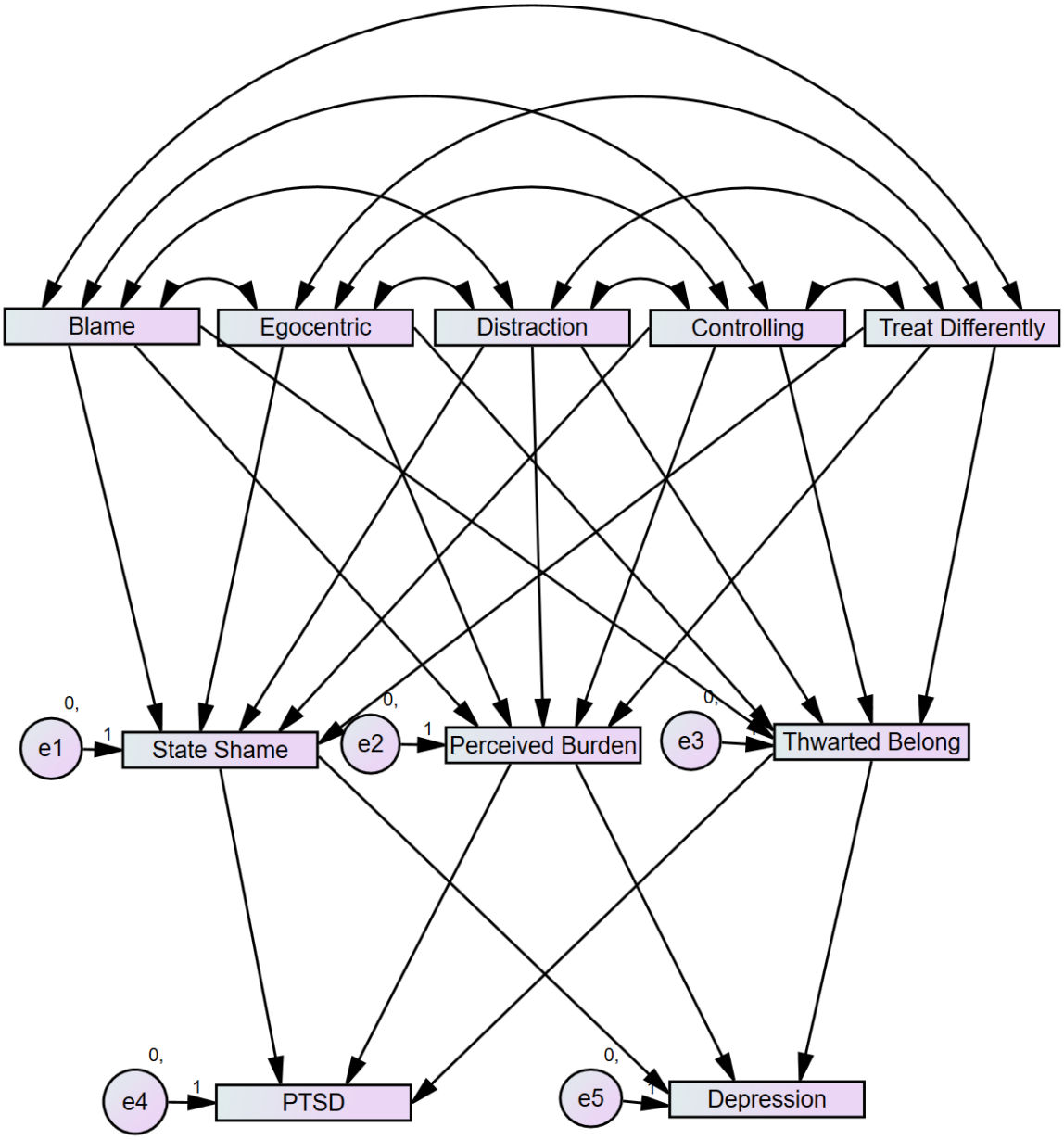

Figure 1. Hypothesized model

APPENDIX B

MEASUREMENTS

Demographics Questionnaire

1. What is your age? _____
2. What is your gender? (please choose only one)
    a. Female
    b. Male
    c. Other (please specify):_____
3. What is your ethnic background?
    a. Hispanic
    b. Not Hispanic
    c. Unknown
4. What is your racial background?
    a. African American
    b. American Indian or Alaskan Native
    c. Asian (Asian American)
    d. Caucasian
    e. Native Hawaiian/other Pacific Islander
    f. Other (please specify):_____
5. What is your current marital status? (please choose only one)
    a. Single
    b. In a committed relationship
    c. Living with a significant other
    d. Married
    e. Divorced or Widowed
6. Yearly Income
    a. $0-$14,999
    b. $15,000-$29,999
    c. $30,000-$44,999
    d. $45,000-$59,999
    e. $60,000-$74,999
    f. $75,000-$89,999
    g. $90,000-$99,999
    h. Over $100,000

Life Events Checklist for DSM-5 (LEC-5; Weathers, Blake, Schnurr, Kaloupek, Marx, & Keane, 2013).

Listed below are a number of difficult or stressful things that sometimes happen to people. For each event check one or more of the boxes to the right to indicate that: (1) it happened to you personally or (0) it did not happen to you. Be sure to consider your entire life (growing up as well as adulthood) as you go through the list of events.

1. Natural disaster (i.e., flood, hurricane, tornado, earthquake).
2. Fire or explosion.
3. Transportation accident (i.e., car accident, boat accident, train wreck, plane crash).
4. Serious accident at work, home, or during a recreational activity.
5. Exposure to toxic substance (i.e., dangerous chemicals, radiation).
6. Physical assault (i.e., being attacked, hit, slapped, beaten up, kicked).

7. Assault with a weapon (i.e., being shot, stabbed, threatened with a knife, gun, bomb).
8. Sexual assault (i.e., attempt to rape, made to perform any type of sexual act through force or threat of harm).
9. Other unwanted or uncomfortable sexual experience.
10. Combat or exposure to a war zone (in the military or as a civilian).
11. Captivity (i.e., being kidnapped, abducted, held hostage, prisoner of war).

12. Life threatening illness or injury.
13. Severe human suffering.
14. Sudden, violent death (i.e., homicide, suicide).
15. Sudden, unexpected death of someone close to you.
16. Serious injury, harm, or death you caused to someone else.
17. Any other stressful event or experience. (Specify: _____)

a) Which was the WORST event?
_____

b) Did this event happen within the last 5 years?
YES (1) NO (2)

c) Did you experience extreme fear, helplessness or horror during this event?
YES (1) NO (2)

Posttraumatic Stress Disorder Checklist 5 (PCL-5; Weathers, Litz, Palmieri, Marx, & Schnurr, 2010).

Instructions: Below is a list of problems and complaints that people sometimes have in response to stressful life experiences. Think about the impact that YOUR MOST stressful life event (from the last survey) has had on you and respond to the following items as they relate to that event. Please read each one carefully, then circle one of the numbers to the right to indicate how much you have been bothered by that problem in the past month.

1 = Not at all 2= A little bit 3=Moderately 4=Quite a bit 5=Extremely

1. Repeated, disturbing memories, thoughts, or images of the stressful experience?
2. Repeated, disturbing dreams of the stressful experience?
3. Suddenly acting or feeling as if the stressful experience were happening again (as if you were reliving it)?
4. Feeling very upset when something reminded you of the stressful experience?
5. Having strong physical reactions (e.g., heart pounding, trouble breathing, sweating) when something reminded you of the stressful experience?
6. Avoiding thinking about or talking about the stressful experience or avoiding having feelings related to it?
7. Avoiding activities or situations because they reminded you of the stressful experience?
8. Trouble remembering important parts of the stressful experience?
9. Loss of interest in activities that you used to enjoy?
10. Feeling distant or cut off from other people?
11. Feeling emotionally numb or being unable to have loving feelings for those close to you?
12. Feeling as if your future somehow will be cut short?
13. Trouble falling or staying asleep?
14. Feeling irritable or having angry outbursts?
15. Having difficulty concentrating?
16. Being “superalert” or watchful or on guard?
17. Feeling jumpy or easily startled?
18. Having strong negative beliefs about yourself, other people, or the world (for example, having thoughts such as: I am bad, there is something seriously wrong with me, no one can be trusted, the world is completely dangerous)?

19. Blaming yourself or someone else strong for the stressful experience or what happened
after it?
20. Having strong negative feelings such as fear, horror anger, guilt or shame?
21. Taking too many risks or doing things that cause you harm?

Center for Epidemiological Studies Depression Scale, Revised (CESD-R; Eaton, Smith, Ybarra, Muntaner, & Tien, 2004)

Below is a list of the ways you might have felt or behaved. Please check the boxes to tell me how often you have felt this way in the past week or so.
Last Week Nearly every day for 2 weeks Not at all or Less than 1 day 1 - 2 days 3 - 4 days 5 - 7 days

My appetite was poor.
I could not shake off the blues.
I had trouble keeping my mind on what I was doing.
I felt depressed.
My sleep was restless.
I felt sad.
I could not get going.
Nothing made me happy.
I felt like a bad person.
I lost interest in my usual activities.
I slept much more than usual.
I felt like I was moving too slowly.
I felt fidgety.
I wished I were dead.
I wanted to hurt myself.
I was tired all the time.
I did not like myself.
I lost a lot of weight without trying to.
I had a lot of trouble getting to sleep.
I could not focus on the important things.

State Shame and Guilt Scale (SSGS; Marschall, Sanftner, & Tangney, 1994).

The following are some statements which may or may not describe how you are feeling right now. Please rate each statement using the 5-point scale below. Remember to rate each statement based on how you are feeling right at this moment.

I do not feel this way I feel this way somewhat I feel this way very strongly

1. I feel good about myself
2. I want to sink into the floor and disappear.
3. I feel remorse, regret.
4. I feel worthwhile, valuable.
5. I feel small.
6. I feel tension about something I have done.
7. I feel capable, useful.
8. I feel like I am a bad person.
9. I cannot stop thinking about something bad I have done
10. I feel proud.
11. I feel humiliated, disgrace.
12. I feel like apologizing, confessing.
13. I feel pleased about something I have done.
14. I feel worthless, powerless.
15. I feel bad about something I have done.

Shame Subscale: 1, 3, 5, 7, 9.

Social Reactions Questionnaire (SRQ; Ullman, 2000).

INSTRUCTIONS: The following is a list of behaviors that other people responding to a person with this experience often show. Please indicate how often you experienced each of the listed responses from other people by placing the appropriate number in the blank next to each item.

0	1	2	3	4
NEVER	RARELY	SOMETIMES	FREQUENTLY	ALWAYS

_____ 1. Told you it was not your fault
_____ 2. Pulled away from you
_____ 3. Wanted to seek revenge on the perpetrator
_____ 4. Told others about your experience without your permission
_____ 5. Distracted you with other things
_____ 6. Comforted you by telling you it would be all right or by holding you
_____ 7. Told you he/she felt sorry for you
_____ 8. Helped you get medical care
_____ 9. Told you that you were not to blame
_____ 10. Treated you differently in some way than before you told him/her that made you uncomfortable
_____ 11. Tried to take control of what you did/decisions you made
_____ 12. Focused on his/her own needs and neglected yours
_____ 13. Told you to go on with your life
_____ 14. Held you or told you that you are loved
_____ 15. Reassured you that you are a good person
_____ 16. Encouraged you to seek counseling
_____ 17. Told you that you were to blame or shameful because of this experience
_____ 18. Avoided talking to you or spending time with you
_____ 19. Made decisions or did things for you
_____ 20. Said he/she feels personally wronged by your experience
_____ 21. Told you to stop thinking about it
_____ 22. Listened to your feelings
_____ 23. Saw your side of things and did not make judgments
_____ 24. Helped you get information of any kind about coping with the experience
_____ 25. Told you that you could have done more to prevent this experience from occurring
_____ 26. Acted as if you were damaged goods or somehow different now
_____ 27. Treated you as if you were a child or somehow incompetent
_____ 28. Expressed so much anger at the perpetrator that you had to calm him/her down
_____ 29. Told you to stop talking about it

_____ 30. Showed understanding of your experience
_____ 31. Reframed the experience as a clear case of victimization
_____ 32. Took you to the police
_____ 33. Told you that you were irresponsible or not cautious enough
_____ 34. Minimized the importance or seriousness of your experience
_____ 35. Said he/she knew how you felt when he/she really did not
_____ 36. Has been so upset that he/she needed reassurance from you
_____ 37. Tried to discourage you from talking about the experience
_____ 38. Shared his/her own experience with you
_____ 39. Was able to really accept your account of your experience
_____ 40. Spent time with you
_____ 41. Told you that you did not do anything wrong
_____ 42. Made a joke or sarcastic comment about this type of experience
_____ 43. Made you feel like you didn't know how to take care of yourself
_____ 44. Said he/she feels you're tainted by this experience
_____ 45. Encouraged you to keep the experience a secret
_____ 46. Seemed to understand how you were feeling
_____ 47. Believed your account of what happened
_____ 48. Provided information and discussed options

Subscales – Negative: Blaming: 1, 9, 17, 25, 33, 4; Egocentric: 4, 12, 20, 28, 36, 44; Distraction: 5, 13, 21, 29, 37, 45; Control: 3, 11, 19, 27, 35, 43; Treat Differently: 2, 10, 18, 26, 34, 42.
Subscales – Positive: Belief: 7, 15, 23, 31, 39, 47; Info/Aid: 8, 16, 24, 32, 40, 48; Emotional Support: 6, 14, 22, 30, 38, 46.

Interpersonal Needs Questionnaire (INQ; Van Orden, Cukrowiczm, Witte, & Joiner, 2012).

INSTRUCTIONS: The following questions ask you to think about yourself and other people. Please respond to each question by using your own current beliefs and experiences, NOT what you think is true in general, or what might be true for other people. Please base your responses on how you've been feeling recently. Use the rating scale to find the number that best matches how you feel and circle that number. There are no right or wrong answers: we are interested in what you think and feel.

Not at all true for me Somewhat true for me Very true for me

1 2 3 4 5 6 7

1. These days, the people in my life would be better off if I were gone
2. These days, the people in my life would be happier without me
3. These days, I think I am a burden on society
4. These days, I think my death would be a relief to the people in my life
5. These days, I think the people in my life wish they could be rid of me
6. These days, I think I make things worse for the people in my life
7. These days, other people care about me
8. These days, I feel like I belong
9. These days, I rarely interact with people who care about me
10. These days, I am fortunate to have many caring and supportive friends
11. These days, I feel disconnected from other people
12. These days, I often feel like an outsider in social gatherings
13. These days, I feel that there are people I can turn to in times of need
14. These days, I am close to other people
15. These days, I have at least one satisfying interaction every day

APPENDIX C

TABLES

LIST OF TABLES

Table 1. Demographic and Other Participant Characteristics

Variable	M(SD)	*n*(%)	Range
Gender			
Female		104(98)	
Other		2(2)	
Age	23.90(5.13)	104	19-46
Marital status			
Single		39(36.8)	
Living with significant other		9(8.5)	
Married		12(11.3)	
In a committed relationship		46(43.4)	
Ethnic background			
Hispanic or Latino		81(76.4)	
Not Hispanic or Latino		25(23.6)	
Racial background			
…African American		9(8.5)	
Native American or Alaskan		6(5.7)	
…Asian American		4(3.8)	
Caucasian		37(34.9)	
Native Hawaiian or Pacific Islander		1(.9)	
Other		39(36.8)	
Trauma history			
Sexual assault		91(85.8)	
Other unwanted uncomfortable sexual experience		94(88.7)	
Student yearly income			
$0-$14,999		70(66)	
$15,000-$29,999		27(25.5)	
$30,000-$44,999		6(5.7)	
$45,000-$59,999		2(1.9)	
$60,000-$74,999		0	
$75,000-$89,999		1(.9)	
Year in college			
Freshman		1(.9)	
Sophomore		9(8.5)	
Junior		18(17)	
Senior		32(30.2)	

Table 2. Means and Pearson correlations between variables of interest

Variable	*M*	*SD*	*α*	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*
1. Blame	5.78	4.09	.73	1									
2. Egocentric	10.09	4.12	.72	.27**	1								
3. Distraction	12.28	4.97	.82	.16	.57**	1							
4. Control	10.97	4.48	.75	.23*	.76**	.58**	1						
5. Treat Differently	9.82	4.42	.80	.54**	.67**	.63**	.64**	1					
6. Perceived Burdensomeness	11.76	8.72	.95	.43**	.28**	.13	.18	.29**	1				
7. Thwarted Belonging	29.95	13.93	.90	.26**	.11	.07	.03	.19*	.58**	1			
8. Shame	9.58	4.87	.85	.27**	.26**	.04	.26**	.22*	.62**	.44**	1		
9. Depression	26.24	19.05	.95	.15	.28**	.10	.24*	.26**	.46**	.26**	.69**	1	
10. PTSD	39.47	20.89	.95	.22*	.45**	.35**	.41**	.48**	.43**	.36**	.55**	.71**	1

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

Table 3. Path Analysis Outcomes and Fit

Pathway	*β*	χ^2	*df*	*RMSEA*
Overall Model		143.13	14	.29
Blame → Shame	.17			
Blame → Perceived Burdensomeness	.41*			
Blame → Thwarted Belonging	.22			
Egocentric → Shame	.14			
Egocentric → Perceived Burdensomeness	.27			
Egocentric → Thwarted Belonging	.08			
Distraction → Shame	-.18			
Distraction → Perceived Burdensomeness	.02			
Distraction → Thwarted Belonging	.01			
Control → Shame	.25			
Control → Perceived Burdensomeness	-.07			
Control → Thwarted Belonging	-.13			
Treat Differently → Shame	.01			
Treat Differently → Perceived Burdensomeness	-.07			
Treat Differently → Thwarted Belonging	.10			
Shame → PTSD	.49*			
Shame → Depression	.67*			
Perceived Burdensomeness → PTSD	.07			
Perceived Burdensomeness → Depression	.09			
Thwarted Belonging → PTSD	.12			
Thwarted Belonging → Depression	-.05			

Note: * $p < .01$.

REFERENCES

Agaibi, C. E., & Wilson, J. P. (2005). Trauma, PTSD, and resilience: a review of the literature. *Trauma, Violence, & Abuse*, *6*(3), 195-216.

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.

Banyard, V. L., Ward, S., Cohn, E. S., & Plante, E. G. (2007). Unwanted sexual contact on campus: A comparison of women's and men's experiences. *Violence and Victims*, *22*(1), 52.

Black, M. C., Basile, K. C., Breiding, M. J., Smith, S. G., Walters, M. L., Merrick, M. T., & Stevens, M. R. (2011). The national intimate partner and sexual violence survey: 2010 summary report. *Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention*, *19*, 39-40.

Bovin, M. J., Marx, B. P., Weathers, F. W., Gallagher, M. W., Rodriguez, P., Schnurr, P. P., & Keane, T. M. (2016). Psychometric properties of the PTSD Checklist for Diagnostic and Statistical Manual of Mental Disorders–Fifth Edition (PCL-5) in veterans. *Psychological Assessment*, *28*(11), 1379.

Brewin, C. R., Andrews, B., & Valentine, J. D. (2000). Meta-analysis of risk factors for posttraumatic stress disorder in trauma-exposed adults. *Journal of Consulting and Clinical Psychology*, *68*(5), 748.

Brecklin, L. R., & Ullman, S. E. (2002). The roles of victim and offender alcohol use in sexual assaults: results from the National Violence Against Women Survey. *Journal of Studies on Alcohol*, *63*(1), 57-63.

Davis, M. T., Witte, T. K., & Weathers, F. W. (2014). Posttraumatic stress disorder and suicidal ideation: The role of specific symptoms within the framework of the interpersonal-psychological theory of suicide. *Psychological Trauma: Theory, Research, Practice, and Policy*, *6*(6), 610.

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

Du Mont, J., Miller, K. L., & Myhr, T. L. (2003). The role of “real rape” and “real victim” stereotypes in the police reporting practices of sexually assaulted women. *Violence Against Women*, *9*(4), 466-486.

Eaton, W. W., Smith, C., Ybarra, M., Muntaner, C., & Tien, A. (2004). Center for Epidemiologic Studies Depression Scale: review and revision (CESD and CESD-R).

Elklit, A., & Christiansen, D. M. (2010). ASD and PTSD in rape victims. *Journal of Interpersonal Violence*, *25*(8), 1470-1488.

Fergusson, D. M., Swain-Campbell, N. R., & Horwood, L. J. (2002). Does sexual violence contribute to elevated rates of anxiety and depression in females?. *Psychological Medicine*, *32*(6), 991-996.

Hakimi, D., Bryant-Davis, T., Ullman, S. E., & Gobin, R. L. (2016). Relationship between negative social reactions to sexual assault disclosure and mental health outcomes of Black and White female survivors.

Hassija, C. M., & Gray, M. J. (2012). Negative social reactions 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.

Hill, R. M., & Pettit, J. W. (2014). Perceived burdensomeness and suicide-related behaviors in clinical samples: Current evidence and future directions. *Journal of Clinical Psychology*, *70*(7), 631-643.

Hunter, W. M., Cox, C. E., Teagle, S., Johnson, R. M., Mathew, R., Knight, E. D., & Leeb, R.T. (2003). Measures for Assessment of Functioning and Outcomes in Longitudinal Research on Child Abuse. Volume 1: Early Childhood.

Joiner, T. (2005). *Why People Die by Suicide*. Cambridge, MA, US: Harvard University Press.

La Bash, H., & Papa, A. (2014). Shame and PTSD symptoms. *Psychological Trauma: Theory, Research, Practice, and Policy*, *6*(2), 159.

Norris, F. H., & Hamblen, J. L. (2003). Standardized selfreport measures of civilian trauma and PTSD. In J. Wilson & T. Keane (Eds.), *Assessing Psychological Trauma and PTSD: A Practitioner's Handbook* (2"d Ed.), New York: Guilford.

Nwankwo, F. E. (2017). *Role of Stress, Personality and Self Blame on Suicidal Ideation among Anambra State Prison Inmates* (Doctoral dissertation).

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.

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.

Starzynski, L. L., Ullman, S. E., Filipas, H. H., & Townsend, S. M. (2005). Correlates of women's sexual assault disclosure to informal and formal support sources. *Violence and Victims*, *20*(4), 417.

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.

Ullman, S. E. (2000). Psychometric characteristics of the social reactions questionnaire. *Psychology of Women Quarterly*, *24*(3), 257-271.

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.

Ullman, S. E., & Peter-Hagene, L. (2014). Social reactions to sexual assault disclosure, coping, perceived control, and PTSD symptoms in sexual assault victims. *Journal of Community Psychology*, *42*(4), 495-508.

Van Dam, N. T., & Earleywine, M. (2011). Validation of the Center for Epidemiologic Studies Depression Scale—Revised (CESD-R): Pragmatic depression assessment in the general population. *Psychiatry Research*, *186*(1), 128-132.

Van Orden, K. A., Witte, T. K., Cukrowicz, K. C., Braithwaite, S. R., Selby, E. A., & Joiner Jr, T. E. (2010). The interpersonal theory of suicide. *Psychological Review*, *117*(2), 575.

Van Orden, K. A., Cukrowicz, K. C., Witte, T. K., & Joiner Jr, T. E. (2012). Thwarted belongingness and perceived burdensomeness: Construct validity and psychometric properties of the Interpersonal Needs Questionnaire. *Psychological Assessment*, *24*(1), 197.

Weathers, F.W., Blake, D.D., Schnurr, P.P., Kaloupek, D.G., Marx, B.P., & Keane, T.M. (2013). *The Life Events Checklist for DSM-5 (LEC-5)*

Weiss, K. G. (2010). Male sexual victimization: Examining men's experiences of rape and sexual assault. *Men and Masculinities*, *12*(3), 275-298.

Wesselmann, E. D., Williams, K. D., & Wirth, J. H. (2014). Ostracizing group members who can (or cannot) control being burdensome. *Human Ethology Bulletin*, *29*(2), 82-103.