PREDICTING THE IMPACT OF ABUSE: IS EXPERIENTIAL AVOIDANCE A MEDIATOR?

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Intimate partner violence (IPV) occurs between two individuals who have formerly been or are currently in an intimate relationship. IPV includes physical violence, sexual violence, threats of physical or sexual violence, and emotional abuse (Kernic, Wolf, & Holt, 2000; Rennison &Welchans, 2000). Experiencing IPV is associated with a serious impact on psychological health (Afifi, MacMillan, Cox, Asmundson, Stein, & Sareen, 2008; Calvete, Corral , & Estévez, 2008). Research on other forms of trauma indicates that experiential avoidance (EA) plays an important role in psychological distress and psychopathology. Thus, it was hypothesized that EA would play a key role in the impact of IPV. Using the Baron and Kenny (1986) method, the current study examined whether EA was a mediator between IPV severity and psychological distress, and whether EA was a mediator between IPV severity and PTSD symptomology, more specifically. In addition, mediational analyses were run to determine if suppression changed the relationships between IPV severity and psychological distress, or IPV severity and PTSD symptomology. Using the same methods, EA and suppression were both also examined as mediators between psychological/verbal abuse severity and psychological distress, and between psychological/verbal abuse severity and PTSD symptomology. No significant results were found in a treatment sample. However, several mediations and partial mediations were found in an undergraduate sample. These findings are likely to impact treatment of individuals who have experienced IPV and demonstrate the utility of acceptance and mindfulness based interventions such as ACT with this population.

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CHAPTER 1

INTRODUCTION

Intimate partner violence (IPV) occurs between two individuals in an intimate relationship and is defined as violence performed by a spouse, ex-spouse, or current or previous significant other. IPV includes physical violence, sexual violence, threats of physical or sexual violence, and emotional abuse. IPV frequently results in physical injury, psychological trauma, and sometimes death (Kernic, Wolf, & Holt, 2000; Rennison & Welchans, 2000). Furthermore, while both men and women can be victims of IPV, literature suggests that women are much more likely than men to suffer physical, and probably psychological, injuries from IPV (Rennison & Welchans, 2000).

IPV is a serious problem and the effects of IPV can endure for a lifetime (Rennison & Welchans, 2000). In the U.S. every year, women experience about 4.8 million intimate partner-related physical assaults and rapes (Fox & Zawitz, 2007). However, these numbers drastically underestimate the problem because many victims do not report IPV to police, friends, or family (Tjaden &Thoennes, 2000). In 2005, 1,510 deaths occurred as a result of IPV. Of these deaths, 78% were females and 22% were males (Fox & Zawitz, 2007).

Results from the National Violence Against Women Survey substantiate previous reports indicating that much of the violence committed against women by their partners is habitual in nature. More than half of the women raped by a partner and two-thirds of the women physically assaulted by a partner reported being victimized numerous times by the same partner. Moreover, female rape victims experienced an average of 4.5 rapes by the same partner, and female physical assault victims experienced an average of 6.9 assaults by the same partner. Among women who were abused several times by the same partner, 62.6% of the rape victims and

69.5% of the assault victims reported their abuse lasted a year or more. On average, women who were raped numerous times reported their abuse transpired over 3.8 years, and women who were physically assaulted numerous times reported their abuse occurred over 4.5 years (Tjaden & Thoennes, 2000).

Consequences of Intimate Partner Violence

Many studies have found that experiencing IPV is associated with a serious impact on psychological health (Afifi, MacMillan, Cox, Asmundson, Stein, Sareen, 2008; Calvete, Corral, & Estévez, 2008). Moreover, experiencing IPV may lead to feelings of depression, anxiety, or stress and may manifest as a psychiatric disorder (Afifi et al., 2008). Some researchers have studied the specific relationship between abuse and dysphoria. Researchers have found that abused women who credit the cause of their abuse to internal, global, and stable factors are more apt to show evidence of helplessness and related deficits, including depressed affect, poor coping skills, and impaired cognitive functioning (Abramson, Seligman, & Teasdale, 1978).

Additionally, Calvete, Corral, and Estévez (2008) found that victims of IPV experience significant anxiety and depressive symptomology. These researchers found that 36.6% of participants had high depressive symptomology. Approximately 12% of women who had been victims of IPV had a mood disorder, and 30.4% of women who had been victims of IPV had an anxiety disorder (2008). More generally speaking, 36.6% of women who had experienced IPV have a psychiatric disorder, and 17.5% had two or more disorders in the past year (Afifi et al., 2008). Chandra, Satyanarayana, and Carey (2009) found a significant positive correlation between PTSD and both physical and non-physical abuse in women who had experienced IPV.

Follingstad, Brennan, Hause, Polek, and Rutledge (1991) examined the relationship between frequency and severity of abuse and stress-related symptoms. Follingstad et al. (1991)

investigated the physical and psychological symptoms of battered women. The authors hypothesized that the women's ongoing victimization would produce stress-related symptoms and that effects would be moderated by the frequency and severity of the abuse. The study included 234 battered women and utilized a structured format, which allowed for behavioral indices of the data and categorization of the women's responses. Results suggested that frequency of abuse was a strong predictor of the number and severity of physical and psychological symptoms. Furthermore, severity of physical and psychological symptoms was predicted by: number of injuries requiring medical attention, women adhering to traditional sex role values, and the presence of one type of emotional abuse. Battered women perceived their physical and emotional health as deteriorating during the relationship and during the abuse, but as getting healthier after the abuse ended.

Experiential Avoidance

One predictor of the impact of abuse may be the degree to which an individual engages in experiential avoidance (EA). EA is defined as "the phenomenon that occurs when a person is unwilling to remain in contact with particular private experiences (e.g., bodily sensations, emotions, thoughts, memories, behavioral predispositions) and takes steps to alter the form or frequency of these events and the contexts that occasion them" (Hayes, Wilson, Gifford, Follette, & Strosahl, 1996). One advantage of using a model based on EA is that it may have clinical utility by providing a functional perspective of presenting symptoms. In a functional approach that examines relevant contingencies, behaviors (including symptoms) are examined in relation to the purposes that they serve. While the behaviors themselves might look very different across a person or a situation, the purposes behind why behaviors are performed (i.e., the functions they serve) could be very similar. For example, dissociation, drug use, and working hard as a student

might all emerge, or be maintained, as behaviors after IPV because they provide opportunity to escape or avoid aversive consequences. If a clinician or clinical researcher can identify such functions, then he or she can also suggest effective courses of intervention and potentially integrate findings from a variety of theoretical paradigms.

It is broadly believed – across paradigms – that animals, including humans, are conditioned to avoid negative circumstances. For example, if a rat experiences an electric shock in a chamber, the rat will be hesitant to revisit that chamber (Blanchard & Blanchard, 1968). This set of behaviors has palpable survival value since the ability to avoid indications of danger may permit the organism to avoid real bodily harm. Avoidance becomes problematic, however, when there is no real danger that necessitates it. Blackledge and Hayes (2001) propose that the problem of EA originates in the literal and evaluative functions of human language and cognition. Language significantly increases the number of possible cues for danger, and an individual may become motivated to circumvent not only external cues of danger, but also symbolic representations of that aversive experience. Language can be considered bidirectional in that the "functions of events are partially available in the symbolic description and vice versa" (Hayes, Wilson, Gifford, Follette, & Strosahl, 1996, p. 1155). Therefore, verbally reporting pain can cause a re-experiencing of that pain.

The concept that humans are motivated to circumvent such negative private (i.e., internal) experiences is substantially demonstrated by literature which discusses cognitive and affective strategies such as thought suppression (Wenzlaff & Wegner, 2000), emotional suppression (Gross & Levenson, 1993), avoidance coping (Penley, Tomaka, & Wiebe, 2002), and reappraisal (Lazarus, 1991). Cognitive strategies like thought suppression and thought control entail the general tendency to push away undesired thoughts and an attempt to control them through

distraction or worry. These strategies often cause a paradoxical increase in the occurrence of the target thoughts (Clark, Ball, & Pape, 1991; Gold & Wegner, 1995; Wegner, Schneider, Carter, & White, 1987; Wegner, Schneider, Knutson, & McMahon, 1991). Emotional suppression, which includes the avoidance of affective responses, is associated with poor psychological and physical health outcomes (Gross & John, 2003). Furthermore, avoidance coping, or the propensity to take part in behavioral avoidance strategies in response to stressful situations (e.g., turning to work or other activities) is also related to negative psychological outcomes (Penley, Tomaka, & Wiebe, 2002). Each of the above strategies can be considered EA since they are specific methods by which action is taken to change aversive private experiences.

Experiential Avoidance and Psychopathology

There are several ways in which EA can contribute to psychopathology. One possible pathway is through conscious avoidance strategies, which are typically verbal and include the avoided item (i.e., "I won't think about the violence today" includes the symbolic representation of violence). The avoided item may in fact become more accessible in the mind and likely to influence further cognition and behavior (Wenzlaff & Wegner, 2000). A second possibility is that private experiences, which are frequently classically conditioned, may not be able to be managed with verbal strategies. Both of these findings suggest that utilizing verbal control strategies may be somewhat unsuccessful for nonverbal processes involved in pathology. A third possible pathway is that, even if avoidance strategies are successful, they may lead to secondary problems such as having an extremely constricted life (Hayes, 1996). For example, an individual may be experiencing social anxiety and may successfully avoid social situations where they tend to become anxious; however, doing so may not allow them to enjoy time with friends or engage in valued activities.

Furthermore, research indicates that EA plays an important role in psychological distress and psychopathology. Many studies have examined the role of EA in anxiety symptomology and disorders. Roemer, Salters, Raffa, and Orsillo (2005) performed a study to evaluate the role of EA and fear of emotional responding in generalized anxiety disorder (GAD) related symptomatology. In their study using a large sample of female undergraduate students, both worry and EA were significant predictors of GAD severity. Furthermore, Kashdan, Barrios, Forsyth, and Steger (2006) performed a two-part study that evaluated EA as a mediator of the relationship between maladaptive coping and emotion- regulation strategies, and anxiety-related distress (e.g., anxiety sensitivity, trait anxiety, suffocation fears, and body sensation fears). In the first study, they found that predispositions towards EA were positively associated with negative outcomes, and that relationships between different self-regulatory strategies and psychological outcomes were mediated by EA. Kashdan et al. (2006) also examined the relationship between self-regulatory strategies and psychological outcomes over time. Again, all of the significant relations between emotion regulation and daily outcomes (e.g., negative affect and social anxiety) were mediated by EA. Hence, research indicates that maladaptive coping and self-regulatory strategies may lead to anxiety-related distress through the tendency to avoid unwanted private experiences.

Trauma and Posttraumatic Stress Disorder

Many studies have found that EA may lead to or exacerbate psychological distress in individuals who engage in EA subsequent to a trauma (Marx & Sloan, 2005). A recent study examined the role of EA, as measured by the 9-item Acceptance and Action Questionnaire (AAQ), and forgiving response styles. The study found that experientially avoidant and forgiving response styles partially mediated the relationship between interpersonal trauma and

Posttraumatic Stress Disorder (PTSD) (Orcutt et al., 2005). Another study examined the relationship between EA, posttraumatic stress symptom severity, depression, anxiety, and somatization in women who had been exposed to multiple traumatic events (Tull, Gratz, Salters, & Roemer, 2004). The results of this study indicated that EA, as measured by the 16-item Acceptance and Action Questionnaire, did not significantly predict PTSD symptom severity beyond the number of potentially traumatic events and general psychiatric symptom severity. However, when EA was conceptualized as thought suppression and measured with the White Bear Suppression Inventory, it did account for significant additional variance in depression, anxiety, and somatization, over and above number of potentially traumatic events and PTSD symptom severity (Tull et al., 2004). While this study did not support the hypothesis that EA as measured by the AAQ is related to PTSD symptom severity, the results indicated that EA, or at least the act of trying to not experience negative thoughts, may be related to general psychiatric symptoms in those exposed to a number of potentially traumatic experiences.

Plumb, Orsillo, and Luterek (2004) assessed the role of EA, as measured by the 16-item Acceptance and Action Questionnaire, in predicting functioning after a trauma. The study examined undergraduate college students with a history of trauma (Plumb, Orsillo, & Luterek, 2004). The study found that undergraduate students who used EA as a coping method had higher levels of psychological distress, as indicated by symptoms of PTSD and depression (Plumb, Orsillo, & Luterek, 2004). Additionally, Plumb, Orsillo, and Luterek (2004) found that EA predicted PTSD symptom severity and general psychological distress, over and above the severity of the traumatic experience. EA also predicted depression. The results of this study appear to suggest that individuals who use EA as a coping strategy following exposure to either a stressful or traumatic life event are more likely to exhibit impaired psychological functioning.

Morina (2007) conducted a study examining 152 civilian Kosovo war survivors. The study examined the relationship between EA, as measured by the AAQ, and psychological distress subsequent to war-related traumatic experiences. Significant correlations were found between EA and psychological distress. Moreover, participants who scored high on EA reported more impaired psychological functioning and lower subjective quality of life compared to those who scored low on EA. Results of this study suggest that EA may be an important factor in understanding war-related psychological distress.

Rosenthal, Hall, Palm, Batten, and Follette (2005) conducted a study with 151 undergraduate women to assess whether EA served as a mediator in the relationship between childhood sexual abuse and psychological distress. Rosenthal et al. (2005) found that EA, as measured by the 6-item AAQ, did serve as a mediator in the relationship between childhood sexual abuse and psychological distress. These findings are consistent with previous studies, and further suggest that the tendency to engage in EA exacerbates psychological distress in women with a history of abuse.

Boeschen, Koss, Figueredo, and Coan (2001) examined EA in female victims of rape. Boeschen, Koss, Figueredo, and Coan (2001) conceptualized EA as a cognitive coping strategy and utilized qualitative data to assess EA. Participants were asked to complete a lifeline and mark and label the significant events in their lives. Participants then responded to follow-up questions depending on whether or not they included rape as a significant event on the lifeline. Results indicated that EA was related to higher levels of self-blame. Further, women who utilized EA as a coping technique did not try to integrate the experience into their lives. These findings were replicated in samples involving lesbian and gay participants who were victims of sexual assault (Boeschen, Koss, Figueredo, & Coan, 2001).

Additionally, research also indicates whereas EA may be beneficial immediately following a traumatic event, it is maladaptive in the long term. EA allows victims to confront their traumatic experiences in controllable doses immediately after an event, but ultimately interferes with recovery over the long term (Boeschen, Koss, Figueredo, & Coan, 2001). Additional research is needed to examine the role of EA in women who have experienced IPV and psychological distress. While some studies have found that EA plays an important role in the psychological distress of abuse victims, several of these studies have used measures lacking in psychometric strength. Further, little research has looked at these constructs in a representative sample of women (i.e., both in shelters and in the community) who have experienced IPV. Thus, because of the numerous studies indicating a relationship between EA and psychological distress and research indicating that EA is harmful in the long term, it was hypothesized that EA would play a key role in the impact of abuse. Additionally, because severity and frequency have been shown to be strong predictors of degree of psychological distress in abused women, it was theorized that as severity and frequency of abuse increase, women may tend to be more experientially avoidant and that their EA will lead to higher levels of psychological distress. However, this had not been directly tested before.

Rationale for Current Study

Many studies have examined the variables of trauma, EA and psychological distress; however, the relationships between and among some of these variables are still not well understood. Additionally, the majority of research focuses on childhood abuse, or other forms of abuse, rather than IPV. More research is needed on how these variables relate to individuals who have experienced IPV. Therefore, the current study endeavored to further understand these variables and their relationships to one another.

The purpose of the current study was to examine whether severity of abuse and a person's level of acceptance or avoidance are predictors of the impact of the abuse. Because of Follingstad et al.'s (1991) findings and other previous research on EA, it was hypothesized that:

1. EA would be a mediator between severity of IPV and psychological distress.
    a. EA would be a mediator between psychological aggression IPV and psychological distress.
    b. EA would be a mediator between physical assault IPV and psychological distress.
    c. EA would be a mediator between injury IPV and psychological distress.
    d. EA would be a mediator between sexual coercion IPV and psychological distress.
2. Suppression would be a mediator between severity of IPV and psychological distress.
    a. Suppression would be a mediator between psychological aggression IPV and psychological distress.
    b. Suppression would be a mediator between physical assault IPV and psychological distress.
    c. Suppression would be a mediator between injury IPV and psychological distress.
    d. Suppression would be a mediator between sexual coercion IPV and psychological distress.
3. EA would be a mediator between severity of IPV and PTSD symptomology.
    a. EA would be a mediator between psychological aggression IPV and PTSD symptomology.
    b. EA would be a mediator between physical assault IPV and PTSD symptomology.
    c. EA would be a mediator between injury IPV and PTSD symptomology.
    d. EA would be a mediator between sexual coercion IPV and PTSD symptomology.

4. Suppression would be a mediator between severity of IPV and PTSD symptomology.
    a. Suppression would be a mediator between psychological aggression IPV and PTSD symptomology.
    b. Suppression would be a mediator between physical assault IPV and PTSD symptomology.
    c. Suppression would be a mediator between injury IPV and PTSD symptomology.
    d. Suppression would be a mediator between sexual coercion IPV and PTSD symptomology.
5. EA would be a mediator between psychological/verbal abuse and psychological distress.
6. EA would be a mediator between psychological/verbal abuse and PTSD symptomology.
7. Suppression would be a mediator between psychological/verbal abuse and psychological distress.
8. Suppression would be a mediator between psychological/verbal abuse and PTSD symptomology.

CHAPTER 2

METHOD

Participants

Participants were recruited from domestic violence emergency shelters or community treatment centers devoted to intervention on interpersonal violence and from the University of North Texas Sona Systems (Sona), an online system utilized to recruit undergraduate research participation. Inclusion into the study was determined by recruiting women who (a) were English-speaking (b) reported at least one episode of physical violence with a current or former intimate partner within the previous 12 months and (c) were 18 years old or older. Directors at domestic violence emergency shelters and treatment centers were contacted through telephone calls and e-mails and asked if they would be willing to allow recruitment. The undergraduate student sample was recruited through Sona and the study was advertised as a two-part study focused on "examining conflict in intimate relationships."

The undergraduate participants completed the study in two parts. The first part of the study consisted of a brief screener to ascertain the presence of conflict within a recent relationship (i.e., within past 12 months). Participants whose responses to the screener suggested the presence of conflict were asked to complete the second portion of the study.

Participants from the domestic violence emergency shelters and treatment centers did not have to respond to the screener since the presence of conflict was already known due to requirements of residency and/or treatment. Participants from the shelter/treatment centers consented to be in the study and then completed the same packet that the undergraduate participants completed in the second portion of the study (i.e., completion of a packet of measures including the demographics questionnaire, Conflict Tactics Scale- Revised (CTS2),

Multidimensional Measure of Emotional Abuse (MMEA), Action and Fusion Questionnaire (AFQ), White Bear Suppression Inventory (WBSI), Posttraumatic Stress Disorder Checklist (PCL-S), and Brief Symptom Inventory (BSI), to be described more fully later in this manuscript).

The number of participants that were recruited was based on a power analysis that was conducted with the program G-power (G*Power 3; Faul, Erdfelder, Lang, & Buchner, 2007). A recent study found a large effect size ($f^2 = .69$) between childhood psychological abuse, EA and psychological distress in adulthood (Reddy, Pickett, & Orcutt, 2006). While childhood psychological abuse is different from IPV, it was expected that the findings of Reddy et al. (2006) should closely approximate the findings of the current study. Additionally, Reddy et al. (2006) did not report the effect size; thus, calculations for the effect size were based of formulas found in *A Beginner's Guide to Structural Equation Modeling* by Schumacke and Lomaxz (2004). The Reddy et al. (2006) study was selected as a reference for effect size as it is the most recent to examine psychological distress as an outcome of experiencing abuse and EA. The results of power analysis with G-power indicated that a sample size of 11 would ensure an 80% likelihood of detecting an effect size of 0.69 for the main mediation. However, due to the number of analyses being proposed as well as the nature of the population and likely attrition, more participants were recruited to ensure that enough participants were obtained to account for drop-out and missing data.

In both the samples of shelter/treatment centers and undergraduates, all participants were female as indicated in the inclusion criteria ($n = 18$, $n = 97$, respectively) and several ethnic groups were represented (see Table 1 and Table 2). Additionally, education level, employment status, and annual income data was gathered from both samples (see Tables 3 and

4). In both samples, emotional and verbal abuse was the most frequently cited type of interpersonal conflict. However, in the shelter and treatment centers sample, the emotional and verbal abuse was co-occurring at equal rates with physical abuse. More detailed information will be provided about the participants in the descriptive analyses section of the manuscript.

Table 1

Descriptive Statistics for Shelter/TC Sample

	Frequency	Percent
Ethnicity (n = 18)		
Caucasian (White)	3	16.7%
African American (Black)	10	55.6%
Native American (Indian)	0	0%
Asian	0	0%
Hispanic (Latina, Mexican)	3	16.7%
Biracial/Multiracial	2	11.1%
Type of IPV (n = 18)		
Physical (only)	0	0%
Emotional/Verbal (only)	2	11.1%
Sexual (only)	0	0%
Physical & Emotional/Verbal	8	44.4%
Physical & Sexual	1	5.6%
Emotional/Verbal & Sexual	0	0%
Physical, Emotional/Verbal, & Sexual	7	38.9%
Relationship Status with Perpetrator (n = 18)		
Currently Involved	4	22.2%

Table 2

Descriptive Statistics for Undergraduate Sample

	Frequency	Percent
Ethnicity (*n* = 97)		
Caucasian (White)	45	46.4%
African American (Black)	22	22.7%
Native American (Indian)	1	1.0%
Asian	5	5,2%
Hispanic (Latina, Mexican)	22	22.7%
Biracial/Multiracial	2	2.1%
Type of IPV (*n* = 97)		
Physical (only)	1	1.3%
Emotional/Verbal (only)	62	78.5%
Sexual (only)	0	0%
Physical & Emotional/Verbal	10	12.7%
Physical & Sexual	0	0%
Emotional/Verbal & Sexual	3	3.8%
Physical, Emotional/Verbal, & Sexual	3	3.8%
Relationship Status with Perpetrator (*n* = 86)		
Currently Involved	35	40.7%

Measures

The participants in the study were first consented to the project (Appendix A) and then administered a demographics questionnaire (Appendix B), the Woman Abuse Screening Tool (WAST), the Conflicts Tactics Scale Revised (CTS-2), The Multidimensional Measure of Emotional Abuse (MMEA), Avoidance and Fusion Questionnaire (AFQ), White Bear Suppression Inventory (WBSI), Brief Symptom Inventory (BSI), and Posttraumatic Stress Disorder Checklist (PCL-S).

Demographics

Demographic information was collected from each participant using a brief list of questions regarding age, ethnicity, education completion in years, employment status, and family income. Additionally, participants were asked about the nature of their relationship with their partner (e.g., spouse, significant other).

Conflict and Presence of Abuse Screener

The Woman Abuse Screening Tool (WAST is an 8-item screening tool used to screen for abuse. The WAST was originally developed for family physicians, but subsequently it has been tested in many emergency departments. According to Weiss, Ernst, Cham, and Nick (2003) the WAST has good internal reliability with an alpha of 0.95. In the original validation study, the WAST also demonstrated construct validity, with total scores correlating highly ($r = 0.96$) with scores on the Abuse Risk Inventory (ARI). The validation study also provided evidence of discriminant validity, finding significant differences in the scores of abused and non-abused women both on individual items and on the overall scores (Brown, Lent, Brett , Sas & Pederson, 1996). In the current sample, the internal consistency reliability coefficient was .48. However, when just the first two-items were included (the WAST-short form), the internal consistency increased to an alpha of 0.61.

Intimate Partner Violence

The Conflict Tactics Scale-Revised (The CTS2) is a 78-item self-report measure used to assess severity and frequency of abuse. The CTS2 is composed of scales to measure physical assault, injury from assault by a partner, psychological aggression, sexual coercion, and negotiation. The 78-item scale (39 behaviors or experiences, each asked once for respondent and once for partner) is comprised of five subscales, including negotiation, psychological aggression,

physical assault, injury and sexual coercion. Each subscale can be grouped by content coverage. Groupings by subscale include: Negotiation (cognitive and emotional); Psychological Aggression (minor and severe); Physical Assault (minor and severe); Injury (minor and severe); and Sexual Coercion (minor and severe). The response categories gauge the frequency with which acts were used during conflict with a partner in the past year using a 6-point scale ranging from *once* to *20 or more times*. There are also response options of *Never in the last year, but it did happen before that*, and *This has never happened*. (Strauss, Hamby, Boney-McCoy, & Sugarman, 1996). The total severity score was used for the analyses in this study. Only questions about what behaviors were committed by the partner were utilized.

The CTS2 has demonstrated good internal consistency with alphas ranging from 0.79 for the psychological aggression subscale to 0.95 for the injury subscale (Straus et al., 1996) in undergraduate samples. Additionally, within community samples of abused women, the CTS2 demonstrated good internal consistency ($\alpha = 0.97$; Samuelson & Cashman, 2008) and in shelter samples, alphas across subscales have ranged from 0.55 to 0.87 (Jarvis et al., 2005). Additionally, Straus et al. (1996) found that the CTS2 had good construct and discriminant validity. In order to assess the construct validity, Straus et al. (1996) examined whether other variables that should be theoretically associated were correlated. The psychological aggression and physical assault scales on the CTS2 theoretically should be more highly correlated with the sexual coercion scale in men than women. Straus et al. (1996) found that relationship between psychological aggression and sexual coercion was in fact stronger in men than women ($r = .66$ and $r = .25$, respectively). Additionally, the CTS2 has shown good discriminant validity. Variables, such as negotiation and sexual coercion and negation and injury, that should not theoretically be correlated with each other, were not significantly correlated. In the current

study, alphas were .72 for the shelter/treatment center sample and .73 for the undergraduate sample.

In the shelter/treatment sample the following ranges, minimum, and maximum scores were obtained. The CTS2 Psychological Aggression subscale had a range of 119 with a lowest score of 50 and highest score of 169. The CTS2 Physical Assault subscale had a range of 244 with a lowest score of 6 and highest score of 250. The CTS2 Injury subscale had a range of 27 with a lowest score of 0 and highest score of 27. The CTS2 Sexual Coercion subscale had a range of 52 with a lowest score of 0 and highest score of 52.

In the undergraduate sample the following ranges, minimum, and maximum scores were obtained. The CTS2 Psychological Aggression subscale had a range of 126 with a lowest score of 0 and highest score of 126. The CTS2 Physical Assault subscale had a range of 29 with a lowest score of 0 and highest score of 29. The CTS2 Injury subscale had a range of 3 with a lowest score of 0 and highest score of 3. The CTS2 Sexual Coercion subscale had a range of 0with a lowest score of 0 and highest score of 39.

Emotional/Psychological Abuse

The Multidimensional Measure of Emotional Abuse (MMEA; Murphy & Hoover, 1999) is a 28-item self-report measure of psychological abuse. The MMEA was created with the intention of building upon the Psychological Aggression subscale of the CTS2; thus it assesses a broader range of behaviors with a similar response format to the CTS2. Of note, the MMEA represents a shift in conceptualization of psychological abuse from a unidimensional construct to a multidimensional construct (Ro & Lawrence, 2007). The four subscales that comprise the MMEA assess four distinct forms of emotional abuse including: restrictive engulfment (e.g., "tried to stop the other person from seeing certain friends or family members"), hostile

withdrawal (e.g., "acted cold or distant when angry"), denigration (e.g., "called the other person a loser, failure, or similar term"), and dominance/intimidation (e.g., "threw, smashed, or kicked something in front of the other person"). For each item, respondents report the number of times their partner as well as themselves have engaged in the behavior over the past 6 months. Response choices are similar to the CTS2 and consist of a six-point scale of response categories ranging from 1 = once to 6 = more than 20 times. There is also an option to indicate if the behavior did not occur in the past 6 months but happened before or if the behavior has never happened. As with the CTS2, only responses about partners' behavior were utilized in data analyses.

Total scores for the MMEA were derived to assess the overall perpetration of psychological abuse by summing the midpoints for each response category. For example, an item endorsed as "4" (6-10 times) was recoded as an eight and responses of "more than 20 times" were recoded as 25. This recoding was conducted because the MMEA has the same response categories as the CTS2 and is typically recoded in this fashion for comparison purposes with CTS2 scales (e.g., Ro & Lawrence, 2007). Based on this recoding, total MMEA scores can range from 0 to 700. Total measure scores ranged from 0 to 383 with the current sample. Within college samples, the MMEA has demonstrated high internal consistency for the total score (α = 0.92 to 0.93) and it evidences satisfactory to high internal consistency for the subscales (α = 0.71 to 0.91; Taft et al., 2005). In the current study, alphas were .92 for the shelter/treatment center sample and .93 for the undergraduate sample. In the shelter/treatment sample, the MMEA had a range of 608 with a lowest score of 0 and highest score of 608. In the undergraduate sample, the MMEA had a range of 383 with a lowest score of 0 and highest score of 383.

Experiential Avoidance and Cognitive Fusion

The Avoidance and Fusion Questionnaire (AFQ) is a of 17-item self-report measure used to assess psychological inflexibility due to EA and cognitive fusion. The AFQ was designed to measure psychological inflexibility of children and adolescents by measuring the degree to which examinees over-identify with their thoughts, feelings, bodily sensations, and related experiences. Sample items from the AFQ include: *my life won't be good until I feel happy* (cognitive fusion), *I push away thoughts and feelings that I don't like* (experiential avoidance), *I don't try out new things if I'm afraid of messing up* (inaction in presence of unwanted internal experiences). Preliminary findings suggested that the AFQ correlates positively with child-reported somatic complaints, (r = .45) anxiety (r = .*58)*, problem behavior (r = .11*)* and thought suppression (r = 53). Moreover, it has been found to correlate negatively with overall quality of life (r = -.39*)*, mindfulness and acceptance (r = -.53) (Greco, Lambert, & Baer, 2008). Internal consistency within medical and community setting is good, with alphas that range from 0.89 to 0.93. Additionally, while the AFQ was developed to be used in children and adolescents it has also been found to be a reliable and valid measure in an adult population. Schmalz and Murrell (2010) found that the AFQ evidenced adequate reliability (α = .92) in a sample of adult college students. The AFQ also had appropriate convergent and divergent validity in the adult college student sample. In the current study, alphas were .93 for the shelter/treatment center sample and .88 for the undergraduate sample. In the shelter/treatment sample, the AFQ had a range of 50 with a lowest score of 10 and highest score of 60. In the undergraduate sample, the AFQ had a range of 49 with a lowest score of 2 and highest score of 51.

Suppression

The White Bear Suppression Inventory (WBSI) is a 15-item questionnaire that is designed to measure thought suppression. The scoring of the WBSI is based on a five-point scale from *strongly disagree* (1) to *strongly agree* (5). The total score is obtained by summing up the responses that are provided by respondents. The total score can range from 15 to 75. Higher scores on the WBSI indicate greater tendencies to suppress or push away thoughts. The WBSI has very good internal consistency, with alphas ranging from .87 to .89 in previous studies. The WBSI has also been found to have good stability with a 1 week test-retest correlation of .92, and a 3-week to 3-month test-retest correlation of .69. The WBSI demonstrates excellent convergent validity with significant correlations between the WBSI and several measures including Beck's Depression Inventory (BDI), the Maudsley Obsessive-Compulsive Inventory, and the State-Trait Anxiety Inventory (STAI). It has also been found that the WBSI correlates negatively with repression, thus suggesting that the WBSI measures a characteristic that is different to traditional concepts of repression (Wegner & Zanakos, 1994). In the current study, alphas were .92 for the shelter/treatment center sample and .93 for the undergraduate sample. In the shelter/treatment sample, the WBSI had a range of 49 with a lowest score of 24 and highest score of 73. In the undergraduate sample, the WBSI had a range of 58 with a lowest score of 17 and highest score of 75.

Psychological Distress and Symptomology

The Brief Symptom Inventory (BSI) is a 53-item self-report measure used to assess overall psychological functioning. The BSI is comprised of nine symptom dimensions: Somatization, Obsessive-Compulsive, Interpersonal Sensitivity, Depression, Anxiety, Hostility, Phobic Anxiety, Paranoid Ideation, and Psychoticism. Items on the BSI encompass three global

indices that measure overall psychological distress (Global Severity Index), intensity of symptoms (Positive Symptom Distress Index), and number of reported symptoms (Positive Symptom Total) (BSI; Derogatis, 1993). The BSI asks for symptoms in the past seven days and items are answered using a 5-point scale ranging from 0 (*not at all*) to 4 (*extremely*). Research suggests that the BSI has adequate internal consistency for the nine dimensions with alphas ranging from 0.71 for Psychoticism to 0.85 for Depression (Derogatis, 1993). Research with women dwelling at a battered women's shelter has shown the BSI to have moderate to good internal consistency across subscales within this population ($\alpha = 0.97$ for global severity; $\alpha = 0.83$ for depression; Jarvis et al., 2005). For the current study, only the Global Severity Index score was utilized. In the current study, alphas were .95 for the shelter/treatment center sample and .96 for the undergraduate sample. In the shelter/treatment sample, the BSI Global Severity Index had a range of 30 with a lowest score of 50 and highest score of 80. In the undergraduate sample, the BSI Global Severity Index had a range of 45 with a lowest score of 35 and highest score of 80.

Posttraumatic Stress Disorder Symptomology

The Posttraumatic Stress Disorder Checklist (PCL-S**)** is a 17-item self-report measure based on the DSM-IV criteria for PTSD used to assess for PTSD symptomology. Questions correspond to the key DSM-IV symptoms of re-experiencing (5), avoidance and numbing (7), and hyperarousal (5). For example, one item on the PCL-S asks "In the past month, how much have you been bothered by: repeated, disturbing memories, thoughts, or images of a stressful experience from the past?" All responses are based on the past month and are recorded with a five-point Likert-like scale (1 = *not at all* to 5 = *extremely*). The PCL-S has demonstrated excellent internal consistency ($\alpha = 0.94$). Within a community sample of battered women, the

PCL-S has been found to have good internal reliability with an alpha of 0.95 (Samuelson & Cashman, 2008). In the current study, alphas were .88 for the shelter/treatment center sample and .93 for the undergraduate sample. In the shelter/treatment sample, the PCL had a range of 40 with a lowest score of 38 and highest score of 78. In the undergraduate sample, the PCL had a range of 58 with a lowest score of 17 and highest score of 75.

Procedures

Consent was acquired using procedures approved by the University of North Texas Institutional Review Board. The purpose, risks, and benefits of the study were outlined in a cover letter and attached to the informed consent form. Contact information for the principal investigator and research assistant were included on the informed consent sheet (again, see Appendix A). Any questions regarding informed consent were answered by the principal investigator or research assistant prior to participation in the study. A master list linking participant identification numbers with participant names was destroyed after all data had been collected and analyzed and all participants received proper compensation for participation. All data with any identifying information, including copies of signed informed consent forms were stored in a cabinet in a locked room in Dr. Amy Murrell's research lab (328) in Terrill Hall at the University of North Texas. All research assistants who have access to this research lab have been thoroughly trained in procedures necessary to protect participant confidentiality.

Data collection was performed in a quiet room and only the participants who consented were allowed to participate. During data collection, the principal investigator and/or a research assistant were available to assist participants in understanding or defining any unknown terms. Participants were given as long as they need to complete questionnaires; however, most participants completed the study in 60 minutes.

Compensation for participation from the shelter/treatment center participants included entry into a raffle. All shelter/treatment center participants had their names entered into a drawing to win $50. Additionally, upon completion of the measures shelter/treatment center participants received two $1.00 coupons to McDonalds. As several participants were residing at a shelter for battered women or in treatment for violence-related symptoms, many were involved in counseling services. However, staff at the shelter/treatment center were informed about the nature of the study and potential risks of participation in the study in the event that some individuals needed additional assistance. Researchers were available during the administration of the study to aid participants if they became distressed. Additionally, since not all participants were currently in treatment and as precautionary mechanism, participants were provided with referrals for psychological assistance and crisis line numbers.

Undergraduate participants with negative screener results were thanked for their participation and informed that the study was complete. They were given extra credit points for their psychology courses for a 1/2 hour of their time through Sona. Undergraduate participants with positive screener results were asked to participate in part two of the study which took place during the same session as part one. Undergraduate participants with a positive screen were eligible to complete the second portion of the study, but were free to decline participation in part two. Consenting participants for part two of the study were instructed to complete the questionnaire packet in full, and not to skip any questions. The principal investigator and/or a research assistant were available to assist participants in understanding or defining any unknown terms. Upon completion of the study, research assistants debriefed all participants and assigned credit through the UNT psychology department's Sona system. These participants

were given 1 ½ hours worth of Sona credits. Additionally, all participants, for both Part 1 and 2, were provided with a brochure detailing information about IPV and a list of local resources.

CHAPTER 3

RESULTS

Prior to hypothesis testing, preliminary data analyses were conducted. The demographics of the samples and the psychometric properties of the scales were examined. Additionally, the assumptions of regression models, and mediation, were tested.

Descriptive Statistics

Descriptive statistics were calculated for age, relationship status, ethnicity, education level, employment status, and annual income as reported on the demographic questionnaire. Additionally, percentages of self-report of intimate partner violence (IPV) type were calculated. In the samples of shelter/treatment centers and undergraduate students, all participants were female as indicated in the inclusion criteria (n = 18, n = 97 respectively) and several ethnic groups were represented (refer to Table 1 and Table 2 for details). Further descriptive information is provided about each sample below. It is important to note that no statistically significant differences were found among ethnicity, education level, employment status, and annual income nor were there differences between these variables and the dependent variables in either sample.

Shelter/Treatment Center Statistics

Ethnic groups represented by shelter/treatment center participants included: Caucasian (n = 3), African American/Black (n = 10), Hispanic or Latino (n = 3), and biracial/multiracial (n = 2). Age of shelter/treatment center participants ranged from 21 to 67, with a mean age of 33.78 years-old (SD = 12.12). Within that sample, a wide range of education level, employment status, and annual income were represented (see Table 3). In regard to highest level of education obtained, 5.6% obtained a junior high education, 22.2% obtained some

high school education, 16.7% obtained a high school or general education development (GED) level of education, 27.8% obtained some college, 11.1% obtained an associate's degree, and 16.7% obtained a 4-year college education. In regard to employment status, 27.8% were unemployed, 5.6% of the shelter/treatment center sample was employed part time, and 66.7% were employed full time. In regards to annual income of that sample, 83.3% reported having an annual income between $0-$20,000, 5.6% reported an annual income of $20,001-$40,000, and 11.1% reported an annual income of $40,001-$60,000.

Table 3

Clinical/Shelter Sample: SES Descriptive Statistics

	Frequency	Percent
Highest Level of Education (*n* = 18)		
Junior High	1	5.6%
Some High School	4	22.2%
High School/GED	3	16.7%
Some College	5	27.8%
Associate's Degree	2	11.1%
4 Year College	3	16.7%
Employment Status (*n* = 18)		
Part Time	1	5.6%
Unemployed	5	27.8%
Full Time	12	66.7%
Annual Income (*n* = 18)		
0- 20,000	15	83.3%
20,001-4 0,001	1	5.6%
40,001- 60,000	2	11.1%

With regard to self-report of IPV type in the shelter/treatment center sample, emotional/verbal abuse and physical abuse was the most commonly reported (44.4%). Additionally, 38.9% of the shelter/treatment center sample experienced physical, emotional/verbal, and sexual abuse. Approximately 11% reported only emotional/verbal abuse, and the smallest percentage of shelter/treatment center participants experienced physical and sexual abuse (5.6%).

Undergraduate Student Statistics

Ethnic groups represented by undergraduate participants included: Caucasian (n = 45), African American/Black (n = 22), Native American (n = 1), Asian (n = 5), Hispanic or Latino (n = 22), and biracial/multiracial (n = 2). Age of undergraduate participants ranged from 18 to 43, with a mean age of 21.8 years-old (SD = 5.07). Within the undergraduate sample, a wide range of education level, employment status, and annual income were represented (see Table 4). In regard to highest level of education obtained, 16.5% obtained a high school or GED level of education, 69.1% obtained some college, 11.3% obtained an Associate's degree, 1% obtained a 4 year college level of education, 1% obtained a graduate school level of education. In regard to employment status, 43.3% of the student sample was unemployed, 44.3% was employed part time, and 12.4% of the students were employed full time. In regard to annual income of the student sample, 74.2% reported having an annual income between $0-$20,000, 13.4% reported an annual income of $20,001-$40,000, 3.1% reported an annual income of $40,001-$60,000, 3.1% reported an annual income of $60,001-$80,000, 0.1% stated that they had an annual income of $80,001-$100,000, and 2.1% reported an annual income of $100,001 or above.

Table 4

Undergraduate Sample: SES Descriptive Statistics

	Frequency	Percent
Highest Level of Education (*n* = 97)		
High School/GED	16	16.5%
Some College	67	69.1%
Associate's Degree	11	11.3%
4 Year College	1	1%
Graduate School	1	1%
Employment Status (*n* = 97)		
Part Time	43	44.3%
Unemployed	42	43.3%
Full Time	12	12.4%
Annual Income (*n* = 97)		
0- 20,000	72	74.2%
20,001- 40,001	13	13.4%
40,001- 60,000	3	3.1%
60,001- 80,000	3	3.1%
80,001- 100,000	1	1%
100,001 and above	2	2.1%

With regard to self-report of IPV type in the undergraduate sample, emotional/verbal abuse (only) was the most commonly reported (78.5%). This finding was similar to previous studies of intimate partner violence which found high rates of psychological abuse among college undergraduates (e.g., Hines & Saudino, 2003; White & Koss, 1991). Several individuals reported poly-traumatization, including physical and emotional/verbal abuse (12.7%), emotional/verbal and sexual abuse (3.8%), and physical, emotional/verbal, and sexual abuse (3.8%). Of the 86 individuals who responded to the relationship status

question, a total of 35 participants (40.7%) reported being currently involved with the perpetrator of the abuse. Of note, on the demographic questionnaire, the two questions with the highest non-response rate were those that assessed type of IPV experience and relationship status with perpetrator of abuse (n = 79 and 86, respectively). Given that these questions were the most personal questions on the demographic questionnaire, and given the nature of the study, it is not surprising that several participants chose to not respond to these questions. More information will be provided on missing data later in this manuscript.

Measures

Internal consistency reliability coefficients for both the shelter/treatment center sample (Table 5) and the undergraduate sample (Table 6) were calculated for the following measures: CTS2, MMEA, AFQ, WBSI, and PCL-S. Means, standard deviations, and range of scores were calculated for both the shelter/treatment center sample (Table 5) and the undergraduate sample (Table 6) for each scale.

Table 5.

Descriptive Statistics and Correlations Among Key Variables in Shelter/TC Sample

Variables			1.	2.	3.	4.	5.	6.
	M	*SD*						
1. CTS2	75.94	72.80	(.73)	.07	-.11	.07	.07	.10
2. MMEA	357.29	180.83		(.92)	-.59*	-.48	-.47	-.69
3. AFQ	35.50	16.83			(.93)	.62*	.69**	.71**
4. WBSI	59.38	12.62				(.92)	.45	.50**
5. PCL-S	55.44	12.81					(.88)	.70**
6. BSI	72.61	8.60						(.95)

Note. CTS2 = Conflict Tactics Scale 2; MMEA = Multidimensional Measure of Emotional Abuse; AFQ = Avoidance and Fusion Questionnaire; WBSI = White Bear Suppression Inventory; PCL-S = Posttraumatic Stress Disorder Checklist (Specific); BSI = Brief Symptom Inventory (Global Severity Index). Values enclosed in parentheses represent Cronbach's Alpha for the measure. * $p < .05$, ** $p < .01$ (one-tailed).

Table 6.

Descriptive Statistics and Correlations Among Key Variables in Undergraduate Sample

Variables			1	2	3	4	5	6
	M	*SD*						
1. CTS2	4.46	8.21	(.73)	.34**	.27**	.18*	.25*	.21*
2. MMEA	100.41	104.68		(.93)	.42**	.37**	.47**	.44**
3. AFQ	22.39	11.77			(.88)	.58**	.72**	.75**
4. WBSI	52.25	12.70				(.93)	.50**	.61**
5. PCL-S	34.83	13.58					(.93)	.73**
6. BSI	64.02	9.12						(.96)

Note. CTS2 = Conflict Tactics Scale 2; MMEA = Multidimensional Measure of Emotional Abuse; AFQ = Avoidance and Fusion Questionnaire; WBSI = White Bear Suppression Inventory; PCL-S = Posttraumatic Stress Disorder Checklist (Specific); BSI = Brief Symptom Inventory (Global Severity Index). Values enclosed in parentheses represent Cronbach's Alpha for the measure. * $p < .05$, ** $p < .01$ (one-tailed).

Missing Data and Assumption Testing

Distribution and pattern of missing data were evaluated based on procedures outlined in Tabachnick & Fidell (2007). One case was immediately removed due to incompletion of half of the measures of interest, including the preliminary abuse screener, and an indentifiable pattern of responses for completed measures (e.g., almost all zeros). Next, the pattern of missing data was analyzed, including examination of absolute number of missing data points and their percentages. With the exception of seven cases, the missing data appeared to be random in nature. The seven cases identified as the exception each failed to complete one of the outcome measures (e.g., PCL-S, CTS2). When compared to the rest of the sample, these seven cases did not differ significantly on other completed measures of interest. As the missing data for these participants was limited to only one outcome measure each, they were retained in the overall sample and their data was utilized in analyses, where appropriate (i.e., completed outcome measure utilized in analysis). Additionally, mean substitution was performed to account for the missing data points.

The assumptions of normality, homoscedasticity, linearity and independence were met. Thus, no transformations of the data were necessary. There were some theoretical reasons to have concern about overlap in variables of interest. Thus, multicollinearity is discussed with careful consideration. There is some overlap between experiential avoidance (EA) and the Diagnostic and Statistical Manual of Mental Disorders, fourth edition, text revised (DSM-IV-TR) avoidance criteria for PTSD, so it was reasonable to hypothesize that there would be a moderate to high correlation between AFQ and PCL scores. Indeed, that was the case, with a significant $r^2 = .75$ ($p < .01$). However, a multicollinearity analysis revealed that this relationship was not significantly impacting the regression model (tolerance = 1.00; VIF = 1.0). Although there is some overlap between the concept of EA and the DSM-IV avoidance criteria for PTSD, EA is different from this group of avoidance symptoms. The avoidance symptoms required for PTSD diagnosis refer to behaviors that are triggered by exposure to trauma-related stimuli whereas EA refers to "the repetition of unworkable patterns of behavior that prevent people from acting in ways that are congruent with their central values" (Kashdan & Kane, 2011, p. 85). As a broad construct, EA thus allows for an "all-inclusive explanation" of the role of avoidance in the development and maintenance of trauma-related symptoms (Walser & Hayes, 2006). This broad definition often leads to EA being highly correlated with general measures of psychological distress. While there appears to be a fairly strong relationship between EA and the Global Severity Index (GSI) on the BSI ($r^2 = .52$, $p < .01$), a multicollinearity analysis revealed that this relationship was not significantly impacting the regression model (tolerance = 1.00; VIF = 1.0). Additionally, before hypothesis testing was begun, experiment-wise error was controlled for using Bonferroni correction. The overall alpha level was divided up by the

number of tests run for each sample. The *p* value for significance was thus set at equal to or less than .003 (.05 was divided by 18 for each of the mediational analysis to account for family-wise error).

Hypotheses Testing

Several mediation analyses using the Baron and Kenny (1986) method were conducted to investigate: whether EA, as measured by the AFQ, was a mediator between IPV severity (as measured by the CTS2 subscales related to psychological aggression, physical assault, injury, and sexual coercion) and psychological distress, measured by the Global Severity Index (GSI) of the BSI, and whether EA was a mediator between IPV severity and PTSD symptomology (as measured by the PCL-S), more specifically. In addition, mediational analyses were run to determine if suppression, as measured by the WBSI, changed the relationships between IPV severity and psychological distress, or IPV severity and PTSD symptomology. Using the same methods, EA and suppression were both also examined as mediators between psychological/verbal abuse severity (as measured by the MMEA) and psychological distress, and between psychological/verbal abuse severity and PTSD symptomology. Mediation analyses were performed on the undergraduate sample and the shelter/treatment center sample. No significant results were found in the shelter/treatment center sample. However, several mediations and partial mediations were found in the undergraduate sample. For each statistically significant mediation, effect sizes were calculated. Effect sizes were examined according to the guidelines proposed by Frazier, Tix, and Barron (2004). According to this method, effect sizes for mediation analyses are calculated using the indirect effect. Thus, the betas of path a and path b are multiplied and turned into an effect size. Each of these findings is covered.

Hypothesis 1a

Hypothesis 1a was partially supported since results indicated EA was a partial mediator between psychological aggression IPV and psychological distress (see Figure 1). Following the Baron and Kenny (1986) method, the first step was to establish the existence of a significant relationship between psychological aggression IPV (predictor) and psychological distress (outcome). Results of this regression were significant (R^2 =.15, F (1, 90) = 15.98, p <.001). Specifically, psychological aggression IPV significantly predicted psychological distress (β = .39, B = .11, p < .001). Thus, the criterion for mediation as defined by Baron and Kenny (1986) was met.

The second step of the analysis required establishing that psychological aggression IPV (predictor) is correlated with EA (mediator). This model was significant, indicating that psychological aggression IPV was significantly correlated with EA (R^2 =.12, F (1, 92) = 12.27, β = .34, B = .12, p = .001). Therefore, the second criterion for mediation was met.

For the third and fourth steps of the mediational test, the relationship between EA (mediator) and psychological distress (outcome) was examined. This was accomplished with a regression in which psychological distress (BSI_GSI) was identified as the criterion variable and psychological aggression IPV score (CTS2) and EA (AFQ) were selected as predictors. Results of step one of this regression were significant, indicating that psychological aggression IPV significantly predicted psychological distress (R^2 =.15, F (1, 90) = 15.98, p <.001). Once the effects of psychological aggression IPV were accounted for, EA was added to the model with significant results (R^2 =.58, F (2, 89) = 61.70, p <.001). While psychological aggression IPV accounted for 15% of the variance for psychological distress, the addition of EA increased the variance accounted for by the whole model to 58% (R^2 change = .43, R^2 = .58, β = .70, B = .57,

$p < .001$). Furthermore, the standardized beta coefficient for psychological aggression IPV was.15 (B = .04, $p = .04$). As recommended by Baron and Kenny, the Sobel test was used to determine if the reduction in prediction was statistically significant. EA is a partial mediator between psychological aggression IPV and psychological distress z' = 2.86, $p < .01$. The effect size of this mediation is 0.24.

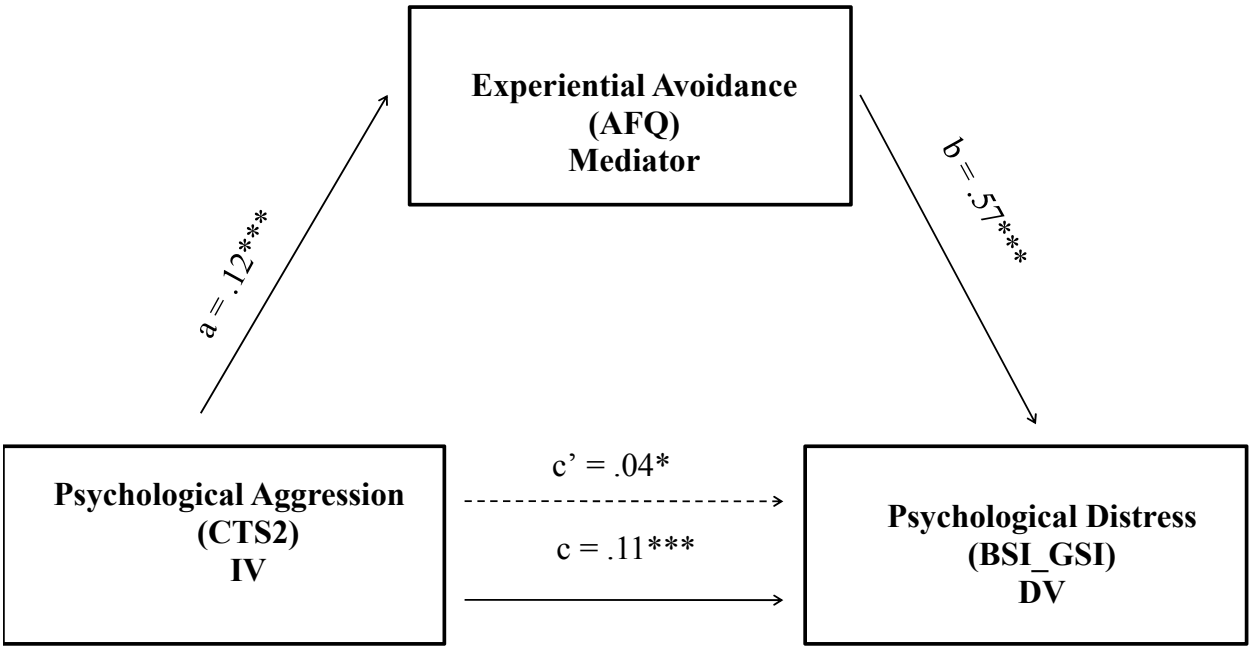

Figure 1. Mediation model of psychological aggression, experiential avoidance, and psychological distress. * $p < .05$, ** $p < .01$, *** $p < .001$.

Hypothesis 1b

Hypothesis 1b was not supported. Following the Baron and Kenny (1986) method, the first step was to establish the existence of a significant relationship between physical assault IPV (predictor) and psychological distress (outcome). Results of this regression were not significant (R^2 =.04, F (1, 90) = 4.05, β = .21, B = .11, p =.05). Since step 1 was not significant further analyses were not conducted.

Hypothesis 1c

Hypothesis 1c was also supported; EA was a mediator between injury IPV and psychological distress (see Figure 2). Following this method, the first step was to establish the existence of a significant relationship between injury IPV (predictor) and psychological distress (outcome). Results of this regression were significant (R^2 =.10, F (1, 90) = 9.55, p = .003). Specifically, injury IPV significantly predicted psychological distress (β = .31, B = 3.01, p = .003). Thus, the criterion for mediation as defined by Baron and Kenny (1986) was met.

The second step of the analysis required establishing that injury IPV (predictor) is correlated with EA (mediator). This model was significant, indicating that injury IPV was significantly correlated with EA (R^2 =.09, F (1, 92) = 8.59, β = .29, B = 3.62, p = .003). Therefore, the second criterion for mediation was met.

For the third and fourth steps of the mediational test, the relationship between EA (mediator) and psychological distress (outcome) was examined. This was accomplished with a regression in which psychological distress (BSI_GSI) was identified as the criterion variable and injury IPV score (CTS2) and EA (AFQ) were selected as predictors. Results of step one of this regression were significant, indicating that injury IPV significantly predicted psychological distress (R^2 =.10, F (1, 90) = 9.55, p = .003). Once the effects of injury IPV were accounted for, EA was added to the model with significant results (R^2 =.57, F (2, 89) = 58.97, p <.001). While injury IPV accounted for 10% of the variance for psychological distress, the addition of EA increased the variance accounted for by the whole model to 57% (R^2 change = .47, R^2 = .57, B = .59 β = .72, p < .001). Furthermore, the standardized beta coefficient for injury IPV was .10 (B = .10, p = .179). As recommended by Baron and Kenny, the Sobel test was used to

determine if the reduction in prediction was statistically significant. EA is a mediator between injury IPV and psychological distress z' = 2.80, $p < .01$. The effect size for this mediation is large, .21.

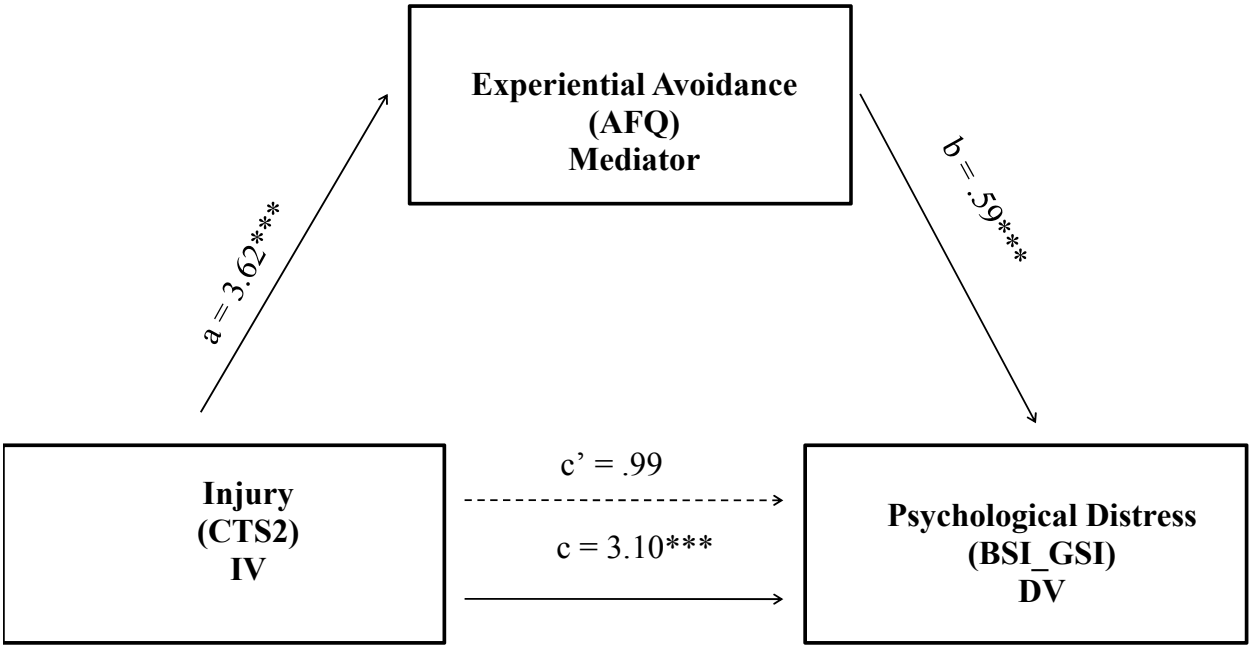

Figure 2. Mediation model of injury, experiential avoidance, and psychological distress. * $p < .05$, ** $p < .01$, ***$p < .001$.

Hypothesis 1d

Hypothesis 1d was not supported. Following the Baron and Kenny (1986) method, the first step was to establish the existence of a significant relationship between sexual coercion IPV (predictor) and psychological distress (outcome). Results of this regression were not significant (R^2 =.06, F (1, 90) = 5.73, β = .24, B = .19, p =.02). Since step 1 was not significant further analyses were not conducted.

Hypothesis 2a

Hypothesis 2a was partially supported since results indicated suppression was a partial mediator between psychological aggression IPV and psychological distress (see Figure 3).

Following this method, the first step was to establish the existence of a significant relationship between psychological aggression IPV (predictor) and psychological distress (outcome). Results of this regression were significant (R^2 =.15, F (1, 90) = 15.98, p <.001). Specifically, psychological aggression IPV significantly predicted psychological distress (β = .39, B = .11, p < .001). Thus, the criterion for mediation as defined by Baron and Kenny (1986) was met.

The second step of the analysis required establishing that psychological aggression IPV (predictor) is correlated with suppression (mediator). This model was significant, indicating that psychological aggression IPV was significantly correlated with suppression (R^2 =.15, F (1, 92) = 15.65, β = .38, B = .16, p = .001). Therefore, the second criterion for mediation was met.

For the third and fourth steps of the mediational test, the relationship between suppression (mediator) and psychological distress (outcome) was examined. This was accomplished with a regression in which psychological distress (BSI_GSI) was identified as the criterion variable and psychological aggression IPV score (CTS2) and suppression (WBSI) were selected as predictors. Results of step one of this regression were significant, indicating that psychological aggression IPV significantly predicted psychological distress (R^2 =.15, F (1, 90) = 15.98, p <.001). Once the effects of psychological aggression IPV were accounted for, suppression was added to the model with significant results (R^2 =.39, F (2, 89) = 28.40, p <.001). While psychological aggression IPV accounted for 15% of the variance for psychological distress, the addition of suppression increased the variance accounted for by the whole model to 39% (R^2 change = .24, R^2 = .39, B = .37, β = .53, p < .001). Furthermore, the standardized beta coefficient for psychological aggression IPV was .19 (B = .06, p = .04). As recommended by Baron and Kenny, the Sobel test was used to determine if the reduction in prediction was

statistically significant. Suppression is a partial mediator between psychological aggression IPV and psychological distress z' = 2.80, $p < .01$; effect size is 0.20.

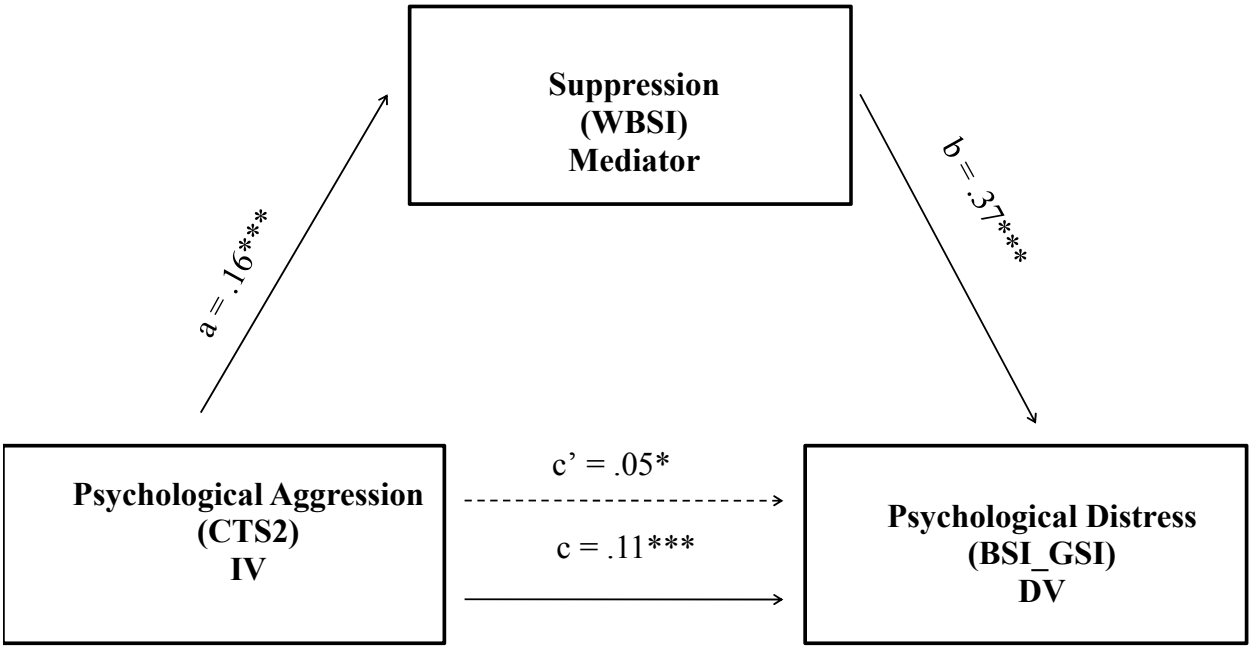

Figure 3. Mediation model of psychological aggression, suppression, and psychological distress. * $p < .05$, ** $p < .01$, ***$p < .001$.

Hypothesis 2b

Hypothesis 2b was not supported. Following the Baron and Kenny (1986) method, the first step was to establish the existence of a significant relationship between physical assault IPV (predictor) and psychological distress (outcome). Results of this regression were not significant (R^2 =.04, F (1, 90) = 4.05, β = .21, B = .23, p =.05). Since step 1 was not significant further analyses were not conducted.

Hypothesis 2c

Hypothesis 2c was partially supported since results indicated suppression was a partial mediator between injury IPV and psychological distress (see Figure 4). Following this method, the first step was to establish the existence of a significant relationship between injury IPV

(predictor) and psychological distress (outcome). Results of this regression were significant (R^2 =.10, F (1, 90) = 9.55, p =.003). Specifically, injury IPV significantly predicted psychological distress (β = .31, B = 3.01, p = .003). Thus, the criterion for mediation as defined by Baron and Kenny (1986) was met.

The second step of the analysis required establishing that injury IPV (predictor) is correlated with suppression (mediator). This model was significant, indicating that injury IPV was significantly correlated with suppression (R^2 =.10, F (1, 90) = 9.61, β = .31, B = 4.37, p = .003). Therefore, the second criterion for mediation was met.

For the third and fourth steps of the mediational test, the relationship between suppression (mediator) and psychological distress (outcome) was examined. This was accomplished with a regression in which psychological distress (BSI_GSI) was identified as the criterion variable and injury IPV score (CTS2) and suppression (WBSI) were selected as predictors. Results of step one of this regression were significant, indicating that injury IPV significantly predicted psychological distress (R^2 =.10, F (1, 90) = 9.55, p =.003). Once the effects of injury IPV were accounted for, suppression was added to the model with significant results (R^2 =.38, F (2, 89) = 26.94, p <.001). While injury IPV accounted for 10% of the variance for psychological distress, the addition of suppression increased the variance accounted for by the whole model to 38% (R^2 change = .28, R^2 = .38, B = .39, β = .56, p < .001). Furthermore, the standardized beta coefficient for injury IPV was .14 (B = .1.39, p = .12). As recommended by Baron and Kenny, the Sobel test was used to determine if the reduction in prediction was statistically significant. Suppression is a mediator between injury IPV and psychological distress z' = 2.80, p < .01. The effect size of this mediation is.17**.**

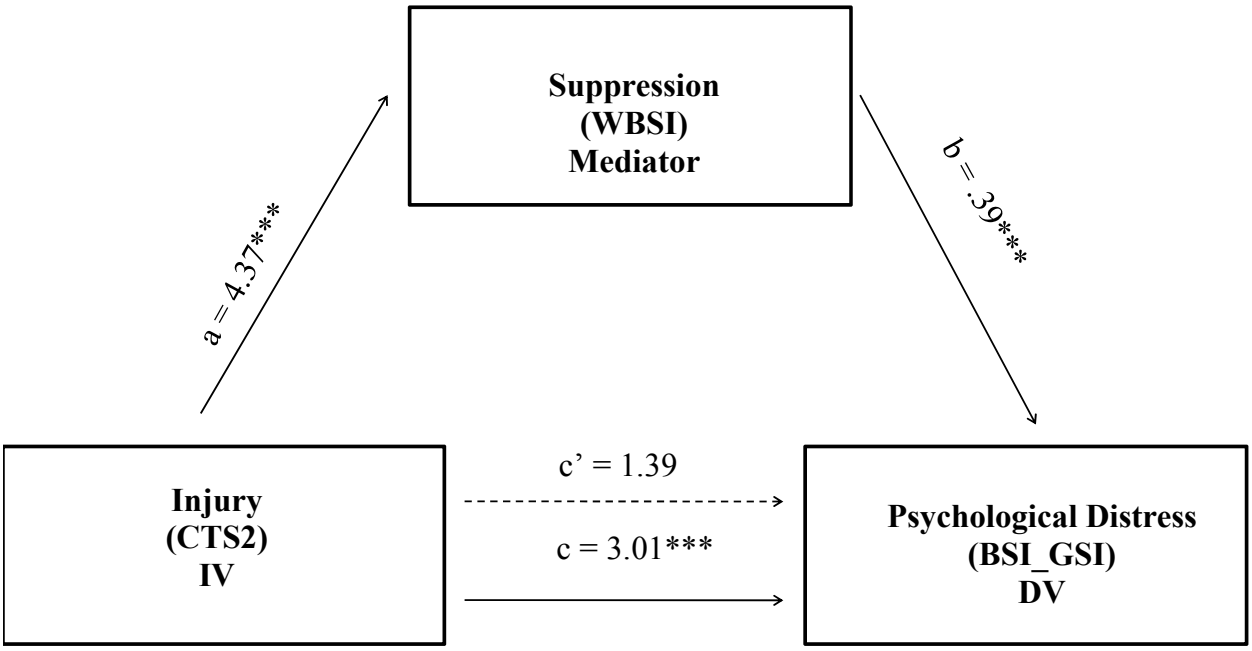

Figure 4. Mediation model of injury, suppression, and psychological distress. * $p < .05$, ** $p < .01$, ***$p < .001$.

Hypothesis 2d

Hypothesis 2d was not supported. Following the Baron and Kenny (1986) method, the first step was to establish the existence of a significant relationship between sexual coercion IPV (predictor) and psychological distress (outcome). Results of this regression were not significant (R^2 =.06, F (1, 90) = 5.37, β = .24, B = .19, p =.04). Since step 1 was not significant further analyses were not conducted.

Hypothesis 3a

Hypothesis 3a was partially supported since results indicated EA was a partial mediator between psychological aggression IPV and PTSD symptomology (see Figure 5). Following this method, the first step was to establish the existence of a significant relationship between psychological aggression IPV (predictor) and PTSD symptomology (outcome). Results of this regression were significant (R^2 =.19, F (1, 90) = 21.01, p <.001). Specifically, psychological

aggression IPV significantly predicted PTSD symptomology (β = .44, B = .18, $p < .001$). Thus, the criterion for mediation as defined by Baron and Kenny (1986) was met.

The second step of the analysis required establishing that psychological aggression IPV (predictor) is correlated with EA (mediator). This model was significant, indicating that psychological aggression IPV was significantly correlated with EA (R^2 =.12, F (1, 92) = 12.27, β = .34, B = .12, p = .001). Therefore, the second criterion for mediation was met.

For the third and fourth steps of the mediational test, the relationship between EA (mediator) and PTSD symptomology (outcome) was examined. This was accomplished with a regression in which PTSD symptomology score (PCL-S) was identified as the criterion variable and psychological aggression IPV score (CTS2) and EA (AFQ) were selected as predictors. Results of step one of this regression were significant, indicating that psychological aggression IPV significantly predicted PTSD symptomology (R^2 =.19, F (1, 90) = 21.01, p <.001). Once the effects of IPV were accounted for, EA was added to the model with significant results (R^2 =.54, F (2, 89) = 52.50, p <.001). While psychological aggression IPV accounted for 19% of the variance for PTSD symptomology, the addition of EA increased the variance accounted for by the whole model to 54% (R^2 change = .35, R^2 = .54, B = .77 β = .63, $p < .001$). Furthermore, the standardized beta coefficient for IPV was .22 (B = .10, p = .004). As recommended by Baron and Kenny, the Sobel test was used to determine if the reduction in prediction was statistically significant. EA is a partial mediator between psychological aggression IPV and PTSD symptomology z' = 2.83, $p < .01$; effect size is 0.29.

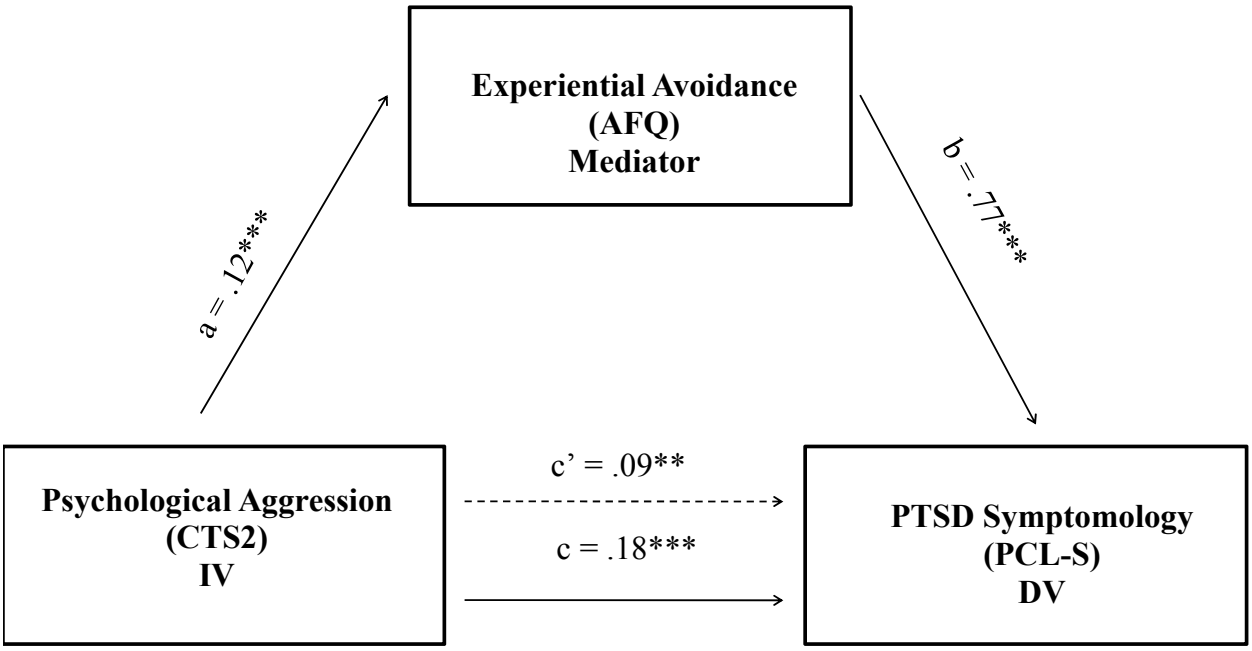

Figure 5. Mediation model of psychological aggression, experiential avoidance, and PTSD symptomology. * $p < .05$, ** $p < .01$, ***$p < .001$.

Hypothesis 3b

Hypothesis 3b was not supported. Following the Baron and Kenny (1986) method, the first step was to establish the existence of a significant relationship between physical assault IPV (predictor) and PTSD symptomology (outcome). Results of this regression were not significant (R^2 =.06, F (1, 90) = 6.07, β = .25, B = .41, p =.016). Since step 1 was not significant further analyses were not conducted.

Hypothesis 3c

Hypothesis 3c was not supported. Following the Baron and Kenny (1986) method, the first step was to establish the existence of a significant relationship between injury IPV (predictor) and PTSD symptomology (outcome). Results of this regression were not significant

(R^2 =.06, F (1, 90) = 5.93, β = .25, B = 3.66, p =.017). Since step 1 was not significant further analyses were not conducted.

Hypothesis 3d

Hypothesis 3d was not supported. Following the Baron and Kenny (1986) method, the first step was to establish the existence of a significant relationship between sexual coercion IPV (predictor) and PTSD symptomology (outcome). Results of this regression were not significant (R^2 =.05, F (1, 90) = 5.15, β = .23, B = .28, p =.026). Since step 1 was not significant further analyses were not conducted.

Hypothesis 4a

Hypothesis 4a was partially supported since results indicated suppression was a partial mediator between psychological aggression IPV and PTSD symptomology (see Figure 6). Following this method, the first step was to establish the existence of a significant relationship between psychological aggression IPV (predictor) and PTSD symptomology (outcome). Results of this regression were significant (R^2 =.19, F (1, 90) = 21.01, p <.001). Specifically, psychological aggression IPV significantly predicted PTSD symptomology (β = .44, B = .18, p < .001). Thus, the criterion for mediation as defined by Baron and Kenny (1986) was met.

The second step of the analysis required establishing that psychological aggression IPV (predictor) is correlated with suppression (mediator). This model was significant, indicating that psychological aggression IPV was significantly correlated with suppression (R^2 =.15, F (1, 92) = 15.65, β = .38, B = .16, p < .001). Therefore, the second criterion for mediation was met.

For the third and fourth steps of the mediational test, the relationship between suppression (mediator) and PTSD symptomology (outcome) was examined. This was accomplished with a regression in which PTSD symptomology score (PCL-S) was identified as

the criterion variable and psychological aggression IPV score (CTS2) and suppression (WBSI) were selected as predictors. Results of step one of this regression were significant, indicating that psychological aggression IPV significantly predicted PTSD symptomology (R^2 =.19, F (1, 90) = 21.01, p <.001). Once the effects of IPV were accounted for, suppression was added to the model with significant results (R^2 =.31, F (2, 89) = 20.40, p <.001). While psychological aggression IPV accounted for 19% of the variance for PTSD symptomology, the addition of suppression increased the variance accounted for by the whole model to 31% (R^2 change = .13, R^2 = .31, B = .40 β = .38, p < .001). Furthermore, the standardized beta coefficient for psychological aggression IPV was .30 (B = .13, p = .002). As recommended by Baron and Kenny, the Sobel test was used to determine if the reduction in prediction was statistically significant. Suppression is a partial mediator between psychological aggression IPV and PTSD symptomology z' = 2.83, p < .01; effect size is 0.19.

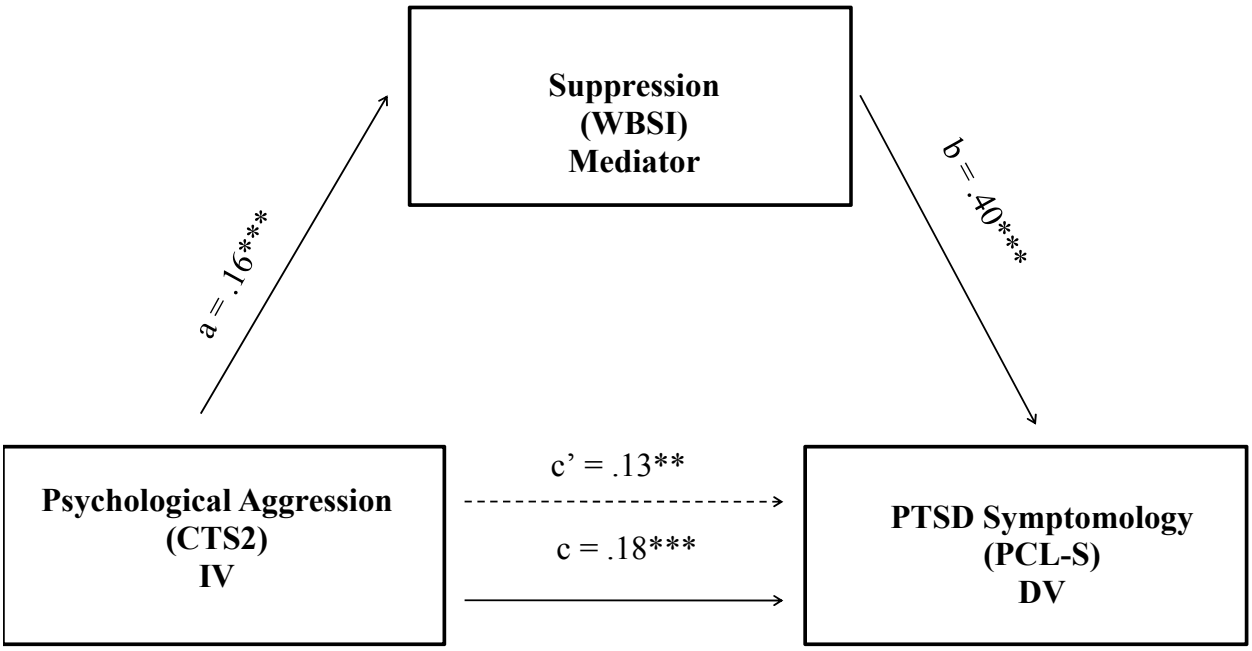

Figure 6. Mediation model of psychological aggression, suppression, and PTSD symptomology. * p < .05, ** p < .01, ***p < .001.

Hypothesis 4b

Hypothesis 4b was not supported. Following the Baron and Kenny (1986) method, the first step was to establish the existence of a significant relationship between physical assault IPV (predictor) and PTSD symptomology (outcome). Results of this regression were not significant (R^2 =.06, F (1, 90) = 6.07, β = .25, B = .41, p =.016). Since step 1 was not significant further analyses were not conducted.

Hypothesis 4c

Hypothesis 4c was not supported. Following the Baron and Kenny (1986) method, the first step was to establish the existence of a significant relationship between injury IPV (predictor) and PTSD symptomology (outcome). Results of this regression were not significant (R^2 =.06, F (1, 90) = 5.93, β = .25, B = 3.66, p =.017). Since step 1 was not significant further analyses were not conducted.

Hypothesis 4d

Hypothesis 4d was not supported. Following the Baron and Kenny (1986) method, the first step was to establish the existence of a significant relationship between sexual coercion IPV (predictor) and PTSD symptomology (outcome). Results of this regression were not significant (R^2 =.05, F (1, 90) = 5.15, β = .23, B = .30, p =.026). Since step 1 was not significant further analyses were not conducted.

Hypothesis 5

Hypothesis 5 was partially supported since results indicated EA was a partial mediator between psychological/verbal abuse and psychological distress (see Figure 7). Following this method, the first step was to establish the existence of a significant relationship between psychological/verbal abuse (predictor) and psychological distress (outcome). Results of this

regression were significant (R^2 =.19, F (1, 93) = 21.93, p <.001). Specifically, psychological aggression IPV significantly predicted psychological distress (β = .44, B = .04, p < .001). Thus, the criterion for mediation as defined by Baron and Kenny (1986) was met.

The second step of the analysis required establishing that psychological/verbal abuse IPV (predictor) is correlated with EA (mediator). This model was significant, indicating that psychological/verbal abuse was significantly correlated with EA (R^2 =.17, F (1, 95) = 20.48, β = .42, B = .05, p = .001). Therefore, the second criterion for mediation was met.

For the third and fourth steps of the mediational test, the relationship between EA (mediator) and psychological distress (outcome) was examined. This was accomplished with a regression in which psychological distress (BSI_GSI) was identified as the criterion variable and psychological/verbal abuse score (MMEA) and EA (AFQ) were selected as predictors. Results of step one of this regression were significant, indicating that psychological/verbal abuse IPV significantly predicted psychological distress (R^2 =.19, F (1, 93) = 21.93, p <.001). Once the effects of IPV were accounted for, EA was added to the model with significant results (R^2 =.58, F (2, 92) = 63.13, p <.001). While psychological/verbal abuse accounted for 19% of the variance for psychological distress, the addition of EA increased the variance accounted for by the whole model to 58% (R^2 change = .39, R^2 = .58, B = .53 β = .69, p < .001). Furthermore, the standardized beta coefficient for psychological/verbal abuse was .15 (B = .01, p = .05). As recommended by Baron and Kenny, the Sobel test was used to determine if the reduction in prediction was statistically significant. EA is a partial mediator between psychological/verbal abuse and psychological distress z' = 4.35, p < .01; effect size is 0.22.

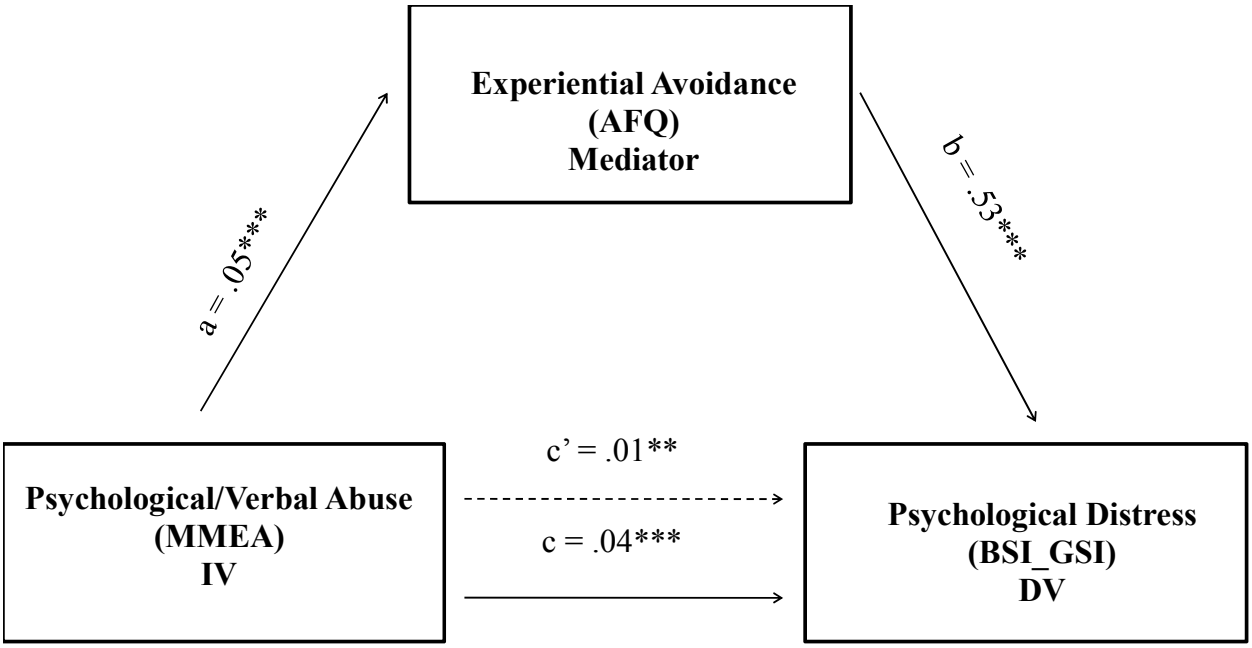

Figure 7. Mediation model of psychological/verbal abuse, experiential avoidance, and psychological distress. * $p < .05$, ** $p < .01$,*** $p < .001$.

Hypothesis 6

Hypothesis 6 was partially supported since results indicated EA was a partial mediator between psychological/verbal abuse and PTSD symptomology (see Figure 8). Following this method, the first step was to establish the existence of a significant relationship between psychological/verbal abuse (predictor) and PTSD symptomology (outcome). Results of this regression were significant (R^2 =.22, F (1, 93) = 26.18, p <.001). Specifically, psychological aggression IPV significantly predicted PTSD symptomology (β = .47, B = .06, $p < .001$). Thus, the criterion for mediation as defined by Baron and Kenny (1986) was met.

The second step of the analysis required establishing that psychological/verbal abuse IPV (predictor) is correlated with EA (mediator). This model was significant, indicating that psychological/verbal abuse was significantly correlated with EA (R^2 =.17, F (1, 95) = 20.48, β = .42, B = .05, p = .001). Therefore, the second criterion for mediation was met.

For the third and fourth steps of the mediational test, the relationship between EA (mediator) and PTSD symptomology (outcome) was examined. This was accomplished with a regression in which PTSD symptomology score (PCL-S) was identified as the criterion variable and psychological/verbal abuse score (MMEA) and EA (AFQ) were selected as predictors. Results of step one of this regression were significant, indicating that psychological/verbal abuse IPV significantly predicted PTSD symptomology (R^2 =.22, F (1, 93) = 26.18, p <.001). Once the effects of psychological/verbal abuse were accounted for, EA was added to the model with significant results (R^2 =.55, F (2, 92) = 56.74, p <.001). While psychological/verbal abuse accounted for 22% of the variance for psychological distress, the addition of EA increased the variance accounted for by the whole model to 55% (R^2 change = .33, R^2 = .55, B = .75 β = .09, p < .001). Furthermore, the standardized beta coefficient for psychological/verbal abuse was .20 (B = .03, p = .01). As recommended by Baron and Kenny, the Sobel test was used to determine if the reduction in prediction was statistically significant. EA is a partial mediator between psychological/verbal abuse and psychological distress z' = 4.16, p < .01. The effect size for this mediation is 0.27.

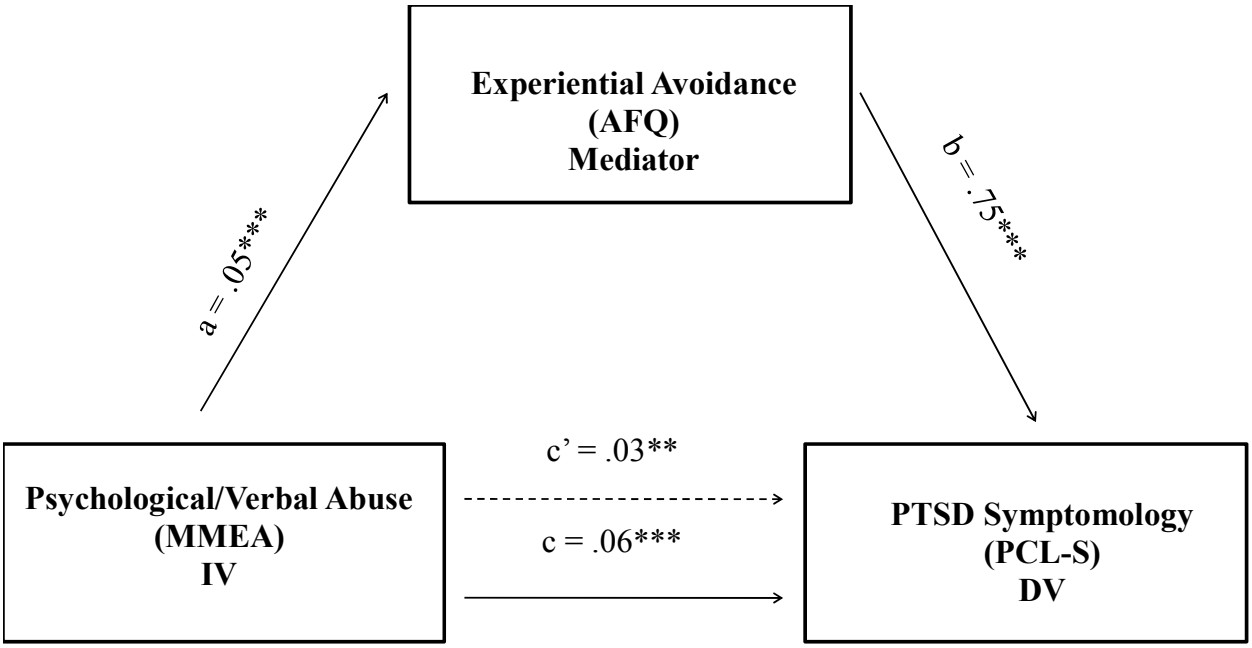

Figure 8. Mediation model of psychological/verbal abuse, experiential avoidance, and PTSD symptomology. * $p < .05$, ** $p < .01$, ***$p < .001$.

Hypothesis 7

Hypothesis 7 was partially supported since results indicated suppression was a partial mediator between psychological/verbal abuse and psychological distress (see Figure 9). Following this method, the first step was to establish the existence of a significant relationship between psychological/verbal abuse (predictor) and psychological distress (outcome). Results of this regression were significant (R^2 =.19, F (1, 93) = 21.93, p <.001). Specifically, psychological/verbal abuse significantly predicted psychological distress (β = .44, B = .04, p < .001). Thus, the criterion for mediation as defined by Baron and Kenny (1986) was met.

The second step of the analysis required establishing that psychological/verbal abuse (predictor) is correlated with suppression (mediator). This model was significant, indicating that psychological/verbal abuse was significantly correlated with suppression (R^2 =.14, F (1, 95) = 15.39, β = .37, B = .05, p = .001). Therefore, the second criterion for mediation was met.

For the third and fourth steps of the mediational test, the relationship between suppression (mediator) and psychological distress (outcome) was examined. This was accomplished with a regression in which psychological distress (BSI_GSI) was identified as the criterion variable and psychological/verbal abuse score (MMEA) and suppression (WBSI) were selected as predictors. Results of step one of this regression were significant, indicating that psychological/verbal abuse significantly predicted psychological distress (R^2 =.19, F (1, 93) = 21.93, p <.001). Once the effects of psychological/verbal abuse were accounted for, EA was added to the model with significant results (R^2 =.42, F (2, 92) = 33.21, p <.001). While psychological/verbal abuse accounted for 19% of the variance for psychological distress, the addition of suppression increased the variance accounted for by the whole model to 42% (R^2 change = .23, R^2 = .42, B = .37 β = .52, p < .001). Furthermore, the standardized beta coefficient for psychological/verbal abuse was .25 (B = .02, p = .005). As recommended by Baron and Kenny, the Sobel test was used to determine if the reduction in prediction was statistically significant. Suppression is a partial mediator between psychological/verbal abuse and psychological distress z' = 3.88, p < .01; the effect size for this mediation is 0.14.

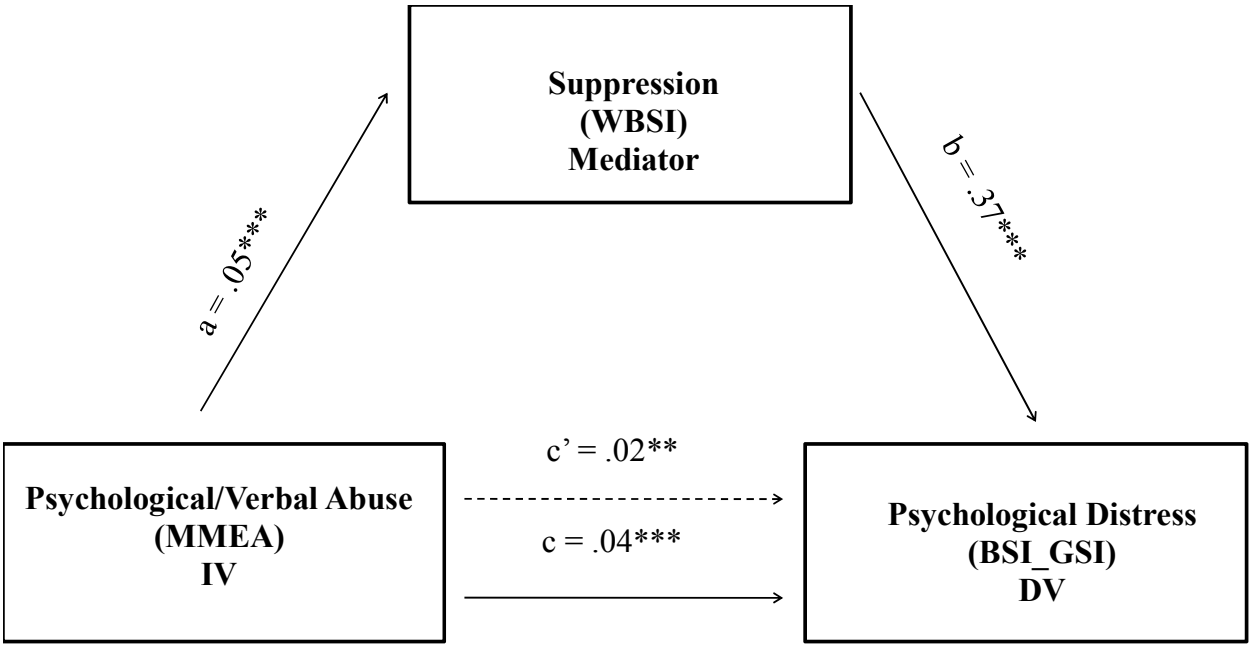

Figure 9. Mediation model of psychological/verbal abuse, suppression, and psychological distress. * $p < .05$, ** $p < .01$, ***$p < .001$.

Hypothesis 8

Hypothesis 8 was not supported. Following the same method as previously described, the first step was to establish the existence of a significant relationship between psychological/verbal abuse (predictor) and PTSD symptomology (outcome). Results of this regression were significant (R^2 =.22, F (1, 93) = 26.18, p <.001). Specifically, psychological/verbal abuse significantly predicted PTSD symptomology (β = .47, B = .06, p < .001). Thus, the criterion for mediation as defined by Baron and Kenny (1986) was met.

The second step of the analysis required establishing that psychological/verbal abuse (predictor) is correlated with suppression (mediator). This model was significant, indicating that psychological/verbal abuse was significantly correlated with suppression (R^2 =.14, F (1, 95) = 15.39, β = .37, B = .05, p = .001). Therefore, the second criterion for mediation was met.

For the third and fourth steps of the mediational test, the relationship between suppression (mediator) and PTSD symptomology (outcome) was examined. This was accomplished with a regression in which PTSD symptomology (PCL-S) was identified as the criterion variable and psychological/verbal abuse score (MMEA) and suppression (WBSI) were selected as predictors. Results of step one of this regression were significant, indicating that psychological/verbal abuse significantly predicted PTSD symptomology (R^2 =.22, F (1, 93) = 26.18, p <.001). Once the effects of psychological/verbal abuse were accounted for, suppression was added to the model with significant results (R^2 =.34, F (2, 92) = 23.72, p <.001). While psychological/verbal abuse accounted for 22% of the variance for PTSD symptomology, the addition of suppression increased the variance accounted for by the whole model to 34% (R^2 change = .12, R^2 = .34, B = .41 β = .37, p < .001). The hypothesis was not supported because when suppression was added to the model there was still a significant relationship between psychological/verbal abuse and PTSD symptomology (β = .33, B = .04, p < .001).

Summary

No significant results were found in the shelter/treatment center sample. There were a number of significant findings with respect to both EA and suppression in the student sample. For each statistically significant mediation, effect sizes were calculated. Effect sizes were examined according to the guidelines proposed by Frazier, Tix, and Barron (2004). According to this method, effect sizes for mediation analyses are calculated using the indirect effect. Thus, the betas of path a and path b are multiplied and turned into an effect size. After the effect size has been calculated, Cohen's standards are used to asses for size of the effect size.

Significant EA Findings

The current study found that EA was a partial mediator between psychological aggression

IPV and psychological distress. This mediation has a medium effect (.24). EA was also a mediator between injury IPV and psychological distress with a medium effect size of .21. EA was also found to be a partial mediator between psychological aggression IPV and PTSD symptomology, with a medium effect size of .22. Additionally, EA was found to be a partial mediator between psychological/verbal and psychological distress with a large effect size of .29. Finally, EA was found to be a partial mediator between psychological/verbal abuse and PTSD symptomology, with a large effect size of .27.

Significant Suppression Findings

In regard to the role suppression plays between the relationship between IPV and psychological distress, and IPV and PTSD symptomology, several partial mediations and a full mediation were found. The current study found that suppression was a partial mediator between psychological aggression IPV and psychological distress with a medium effect size of .20. Suppression was also a mediator between injury IPV and psychological distress with a medium effect size of .17. Suppression was also found to be a partial mediator between psychological aggression IPV and PTSD symptomology, with a medium effect size of .19. Finally, suppression was found to be a partial mediator between psychological/verbal and psychological distress with a medium effect size of .14.

Non-Significant Findings

As previously stated, none of the hypothesis tests were statistically significant in the clinical (shelter/treatment center) sample. While there were some hypothesized findings in student sample, there were some non-significant tests as well. Neither EA (as measured by the AFQ) nor suppression (as measured by the WBSI) was found to mediate the relationships between physical assault (measured by the CTS2-Physical Subscale) or sexual coercion

(measured by the CTS2-Sexual Coercion Subscale) and psychological distress (measured by the GSI of BSI). Additionally, neither EA nor suppression was found to mediate the relationships between PTSD symptoms, as measured by the PCL-S, and these IPV types (physical assault and sexual coercion), or Injury IPV (as measured by the CTS-2). Finally, it was discovered that suppression did not mediate the relationship between Psychological/Verbal Abuse (as measured by the MMEA) and PTSD symptoms as was originally proposed. However, it is important to note that this study had several limitations, which are discussed subsequently, that could have affected these findings. Also, some results were likely not significant due to the implementation of a stringent significance cutoff score after the Bonferonni correction was made for the number of tests that were conducted.

CHAPTER 4

DISSCUSSION

The purpose of the current study was to examine whether experiential avoidance (EA) was a mediator between intimate partner violence (IPV) severity and psychological distress, and whether EA was a mediator between IPV severity and posttraumatic stress disorder (PTSD) symptomology, more specifically. In addition, mediational analyses were run to determine if suppression changed the relationships between IPV severity and psychological distress, or IPV severity and PTSD symptomology. Using the same methods, EA and suppression were both also examined as mediators between psychological/verbal abuse severity and psychological distress, and between psychological/verbal abuse severity and PTSD symptomology. The current study set forth to examine these possible mediation models in both an undergraduate sample (non-clinical sample) and women residing in shelters or seeking outpatient treatment for IPV(clinical sample). The results of hypothesis testing, general implications, limitations, and future directions for research are explored in the following sections.

The Role of Experiential Avoidance in the Relationships between Subtypes of IPV and Psychological Distress, and PTSD Symptomology: Hypotheses 1, 3, 5, and 6

The current study explored the relationships between psychological distress and four subtypes of IPV: psychological aggression, physical assault, injury and sexual coercion. Additionally, the current study examined the relationship between PTSD symptomology and four subtypes of IPV: psychological aggression, physical assault, injury and sexual coercion. In addition, statistical procedures were conducted to examine whether the presence of EA affected any of these relationships. The role of EA in the relationship between psychological aggression and psychological distress was examined by testing hypothesis 1a (with the CTS2) and

hypothesis 5 (using the MMEA scores). The role of EA in the relationship between psychological aggression and PTSD symptomology was examined by testing Hypotheses 3a (with the CTS2) and 6 (using the MMEA scores). In each case, EA proved to be a partial mediator and these results will be discussed further below. Neither the relationship between physical assault and psychological distress (Hypothesis 1b), nor the relationship between physical assault and PTSD symptoms (3b) were mediated by EA. Hypothesis testing of EA's role in the relationship between injury IPV and psychological distress (1c) indicated a partial mediation; whereas it was non-significant for PTSD (3c). EA did not play a mediating role in the relationships between the experience of sexual coercion and psychological distress (Hypothesis 1d) or PTSD symptomology (3d).

EA accounted for 43% of the variance in the relationship between psychological aggression IPV and psychological distress. Thirty-nine percent of the variance was accounted for by EA in the relationship between psychological/verbal abuse and psychological distress. Additionally, EA accounted for 35% of the variance between psychological aggression IPV and PTSD symptomology. Finally, EA accounted for the 33% of the variance in the relationship between psychological/verbal abuse and PTSD symptomology. These findings suggest that EA plays a key role between these measures of IPV and psychological distress, generally, and PTSD, more specifically. With these findings in mind, clinicians can help clients who have experienced IPV reduce their level of EA and therefore likely reduce their clients' level of psychological distress and PTSD symptomology.

EA was also a mediator between injury IPV and psychological distress, accounting for 47% of the variance in the mediation model. This finding suggests that EA plays a particularly important role in psychological distress levels in women who have been injured due to IPV.

Results from the current study lend further support to a growing body of literature emphasizing the important role of EA as a mediator of psychological distress (Roemer, Salters, Raffa, and Orsillo, 2005; Kashdan et al., 2006). Additionally, results from the current study lend further support to a growing body of literature emphasizing the important role of EA as a mediator of PTSD symptoms across a variety of samples including combat veterans (Roemer et al., 2001), undergraduates with history of stressful life events or trauma (Plumb et al., 2004), and childhood sexual abuse survivors (Rosenthal et al., 2005).

The finding that EA was a mediator in the relationship between IPV and psychological distress, and between IPV and PTSD symptomology – specifically, is significant in that EA is theorized to be one of the key processes related to the development and maintenance of PTSD (Orsillo & Batten, 2005). As previously discussed, EA involves a process by which an individual engages in repeated patterns of behavior aimed at controlling or eliminating unwanted internal experiences. With regard to PTSD, these strategies often initially begin in relation to trauma-specific stimuli and then can generalize to non-trauma stimuli, which eventually leads to more constriction of behavior and a less full life.

Results of the current study also support previous research which suggests EA contributes to psychopathology. EA may possibly contribute to psychopathology through conscious avoidance strategies (which are typically verbal and include the avoided item) in which the avoided item becomes more accessible and is likely to influence further cognition and behavior (Wenzlaff & Wegner, 2000). Additionally, EA may contribute to psychopathology because private experiences may not be able to be managed with verbal strategies. Finally, EA may contribute to psychopathology because, even if avoidance strategies are successful, they may lead to secondary problems such as having an extremely constricted life (Hayes, 1996).

Longitudinal studies of EA and psychological distress would provide more detail about the relationship, including whether EA develops prior to psychological distress or if - as EA levels increase - so does severity of psychological distress. Additionally, longitudinal studies of EA and PTSD symptomology would provide further information about the relationship. Longitudinal treatment studies with mindfulness and acceptance based psychotherapies, which focus on EA, could also offer information about whether changes in EA relate to psychological distress and PTSD symptomology over time.

The Role of Suppression in the Relationships between Subtypes of IPV and Psychological Distress, and PTSD Symptomology: Hypotheses 2, 4, 7, and 8

The current study explored the relationships between psychological distress and four subtypes of IPV: psychological aggression, physical assault, injury and sexual coercion. Additionally, the current study examined the relationship between PTSD symptomology and four subtypes of IPV: psychological aggression, physical assault, injury and sexual coercion. Statistical procedures were performed to examine whether the presence of suppression affected any of these relationships. The role of suppression in the relationship between psychological aggression and psychological distress was examined by testing Hypotheses 2a (with the CTS2) and 7 (using the MMEA scores). The role of suppression in the relationship between psychological aggression and PTSD symptomology was examined by testing Hypotheses 4a (with the CTS2) and 8 (using the MMEA scores). In several cases (but not all), suppression proved to be a partial mediator and these results are discussed further below. Neither the relationship between physical assault and psychological distress (Hypothesis 2b), nor the relationship between physical assault and PTSD symptoms (4b) were mediated by suppression. Further, the relationship between psychological/verbal aggression and PTSD was not mediated

by suppression (Hypothesis 8). Suppression did not play a mediating role in the relationships between the experience of sexual coercion and psychological distress (Hypothesis 2d) or PTSD symptomology (4d). Further, there was not a significant mediation effect of suppression in the relationship between injury IPV and PTSD (4c). However, there were significant mediation models for suppression's role in the relationships between some types of IPV (CTS2 Psychological Aggression and Injury scales and MMEA scores) and psychological distress (as measured by both the GSI and PCL-S). These were seen in tests of Hypotheses 2a, 2c, 4a, and 7.

Suppression accounted for 39% of the variance in the relationship between psychological aggression IPV and psychological distress. Twenty-three percent of the variance was accounted for by suppression in the relationship between psychological/verbal abuse and psychological distress. Additionally, suppression accounted for 13% of the variance between psychological aggression IPV and PTSD symptomology. Suppression, as a mediator between injury IPV and psychological distress, accounted for 28% of the variance. These findings suggest that suppression plays a key role between experience of IPV and psychological outcomes.

Results from the current study lend further support to a growing body of literature emphasizing the important role of suppression as a mediator of psychological distress. Previous research has found that various forms of suppression such as thought suppression (Wenzlaff & Wegner, 2000), emotional suppression (Gross & Levenson, 1993), avoidance coping (Penley, Tomaka, & Wiebe, 2002), and reappraisal (Lazarus, 1991) are associated with poor psychological and physical health outcomes. Cognitive strategies like thought suppression and thought control entail the tendency to suppress unwanted thoughts and attempt to control them by utilizing distraction techniques. However, as previously discussed, these strategies tend to lead to a paradoxical increase in the occurrence of the target thoughts (Clark, Ball, & Pape, 1991;

Gold & Wegner, 1995; Wegner, Schneider, Carter, & White, 1987; Wegner, Schneider, Knutson, & McMahon, 1991), thus exacerbating the problem. Similarly, emotional suppression, the avoidance of affective responses (including physiological, subjective, and behavioral responses), is associated with decreased psychological and physical health outcomes (Gross, 1989; Gross & John, 2003). Avoidance coping, defined as the tendency to engage in behavioral avoidance techniques in response to stressful situations, is also associated with negative psychological outcomes (Penley, Tomaka, & Wiebe, 2002).

Each these strategies or coping techniques can be labeled as EA. These strategies or coping techniques can be considered forms of EA since they represent specific methods by which action is taken to modify negative private experience. However, it is important to note that the construct of EA is broader than specific strategies (Hayes et al., 2004). Therefore, the above mentioned strategies or coping techniques can be seen as specific types or forms of EA, but EA is a much broader construct than these methods. Given this understanding, it is not surprising that results of the current study indicate that suppression, a form of EA, and EA partially mediate the relationship between IPV and psychological distress and IPV and PTSD symptomology.

Additionally, given this understanding of the constructs of EA and suppression it is not surprising that the results of the mediation analysis with EA as a mediator closely paralleled the results of suppression as a mediator. EA and suppression were both found to be partial mediators between psychological aggression IPV and psychological distress. However, suppression only accounted for 39% of the variance while EA accounted for 43% of the variance. EA and suppression were both mediators between injury IPV and psychological distress. EA accounted for much more variance in the mediation model (47%) than suppression

accounted for in the mediation model (28% of the variance). EA and suppression were both partial mediators between psychological aggression IPV and PTSD symptomology, with EA accounting for 35% of the variance and suppression accounting for 13% of the variance. Additionally, EA and suppression were both partial mediators between psychological/verbal abuse and psychological distress, with EA accounting for 39% of the variance and suppression accounting for 23% of the variance. Additionally, it is not surprising that suppression accounts for an overall less amount of variance between IPV and psychological distress and IPV and PTSD symptomology than EA since suppression is merely one form of EA.

These findings can help influence the treatment of psychological distress and PTSD symptomology in individuals who have experienced IPV. The understanding of the role of suppression, and EA in broader sense, can aid a clinician in being aware of the complicated relationship between clients' ineffective coping strategies, life events, and symptomology. Longitudinal studies of suppression and psychological distress would provide more detail about the relationship, including whether suppression develops prior to psychological distress or if - as suppression levels increase - so does severity of psychological distress. Additionally, longitudinal studies of suppression and PTSD symptomology would provide further information about the relationship. Longitudinal treatment studies with mindfulness and acceptance based psychotherapies, which focus on suppression, could also offer information about whether changes in suppression relate to psychological distress and PTSD symptomology over time.

Limitations

Several limitations should be noted when interpreting the results of this current study. First, the cross sectional nature of this study prohibits observation of the development of IPV and its consequences. Thus, psychological distress and PTSD symptomology following

reports of IPV cannot be definitively described as the result of IPV. Longitudinal studies are needed to examine the trend of IPV over time and to explore possible consequences of IPV. Additionally, as pointed out by previous research (Orcutt et al., 2005), both EA and PTSD contain elements of avoidance and thus overlap (e.g., numbing of feelings, avoidance of feelings). Hence, some overlap exists between EA and PTSD symptomology; therefore, longitudinal studies are needed to explore the possibility of EA being a risk factor for the development of PTSD.

Additionally, the projected sample size was based on a large effect size that was appropriately conservative in relation to previous research. While more than the 11 participants were recruited, it is likely that given the differences in type of abuse and when the abuse occurred, the actual effect being sought could be harder to observe and more participants may have been needed in the shelter/treatment center sample. However, due to the nature of participants in the clinical sample and difficulty recruiting participants in shelters/treatment centers, obtaining more participants would have been quite difficult. Thus, additional studies are needed to explore the role of experiential avoidance, psychological distress, and PTSD symptomology in women who have experienced IPV and who are currently residing in a women's shelter. Furthermore, it is unclear whether no significant results were found in the clinical sample because there truly are no significant findings or simply that more participants were needed. Alternatively, it could be that the shelter/treatment center participants tended to experience more severe IPV, but they did not exhibit psychological distress because they were currently in treatment.

Additionally, the undergraduate sample was a sample of convenience and consisted of predominantly European American undergraduate attending a university in the south-central

region of the United States. Hence, results may not generalize to students who belong to an ethnic minority or students in other geographical locations. However, because this is a time and environment where IPV is likely to occur and the availability of counseling centers at universities, this is an important population to study. Furthermore, all undergraduate participants answered positively to the WAST screening items and were given a choice on whether they wanted to complete the second portion of the study. Undergraduates who completed the study may differ from students who did not volunteer for the study. This limitation is often seen in volunteer samples since it is unclear if participants who submit for studies are healthier than individuals who do not volunteer for the study, especially since they are willing to acknowledge the occurrence of IPV. Furthermore, individuals who volunteered to participate in the study may engage in less EA given that they were willing to complete a study about IPV. Another limitation of this study stems from the nature of measures utilized in the current study. Additionally, some if the analyses were underpowered due to the lack of experience of specific types of IPV by the sample; thus, significant results may exist in this population. The measures used in the current study asked participants to answer questions retrospectively about events that occurred in the past 12 months. Because it can be difficult to accurately remember events over a prolonged period of time, responses of the participants could have been skewed due to difficulty recalling past events.

Clinical Implications

One facet of acceptance and commitment therapy (ACT), and other mindfulness based therapies, is based on behavioral principles that aim to reduce EA and cognitive entanglement by emphasizing mindful awareness and acceptance of private events and physical sensations without evaluation (Hayes, Strosahl, & Wilson, 1999). Because of this approach to EA, ACT

and similar treatments are uniquely situated to address the range of problems associated with exposure to trauma. The construct of EA provides one important and useful way of conceptualizing not only PTSD, but also the associated clinical problems that can be related to trauma exposure (Follette, Palm, & Rasmussen Hall, 2004). Subsequent to surviving tremendously challenging life experiences, many trauma survivors will avoid experiencing the overwhelming private events (e.g., horrifying and intrusive thoughts and feelings) related to memories of the trauma Polusny & Follette, 1995.

One key aspect of EA that proves difficult in therapy is that frequently, these initial attempts to avoid can help the person to feel better momentarily since often, their anger pushes others away and fear and anxiety decrease (Walser & Hayes, 2006). This transitory solution provides a false impression that this strategy is actually working and that the individual just needs to find better ways to apply the avoidance strategies as a means to feel better and become better (Walser & Hayes, 2006; Walser & Westrup, 2007). However, avoidance strategies can be considered momentary relief, and rarely improve things for the individual in the long term. In fact, avoidance strategies have adverse effects and soon the individual needs help not only to recover from the traumatic event, but also to recover and cope with problems that their long-standing avoidance behaviors have created (Walser & Westrup, 2007).

ACT shares some commonalties with other treatments for Posttraumatic Stress Disorder (PTSD). Regardless of the stated intention of the treatment, alternate treatments for PTSD ultimately offer the opportunity for the individual to develop different and more helpful relationships with uncomfortable thoughts, physical sensations, and emotions (Hayes et al, 2006). For example, prolonged exposure therapy and ACT both help individuals to stay in contact with their internal and physiological reactions to traumatic stimuli, thereby

experientially learning to view them differently (Hayes et al, 2006). Whether implicitly or explicitly stated, the individual develops a different perspective of the relationship between their self and their thoughts, feelings, and physiological reactions (Hayes et al, 2006). Furthermore, since other treatments for PTSD tend to attempt to modify an individual's thoughts, feelings, or physiological reactions, individuals often become noncompliant before treatment can be completed. Because ACT clinicians do not attempt to modify an individual's thoughts, feelings, or physiological responses and emphasizes that internal phenomena are distinct from the self, many individuals may have better outcome with ACT than with traditional approaches (Hayes et al, 2006; Walser & Hayes, 2006; Walser & Westrup, 2007).

Future Directions

The current study is the first to explore the relationship between women who, within the past year, experienced IPV and psychological distress and PTSD symptomology; however, due to the limitations of this study, additional research is needed in this area with women in a shelter. Additionally, while women tend to be the victims of IPV, more research is needed to examine how IPV affects men. In fact, recent research indicates that a significant difference does not exist between men and women students' report of physical, psychological, and sexual abuse (Próspero & Vohra-Gupta, 2008). These findings differ from previous incident rates which suggest that, among the general population, women report significantly more victimization by a partner (Tjaden & Thoennes, 2000). The inclusion of men into future studies examining IPV in undergraduates would allow for further understanding of IPV.

Additionally, future research can utilize structured interviews to further assess for psychological distress and PTSD symptomology. While the BSI and PCL-S are valuable tools for assessing for the presence of psychological distress and PTSD symptomology, self-

report measures do not replace the value and depth of information obtained in structured clinical interviews. Further in depth assessment of psychological distress and PTSD symptomology with structured interviews could provide important information about the onset of symptoms. This additional information could help enhance the understanding of the relationship with IPV and psychological distress, and PTSD symptomology.

Conclusion

Within the undergraduate sample, EA was found to be a mediator and partial mediator between several types of IPV and psychological distress. Additionally, within the undergraduate sample, suppression was found to be a mediator and partial mediator between several types of IPV and psychological distress. Overall, rates of both physical and psychological aggression were consistent with previous research involving college samples.

Examination of the mediators in abuse-trauma link provides important information for the treatment of individuals who have experienced IPV. EA as a mediator and partial mediator suggests that acceptance and mindfulness-based treatments, such as ACT, may be especially helpful for individuals who have experienced IPV. ACT can help individuals to stay in contact with their internal and physiological reactions to traumatic stimuli, thereby experientially learning to view them differently (Hayes et al, 2006). Additionally, many individuals experience better outcomes with ACT because there is no attempt to modify an individual's thoughts, feelings, or physiological responses and the treatment emphasizes that internal phenomena is distinct from the self, which may of particular importance with individuals who have experienced IPV (Hayes et al, 2006; Walser & Hayes, 2006; Walser & Westrup, 2007).

APPENDIX A
INFORMED CONSENT

University of North Texas Institutional Review Board

Informed Consent Form

Before agreeing to participate in this research study, it is important that you read and understand the following explanation of the purpose, benefits and risks of the study and how it will be conducted.

Title of Study: Examining Conflict in Intimate Relationships

Principal Investigator: Amy R. Murrell, University of North Texas (UNT) Department of Psychology.

Purpose of the Study:

You are being asked to participate in a research study that consists of two parts. In the first part, you will be asked to complete a brief questionnaire about the nature of conflict within a relationship with an intimate partner. The term "intimate partner" includes current and former spouses, partners, boyfriends, and/or girlfriends. Based on your responses to the first questionnaire, you may be asked to participate in the second part of the study. Completing the first part of the study does NOT commit you to participating in the second part. If you are asked to complete the second part of the study, you will complete additional questionnaires about past experiences of conflict with your partner and your feelings and behaviors.

This study focuses on intimate partner violence (IPV), which is abuse that takes place between two people in a close relationship. IPV can take many forms including physical abuse (e.g., hitting, kicking), sexual abuse, threats, and emotional abuse (e.g., name calling.). Of particular interest in this study is the relationship between type (i.e., psychological, physical) and severity of abuse and psychological symptoms (e.g., depression, anxiety). We are also interested in assessing whether the development of Posttraumatic Stress Disorder (PTSD) symptoms in women with histories of IPV is related to specific language abilities.

Study Procedures:

If you consent to participate, you will be asked to complete several self- report measures. These measures ask about specific behaviors that have occurred during conflicts between you and your partner, your feelings and behaviors related to past experiences of conflict, and your thoughts, feelings, and behaviors in general. You will also be asked to complete tasks that measure both general and specific verbal abilities. The questionnaire for the first part of the study will take approximately 10-15 minutes to complete. If you are asked to complete the second part of the study, those questionnaires will take approximately 1 ½ to 2 hours to complete.

Foreseeable Risks:

The potential risks involved in this study are minimal and include possibly feeling uncomfortable

while answering questions about your thoughts, feelings, and behaviors. There is the potential for emotional distress as the questionnaires ask about potentially traumatic events. At the conclusion of the study, you will receive a brochure including information about intimate partner violence and local mental health services. You may stop doing the study at any time without negative consequence.

Benefits to the Subjects or Others:

There will not be any direct benefits of this research to you other than the experience of being involved in a study. There is a potential benefit to psychology, in that this research may advance our understanding of how intimate partner violence affects women's thoughts, feelings, and behaviors.

Compensation for Participants:

If you are enrolled in an undergraduate psychology course at UNT, you will receive one research credit for completion of part one of the study. If you are asked to complete the second part of the study, you will receive an additional three research credits (four total research credits for parts one and two).

Procedures for Maintaining Confidentiality of Research Records:

You will be assigned a subject number at the beginning of the study. All of your questionnaires will be coded with this number. This number will be placed on a master list that connects the number to your name. The master list will be kept separately from all other information. After the study is complete, we will shred the master list and there will be no way to connect your name to the questionnaires. All materials completed by you will be attached to your respective number and not your name. Your informed consent and the data from this study will be kept in a locked file cabinet in a locked room in Dr. Amy Murrell's lab in Terrill Hall. Only Dr. Murrell's
research assistants who have been trained to maintain your confidentiality will have access to your information. Your name will not be used in any research reports or publications that result from this study, nor will your participation be disclosed to any unauthorized person. The confidentiality of your individual information will be maintained in any publications or presentations regarding this study.

There are conditions under which confidentiality may be breached. The law requires that we make a report to the Department of Family and Protective Services if we believe that a child, disabled person, or elderly person is being abused, neglected, or exploited. Also, confidentiality may be breached if you indicate that you intend to harm yourself or someone else.

Questions about the Study:

If you have any questions about the study, you may contact Dr. Amy Murrell,
UNT Department of Psychology, at 940-565-2967.

Review for the Protection of Participants:

This research study has been reviewed and approved by the UNT Institutional Review Board (IRB). The UNT IRB can be contacted at (940) 565-3940 with any questions regarding the rights of research subjects.

Research Participants' Rights:

Your signature below indicates that you have read or have had read to you all of the above and that you confirm all of the following:

□The Principal Investigator or a research assistant has explained the study to you and answered all of your questions. You have been told the possible benefits and the potential risks and/or discomforts of the study.
□You understand that you do not have to take part in this study, and your refusal to participate or your decision to withdraw will involve no penalty or loss of rights or benefits. The study personnel may choose to stop your participation at any time.
□You understand why the study is being conducted and how it will be performed.
□You understand your rights as a research participant and you voluntarily consent to participate in this study.
□You have been told you will receive a copy of this form.

_____
Printed Name of Participant

_____ _____
Signature of Participant Date

For the Principal Investigator or Designee:

I certify that I have reviewed the contents of this form with the subject signing above. I have explained the possible benefits and the potential risks and/or discomforts of the study. It is my opinion that the participant understood the explanation.

_____ _____
Signature of Principal Investigator or Research Assistant Date

APPENDIX B

DEMOGRAPHICS QUESTTIONAIRRE

Demographics Questionnaire

Please answer some questions about yourself:

1. What is your birth date/age? _____

2. What is your marital status?
□ Single □ Married □ Separated □ Divorced
□ Widowed □ Other_____

3. What is the highest level of education or grade you completed?
□ Less than 7th grade □ Junior high □ Some high school
□ High school/GED □ Some college □ Associates degree
□ 4-year college graduate □ Graduate school

4. What is your current income range per year?
□ 0 – 20,000 □ 20,001 – 40,000 □ 40,001 – 60,000
□ 60,001 – 80,000 □ 80,001 – 100,000 □ 100,001 and above

5. Are you currently employed?
□ Yes, part time □ Yes, full time □ No

6. What is your ethnicity?
□ Caucasian (White) □ African American (Black) □ Native American (Indian)
□ Asian □ Hispanic (Latino, Latina, Mexican)
□ None of these, I am: _____

7. How many children do you have (please circle)?
0 1 2 3 4 5 6 7 or more

8. What type of intimate partner violence have you experienced (mark all that apply)?
□ Physical □ Emotional/Verbal □ Sexual

9. Are you still involved in a relationship with the perpetrator of the abuse?
□ Yes □ No

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