

California State University, San Bernardino

**CSUSB ScholarWorks**

---

Theses Digitization Project

John M. Pfau Library

---

2012

## The role of self-esteem and social support in the relationship between childhood emotional abuse and posttraumatic stress disorder symptoms

Ashley Anne Burton

Follow this and additional works at: <https://scholarworks.lib.csusb.edu/etd-project>



Part of the [Domestic and Intimate Partner Violence Commons](#), and the [Psychology Commons](#)

---

### Recommended Citation

Burton, Ashley Anne, "The role of self-esteem and social support in the relationship between childhood emotional abuse and posttraumatic stress disorder symptoms" (2012). *Theses Digitization Project*. 4038. <https://scholarworks.lib.csusb.edu/etd-project/4038>

This Thesis is brought to you for free and open access by the John M. Pfau Library at CSUSB ScholarWorks. It has been accepted for inclusion in Theses Digitization Project by an authorized administrator of CSUSB ScholarWorks. For more information, please contact [scholarworks@csusb.edu](mailto:scholarworks@csusb.edu).

THE ROLE OF SELF-ESTEEM AND SOCIAL SUPPORT IN THE  
RELATIONSHIP BETWEEN CHILDHOOD EMOTIONAL ABUSE  
AND POSTTRAUMATIC STRESS DISORDER SYMPTOMS

---

A Thesis  
Presented to the  
Faculty of  
California State University,  
San Bernardino

---

In Partial Fulfillment  
of the Requirements for the Degree  
Master of Arts  
in Psychology:  
General-Experimental

---

by  
Ashley Anne Burton

June 2012

THE ROLE OF SELF-ESTEEM AND SOCIAL SUPPORT IN THE  
RELATIONSHIP BETWEEN CHILDHOOD EMOTIONAL ABUSE  
AND POSTTRAUMATIC STRESS DISORDER SYMPTOMS

---

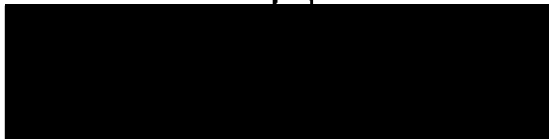
A Thesis  
Presented to the  
Faculty of  
California State University,  
San Bernardino

---

by  
Ashley Anne Burton

June 2012

Approved by:



Michael R. Lewin, Committee Chair, Psychology



David V. Chavez



Matt Riggs

6/5/12

Date

## ABSTRACT

Child emotional abuse survivors are at an increased risk for developing mental health problems, specifically posttraumatic stress disorder (PTSD). This study examined potential predictors of PTSD symptoms and buffers of the effects of child emotional abuse in a nonclinical sample. It was expected that child emotional abuse would be predictive of PTSD symptoms. It was also hypothesized that social support and self-esteem would each moderate and mediate the abuse-PTSD relationship. The sample ( $N = 729$ ) was collected over a period of 9 years as part of a larger ongoing study on women's trauma and resiliency. Female undergraduate students volunteered to complete survey packets in a group setting. The sample consisted primarily of Latina-Americans (38.8%), Caucasians (28.3%), and African Americans (15.6%). The participants' ages ranged from 18 to 62 years old, with an average age of almost 26 years old ( $SD = 8.51$ ). Several separate hierarchical regression analyses were conducted; childhood emotional abuse was a significant positive predictor of PTSD symptoms, above and beyond demographic variables and other types of abuse. It was also revealed that after controlling for covariates (demographics and other types of childhood maltreatment), self-esteem moderated the relationship between childhood emotional abuse and PTSD symptoms [ $\Delta R^2 = .020$ ,  $F(1, 360) = 11.625$ ,  $p = .001$ ]. Those with lower levels of self-esteem had higher levels of PTSD symptoms. Moreover high self-esteem buffered the effects of child emotional abuse on PTSD symptoms. Contrary to hypotheses, social support

was not found to be a significant moderator of the child emotional abuse-PTSD relationship. Finally, regarding the mediation hypotheses, bootstrapping with regression showed that both self-esteem and social support partially mediated the relationship between childhood emotional abuse and PTSD symptoms, after controlling for covariates, 95% C.I. [.18, .48] and 95% C.I. [.05, .15], respectively. Results from the study suggest a dual role of self-esteem to both buffer the effects of abuse, as well as be a mechanism to the actual development of PTSD symptoms. Social support also appeared to play a role in the development of PTSD symptoms, however, the effect was weak. Learning more about potential predictors of PTSD symptoms, as well as variables that play a role in the development of PTSD symptoms in those with childhood emotional abuse, is beneficial for prevention and treatment of PTSD. Clinicians may use these results to their benefit when treating patients with a history of childhood emotional abuse. Treatments that target increasing positive self-cognitions and healthy connectedness with others may prevent the development of PTSD symptoms. Limitations to the study include the use of an all female nonclinical sample, retrospective nature of the measures, and not controlling for other variables that may influence the development of PTSD, such as other lifetime trauma and perpetrator information (e.g. relationship to victim and if there was more than one).

## ACKNOWLEDGMENTS

There are several important people in my life that have made contributions to my academic success, influenced my growth, and helped maintain my overall sanity.

To my handsome Marine, best friend, and fiancé, Steven Houston. Since I met you, my life has changed in a beautiful way. Thank you for supporting my goals, for being patient when I was not at my best, and for believing in me when I doubted my abilities. You have made each day easier, and my whole life richer. I would not be where I am today without you.

To my mother, Laurie Burton, who instilled in me the importance of being independent and to value higher education. Thank you for teaching me good mannerisms, respect, compassion, and perseverance by being a role model of all of these characteristics. And to my 'papa', Kevin Kilpatrick. You modeled strength, held me accountable to my proclaimed goals, but also showed me unconditional love. Your support has meant so much to me!

Lastly, I appreciate my three thesis committee members' guidance throughout this process. Each of you have all challenged me in different ways, and through my interactions with you, I have grown both in my knowledge of psychology but also in my interpersonal skills. I have been treated more as a colleague than a subordinate, and for this I am grateful. The confidence that each of you had in me helped build the confidence that I had in myself. I would like to especially acknowledge my thesis advisor, Dr. Michael R. Lewin, for how

understanding that you have been throughout this process. You have gone above and beyond what your job requires for my own gain. I know I am probably responsible for a few gray hairs of yours, yet you have been so kind and nonjudgmental toward me. Thank you for all that you have done, and continue to do, in helping me through the ups and downs of being a grad student.

## TABLE OF CONTENTS

ABSTRACT .....	iii
ACKNOWLEDGMENTS .....	v
LIST OF TABLES .....	ix
LIST OF FIGURES .....	x
CHAPTER ONE: INTRODUCTION	
Background .....	1
Statement of the Problem .....	1
Purpose of the Study .....	3
CHAPTER TWO: LITERATURE REVIEW .....	4
Abuse and Posttraumatic Stress Disorder .....	7
Abuse, Self-Esteem, and Posttraumatic Stress Disorder .....	9
Abuse, Social Support, and Posttraumatic Stress Disorder .....	11
Hypotheses .....	13
CHAPTER THREE: METHODOLOGY	
Participants .....	15
Measures .....	15
Procedure .....	19
Design and Data Analysis .....	20
CHAPTER FOUR: RESULTS	
Data Screening .....	22
Presentation of the Findings .....	23



Moderation Results .....	25
Mediation Results .....	30
<b>CHAPTER FIVE: DISCUSSION</b>	
Overview of the Main Findings .....	35
Interpretation of the Findings .....	35
Limitations to the Study .....	41
Implications of the Results .....	44
Recommendations for Future Research.....	45
Conclusions .....	46
<b>REFERENCES .....</b>	<b>48</b>

## LIST OF TABLES

Table 1. Descriptive Statistics for Participant Demographic Variables .....	23
Table 2. Descriptive Statistics for Study Variables .....	24
Table 3. Correlation Matrix for Study Variables.....	25
Table 4. A Hierarchical Regression Analysis of the Interaction between Childhood Emotional Abuse and Self-Esteem on Posttraumatic Stress Disorder with Covariates .....	26
Table 5. A Hierarchical Regression Analysis of the Interaction between Childhood Emotional Abuse and Social Support on Posttraumatic Stress Disorder with Covariates .....	29
Table 6. Bootstrap Regression Analysis of the Mediating Role of Self- Esteem on the Relationship between Childhood Emotional Abuse and Posttraumatic Stress Disorder Symptoms .....	31
Table 7. Bootstrap Regression Analysis of the Mediating Role of Social Support on the Relationship between Childhood Emotional Abuse and Posttraumatic Stress Disorder Symptoms .....	33

## LIST OF FIGURES

Figure 1. The interaction between childhood emotional abuse and self-esteem on current posttraumatic stress disorder symptoms .....	28
Figure 2. Partial mediation model showing the standardized coefficients and the reduction after controlling for self-esteem, and covariates .....	32
Figure 3. Partial mediation model showing the standardized coefficients and the reduction after controlling for social support and covariates .....	34

# CHAPTER ONE

## INTRODUCTION

### Background

Little attention has been given to emotional abuse when compared to other types of abuse, even though it occurs frequently and often co-occurs with other types of abuse. In a North American college sample, 37.5% of women recalled experiencing at least mild forms of emotional abuse as a child, which was higher than the rates reported by men (Paivio & Cramer, 2004). Although the overall child victimization rates seem to be decreasing compared to previous years, the effects of child abuse can have a detrimental impact on survivors, often persisting through adulthood (U.S. Department of Health and Human Services, 2010). Due to the potential short- and long-term impact of abuse, research should focus on the factors that aid resiliency, regardless of the reported declining prevalence of abuse.

### Statement of the Problem

Females with a history of child sexual abuse are at an increased risk of psychopathology related to mood, anxiety, and substance abuse disorders compared to males that have been abused and females that have not been abused (Molnar, Buka, & Kessler, 2001). Posttraumatic stress disorder (PTSD), a type of anxiety disorder, is often developed as a result of experiencing or

witnessing a traumatic event. PTSD is characterized by: invasive reoccurring thoughts, dreams, or feelings in response to cues that remind the person of the traumatic event; avoidance and/or numbing (e.g. withdrawing, no affect); and an increased physiological arousal (e.g. trouble sleeping, hyper-vigilance) since the onset of the event (American Psychological Association, 2000). In one study, women that experienced sexual abuse in childhood were nearly 7 times as likely (39.1%) to develop PTSD in adulthood compared to women that had not been sexually abused as a child (5.7%) (Molner et al., 2001). The relationship between PTSD and both child sexual abuse and child physical abuse has been well established in the literature (for review see Rodriguez, Vande Kemp, & Foy, 1998). However, very few studies have focused on the relationship between child emotional abuse and PTSD.

Emotional abuse has been shown to have a positive association with PTSD; in one study, emotional abuse had a higher magnitude of association with PTSD than sexual and physical abuse (Sullivan, Fehon, Andres-Hyman, Lipschitz, and Grilo, 2006). Beyond focusing on the maladaptive outcomes of child abuse, additional exploration of the mechanisms that may contribute to a child developing PTSD would be beneficial in order to prevent future survivors of abuse from developing this disorder. Self-esteem can potentially be an underlying mechanism of developing PTSD after experiencing a traumatic experience. Those with PTSD have demonstrated a more unstable self-esteem than those without PTSD (Kashdan, Uswatte, Stegar & Julian, 2006).

Additionally, in a sample of women that had a history of abuse, self-esteem mediated the relationship between intimate partner violence and PTSD (Bradley, Schwartz, & Kaslow, 2005).

Social support is another possible factor related to the development of PTSD in child abuse survivors. In one study, social support was found to mediate the relationship between childhood multi-type maltreatment and PTSD (Vranceanu, Hobfoll, & Johnson, 2007), although most studies focus on self-esteem as a moderator (Hyman, Gold, & Cott, 2003; Schumm, Briggs-Phillips, and Hobfoll, 2006). Prior research has given some indication that the mechanisms of self-esteem and social support in the development of PTSD need further exploration.

### Purpose of the Study

The purpose of this study was to examine the relationship between child emotional abuse, social support, and self-esteem and current PTSD symptoms. Specifically, the role of social support and self-esteem in the relationship between child emotional abuse and current PTSD was explored, after taking into account demographic variables and other types of abuse. Experiencing more than one type of childhood abuse is common; being aware of the role that other variables play in specifically the emotional abuse-PTSD relationship is useful.

## CHAPTER TWO

### LITERATURE REVIEW

Child emotional abuse is broadly defined as an intentional act of psychological aggression that negatively impacts the victim (Slep, Heyman, & Snarr, 2011). Such acts can consist of verbal abuse, such as name calling (e.g. “stupid”) and/or belittling the child in front of others. Additional modes of child emotional abuse include manipulation and subjugation through coercion, such as: threatening to harm or abandon the child; threatening to withdrawal love; threatening to harm, or actually harming, something the child values (e.g. pet, favorite toy) to send a message. Child emotional abuse may also include more physically degrading events, such as physically confining the child in some way (e.g. tying legs, bounding to chair), and/or punishing the child in ways that are physically painful after a period of time (e.g. making child keep arms up for a long period of time) (Slep et al., 2011). It seems as if there may be some overlap between childhood emotional abuse and physical abuse when childhood emotional abuse definitions include physical aspects, which could have an affect on the type of abuse that is reported and consequently the incidence rates; However, it is likely that childhood emotional abuse differs from physical abuse because there is a psychological aspect to the harm. This list of child emotional abuse acts is not exhaustive, but gives an indication of the type, as well as the range in severity, of acts that would qualify as emotional abuse. Bernstein,

Ahluvalia, Pogge, and Handelsman's (1997) stated childhood emotional abuse as, "...verbal assaults on a child's sense of worth or well-being or any humiliating or demeaning behavior directed toward a child by an adult or older person". They explained childhood emotional abuse to include an excessive control over the child's autonomy (Bernstein et al., 1997).

Responses to abuse can affect the victim's psychological and physical wellbeing, both immediately after the abuse as well as later on in life (Slep et al., 2011). In a pilot study of 50 children, half whom were abused, abuse was predictive of self-esteem; in fact, psychological maltreatment (emotional abuse and neglect), accounted for an additional 10% of the variance in self-esteem, above and beyond other types of abuse (Leeson & Nixon, 2011). Also, parents of the children that were abused reported more internalizing and externalizing symptoms than the parents of children who were not abused (Leeson & Nixon, 2011). In a retrospective study on childhood violence affecting later mental health outcomes in adulthood (Greenfield & Marks, 2010), increased negative mood and poorer psychological wellbeing was associated with earlier experiences of psychological violence in a predominantly Caucasian sample. It was found that childhood psychological violence alone (without the presence of physical abuse) had a negative impact on victim's mental health in adulthood (Greenfield & Marks, 2010). Similarly, Festinger and Baker (2009) found that, in a sample of child welfare personnel, child emotional abuse was a negative predictor of self-esteem and social support. Clearly, victims of child emotional



abuse can be impacted from the event(s) several years after it occurred.

While knowledge about the effects of child emotional abuse has increased, research on prevalence rates of abuse have been variable. The amount of children that experience child emotional abuse varies greatly across the United States. The nature of emotional abuse lends itself to ambiguity because it is not as black-and-white as child sexual and physical abuse. In an analysis of reported child abuse rates across 48 states, Hamarman, Pope, and Czaja (2002) discovered that emotional abuse was the least reported type of abuse compared to neglect, physical, and sexual abuse. Also, emotional abuse rates varied greatly across the states, indicating that the laws and the way emotional abuse is defined affects the reported incidence rates; Child sexual abuse rates were the most consistent (Hamarman et al., 2002). In 2010, 8.1% of children investigated by Child Protective Services (CPS) experienced psychological maltreatment, a rate substantially lower than physical and sexual abuse, and neglect (U.S. Department of Human and Health Services). A little over 10% of children experienced abuse not classified as sexual, physical, emotional, or neglect. "Other" types of abuse included threatening to harm the child or abandoning them; it is possible that emotional abuse cases were reported under the "other" abuse category (U.S. Department of Human and Health Services). In a recent retrospective study, 30% of child welfare personnel reported having experienced child emotional abuse (Festinger & Baker, 2009); despite the inconsistencies with rates, child emotional abuse should remain a

topic of focus in research due to the connection that the abuse has had with negative mental health outcomes.

### Abuse and Posttraumatic Stress Disorder

Previous research has given indication to a connection between early emotional abuse and later maladaptive mental health outcomes. Spertus, Yehuda, Wong, Halligan, and Seremetis (2003) studied a sample of women presenting symptoms to primary care practice. Using the Childhood Trauma Questionnaire (CTQ; Bernstein et al., 1994) to evaluate the frequency and severity of different types of childhood abuse and neglect, the authors reported that 42% of the women experienced low to extreme emotional abuse as a child. Child emotional abuse was positively and strongly associated with PTSD and was also related to depression, anxiety, somatic symptoms, and lifetime occurrence of traumatic events. Spertus et al. (2003) also found that emotional abuse and neglect together explained additional variance in negative mental health outcomes (PTSD, depression, anxiety, and somatic symptoms) above and beyond the other types of abuse (physical and sexual) as well as other trauma experiences throughout life. A limitation to this study was that the effect of child emotional abuse alone was not fully examined.

Further exploring the effects of multiple types of childhood trauma, Grassi-Oliveira and Stein (2008) studied a sample of low-income Brazilian outpatients from a public general health hospital who were assessed using an adapted, but

validated, Portuguese version of the CTQ. The researchers found that child emotional abuse, physical abuse, and sexual abuse combined explained 30% of the variance in PTSD symptoms (Grassi-Oliveira & Stein, 2008). However, only child emotional abuse and child sexual abuse were significant predictors of PTSD; child emotional abuse was twice as strong of a predictor than child sexual abuse. The authors added a second step to the regression in which neglect added an additional 4% of the variance explained in PTSD. Specifically, child emotional neglect – not physical neglect – was a significant predictor of PTSD, above and beyond the abuse. In summary, when examining child maltreatment, emotional abuse and neglect were strong predictors of PTSD.

Past research has focused on multiple types of abuse and given greater attention to child sexual and physical abuse; few studies have looked at emotional abuse in isolation. Childhood emotional abuse was examined in a teenage inpatient sample using the CTQ (Sullivan et al., 2006). Ninety-one percent reported having experienced child emotional abuse. The authors found that emotional abuse was related to PTSD. After controlling for gender and age, child emotional abuse was the strongest and only predictor (compared to the other types of abuse) to predict all three individual cluster symptoms of PTSD (re-experiencing, avoidance/numbing, and arousal), as well as PTSD overall. Research that focuses on emotional abuse exclusively reveals patterns that emotional abuse is in fact damaging to the individual and related to negative mental health outcomes, and therefore deserves attention in future studies.

More recently, in a sample of female undergraduate college students, Burns, Jackson, and Harding (2010) studied the effects of childhood emotional abuse using the CTQ (Bernstein et al., 1994). While the focus of their study remained on emotional regulation as a mediator between emotional abuse and posttraumatic stress (PTS), they did find that emotional abuse was highly positively correlated with PTS. Additionally, childhood emotional abuse remained a significant and positive predictor of PTS, even after testing for the mediating role of emotional dysregulation (Burns et al., 2010). Previous studies show that there is a link between childhood emotional abuse and PTSD; further research needs to be done to find intervening variables that can potentially buffer the effects of abuse.

#### Abuse, Self-Esteem, and Posttraumatic Stress Disorder

Some studies have shown self-esteem as an intervening variable in the relationship between childhood trauma and psychological disorders. In a three-year prospective study on ethnically-diverse older adults, Sachs-Ericsson et al. (2010) found that, after controlling for demographic variables and other non-abuse stressors in the home, self-esteem moderated the relationship between child abuse history, and anxiety and depressive symptoms at the three-year follow-up. Those that experienced at least one form of abuse as a child (sexual, physical, emotional) and had lower self-esteem experienced the highest levels of anxiety and depression at the three-year follow-up. Self-esteem appeared to

buffer the effects of childhood abuse; specifically, those with child abuse histories and high self-esteem reported similar levels of anxiety and depressive symptoms to the non-abused sample. Further analyses showed that self-esteem did not mediate the relationship between child abuse and anxiety and depression. Although the study did not examine child emotional abuse in isolation, it did reveal how – given the age of the sample – self-esteem played a role in the abuse-anxiety/depression relationship even decades after the abuse occurred.

Another study explored the role of self-esteem, social support and religious coping on the relationship between childhood abuse and PTSD. Bradley et al. (2005) studied a hospital sample of low-income African-American women that experienced intimate partner violence and had attempted suicide within the last year. Childhood abuse was measured using the CTQ (Bernstein et al., 1994); fifty-percent of the women met criteria for moderate to severe emotional abuse. The results indicated that self-esteem partially mediated the relationship between total abuse (all types of childhood abuse and intimate partner violence combined) and PTSD symptoms. Social support was not significant in predicting PTSD above and beyond child abuse, so mediation was not tested. This study provides additional support for the role of self-esteem, but research is lacking that examines self-esteem as a buffer of child emotional abuse, independent from the other types of abuse. Although the study provided evidence for self-esteem as a partial mediator of the relationship between abuse and PTSD, the study was limited due to the authors' combination of childhood

trauma and adult intimate partner victimization in their abuse variable. The results remain consistent but not completely comparable to other studies. Of note, the authors also found that PTSD mediated the relationship between total abuse and self-esteem. This suggests that there may be a more complex relationship between these variables.

Walter, Horsey, Palmieri, and Hobfoll's (2010) research on inner-city women found that child abuse (physical/emotional and sexual) was predictive of PTSD symptoms at baseline, however, the abuse was no longer predictive of PTSD symptoms one year after the women were initially surveyed. Also contrary to previous studies, it was found that child abuse was not directly related to protective self-cognitions (self-efficacy and self esteem), and protective self-cognitions failed to mediate the relationship between child abuse and PTSD symptoms assessed one year later. Very few studies have examined self-esteem as a mediator between child emotional abuse and PTSD; given the low frequency of studies and the mixed findings, further studies need to focus on self-esteem's role in the relationship between psychological maltreatment and the later development of PTSD.

#### Abuse, Social Support, and Posttraumatic Stress Disorder

Social support has been shown in previous studies to be related to both child abuse and PTSD outcomes. Schumm et al. (2006) examined levels of social support in low-income women from the Midwest. The sample consisted of

four types of abuse categories: no abuse, childhood abuse (physical and sexual) but no adult rape, no childhood abuse but adult rape, and both types of abuse. The authors found that the levels of social support varied between abused and non-abused women, such that the women that experienced childhood abuse (but no adult rape) were nearly half as likely to have high social support. Social support was a significant predictor of PTSD above and beyond demographic variables, childhood abuse, and adult rape. Although this study didn't examine childhood emotional abuse, it does bring attention to the importance of social support as a negative predictor of PTSD after experiencing abuse (Schumm et al, 2006).

Predictors of PTSD and depression were examined in a sample of 100 low-income women from a Midwestern inner city (Vranceanu et al., 2007). The women were assessed for multiple forms of child maltreatment; the most frequent form of abuse reported was child emotional abuse, experienced by 66% of the sample. Structural Equation Modeling depicted that child multi-type maltreatment was predictive of both social support (support satisfaction and perceived support) and PTSD; those with prior abuse experiences were more likely to have less social support and higher levels of PTSD. Additionally, social support partially mediated the relationship between child multi-type maltreatment and PTSD. Caution should be taken in generalizing these results to emotional abuse; emotional abuse was not independently examined from other types of abuse and only three items assessed psychological maltreatment. Although the

study only examined aggregate abuse histories, the results suggest that the perception of one's social support system is important to the course of developing PTSD symptoms (Vranceanu et al., 2007).

Further exploring the role of social support, Hyman et al. (2003) studied a predominantly white sample of women seeking mental health services for issues related to childhood sexual abuse. It was revealed that there was a negative relationship between social support and PTSD symptoms. Exploratory analyses were run to determine the best form of social support in buffering the effects of PTSD; social support that enhances one's view of self in comparison to others, as well as the perceived availability of others to discuss problems, were the strongest negative predictors of PTSD (Hyman et al, 2003). The limitation to this study and previous ones is the focus on either aggregate abuse or only sexual and physical abuse. Further studies need to be conducted to determine if the buffering effect of social support can be generalized to those that have experienced childhood psychological maltreatment.

### Hypotheses

The purpose of this study was to determine what role self-esteem and social support play in the relationship between child emotional abuse and PTSD in a nonclinical sample. It was expected that child emotional abuse would be predictive of PTSD symptoms, above and beyond covariates (demographic variables and other types of abuse). Also, it was hypothesized that social



support and self-esteem would each be negative predictors of PTSD symptoms. Additionally, it was also expected that social support and self-esteem would either moderate and/or mediate the relationship between childhood emotional abuse and PTSD symptoms, after controlling for covariates. Given the exploratory nature of this study, testing social support and self-esteem for both moderation and mediation would give the best indication of the role they play in the abuse-PTSD relationship.

## CHAPTER THREE

### METHODOLOGY

#### Participants

Female undergraduate students ( $N = 943$ ) enrolled at California State University, San Bernardino, volunteered for this study. The sample was collected between the years 2001 to 2010 as part of an ongoing study on women's trauma and resiliency. Participants were offered extra credit for completion of the survey packet, and were treated in accordance with the "Ethical Principles of Psychologists and Code of Conduct" (American Psychological Association, 2010).

#### Measures

Participants were administered a packet that included: an informed consent statement; demographics form; questionnaires assessing childhood trauma, self-esteem, social support, and PTSD symptoms; and a debriefing statement. The current study was part of a larger study examining child abuse, resiliency and general mental health outcomes. Several other questionnaires were included in the survey packet given to all participants, but the measures employed in the current study were:

#### Demographic Information Form

This author-developed form assessed age, marital status, ethnicity, and

yearly gross income.

### Childhood Trauma Questionnaire – Short Form

The Childhood Trauma Questionnaire – Short Form (CTQ-SF; Bernstein et al., 2003) is a 25-item, 5-point Likert-type scale that measures participants' level of exposure to child maltreatment before the age of 18 years. The response options range from 1 (never true) to 5 (very often true). The survey consists of five clinical subscales: emotional, physical, and sexual abuse, and emotional and physical neglect. All of the five scales are measured by five items each. The subscales were developed based upon factor analytic studies (Bernstein et al., 2003). The CTQ-SF is a shorter form of the original 70-item questionnaire developed to reduce participant response burden in assessing child maltreatment (Bernstein et al., 1994). Four of the five subscales (emotional, physical, and sexual abuse, and emotional neglect) have good internal consistencies, ranging from  $\alpha = .83$  to  $\alpha = .95$  amongst four divergent groups, consisting of adolescents, two substance abuser groups, and community members. Physical neglect, a subscale of the CTQ-SF, has an internal consistency ranging from  $\alpha = .61$  to  $\alpha = .78$ . Responses to variables from this survey were significantly related to similar variables in a therapist observation interview, establishing criterion validity. The internal consistency for child emotional abuse in the present study was .87.

### Rosenberg Self-Esteem Inventory

The Rosenberg Self-Esteem Inventory (RSE; Rosenberg, 1965) is a 10-

item unidimensional survey that measures participant's overall positive attitudes toward the self. The present study utilized a 5-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree), as opposed to the original 4-point scale. Five of the items are positively worded, and the other five are negatively worded. The negatively worded items are reversed scored and then all items are summed to create a total score. Higher scores are indicative of greater levels of self-esteem. This measurement has demonstrated good internal consistency, with  $\alpha = .92$  in a sample of 4-year college graduates, and  $\alpha = .91$  across several different demographic groups from the United States, as well as discriminant validity when compared to a scale measuring social relationships (Sinclair et al., 2010). Additionally, the RSE was negatively correlated with measures of stress, anxiety, and depression, establishing clinical construct validity (Sinclair et al., 2010). The Cronbach's alpha for the current study was .89, suggesting that the changes to the original survey did not compromise internal consistency. The RSE was only utilized during part of the data collection, resulting in a smaller completion number in comparison to the other measures in this study.

### The Social Support Index

The Social Support Index (SSI; McCubbin, Patterson, & Glynn, 1996) is a 17-item, 5-point Likert-type scale that measures the respondent's family's level of connection/reliance with the respondent's community for social support, including emotional, esteem, and network support. The SSI is one of seven scales included in the Family Index of Regenerativity and Adaptation—General (FIRA-

G; McCubbin, Thompson, & McCubbin, 1996). The SSI is related to family well-being, establishing criterion validity (McCubbin, Patterson et al., 1996 as cited in Greefe & Van Der Merwe, 2003), and corresponds to the changes in the dependence on community support during a family's different life stages (McCubbin, Patterson et al., 1996). Also, the SSI has been found to be a reliable predictor of family resiliency. This study demonstrated good internal consistency, with  $\alpha = .82$ , which was consistent with previous studies (McCubbin, Patterson et al., 1996).

#### Penn Inventory for Posttraumatic Stress Disorder

The Penn Inventory for Posttraumatic Stress Disorder (PI-PTSD; Hammarberg, 1992) is a 26-item survey measuring the severity of PTSD symptoms. Each item consists of four sentence choices that are scaled from 0 to 3, with 0 indicating the participant has not experienced those particular symptoms. The four-choice response is modeled after the well-known Beck Depression Inventory (Beck, Ward, Mendelson, Mock & Erbaugh, 1961). Items were chosen based upon their relationship with DSM-IV criteria for PTSD (APA, 2000), and a score above 35 was suggested by Hammarberg (1992) for the diagnosis of PTSD. This survey's strong point seems to be in measuring the diagnosis of PTSD or a change in mental health rather than measuring specific symptoms of PTSD (Scragg, Grey, Lee, Young, & Turner, 2001). This scale has demonstrated good internal consistency with an overall  $\alpha = .94$  across four different populations, consisting of inpatient and outpatient war veterans

diagnosed with PTSD, veterans without PTSD, and nonveterans without PTSD (Hammarberg, 1992). Test-retest reliability for the four groups was .96.

Experiments within the study expanded to a general veteran sample as well as survivors from an oilrig disaster. The PI-PTSD was able to discriminate between a PTSD group and non-PTSD group, and has also been shown to correlate with measures of anxiety, depression, and stressful life events. For this study, the Cronbach's alpha was .88.

### Procedure

Participants signed up for the study via an online research management system, and reported to a conference room at their specified time. They completed survey packets in a group setting. They were given the packet and asked to read and sign the informed consent form. They were then asked to read the instructions carefully, and complete the survey packet to the best of their knowledge. Participants were reminded that they did not have to answer every question, and that they were permitted to leave the study at any point in time. Survey completion time, on average, was around forty-five minutes. Once the survey packet was completed and returned, participants were taken outside of the conference room and debriefed individually, in which a post-study information form was given to them that informed them of the study's purpose, the principal investigator's contact information, and the proposed date in which the results from the study would be available. Participants were reminded that their

responses and identity would remain anonymous. A list of relevant resources (e.g. psychological counseling, hotlines, etc.) was given to each participant upon their completion of the survey packet. Participants received extra credit for their participation and were thanked for their time.

### Design and Data Analysis

This study utilized a non-experimental correlational design, with child emotional abuse, self-esteem and social support as predictors and PTSD symptoms as the criterion. All study hypotheses were analyzed using simple and hierarchical linear regression, with  $\alpha = .05$ .

To test self-esteem and social support as moderators of the relationship between childhood emotional abuse and PTSD symptoms, the self-esteem and social support variables were centered prior to analyses in order to reduce multicollinearity (Keith, 2006, p. 133). Two separate hierarchical regression analyses were run to test for moderation with: income and age entered in Step 1; the other types of abuse were entered in Step 2 (childhood emotional and physical neglect, childhood physical and sexual abuse); childhood emotional abuse and either social support or self-esteem were entered in Step 3; and the interaction term of childhood emotional abuse and either social support or self-esteem was entered in the last step. Significant interactions were graphed using Daniel Soper's *Interaction* software.

For the mediation hypotheses, bootstrapping was performed to individually

test self-esteem and social support as mediators of the relationship between childhood emotional abuse and PTSD symptoms, after controlling for demographic variables (age, income) and other types of abuse (child emotional neglect, child physical neglect, child sexual abuse, and child physical abuse). Bootstrapping was chosen to avoid violating assumptions of normality, and was analyzed using Preacher and Hayes' (2008) macro with SPSS 19.0.



## CHAPTER FOUR

### RESULTS

#### Data Screening

All variables of interest were screened prior to analysis for missing data and outliers. Outliers were deleted list-wise for being discontinuous and at least 3.5 standard deviations away from the mean. Variables that contained outliers included two cases for age, one for PTSD symptoms, one for social support, and one for self-esteem. Examination of histograms revealed that social support was normally distributed and self-esteem was slightly negatively skewed. Age, income, PTSD symptoms and all of the abuse types were negatively skewed. No variables were corrected for their lack of normality.

A missing values analysis was conducted to determine if missing data patterns were non-random, per Tabachnik and Fidell's (2007, p. 62) recommendations. The only variable missing more than 5% of the data was self-esteem, however, this was expected due to the later inclusion of the questionnaire after the initial data collection began. There were no significant patterns of missing data between those that received the self-esteem measure and those that did not, as determined by the Little's MCAR test [ $\chi^2(130) = 177.34, p < .05$ ] and the separate variance *t*-tests, in which none were significant. Because of the large sample size, cases that were missing any data on variables included in the analyses were deleted. The final sample for analysis remained

large after the deletion of outliers and cases with missing data ( $N = 729$ ).

### Presentation of the Findings

Participants included in the analysis were women who ranged in age from 18 to 62 years old ( $M = 25.65$  years,  $SD = 8.51$ ), with a majority of the sample in their early twenties. The ethnic composition was comprised of primarily Latina Americans (38.8%), Caucasian Americans (28.3%), and African Americans (15.6%). Regarding marital status, most of the participants (66.8%) reported being single. Half of the sample's yearly gross income fell below \$24,999 per year. See Table 1 for the breakdown of participants' demographic information.

Table 1

*Descriptive Statistics for Participant Demographic Variables (N = 729)*

Characteristic	%
<b>Ethnicity</b>	
Hispanic/Latino	38.8
Caucasian	28.3
African American	15.6
Asian American	6.4
Pacific Islander	2.3
American Indian	0.7
Other	7.6
<b>Income Per Year</b>	
Less than \$5,000	14.7
\$5,000 to \$14,999	22.1

\$15,000 to \$24,999	12.9
\$25,000 to \$34,999	11.0
\$35,000 to \$44,999	7.1
\$45,000 to \$54,999	8.0
\$55,000 to \$64,999	6.7
\$65,000 to \$74,999	5.3
\$75,000 or more	12.2

Marital Status

Single	70.4
Married	19.6
Divorced	5.9
Cohabiting	4.1

Descriptive statistics were conducted on the final sample for the means and standards deviations of the predictors and criterion (see Table 2).

Table 2

*Descriptive Statistics for Study Variables*

Variable	N	M (SD)	Range
Child Emotional Neglect	729	10.24 (4.73)	5 – 25
Child Physical Neglect	729	7.19 (2.89)	5 – 25
Child Physical Abuse	729	7.89 (3.87)	5 – 25
Child Sexual Abuse	729	7.98 (5.13)	5 – 25
Child Emotional Abuse	729	9.97 (5.12)	5 – 25
Social Support	729	61.21 (8.84)	17 – 85
Self-Esteem	370	39.32 (7.03)	10 – 50

Correlational analyses were conducted on all of the variables of interest (see Table 3). Abuse types were each significantly positively related to each other, indicating some comorbidity of abuse experiences in participants.

Table 3

*Correlation Matrix for Study Variables (N = 729)*

<u>Variable</u>	<u>Pearson's <i>r</i></u>									
	1	2	3	4	5	6	7	8	9	10
1. Age	1									
2. Income	.09*	1								
3. CEN	.23**	-.06	1							
4. CPN	.20**	.12**	.52**	1						
5. CPA	.14**	-.08*	.43**	.33**	1					
6. CSA	.23**	-.04	.32**	.25**	.40**	1				
7. CEA	.13**	-.09*	.61**	.42**	.63**	.40**	1			
8. SS	.00	.16**	-.47**	-.25**	-.21**	-.16**	-.37**	1		
9. SE	.01	.08	-.36**	-.12*	-.20**	-.13*	-.38**	.45**	1	
10. PTSD	-.02	-.11**	.36**	.16**	-.28**	.25**	.42**	-.42**	-.57**	1

Note: \* $p < .05$ , \*\* $p < .01$ . CEN = child emotional neglect, CPN = child physical neglect, CPA = child physical abuse, CSA = child sexual abuse, CEA = child emotional abuse, SS = social support, SE = self-esteem, PTSD = posttraumatic stress disorder symptoms.

## Moderation Results

To test whether self-esteem moderated the relationship between childhood emotional abuse and PTSD symptoms, a hierarchical regression was

conducted (see Table 4).

Table 4

*A Hierarchical Regression Analysis of the Interaction between Childhood Emotional Abuse and Self-Esteem on Posttraumatic Stress Disorder with Covariates (N = 370)*

Step	Predictor	$\Delta R^2$	$\beta$	SE	p
1	Age	.011	-.01	.06	.86
	Income		-.10	.18	.05
2	Age	.134	-.08	.06	.13
	Income		-.08	.17	.13
	Child Emotional Neglect		.28	.12	.00
	Child Physical Neglect		-.09	.18	.13
	Child Physical Abuse		.16	.13	.01
	Child Sexual Abuse		.10	.11	.05
3	Age	.228	-.03	.05	.47
	Income		-.05	.15	.23
	Child Emotional Neglect		.04	.12	.49
	Child Physical Neglect		-.06	.16	.27
	Child Physical Abuse		.05	.13	.45
	Child Sexual Abuse		.07	.10	.15
	Child Emotional Abuse		.16	.12	.02
	Self-Esteem		-.48	.06	.00
4	Age	.020	-.03	.05	.43
	Income		-.06	.15	.18
	Child Emotional Neglect		.07	.12	.23
	Child Physical Neglect		-.05	.16	.37

Child Physical Abuse	.02	.13	.69
Child Sexual Abuse	.07	.10	.11
Child Emotional Abuse	.11	.12	.11
Self-Esteem	-.45	.06	.00
CEA×SE Interaction	-.15	.39	.00

Note: CEA = child emotional abuse, SE = self-esteem.

After controlling for demographics (income and age) and other types of abuse (childhood emotional neglect, childhood physical neglect, childhood sexual abuse, childhood physical abuse), the CEA×SE interaction added explanatory variance and thus self-esteem moderated the relationship between child emotional abuse and PTSD symptoms,  $\Delta R^2 = .020$ ,  $F(1, 360) = 11.625$ ,  $p = .001$ ; however, the magnitude of this effect was modest. The total model accounted for 39.3% of the variance explained in PTSD symptoms. See Figure 1 for a graph of the interaction.

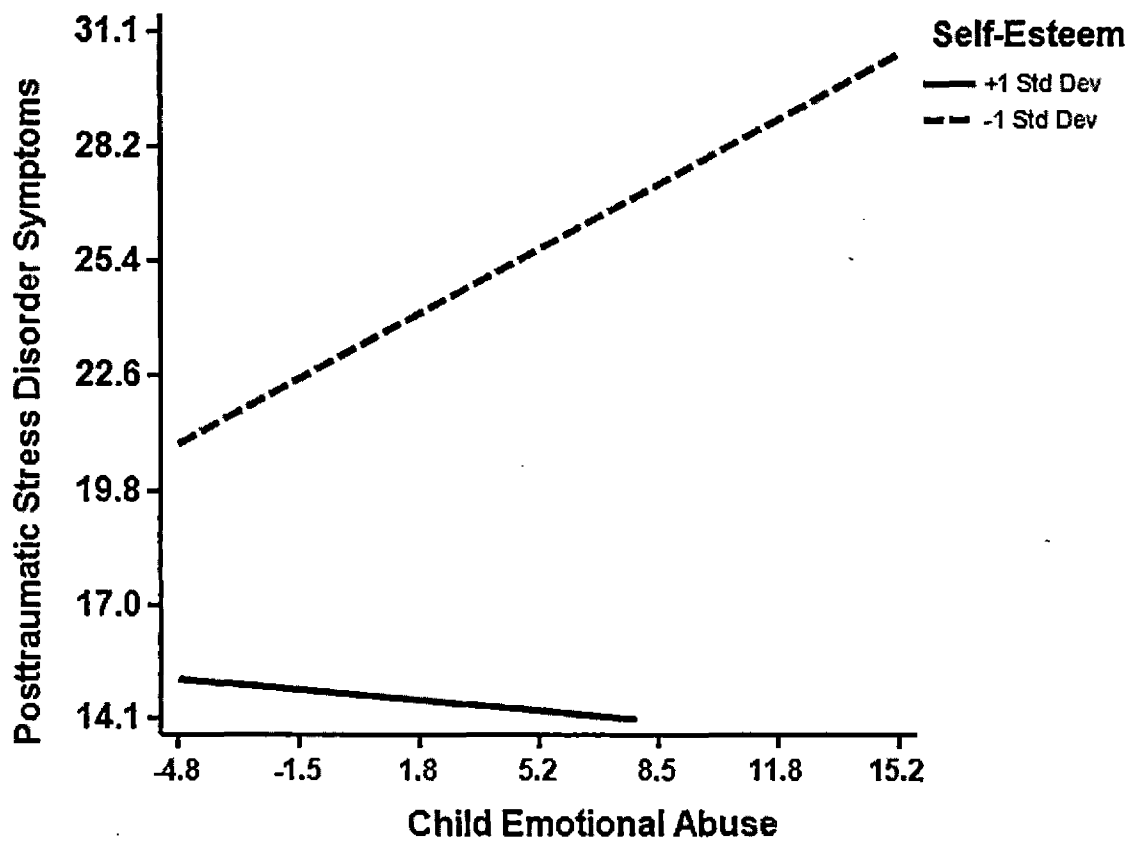


Figure 1. The interaction between child emotional abuse and self-esteem on current posttraumatic stress disorder symptoms. The child emotional abuse and self-esteem variables shown were centered ( $M = 0$ ,  $SD = 1$ ).

A hierarchical regression analysis was conducted to test whether social support moderated the relationship between childhood emotional abuse and PTSD symptoms (see Table 5).

Table 5

*A Hierarchical Regression Analysis of the Interaction between Childhood Emotional Abuse and Social Support on Posttraumatic Stress Disorder with Covariates (N = 729)*

Step	Predictor	$\Delta R^2$	$\beta$	SE	$p$
1	Age	.011	-.01	.04	.72
	Income		-.10	.13	.01
2	Age	.174	-.13	.04	.00
	Income		-.07	.12	.04
	Child Emotional Neglect		.33	.09	.00
	Child Physical Neglect		-.07	.13	.08
	Child Physical Abuse		.12	.10	.00
	Child Sexual Abuse		.14	.07	.00
3	Age	.096	-.09	.04	.01
	Income		-.03	.12	.34
	Child Emotional Neglect		.10	.09	.03
	Child Physical Neglect		-.09	.13	.02
	Child Physical Abuse		.02	.10	.63
	Child Sexual Abuse		.19	.07	.00
	Child Emotional Abuse		.25	.09	.00
	Social Support		-.28	.04	.00
4	Age	.002	-.09	.04	.01
	Income		-.03	.12	.32



Child Emotional Neglect	.11	.09	.02
Child Physical Neglect	-.09	.13	.02
Child Physical Abuse	.02	.10	.66
Child Sexual Abuse	.11	.07	.00
Child Emotional Abuse	.23	.09	.00
Social Support	-.27	.04	.00
CEA×SS Interaction	-.05	.30	.16

Note: CEA = child emotional abuse, SS = social support

Social support did not moderate the relationship between child emotional abuse and PTSD symptoms,  $\Delta R^2 = .002$ ,  $F(1, 719) = 1.976$ ,  $p = .16$ . However, the main effects of child emotional abuse and social support remained significant in predicting of PTSD symptoms. Childhood emotional abuse positively predicted PTSD symptoms, while social support was a negative predictor of PTSD symptoms. The total model accounted for 28.3% of the variance explained in PTSD symptoms.

### Mediation Results

Bootstrapping analyses were conducted to test the mediation hypotheses, with 10,000 resamples. Self-esteem was found to partially mediate the relationship between childhood emotional abuse and PTSD symptoms, after controlling for demographics and other types of abuse,  $c = , p < .001$  (see Table 6). The direct effect of childhood emotional abuse on PTSD symptoms remained significant,  $c' = \text{beta}$ ,  $p < .05$  (see Figure 2). The total model explained 37.3% of

the variance explained in PTSD symptoms,  $F(8, 361) = 26.855, p < .001$ .

Table 6

*Bootstrap Regression Analysis of the Mediating Role of Self-Esteem on the Relationship between Childhood Emotional Abuse and Posttraumatic Stress Disorder Symptoms*

Predictor	$\beta$	SE	$R^2$	LL	UL
			.373***		
Age	-.03	.05			
Income	-.05	.15			
Childhood Emotional Neglect	.04	.12			
Childhood Physical Neglect	-.05	.16			
Childhood Physical Abuse	.04	.13			
Childhood Sexual Abuse	.08	.10			
Childhood Emotional Abuse	.16***	.12			
Self-Esteem	-.47***	.06		.18	.48

*Note:* \*\*\* $p < .001$ . 95% C.I., LL = lower limit of the confidence interval, UL = upper limit of the confidence interval. The value of "0" not falling between the lower limit and upper limit indicates a mediation effect.

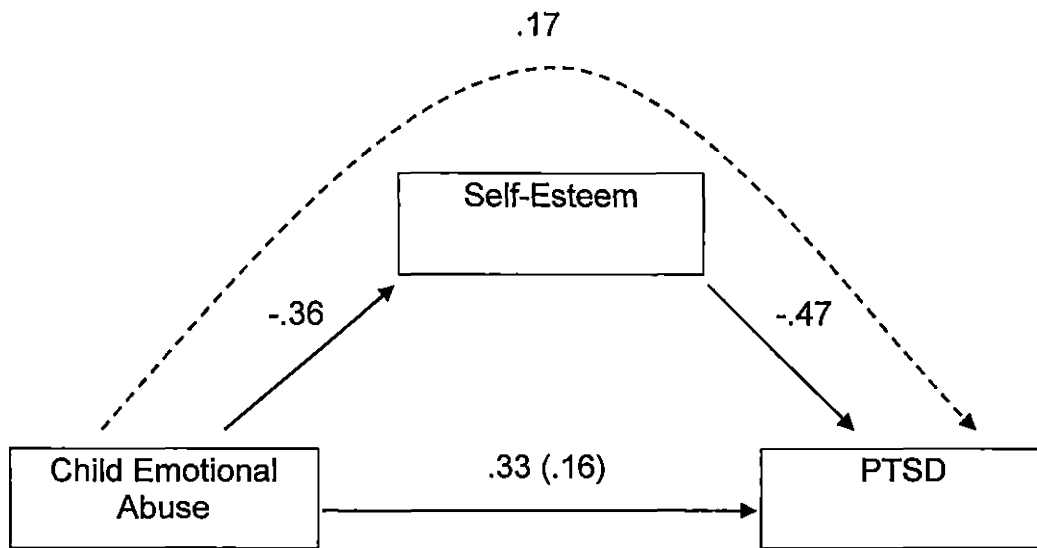


Figure 2. Partial mediation model showing the standardized coefficients and the reduction after controlling for self-esteem and covariates.

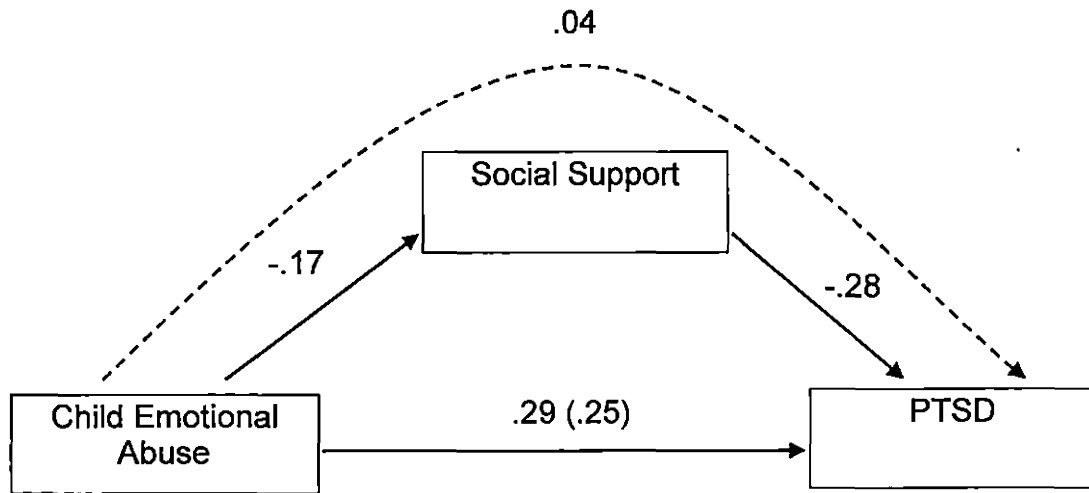
An additional bootstrapping analysis was conducted to test for the potential mediation of social support in the relationship between childhood emotional abuse and PTSD symptoms. Ten thousand resamples were used. Social support was found to partially mediate the relationship between childhood emotional abuse and PTSD symptoms, after controlling for demographics and other types of abuse,  $p < .001$  (see Table 7); however, the effect was small. The direct effect of childhood emotional abuse on PTSD symptoms remained significant,  $p < .001$  (see Figure 3). The total model accounted for 28.1% of the variance explained in PTSD symptoms,  $F(8, 720) = 35.179, p < .001$ .

Table 7

*Bootstrap Regression Analysis of the Mediating Role of Social Support on the Relationship between Childhood Emotional Abuse and Posttraumatic Stress Disorder Symptoms*

Predictor	$\beta$	SE	$R^2$	LL	UL
			.281***		
Age	-.08*	.04			
Income	-.03	.12			
Childhood Emotional Neglect	.10*	.09			
Childhood Physical Neglect	-.09*	.13			
Childhood Physical Abuse	.02	.10			
Childhood Sexual Abuse	.11**	.07			
Childhood Emotional Abuse	.25***	.09			
Social Support	-.28***	.04		.04	.15

Note: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ . 95% C. I., LL = lower limit of the confidence interval, UL = upper limit of the confidence interval.



*Figure 3.* Partial mediation model showing the standardized coefficients and the reduction after controlling for social support and covariates.

## CHAPTER FIVE

### DISCUSSION

#### Overview of the Main Findings

The purpose of this study was to examine the relationship between childhood emotional abuse, self-esteem, social support, and PTSD symptoms. The hypothesis that childhood emotional abuse would be predictive of PTSD symptoms above and beyond demographics and other types of abuse was supported. Self-esteem was a negative predictor of PTSD symptoms. Moreover, self-esteem was found to both moderate and mediate the relationship between childhood emotional abuse and PTSD symptoms. Social support was also a negative predictor of PTSD symptoms, but did not moderate the relationship between childhood emotional abuse and PTSD symptoms. Social support mediated the relationship between childhood emotional abuse and PTSD symptoms.

#### Interpretation of the Findings

The findings from this study are consistent with previous research that found significant relationships between childhood emotional abuse and self-esteem (Festinger & Baker, 2009; Leeson & Nixon, 2011) and self-esteem and PTSD (Kashdan et al, 2006). In this study, self-esteem was not only a possible precursor to PTSD, but also a buffer of the effects of PTSD. Sacchs-Ericsson et

al. (2010) found similar results, with self-esteem as a moderator of the relationship between childhood abuse and later anxiety symptoms. This is consistent with our findings of self-esteem moderating the relationship between childhood emotional abuse and PTSD symptoms. Individuals with higher levels of self-esteem reported lower levels of PTSD symptoms in the face of childhood emotional abuse than their low self-esteem counterparts. The moderation results revealed that the severity of the abuse wasn't the only factor responsible for the severity of PTSD, but also, self-esteem played a role by interacting with the abuse. It is possible that survivors of emotional abuse that are able to develop resilient or sustaining cognitions (e.g., high self-esteem) are better prepared to respond to future life stress and are less likely to develop PTSD symptoms. These protective cognitions may prevent survivors of childhood emotional abuse from internalizing blame or responsibility for the abuse and reduce the likelihood of the development of shame and guilt. Additionally, there may be an overlap with a negative view of one's self in the construct of self-esteem and the symptoms of PTSD. For example, a sample item measuring self-esteem is, "All in all, I am inclined to think that I am a failure" (Rosenberg, 1965), and for measuring PTSD symptoms, "I'll never be able to cope with unwanted thoughts" (Hammarberg, 1992). The definitive negative statements give insight into the conviction the person has about themselves and the power of the negative self-esteem to affect their cognitive framework.

The mediating role of self-esteem is consistent with Bradley et al.'s (2005)

research on intimate partner violence and PTSD in low-income African American women. Some previous studies, however, did not find self-esteem as a mediator in the relationship between abuse and PTSD. Walter et al.'s (2010) research on 402 women from the Midwest failed to find self-esteem as a mediator of the relationship between combined childhood abuse and PTSD. It is possible that the divergent findings are due to differences in the demographic characteristics of the sample. Walter et al.'s (2010) sample utilized low-income women whom had reported being at risk for contracting HIV/AIDS and sexually transmitted diseases. Perhaps the mediation effect is not generalizable to individuals that participate in risky sexual behaviors. Also, it is possible that the mediation with self-esteem is only seen in the relationship between childhood emotional abuse and PTSD. Sachs-Ericsson et al.'s (2010) study on the relationship between childhood abuse and anxiety/depression in older adults also failed to find self-esteem to be a mediator. The sample used in the study were older adults who had physical disabilities. Also, the independent occurrences of child abuse were treated as dichotomous, and then combined to create a score from 0 (no abuse) to 3 (experienced sexual, physical, and emotional abuse). Perhaps the differences in the sample and measurement of abuse contributed to the differences in outcomes of the results.

The results from the current study suggest that self-esteem plays a dual role in the development of PTSD symptoms. In the face of childhood emotional abuse, self-esteem may be a precursor to the development of PTSD symptoms.



Also, self-esteem may serve as a buffer against the harmful effects of child emotional abuse, such as developing PTSD.

Self-esteem consists of overall feelings and beliefs about the self in terms of one's value, perceived abilities, and worth in comparison to others (Rosenberg, 1965). In this study, only global self-esteem was measured, however, global self-esteem has been shown to be more strongly related to mental health than specific self-esteem (e.g. academic self-esteem; Rosenberg, Schooler, Schoenbach, & Rosenberg, 1995). Experiencing emotional abuse as a child can affect the way one views oneself in many dimensions of their life including appraisals of future negative life events as unpredictable and uncontrollable. Leeson and Nixon (2011) found that children who experienced psychological maltreatment reported having more negative cognitions after their trauma compared to those that did not have maltreatment histories. Gibb, Benas, Crossett, and Uhrlass' (2007) research on undergraduates had similar findings; negative and positive automatic thoughts (e.g. self-statements) were found to mediate the relationship between childhood emotional maltreatment and verbal victimization by peers, as well as depressive symptoms. Repetitive experiences of critical and negative comments such as, "You are stupid" early on in life can lead to dysfunctional views of self and relationships with others (e.g. low self-esteem; negative schemas). Victims of trauma who may blame themselves for the abuse, internalize the negative messages from the abuse, or have conflicted feelings about the abuse may develop lower self-esteem and

become more likely to develop PTSD symptoms. A victim with lowered self-esteem may appraise the abuse as a reflection of themselves and personalize the experience, rather than attribute the unfortunate event(s) to the perpetrator's downfalls. Leeson and Nixon's (2011) study on emotionally abused and non-abused children found attributional style to be predictive of self-esteem, however, they did not find it to be related to PTSD. Their explanation for this was that the attributions measured were not specific to the traumatic event (Leeson & Nixon, 2011). Still, it is possible that a more negative interpretation of the abuse, possibly influenced by the lowered self-esteem, may create a vulnerability to developing internalizing disorders such as PTSD, which is known to have a cognitive aspect.

Despite our predictions, the findings revealed that social support did not play a dual role in the relationship between childhood emotional abuse and PTSD symptoms. Inconsistent with previous research (Hyman et al., 2003), social support was not found to be a moderator of the childhood emotional abuse and PTSD symptoms relationship. Interestingly, in Hyman et al.'s (2003) study, social support that specifically included self-esteem support and the availability of others to talk about one's problems were highlighted as the strongest forms of social support in buffering the effects of childhood sexual abuse on PTSD. It seems that only two of the questions touched on these aspects of social support: "I have friends who let me know they value who I am and what I can do" and "Members of my family seldom listen to my problems or concerns" (Rosenberg,

1965). Although social support did not moderate the relationship between child emotional abuse and current PTSD symptoms, social support was a significant negative predictor of PTSD symptoms suggesting that this type of coping resource has some protective benefits.

It is also possible that the social support measure used was not specific regarding if the connectedness to family, friends, and community was a beneficial one. One may feel connected to these avenues, but that doesn't necessarily mean that the support given or the perceived attachment is beneficial to one's wellbeing. Also, the social support measure included three subscales of community, family, and friends. In the current study, these were combined to create one sum total. Perhaps support from family or friends should be more heavily weighted than the support from one's local community. It is unclear from the results in this study whether social support should be measured as a uni- or multi-dimensional construct.

Social support was found to mediate the abuse-PTSD relationship. The mediation results are consistent with Vranceanu et al.'s (2007) research on the mediation of social support between multi-type maltreatment and PTSD. Being a victim of childhood abuse can impact one's access to resources. Previous social support may decline if victims of emotional abuse experience shame, guilt and dysphoric affect in response to the abuse and withdraw from others and do not access social support. The trauma of childhood abuse can cause one to withdraw from others and create a feeling that people are not available for

emotional reassurance. Feelings of isolation and poor access to social support following the abuse can be a mechanism through which PTSD symptoms develop as this isolation leads to the failure to develop resilient cognitions related to appraisals of stress and coping. PTSD symptomology can include feelings of being disconnected and a perceived lack of understanding from others.

Social support was a precursor to the development of PTSD symptoms in this study, but the strength of the mediation was weak. Self-esteem was both a precursor to and a buffer of the effects of childhood emotional abuse on PTSD symptoms. While these findings help the breadth of knowledge on the effects of childhood emotional abuse, future research is needed in order to solidify understanding of the relationship between childhood emotional abuse, self-esteem, social support, and PTSD.

#### Limitations to the Study

This study is not without its limitations. The first limitation was the sample consisted of only nonclinical educated females. People in the college population are likely already at a higher level of functioning (due to being able to attend a university) than, for example, low-income uneducated inner-city women, and thus most likely have lower levels of abuse and PTSD symptoms. Given that the focus of this study was not a comparison of abused versus non-abused, but rather an examination of how abuse relates to social support, self-esteem, and PTSD symptoms, the positive skew of childhood abuse and PTSD symptoms

limited the variance and made finding an effect in the analyses more difficult. Despite this limitation, the sample from the university is more representative of the surrounding community in terms of ethnicity and socioeconomic status than most universities usually are. The similarities between the sample used in the study and the local area increases confidence in the generalizability of the results. Additionally, childhood abuse and PTSD symptoms are positively-skewed in the general population; most people don't experience childhood abuse or develop PTSD symptoms. Thus, the distribution of our sample trends toward what is seen in the general population.

The second limitation is in regards to the measures implemented. All of them were self-report, so there may have been an overreliance on participants' ability to accurately perceive and report symptoms, feelings, and experiences. The CTQ-SF may present an additional problem due to the recall of childhood events that happened many years ago. Some of the older participants in the sample had to think back to events that happened over 50 years ago. An additional measurement issue was that the PTSD symptoms reported were not necessarily specific to the childhood abuse. It is possible that these women experienced additional lifetime trauma, such as rape, car accidents, and intimate partner violence. Posttraumatic stress disorder's symptomology is not unique to the type of trauma itself, but rather the victim's appraisal of the trauma. Child emotional abuse survivors are at an increased risk of experiencing other types of abuse in adulthood. For example, one study of participants (88% female)

presenting headache symptoms found that associations between childhood abuse (as measured by the CTQ) and adult abuse were the strongest with a history of childhood emotional abuse; of those who had childhood emotional abuse histories, 56% reported physical abuse and adulthood, and 61% reported adult sexual abuse (Tietjen et al., 2009). While previous research has mainly focused on the revictimization of childhood physical and sexual abuse survivors, the comorbidity of childhood abuse types does indicate that revictimization is more likely in childhood emotional abuse survivors that have experienced other types of childhood abuse.

The third limitation to the study pertains to the analysis. Perpetrator details (e.g. their relationship to the participant and if there was more than one) were not controlled. It is unclear from the results of this study whether perpetrator type and frequency have an effect on the development of PTSD symptoms in those that have been abused. While a plethora of studies have examined perpetrator-victim relationships in childhood sexual abuse and their affect on attachment, very little research has focused on the impact of the perpetrator in childhood emotional abuse. Gibb et al. (2007) found that perpetration by means of emotional abuse by both caretakers and peers was associated more strongly with automatic negative thoughts versus positive thoughts. Due to the attachment that is likely to be harmed by the presence of emotional abuse, it is possible that abuse from a parent living in the home may be more damaging to a victim's self-cognitions than a perpetrator that the victim

is not emotionally reliant on, such as a babysitter or friend of the family. Multiple perpetrators may also be more harmful to the victim due to the expectations it may create in victims, such as to expect harm from others. The current study attempted to take into account several covariates of the childhood emotional abuse-PTSD symptoms relationship, however, future research may want to address these limitations for better clarity into the effects of childhood emotional abuse.

### Implications of the Results

Despite the study's limitations, the results of this study have important mental health implications in terms of prevention and interventions with survivors of childhood emotional abuse. When treating victims of childhood emotional abuse in psychotherapy, clients' levels of self-esteem and social support should be assessed and targeted in treatment. Both self-esteem and social support are protective and malleable, and thus should be targets in the treatment of survivors of emotional abuse. Sensitivity to dialogue that may sway the client's possible attribution of the traumatic event is important. For example, either external or internal blame for the abuse they endured could be damaging to their self-esteem and ability to handle future stress. It is also important to encourage the client to develop supportive relationships that contribute improved resiliency due to higher self-esteem, self-protective cognitions and coping strategies for addressing stress. Increasing access to others, as well as communication skills,

could be beneficial in buffering the effects of the abuse. Social support may also be important in combatting mistrust issues that a victim may develop in response to abuse. Survivors of childhood emotional abuse that are able to access social support may experience reparative relationship experiences that provides evidence contrary to the abuse experience. Focusing on changing survivors beliefs about relatedness may be useful in order to prevent the perpetuation of unhealthy relationships. Given the comorbidity of PTSD with other anxiety disorders, it would be beneficial for therapists to assess if social anxiety symptoms are preventing access to social support and from forming healthy relationships with others. Overall, working toward helping survivors change their perceptions about themselves (e.g., self-blame, guilt, low self-esteem) and the availability of others (e.g., others cannot be trusted, others are unreliable) could potentially prevent the development of PTSD symptoms.

### Recommendations for Future Research

Future research should address the abovementioned limitations, as well as continue to explore other potential mediators and moderators of the childhood emotional abuse-PTSD symptoms relationship. It is possible that self-esteem may have an interaction with social support – especially given the multitude of types of social support that one can have and how it can affect one’s self-esteem – and this interaction may better explain the relationship between childhood emotional abuse and PTSD in adulthood. Potential mediators and moderators



include negative attributional style, early maladaptive schemas, shame, and coping). Additionally, the role of childhood emotional neglect deserves further exploration. Childhood emotional abuse and neglect were significantly related to each other, but in Baker and Festinger's (2011) study on employees of a social service agency, the two constructs were best interpreted as distinct types of abuse. Previous studies have combined childhood emotional abuse and neglect (Leeson & Nixon, 2011; Spertus et al., 2003), however, more research needs to be done on narrowing down what defines psychological maltreatment, and whether there should be separate subscales of abuse (e.g. "I thought that my parents wished I had never been born") and neglect (e.g. "I felt loved"; reverse-scored). Another possible avenue for future research may be to conduct a factor analysis of the SSI; perhaps the findings for social support would be stronger if the type of social support that is influential is narrowed down, versus having a composite measure. Finally, replicating this study with a longitudinal design could prove more useful in the assessment of cause and effect relationships regarding self-esteem, social support, and development of PTSD symptoms. Collecting these measures all at once can only allow speculation about cause and effect relationships.

### Conclusions

The results from this study suggest that self-esteem and social support should remain topics of focus in research due to their significant role in protecting

against developing PTSD and buffering the effects of abuse. This study attempted to delineate the role of self-esteem and social support in the relationship between childhood emotional abuse and PTSD symptoms. In conclusion, self-esteem serves as a mechanism to developing PTSD, and a buffer of the effects of childhood emotional abuse. Social support was also seen as a precursor to the development of PTSD symptoms, but was not found to be a strong buffer of the effects of abuse. The effects of childhood emotional abuse can be detrimental to survivors and thus this type of abuse should continue to be studied in order to prevent maladaptive adjustment and assist survivors of abuse with resiliency.

## REFERENCES

- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., Text Revision). Washington, DC: Author.
- American Psychological Association. (2010). Ethical principles of psychologists and code of conduct. Retrieved from <http://www.apa.org/ethics/code/index.aspx>
- Baker, A. J. L., & Festinger, T. (2011). Emotional abuse and emotional neglect subscales of the CTQ: Associations with each other, other measures of psychological maltreatment, and demographic variables. *Children and Youth Services Review, 33*, 2297-2302. doi: 10.1016/j.childyouth.2011.07.018
- Beck, A. T., Ward, C. H., Mendelson, M. M., Mock, J. J., & Erbaugh, J. J. (1961). An inventory for measuring depression. *Archives of General Psychiatry, 45*, 561-571. Retrieved from PsycINFO.
- Bernstein, D. P., Ahluvalia, T., Pogge, D., & Handelsman, L. (1997). Validity of the Childhood Trauma Questionnaire in an adolescent psychiatric population. *Journal of the American Academy of Child & Adolescent Psychiatry, 36*(3), 340-348. doi: 10.1097/00004583-199703000-00012
- Bernstein, D., Fink, L., Handelsman, L., Foote, J., Lovejoy, M., Wenzel, K. ...Ruggiero, J. (1994). Initial reliability and validity of a new retrospective measure of child abuse and neglect. *The American Journal of Psychiatry, 151*(8), 1132-1136. Retrieved from PsycINFO.

- Bernstein, D. P., Stein, J. A., Newcomb, M. D., Walker, E., Pogge, D., Ahluvalia, T., ... Zule, W. (2003). Development and validation of a brief screening version of the Childhood Trauma Questionnaire. *Child Abuse & Neglect*, 27(2), 169-190. doi: 10.1016/S0145-2134(02)00541-0
- Bradley, Schwartz, & Kaslow (2005). Posttraumatic stress disorder symptoms among low-income, African American women with a history of intimate partner violence and suicidal behaviors: Self-esteem, social support, and religious coping. *Journal of Traumatic Stress*, 18(6), 685-696. doi: 10.1002/jts.20077
- Burns, E. E., Jackson, J. L., & Harding, H. G. (2010). Child maltreatment, emotion regulation, and posttraumatic stress: The impact of emotional abuse. *Journal of Aggression, Maltreatment & Trauma*, 19(8), 801-819. doi: 10.1080/10926771.2010.522947
- Festinger, T., & Baker, A. (2010). Prevalence of recalled childhood emotional abuse among child welfare staff and related well-being factors. *Children and Youth Services Review*, 32, 520-526. doi: 10.1016/j.childyouth.2009.11.004
- Gibb, B. E., Benas, J. S., Crossett, S. E., & Uhrlass, D. J. (2007). Emotional maltreatment and verbal victimization in childhood: Relation to adults' depressive cognitions and symptoms. *Journal of Emotional Abuse*, 7(2), 59-73. doi: 10.1300/J135v07n02\_04
- Grassi-Oliveira, R., & Stein, L. M. (2008). Childhood maltreatment associated

with PTSD and emotional distress in low-income adults: The burden of neglect. *Child Abuse & Neglect*, 32, 1089-1094. doi: 10.1016/j.chiabu.

2008.05.008

Greenfield, E. A., & Marks, N. D. (2010). Identifying experiences of physical and psychological violence in childhood that jeopardize mental health in adulthood. *Child Abuse & Neglect*, 34, 161-171. doi: 10.1016/j.chiabu.

2009.08.012

Hammarman, S., Pope, K. H., & Czaja, S. J. (2002). Emotional abuse in children: Variations in legal definitions and rates across the United States. *Child Maltreatment*, 7, 303-311. doi: 10.1177/107755902237261

doi:10.1177/107755902237261

Hammarberg, M. (1992). Penn Inventory for Posttraumatic Stress Disorder: Psychometric properties. *Psychological Assessment*, 4(1), 67-76.

doi:10.1037/1040-3590.4.1.67

Hyman, S. M., Gold, S. N., & Cott, M. A. (2003). Forms of social support that moderate PTSD in childhood sexual abuse survivors. *Journal of Family Violence*, 18(5), 295-300. Retrieved from PsycINFO.

Kashdan, Uswatte, Stegar & Julian (2006). Fragile self-esteem and affective instability in posttraumatic stress disorder. *Behaviour Research and Therapy*, 44, 1609-1619. doi: 10.1016/j.brat.2005.12.003

doi: 10.1016/j.brat.2005.12.003

Keith, T. Z. (2006). *Multiple regression and beyond*. Boston, MA: Allyn and Bacon.

Leeson, F. J., & Nixon, R. D. V. (2011). The role of children's appraisals on

adjustment following psychological maltreatment: A pilot study. *Journal of Abnormal Child Psychology*, 39, 759-771. doi: 10.1007/s10802-011-9507-

5

McCubbin, H. I., Patterson, J., & Glynn, T. Social Support Index (SSI). In H. I.

McCubbin, A. I. Thompson, & M. A. McCubbin. (1996). *Family assessment: resiliency, coping and adaption: Inventories for research and practice*. Madison, WI: University of Wisconsin Publishers, 357-389.

Molnar, B. E., Buka, S. L., & Kessler, R. C. (2001). Child sexual abuse and subsequent psychopathology: Results from the National Comorbidity Survey. *American Journal of Public Health*, 91(5), 753-760. doi: 10.2105/AJPH.91.5.753

Paivio, S. C., & Cramer, K. M. (2004). Factor structure and reliability of the Childhood Trauma Questionnaire in a Canadian undergraduate student sample. *Child Abuse & Neglect*, 28(8), 889-904. doi: 10.1016/j.chiabu.2004.01.011

Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40, 879-891. doi: 10.3758/BRM.40.3.879

Rodriguez, N., Vande Kemp, H., & Foy, D. W. (1998). Posttraumatic stress disorder in survivors of childhood sexual and physical abuse: A critical review of the empirical research. *Journal Of Child Sexual Abuse*, 7(2), 17-45. doi: 10.1300/J070v07n02\_02

- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press. Retrieved from PsycINFO.
- Rosenberg, M., Schooler, C., Schoenbach, C. & Rosenberg, F. (1995). Global self-esteem and specific self-esteem: Different concepts, different outcomes. *American Sociological Review*, 60(1). 141-156. Retrived from <http://www.jstor.org/stable/2096350>
- Schumm, J. A., Briggs-Phillips, M., & Hobfoll, S. E. (2006). Cumulative interpersonal traumas and social support as risk and resiliency factors in predicting PTSD and depression among inner-city women. *Journal of Traumatic Stress*, 19(6), 825-836. doi: 10.1002/jts.20159
- Scragg, P., Grey, N. Lee, D., Young, K., & Turner, S. (2001). A brief report on the Penn Inventory for Posttraumatic Stress Disorder. *Journal of Traumatic Stress*, 14(3), 605-611. Retrieved from PsycINFO.
- Sinclair, S. J., Blais, M. A., Gansler, D. A., Sandberg, E., Bistis, K, & LoCicero, A. (2010). Psychometric properties of the Rosenberg Self-Esteem Scale: Overall and across demographic groups living within the United States. *Evaluation & the Health Professions*, 33(1), 56-80. doi: 10.1177/0163278709356187
- Slep, A. M. S., Heyman, R. E., & Snarr, J. D. (2011). Child emotional aggression and abuse: Definitions and prevalence. *Child Abuse & Neglect*, 35, 783-796. doi: 10.1016/j.chiabu.2011.07.002
- Spertus, I. L., Yehuda, R., Wong, C. M., Halligan, S., & Seremetis, S. V. (2003).

- Childhood emotional abuse and neglect as predictors of psychological and physical symptoms in women presenting to a primary care practice. *Child Abuse & Neglect*, 27, 1247-1258. doi: 10.1016/j.chiabu.2003.05.001
- Sullivan, T. P., Fehon, D. C., Andres-Hyman, R. C., Lipschitz, D. S., & Grilo, C. M. (2006). Differential relationships of childhood abuse and neglect subtypes to PTSD symptom clusters among adolescent inpatients. *Journal of Traumatic Stress*, 19(2), 229-239. doi: 10.1002/jts.20092
- Tabachnick, B. G., & Fidell, L. S. *Using multivariate statistics*, 5<sup>th</sup> ed. Boston, MA: Allyn and Bacon.
- Tietjen, G. E., Brandes, J. L., Peterlin, B., Eloff, A., Dafer, R. M., Stein, M. R., & ... Khuder, S. A. (2010). Childhood maltreatment and migraine (Part I). Prevalence and adult revictimization: A multicenter headache clinic survey. *Headache: The Journal Of Head And Face Pain*, 50(1), 20-31. doi:10.1111/j.1526-4610.2009.01556.x
- U.S. Department of Health and Human Services, Administration for Children and Families, Administration on Children, Youth and Families, Children's Bureau. (2010). Child Maltreatment 2009. Available from [http://www.acf.hhs.gov/programs/cb/stats\\_research/index.htm#can](http://www.acf.hhs.gov/programs/cb/stats_research/index.htm#can)
- Vranceanu, A., Hobfoll, S. E., & Johnson, R. J. (2007). Child multi-type maltreatment and associated depression and PTSD symptoms: The role of social support and stress. *Child Abuse & Neglect*, 31, 71-84. doi: 10.1016/j.chiabu.2006.04.010



Walter, K. H., Horsey, K. J., Palmieri, P. A., & Hobfoll, S. E. (2010). The role of protective self-cognitions in the relationship between childhood trauma and later resource loss. *Journal of Traumatic Stress, 23*(2). 264-273. doi: 10.1002/jts.20504