



2016-11-01

# Childhood Abuse Types and Adult Relational Violence Mediated by Adult Attachment Behaviors and Romantic Relational Aggression in Couples

Tabitha Nicole Webster  
*Brigham Young University*

Follow this and additional works at: <https://scholarsarchive.byu.edu/etd>

 Part of the [Marriage and Family Therapy and Counseling Commons](#)

---

## BYU ScholarsArchive Citation

Webster, Tabitha Nicole, "Childhood Abuse Types and Adult Relational Violence Mediated by Adult Attachment Behaviors and Romantic Relational Aggression in Couples" (2016). *All Theses and Dissertations*. 6184.  
<https://scholarsarchive.byu.edu/etd/6184>

This Dissertation is brought to you for free and open access by BYU ScholarsArchive. It has been accepted for inclusion in All Theses and Dissertations by an authorized administrator of BYU ScholarsArchive. For more information, please contact [scholarsarchive@byu.edu](mailto:scholarsarchive@byu.edu), [ellen\\_amatangelo@byu.edu](mailto:ellen_amatangelo@byu.edu).

Childhood Abuse Types and Adult Relational Violence  
Mediated by Adult Attachment Behaviors and  
Romantic Relational Aggression in Couples

Tabitha Nicole Webster

A dissertation submitted to the faculty of  
Brigham Young University  
in partial fulfillment of the requirements for the degree of

Doctor of Philosophy

Jonathan G. Sandberg, Chair  
Jeremy B. Yorgason  
James M. Harper  
Shayne R. Anderson  
Lauren Alyssa Bone Barnes

School of Family Life

Brigham Young University

Copyright © 2016 Tabitha Nicole Webster

All Rights Reserved

## ABSTRACT

### Childhood Abuse Types and Adult Relational Violence Mediated by Adult Attachment Behaviors and Romantic Relational Aggression in Couples

Tabitha Nicole Webster  
School of Family Life, BYU  
Doctor of Philosophy

The current study investigated how three distinct types of childhood abuse—witnessing of parental domestic violence, experiencing physical abuse and total in-home violence, and experiencing sexual abuse—predicted partner reports of relational violence through the mediating factors self-perceptions of attachment and partner reports of relational aggression. The study used paired dyadic data from 1,658 couples who had completed the RELATIONSHIP Evaluation (RELATE). The Family Violence, the Brief Accessibility and Responsiveness, Couples Relational Aggression and Victimization, and the Conflict Tactics scales were the measures used. Data was analyzed by using structural equation modeling to estimate an actor-partner interdependence model exploring these relationships. Results showed only female childhood sexual abuse had direct associations with male relational violence; however, several mediating paths were identified.

Keywords: childhood abuse, relational violence, attachment behaviors, relational aggression

## ACKNOWLEDGEMENTS

There are so many individuals that have supported me along this journey, and to who I am forever grateful to. First, my heartfelt thank you to my chair and my committee and the rest of the MFT faculty. I have had important and valuable life and personal lessons from every single faculty member of the MFT program. I would not be here without all of your support and guidance. Special thank you's go to Jonathan, Jeremy and Jim, to which I really could not have done this program and project without. Your support and belief in me, I will treasure forever. Maybe most importantly, Shannon, who I truly would be lost without.

Secondly, thank you to my sounding board, Jamie, and to my personal advisor, my Pa; to whom both keep my head in the game. Words cannot really express the gratitude to my husband and best friend, Tatsu, who has always supported my dreams, even if he was getting the fallout from the chase. And I really could have never done this without my stress buffers, Ghandi Bear, Barkevious Mingo and Lobby Boy, the furriest, most loyal, patience, and unconditionally loving best buddies, I could ever hope for.

And there is not enough space for the all the names, but I have had some amazing mentors and role models—professors, teachers, bosses, friends, family—who I would not be here without. I owe each and every one of them so much gratitude for their piece in my journey.

Thank you to all!!!

**TABLE OF CONTENTS**

ABSTRACT .....	ii
ACKNOWLEDGEMENTS.....	iii
TABLE OF CONTENTS.....	iv
LIST OF FIGURES .....	vi
LIST OF TABLES .....	vii
Introduction .....	1
Theoretical Foundations .....	4
Empirical Foundations.....	7
Literature Review .....	8
Childhood Maltreatment .....	8
Romantic Relational Aggression and Relational Violence .....	14
Adult Attachment .....	21
Statement of Purpose.....	30
Methods .....	31
Sample .....	31
Participants .....	32
Measures.....	34
Analytic Strategy .....	37
Results .....	38
Direct Effects .....	39
Indirect Effects .....	41

Discussion.....	41
Hypothesis 1 .....	42
Hypothesis 2 .....	43
Hypothesis 3 .....	45
Hypothesis 4 .....	47
Control Variables .....	48
Clinical Implications.....	49
Limitations.....	52
Future Research .....	54
Conclusion .....	55
References .....	57
Appendix A: Physical Health Effects of Childhood Maltreatment .....	105
Appendix B: Figures and Tables.....	107

**LIST OF FIGURES**

Figure 1. Hypothesized Model .....107

Figure 2. Results SEM Model .....108

**LIST OF TABLES**

Table 1. Factor Loadings .....109

Table 2. Correlations.....110

Table 3. Descriptive Statistics of Latent Variables .....111



## Introduction

Childhood maltreatment (CM) is common and leads to many adverse outcomes. The Center for Disease Control (2016) defines childhood maltreatment as an inclusive term that encompasses “all types of abuse and neglect of a child under the age of 18 by a parent, caregiver, or another person in a custodial role (para. 1).” The types include sexual abuse, physical abuse, emotional abuse (e.g., verbal, physiological, witnessing violence), and neglect. Often, within the literature, various forms of CM are treated as a single entity in predicting outcomes, or one specific type of abuse is isolated in examining a particular outcome. There are only a few studies that compare different types of abuses with each other in their effects on a single outcome: often these are found under the Adverse Childhood Experiences (ACEs) study (Brown et al., 2009; Feletti et al., 1998). This paradigm is rarely explored in academic institutions. It is critical that researchers and clinicians better understand both the similarities and differences about how the types of abuse present. The current study looks to clarify further how the relationships among three specific types of maltreatment—childhood sexual abuse (CSA), childhood physical abuse (CPA) and witnessing domestic violence—predict relational violence in couples. Additionally, I examined how adult attachment behaviors and adult relational aggression may mediate that relationship.

To better understand the effects of CM on relational violence in couples, it is essential to define each of the variables of this study. In 1999 the World Health Organization tried to unify these variations stating:

Child sexual abuse is the involvement of a child in sexual activity that he or she does not fully comprehend, is unable to give informed consent to, or for which the child is not

developmentally prepared and cannot give consent, or that violates the laws or social taboos of society. Child sexual abuse is evidenced by this activity between a child and an adult or another child who by age or development is in a relationship of responsibility, trust or power, the activity being intended to gratify or satisfy the needs of the other person. (p. 75).

Physical abuse (CPA), on the other hand, has a more agreed upon definition of caregiver inflicted, non-accidental injury of a child (Crosson-Tower, 2005). CPA includes injuries ranging from mild bruising to broken bones and skull fractures, that can result in fatalities (Kolko, 2002). In the literature, witnessing domestic violence is often described as ‘exposure to violence,’ ‘living with violence,’ ‘being exposed to violence’ or ‘being affected by violence’ (Humphreys, 2010; Powell & Murray 2008). This definition can include CPA and community violence (Eitle & Turner, 2002; Finkelhor, Turner, Ormrod, & Hamby, 2009; Finkelhor, Turner, Ormrod, Hamby, & Kracke, 2009; Covey, Menard, & Franzese, 2013).

Moreover, the term “witnessing domestic violence” provides a broader description of the traumatizing effects of the physical and verbal elements of viewing adults fight (Kantor & Little, 2003). Witnessing domestic violence is defined legally by each state, and the definitions widely vary and in some cases do not exist (Children Bureau, 2012). The current study defines witnessing domestic violence as witnessing or perceiving violence in the home. The present study uses the self-reported identification of each type of CM from both partners to explore their association with the outcomes of relational and physical violence in the couple relationship.

Relational violence (RV) is defined as physical, sexual, or psychological harm by a current or former partner or spouse. RV is one of the most pervasive and complex public health

problems in the United States (Centers for Disease Control and Prevention, 2009). The current study focuses on physical violence in the relationship. Researchers have identified four types of RV in couples: intimate terrorism, violent resistance, mutual violent control, and situational couple violence (Johnson, 2006; Johnson & Ferraro, 2000). If RV is one-sided, in which the perpetrator is using violence to control and dominate their partner, and the partner does not respond in kind, this is termed intimate terrorism. The other three types of RV involve a combination where both partners engage in violence (Johnson, 2006; Johnson & Ferraro, 2000). This more common form of RV within a couple relationship is reciprocal and involves patterns of unhealthy interaction which contribute to violence (Stith, McCollum, Amanor-Boadu, & Smith, 2012). With relational violence, individuals tend to underreport violence in the relationship (Sugarman & Hotaling, 1997; Cui, Lorenz, Conger, Melby, & Bryant, 2005). The current study uses the partners' report of the level of physical violence in the relationship, which is often a more accurate depiction of the ongoing relational dynamics.

Though there is an abundance of literature exploring relational violence, only recently has relational aggression received attention in couples research. The most recent literature suggests that romantic relational aggression (RA) may be seen not only as a stepping stone to violence (Oka, Sandberg, Bradford, & Brown, 2014) but also seen as its own relationally dysfunctional process. RA is defined as non-physical, aggressive actions taken by partners toward each other (Coyne et al., 2011; Carroll et al., 2010; Goldstein, Chesir-Teran, & McFaul, 2008). RA can be further described as “behaviors that harm others through damage (or the threat of damage) to relationships or feelings of acceptance, friendship, or group inclusion” (Crick & Grotpeter, 1995, p. 711). RA is reported to occur commonly in romantic relationships, and at

similar rates across gender (Carroll et al., 2010; Linder, Crick, & Collins, 2002). Therefore, RA as nonphysical form of damage may mediate the effects of how physical RV plays out in couples' dynamics.

Examples of RA include social sabotage (passive aggression, spreading of rumors, gossip, triangulation of a third party, disclosure of personal information to others, intentionally embarrassing a partner in front of others) and love withdrawal (intentionally ignoring a partner, stone-walling, silence treatment, and withholding physical and emotional affection or intimacy) (Carroll et al., 2010; Byrne & Carr, 2000; Busby & Holman, 2009; Gottman, 1994, 1999). RA is different from psychological aggression where the goal is to create or threaten emotional harm and is often direct and overt (e.g., verbal threats, ridiculing, attempting to control partner, isolating from family and friends) (Lawrence et al., 2009; Murphy & Cascardi, 1999). RA is used to harm the relationship and is subtler and indirect (Carroll et al., 2010). As well, various forms of childhood abuse and adult relational aggression have not been considered together. The purpose of this study is to help fill these gaps by considering both relational aggression and attachment as potential mediators between types of childhood maltreatment and adult couple violence.

### **Theoretical Foundations**

One theoretical perspective that offers understanding regarding the potential links between childhood maltreatment types, romantic relational aggression, and relational violence in couple relationships is attachment theory (Hazan & Shaver, 1987; Main, Kaplan, Cassidy, 1985; Mikulincer & Shaver, 2007). Adult attachment research has expanded upon the original work of Bowlby and Ainsworth. These authors describe attachment as the emotional bond between

parents and children allowing for a safe base to explore the world and seek refuge in times of distress and discomfort (Bowlby, 1969, 1980; Ainsworth et al., 1967, 1969, & 1978). Mikulincer and Shaver (2007) describe attachment as an “inborn regulatory system” central to “social behavior” and the development of “emotional stability, mental health, and satisfying, close relationships (p. 28).”

The importance of adult attachment has also been summarized, by Bowlby and King (2004), in this way: “A fundamental principle of Attachment Theory is that people of all ages show a preference for one primary attachment figure above all others; this will usually shift from a primary attachment figure... to a romantic partner over time” (p. 17). Hazan and Shaver (1987) were the first to overtly describe the emotional bond that develops between adult partners as functioning through the same motivational system—the attachment behavioral system. They state that the relationship between infants and caregivers and the relationship between adult romantic partners share the same features. Simply stated, the literature has shown attachment is a primary motivator and is central to romantic relationships and human connection (Feeney & Noller, 1990; Mikulincer & Shaver, 2007). Researchers have built on this foundation over time to define, describe, and measure adult attachment styles (Hazan & Shaver, 1990; Mikulincer & Shaver, 2007; Feeney, 2008).

Additionally, Bowlby (1969, 1980) and Ainsworth (1967) describe how certain behaviors link to different attachment styles: secure, avoidant and anxious. Bowlby (1980) states that “accessible and responsive...” behaviors from an attachment figure are essential to foster a secure base (p. 39). A growing number of researchers are now choosing to focus on these behaviors as a means to understand how secure couple relationships are formed (Sandberg,

Novak, Davis, & Busby, 2016). When measuring attachment style, the focus is on the individual's feelings and beliefs about his/her romantic relationship, whereas in the measurement of attachment behaviors, the focus is on distinct actions carried out in a relationship that promote attachment security (Sandberg, Bradford, & Brown, in press). Among attachment behaviors, accessibility, responsiveness, and engagement seem to be of particular importance (Sandberg et al., 2012). Accessibility can be described as being available in the time of a partner's need. Responsiveness can be seen as an openness to and reacting in a responsive way to a partner's needs. Engagement is connecting inept and meaningful ways to a partner.

The current study supposes that childhood maltreatment affects the attachment system of the victim, which often has long lasting effects into adulthood. The experiences leading to insecure attachment can lead to attachment related problems in adult romantic relationships (Godbout, Dutton, Lussier, & Sabourin, 2009; Schreiber, & Lyddon, 1998). Poor attachment behaviors may increase the pleas for connection with their partner in dysfunctional ways, like the use of aggression, and possible escalation of relational violence, to negotiate the bids for closeness and connection (Oka, et al., 2014). These unhealthy bids can simply be a form of proximity seeking as described in the attachment literature (Mikulincer & Shaver, 2007).

Thus, attachment theory serves as the theoretical foundation for the current study because it provides a framework which can help explain how and why people connect and disconnect in both childhood and adulthood. Therefore, it is a natural fit for a project that considers both the effects of childhood adversities that cause disruption (Tremblay & Sullivan, 2010; Murphy et al., 2014) and relational aggression and violence in couple relationships (Oka et al., 2014).

### **Empirical Foundations**

There is currently only one study that has investigated adult attachment behaviors and both romantic relational aggression and relational violence in the same study (Oka et al., 2014). The current study will build upon the theoretical and empirical foundation established by Oka's team. In that study, the authors reported that female reports of insecure attachment behavior predicted higher levels of both male and female aggression and male violence. Likewise, male reports of insecure attachment behaviors predicted higher levels of both male and female aggression and male relational violence. However, the current study will add components relating to family of origin (FOO) adversities to investigate how childhood abuse experiences may affect the relationship among attachment behaviors, romantic relational aggression, and violence in couple relationships.

Whereas, Oka et al. (2014) used a single mediation actor-partner interdependence model, the current study analyzes this dynamic using a serial multiple mediator actor-partner interdependence model. Oka et al. (2014) found both direct and indirect effects of relational aggression as important mediator between attachment behaviors and physical violence. "Insecure attachment behaviors and relational aggression were positively associated with their partner's physical aggression (Oka et al., 2014, pg.12)." Likewise, "the indirect actor effect of insecure attachment behaviors on their physical aggression was significant (Oka et al., 2014, pg.13). As explained by Hayes (2013), "In a serial multiple mediator model, the assumption of no causal association between two or more mediators is not only relaxed, it is rejected outright a priori." Therefore, the purpose of the current study is to extend the work of Oka and colleagues to

investigate the direct and indirect effects of different types of CM on adult relational violence within couple relationships.

### **Literature Review**

This review of literature will begin by exploring the prevalence rate of overall childhood maltreatment (CM) and the rates of each type of abuse modeled in the analysis, including the societal and economic cost of CM. Next, I explore the definition of romantic relational aggression and theory which attempts to explain this phenomenon. I also review the documented effects of RA on relationships and the research which supports the potential mediating role RA, as related to physical Relational Violence (Oka et al., 2014). I then explore the prevalence rates of RV and the documented effects of both RA and RV. And finally, I summarize and synthesize the research on the research connecting CM, RA and RV.

The current study theorizes adult attachment behaviors and RA both mediate the path toward RV, as was supported in Oka et al. (2014). Therefore, I first both review and discuss the relationship of adult attachment and CM providing an overview of the existing studies of interest. Connecting these pieces, I will explore the literature on AA and its connection to RA and RV, highlighting again this importance as suggested by Oka et al. (2014). As this study explores dyadic couples data I will highlight the research regarding gender differences the relationship of AA and RA and RV. Finally, I will discuss how measuring attachment behaviors, as a way to assess attachment in couples, is supported by a new and rapidly growing body of literature.

### **Childhood Maltreatment**

There are many noted effects of childhood maltreatment ranging from psychosocial, physical, interpersonal, and neurobiological. CM is often explored as one variable, yet there is



some literature that examines the different and specific effects of each type of abuse. The research shows startling yet inconsistent rates of its prevalence.

**Prevalence.** In 2012, the Children's Bureau screened 3.2 million cases of CM. Of those cases, nearly 20% were found to be indicated or substantiated as maltreatment. In 2014, Child Protective Services reported 702,000 unique child victims of CM. Nearly 40% of children with substantiated or indicated cases of maltreatment did not receive any services. These numbers reflect only reported cases of CM, strongly suggesting that underreporting of maltreatment is a concern (Finkelhor & Dzuiba-Leatherman, 1994). In 2003, Scher, Forde, McQuiad, and Stein estimated the prevalence of CM in a community sample to be about 30% for females and over 40% for males, with approximately 13% reporting multiple types of maltreatment. In 2009, the CDC analyzed information from 26,229 adults in five states using the 2009 ACE (adverse childhood experiences-these include different types of CM) module of the Behavioral Risk Factor Surveillance System (BRFSS) found nearly 60% of participants had one at least one ACE, with nearly 9% reporting 5 or more ACEs.

Where the research indicates wide ranges of inconsistency in rates for CM, the same holds true for specific types of abuse as well. There has been wide variation reported in prevalence studies, with sexual abuse ranging from 3% to 36% (Finkelhor, 1994). Gorey and Leslie (1997) used a combination of 25 samples to estimate sexual abuse prevalence for females at 22.3% and males at 8.5%. The 2009 CDC study found 6.7% of men and 17.2% of women had experienced at least one incident of sexual abuse.

Similarly, the CDC ACEs study (2009) reported rates of 14.1% of men and 15.4% of women reported at least one incident of physical abuse. In 2013, US Health and Human Services

reported that physical abuse counted for 18% of founded allegations of abuse. Of the founded physical abuse allegations for children under the age of three, 41% died from the abuse. Again, underreporting of CPA is a major concern. MacMillian et al. (1997), trying to account for underreporting, estimated the CPA rate at 21.1% for females and 31.2% for males.

Although, all types of CM are underreported, witnessing domestic violence may be the most widely overlooked. In part, witnessing domestic violence has only recently begun to be investigated as a separate type of CM. Additionally, state by state variations in definition and reporting mandates make CM difficult to track. Underreporting of domestic or intimate partner violence alone is extremely high. Documented accounts of DV by authorities often do not include witnessing domestic violence in their records, even if a child was present (Bartels, 2010; Edleson, 1999; Richards, 2011).

Although it is clear that underreporting of witnessing violence in childhood is a problem, it has been estimated that 15-275 million children witness domestic violence each year (Gil-Gonzalez et al., 2007; Pinheiro, 2006; McDonald, Jouriles, Ramisetty-Milkler, Caetano, & Green, 2006). Early research suggests that nearly half of children interviewed stated they had seen their mother physically assaulted, including an event that involved choking (McCloskey, Figuerdo, & Koss, 1995). Similarly, McGee (2000) found that 71% of his sample of children had witnessed physical assaults in their lives, and 10% had witnessed sexual assaults of their mothers. Other research estimates that 20 to 24% of children under 18 have witnessed an attack on a family member (McDonald, Jouriles, Ramisetty-Milkler, Caetano, & Green, 2006; O'Brien, John, Margolin, & Erel, 1994; Finkelhor, Turner, Ormrod, & Hamby, 2009). The CDC study (2009) found rates of 15.7% of men and 16.9% of women reported at least one incident of

witnessing domestic violence. What is clear is, CM and its specific subtypes happen at alarming rates. Many of the adults have CM as part of their histories. The literature has explored, in depth, the long-term effect of CM histories in adulthood.

**Societal effects.** As the current study looks to examine the adult outcome of relational violence of those with CM histories, it is important to understand what the research generally states about the adult outcomes of CM. These long-term effects of childhood maltreatment are pervasive and vast. Approximately 80% of young adults with childhood maltreatment histories met DSM criteria for at least one psychiatric disorder by age 21 (Silverman, Reinherz, & Giaconia, 1996). CM is also quite costly for both individuals and society. In 2010, the estimated lifetime cost per victim of nonfatal CM was \$210,012 (Fang et al., 2012). In that same year, the total lifetime economic burden resulting in new cases of CM in the U.S. was approximately \$124 billion, which is costlier than the other main public health concerns such as stroke and Type 2 diabetes (Fang, Brown, Florence, & Mercy, 2012).

**Psychosocial effects.** Some of the documented long-term psycho-social effects of CM include depression, anxiety, eating disorders, substance abuse, self-harm, suicide, post-traumatic stress disorder (PTSD), divorce, marital discord, sexual dysfunction, and interpersonal concerns (Hunter, 2006; Mullen, Martin, Anderson, Romans, & Herbison, 1996; Williamson, 2009). CSA survivors are at an increased risk for mood and substance use disorders (Nelson, Heath, & Madden, 2002), sexual dysfunction (Noll, Trickett, & Putnam, 2003), and interpersonal dysfunction in adulthood (Rumstein-McKean & Hunsley, 2001). A meta-analysis further validates the correlations between CSA and PTSD, depression, suicide, sexual promiscuity, the victim-perpetrator cycle, and academic performance (Paolucci, Genuis, & Violato, 2001).

Furthermore, a longitudinal study by Spataro, Mullen, Burgess, Wells, and Moss (2004) suggests a three times greater risk for anxiety and acute stress disorders and a five-time increased risk for having a personality disorder for those who experienced CSA.

CPA survivors have reported higher levels of PTSD, anxiety, depression, substance abuse and other psychiatric disorders, cognitive or intellectual deficits, social skill deficits, low self-esteem, internalized aggression, risk taking and criminal behavior, externalized aggression and anger, and interpersonal dysfunction (Hoskote et al. 2003; Kolko 2002; Manly, Kim, Rogosch & Cicchetti, 2001; Finzi et al. 2002; Crosson-Tower, 2005; Egeland, Yates, Appleyard, & van Dulmen, 2002; Norman et al., 2012). Additionally, Pompili et al. (2009) found CPA survivors are at a significant risk for suicidal behaviors. Furthermore, adult male alcoholics with CPA histories had higher rates of serious suicide attempts than their non-abused counterparts (Kroll, Stock, & James, 1985). Other researchers have reported similar findings within different clinical and community populations; namely, CPA increases the risk of serious suicide attempts (Dube et al., 2001; Afifi et al., 2008; Ystgaard, Hestetun, Loeb & Mehlum, 2004; Lipschitz, Winegar, Hartnick, Foote & Southwick, 1999; Roy, 2001; Yoder, 1999; Blaauw, Winkel, Arensman, Sheridan & Freeve, 2002; Verona & Sachs-Ericsson, 2005). Moreover, the research has found a strong relationship between CPA and increased victimization of abuse experiences as an adult (Bensley, Van Eenwyk & Wynkoop-Simmon, 2003; Renner & Slack 2006); in part, these experiences can increase the level of violence in the adult survivors' own home (Sahin, Baloglu, & Unalmis, 2010.)

Witnessing domestic violence likewise has a variety of negative outcomes associated with it, including: substance abuse, psychological dysfunction and poor adjustment, bullying in

schools, post-traumatic stress, depression, anxiety, anti-social behaviors, running away, prostitution, teenage pregnancy, sexual assaults, low self-esteem, problems in school, lower verbal abilities, delinquency, criminal behaviors, and animal cruelty (Arbetter, 1995; Baldry, 2003; Edwards, 1992; Kilpatrick & Williams, 1998; McCloskey & Lichter, 2003; Carlson, 1984; Diamond & Muller, 2004; Hughes, 1988; Maker, Kimmelmeier, & Peterson, 1998; Silvern et al., 1995; Huth-Bocks, Levendosky, & Semel, 2001; Levendosky & Graham-Bermann, 1998; Osofsky, 2005; Currie, 2006; Evans, 2008; Agnew, 2002; Kernic et al., 2003). Many of these issues persist through adulthood (Geffner, Igelman, & Zellner, 2003). Research has also identified that increased frequency and intensity of witnessing domestic violence is associated with poorer relational and mental health outcomes (even when fewer than 10 lifetime witnesses of domestic violence incidences have occurred) including enduring depression symptoms (Fergusson & Horwood, 1998; Russell, Springer, & Greenfield, 2010). Dube et al., (2001) found that children who witnessed domestic violence were up to five times more likely to commit suicide as adults. The literature also suggests that those who witness domestic violence in childhood have a higher risk for entering abusive relationships themselves in adulthood (Arbetter, 1995; Miller, Handal, Gilner, & Cross, 1991; Purvin, 2003; Marker et al., 1998.)

Although exact prevalence rates for CM are unknown, it occurs at alarming rates. Definitions continue to be unclear and underreporting is all too common. CM is clearly related to broad and varied negative outcomes that are often pervasive in adulthood, affecting biology, physical and physiological health, and relationships (see appendix A).

### **Romantic Relational Aggression and Relational Violence**

Like CM, romantic relational aggression and violence in adulthood is all too common and often underreported. Similarly, research has indicated that there are a variety of negative outcomes when individuals use relational aggression and violence in adulthood. There are several theoretical conceptualizations as to the cause and contributing factors for relational aggression and violence. Feminist theorists suggest that the need for power and dominance is central to relational violence (Straus, 1976; Yllö, 2005). Examining societal and cultural factors provides for another explanation. Examples of this theory include socialization to violence, societal acceptance/tolerance of violence, and poverty (Copenhaver, Lash, & Eisler, 2000). Social learning theory suggests those that witness violence or any repeated behavior are more likely to repeat that behavior. The literature also describes an intergenerational effect of relational violence (Ehrensaft et al., 2003). More recently, researchers have explored a relational/dyadic perspective to relational violence, focusing on the couples' role, typologies and interactional effects (Bartholomew & Allison, 2006; Johnson, 2008).

It is also important to understand how romantic relational aggression affects relationships. Research suggests that relational aggression is learned in early peer relationships during adolescence and early adulthood and then used with romantic partners in adulthood (Murray-Close, Ostrov, Nelson, Crick, & Coccaro, 2010). Females seem to use and are bothered more by relational aggression than their male counterparts. Females perceive relational aggression to have a greater impact on their relationships and report thinking about and discussing it more than males (Salmivalli & Kaukiainen, 2004). Relational aggression seems to

damage the overall development, formation, and maintenance of relationships (Prinstein, Boegers, & Vernberg, 2001).

Romantic relational aggression is typically conceptualized as a path toward the use of violence or as a unique end point. Currently, there is only minimal support for either conceptualization. A few studies support the idea that relational aggression is part of the path toward the use of violence in adult relationships (Bagner, Storch, & Preston, 2007; White, Smith, Koss, & Figueredo, 2000; Rothbaum, Weisz, Pott, Miyake, & Morelli, 2000). Whereas, Oka et al. (2014) and Wright and Benson (2010) found that relational aggression is associated with relational violence, suggesting that relational aggression can be a unique construct.

**Relational violence prevalence.** Relational violence is, unfortunately, commonplace in many adult relationships. Nationally, RV is estimated to affect up to 21% of couples in any given year (Jose & O’Leary, 2009; Schafer, Caetano, & Clark, 1998). In the United States, up to 25% of women will experience at least one incidence of RV in their lifetime (Breiding, Black, & Ryan, 2008; Tjaden & Thoennes, 2000). Research suggests that physical aggression is relatively stable over time, and RV in adolescent romantic relationships predicts RV in marriages (O’Leary & Slep, 2003; O’Leary et al., 1989). Others have found that one-third of young adults have engaged in RV against their romantic partners (Straus, 2004; Sugarman & Hotaling, 1989). Thus, all genders experience both perpetration and victimization in RV. However, women are more often physically injured by RV. Archer’s (2000) study suggests that women are more often the perpetrators of RV than men. In cases of non-reciprocal violence, women perpetrated more than 70% of the time, but in more than 50% of RV cases, violence was reciprocated within the partnership (Whitaker, Haileyesus, Swann, and Saltzman, 2007).

**Effects.** As previously mentioned, RV has many documented negative outcomes. RV is highly associated with mental and physical health problems, which in turn create a significant burden on the health care system (Rivara et al., 2007; Bonomi et al. 2006; Coker, Weston, Creson, Justice, & Blakeney, 2005). Golding (1999) reports up to 85% of RV survivors meet criteria for PTSD diagnosis. Personality disorders (dysphoric, borderline, anti-social) psychological traits and other internal factors (low self-esteem, anger, hostility, and poor problem-solving skills) are also associated with increased RV risk (Ehrensaft, Cohen, & Johnson, 2006; Sedlar & Hanson, 2001; Holtzworth-Munroe & Stuart, 1994). Research additionally shows a high correlation between substance use and RV (Coker, Smith, McKeown, & Melissa, 2000).

Similarly, RA is associated with psychosocial maladjustment, social anxiety, substance use, loneliness, depression, lower relationship quality, lower sense of belonging, lower levels of acceptance, and poor intimacy (Goldstein & Tisak, 2004; Landbeater, Bannister, Ellis, & Yeung, 2008; Welsh, Grello, & Harper, 2003; Bagner, Storch, & Preston, 2007). In both samples of children and adults, targets of RA have been shown to exhibit more adjustment difficulties, poorer relationship quality, depression symptoms, and substance use (Bagner, Storch, & Preston, 2007; Linder et al., 2002; Schad, Szvedo, Antonishak, Hare, & Allen, 2008). Whereas the perpetrators of RA demonstrate higher levels of depression, hostility, psychopathy, hostile attribution style, alcohol use, and anger (Coyne, Nelson, Graham-Kevan, Keister, & Grant, 2010; Murray-Close et al., 2010; Schad et al., 2008). RA has also been associated with psychopathic, anti-social, and borderline personality traits (Czar, Dahlen, Bullock & Nicholson, 2011; Schmeelk, Sylvers, & Lilienfled, 2008; Marsee, Silverthron, & Frick, 2005; Storch, Masia-Warner, & Brassard, 2003; Werner & Crick, 1999).



Results from the Murray-Close (2012) study suggest an elevated fight or flight response to conflict when RA was present, especially in low-quality relationships. Furthermore, Martin, Miller, Kubricht, Yorgason and Carroll (2015) report that wives and husbands who used social sabotage in the relationship reported a decrease in overall health during the next five years. In summary, there are well-documented effects of both relational aggression and violence, which are often severe and long-term for their negative outcomes. In order to better serve this population, researchers and clinicians ought to better understand the precursors to the use of aggression and violence in adult relationships.

**Childhood maltreatment, relational violence, and aggression.** The literature clearly supports a relationship between CM and adult violence (Epps, Carlin, & Ward, 1999; Lansford et al., 2007; Maneta, Cohen, Schulz, & Waldinger, 2012; Scarpa, Haden, & Abercromby, 2010). One documented risk factor of RV in adulthood is previous violence exposure as a child (Black, Heyman, & Smith-Slep, 2001; Cogle, Resnick, & Kilpatrick, 2009; Desai, Arias, Thompson, & Basile, 2002; Noll, 2005; Whitfield, Anda, Dube, & Felitti, 2003; Dutton, 2009). The literature also supports the reverse relationship, that DV in a home increases the risk of CM, direct physical and sexual abuse, ranging from 45 to 70% of home reporting co-occurrence (Farmer & Owen, 1995; Kellog & Menard, 2003; McGee, 2000; Osofsky, 2003; Connolly et al., 2006; Cunningham & Baker, 2004; Edleson, 1999; Guille, 2004; Hester, Pearson, & Harwin, 2007). These findings highlight the critical importance of better understanding the relationships among CM and relational violence and any mediating factors.

Where there is some research exploring the role of RV in CM, the role of RA in CM is unclear. Chen, Coccaro, Lee, and Jacobson (2012) found a significant association between CM

and aggressive behavior in adulthood, even when controlling for hostile attribution biases and negative emotional responses. This effect was further amplified when examining emotional abuse. However, the researchers did not differentiate between direct vs. indirect types of aggression. On the other hand, other research shows a correlation between CM and RV but not an association with RA (Burnette & Dickson-Reppucci, 2009).

Where there is some literature on the association of CM and RV and RA, CSA is an example of where there has been little inquiry into the specific types of abuse and their effects on RV and RA. However, research available on CSA does support a greater risk of interpersonal dysfunction and violence in the home (Kellogg & Menard, 2003; McCloskey et al., 1995; Gilbert, El-Bassel, Schilling, & Friedman, 1997). The Fullerton-Sen et al. (2008) study found a higher level of RA used in relationships of female survivors of CM, specifically if the abuse was CSA.

Where there is little research on CSA and RV and RA, there have been studies exploring the relationship of CPA and RV and RA. The research has found a significant association between CPA and physical aggression, anger, and hostility in adulthood (Keene & Epps, 2016; Carter, Crabtree, Epps, & Roberts-Davis, 2014; Egeland et al., 2002; Springer, Sheridan, Kuo, & Carnes, 2007). Menard, Weiss, Franzese and Covey (2014) reported an association between of CPA and RA only in males. Some factors have been identified as influencing the effects of CPA on RA including emotional regulation and cognitive processing (Gratz, Paulson, Jakupcak, & Tull, 2009; Stevens et al., 2013; Teisl & Cicchetti, 2008; Chen, Coccaro, Lee, & Jacobson, 2012; Verona & Sachs-Ericsson, 2005). Similarly, CPA increases the likelihood that a child will use and view aggressive strategies as an efficient way to meet their relational needs (Herrenkohl, Egolf,

& Herrenkohl, 1997; Shields & Cicchetti, 2001; Weiss, Dodge, Bates, & Pettit, 1992). Swogger, You, Ashman-Brown, & Conner (2011) found CPA was not only correlated with lifetime frequency of aggression but was also correlated with a lifetime history of suicide attempts.

By far, witnessing domestic violence is the most explored specific type of CM as it relates to RV and RA, though most studies focus on violence. To date, this body of research produces inconsistent findings. Some studies have found no significant association (Alexander, Moore, & Alexander, 1991; Bevan & Higgins, 2002; Capaldi & Clark, 1998; Ernst et al., 2007; Simons, Johnson, Conger, & Elder, 1998). Whereas, other studies have found only indirect effects (Fergusson, Boden, & Horwood, 2006; Mihalic & Elliott, 1997). While others support a significant and direct effect of increased risk of RV in adulthood for both perpetration and victimization (Babcock, Green, Webb & Graham, 2004; Rivera & Fincham, 2015; Ehrensaft et al., 2003; Ernst et al., 2009; Iverson, Jimenez, Harrington, & Resick, 2011; Karakurt, Kelley, & Posada, 2013). It has also been shown that children exposed to RV are 15 times more likely to be physically abused (Osofsky, 1999). Studies have even examined the child welfare record, finding that 64 to 71% of cases were reports of dual violence (CPA and DV) in the families (Beeman, Hagenmeister, & Edleson, 2001; Shepard & Raschick's, 1999). One purpose of the current study is to examine further if witnessing violence increases use of violence in adult relationships.

There are several theories that attempt to explain why witnessing violence increases the risk of the use of violence. Social learning theory proposes that youth who witness domestic violence learn that it is an acceptable means of conflict resolution and emotion regulation (Ehrensaft et al., 2003; Kalmuss, 1984; O'Leary, 1988). This hypothesis is supported by the research that suggests witnessing domestic violence increases the risk of RV as an adult (Caesar,

1988; Hotaling & Sugarman, 1986; Kalmuss, 1984; Murphy & O'Farrell, 1994). The intergeneration transmission theorists have found the same, exposure to violent parents leads to RV in adults (Elbow, 1982; Kantor & Jasinski, 1998; Straus, Gelles, & Steinmetz, 1980). Whereas the General Strain Theory from Agnew (1985, 1992, 2002) states that the use of violence is a reactionary strategy; it may often be used in an effort to avoid negative relational and emotional stimuli and to further deter personal victimization, indicating an 'I hurt you before you hurt me' attitude. This theory also has research support (Baron, 2009; Hay & Evans, 2006; Rebellon & Van Gundy, 2005).

There are additional mixed results for children who witnessed DV, as some studies have not differentiated between directly experiencing violence (as the victim) from exposure to violence (Acosta, Albus, Reynolds, Spriggs, & Weist, 2001; Gewirtz & Edleson, 2007). While others argue 'witnessing' goes beyond direct observation of the violence, it can include overhearing and seeing the aftermath (e.g., injuries, broken home goods) of the incidences (Cunningham & Baker, 2004; Mullender et al., 2002). Kaufman and Ziegler (1987), found only 30% of individuals who witnessed domestic violence become violent as adults, meaning not everyone who is exposed to violence perpetrates (Stith, Busch, Lundberg & Carlton, 2000). Therefore, any research that can shed light on the circular nature of CM and RA is of value.

It is clear that the inconsistency in conceptualization, definitions, and findings has limited the fields understanding of the relationship between RV and RA. The literature is also clear that there are significant correlations between negative outcomes for adults and an impact on their romantic partnerships.

### **Adult Attachment**

Adult attachment may be a significant part of understanding how CM (and its specific types) are related to RA and RV in adult romantic relationships. A secure adult attachment style can serve as a secure base and helps to improve marital quality (Sandberg, Bradford & Brown, 2016). Whereas, couples with insecure attachment styles report decreased relationship quality (Hollist & Miller, 2005). Research on anxiously attached adults suggest maladaptive and dysfunctional schemas, including severe symptoms of depression, anxiety, hostility, hyperactive coping strategies, heightened attention to others negative emotions, increased perception of threats and distress to unavailable or unresponsive partners, excessive desire for proximity to others, fear of abandonment and rejection, (Mikulincer & Shaver, 2007; Maunder, Lancee, Nolan, Hunter, & Tannenbaum, 2006; Mikulincer, Gillath, & Shaver, 2002; Pielage, Gerlsma, & Schade. 2000; Mikulincer, Florian, & Weller, 1993).

Research on an avoidant adult attachment style also suggests other maladaptive and dysfunctional schema, including depression, reduction in seeking social support, deactivating emotion regulation strategies, chronic self-reliance, inattention to threatening information, suppression of distressing memories, and reduction in emotional capacity and acknowledgement (Fraley & Shaver, 1997; Shaver & Mikulincer, 2008, Simpson, Rholes, & Nelligan, 1992; Wei, Russell, Mallinckrodt, & Vogel, 2007). The literature also reports strong associations between health outcomes and adult attachment (Hammill, 2010; Mcevoy, 2005; Reis & Grenyer, 2004; Tremblay & Sullivan, 2010). As can be clearly seen in the literature, attachment is a powerful variable in understanding adult romantic relationships.

Whereas insecure attachment has many maladaptive and dysfunctional relational, physical and emotional outcomes (Mikulincer & Shaver, 2007), including RV (Dutton, Saunders, Starzomski, & Bartholomew, 1994; Dutton, 2011; Dutton & White, 2012), secure attachment leads to many positive outcomes. Researchers suggest that violence is a way to manage distance and closeness in the relationship (Allison, Bartholomew, Mayseless, & Dutton, 2008; Pistole, 1994), while others have found that violence often occurs when a partner fears abandonment (Dutton & Kerry, 1999; Holtzworth-Munroe & Anglin, 1991). These findings suggest the importance in understanding how insecure attachment leads to the use of violence in the adult relationships.

Similarly, researchers have found couples with insecure adult attachment report higher levels of RA (Fournier, Brassard, & Shaver, 2011; Linder, Crick, & Collins, 2002; Oka, Sandberg, Bradford, & Brown, 2014; Weiss, 2006; Wilson, 2010). Oka, Brown, and Miller (2016) found higher levels of insecure attachment predict the partners' reports of low relationship power. Additionally, self-reports of low power correlated increased risk of the partner using relational aggression. Goldstein et al. (2008) found that couples that used insecure attachment language in describing their relationships have higher levels of RA.

**Childhood maltreatment and adult attachment.** There is a large body of research exploring the relationship of CM and attachment styles in adulthood. CM has been shown to lead to higher risks of interpersonal and relational dysfunction, highlighted by insecure adult attachment, which predict higher rates of involvement in violent and abusive relationships (Briere & Runtz, 1988; Morimoto & Sharma, 2004; Carbone, 2010; Dodge-Reyome, 2011; Gauthier, Stollak, Messe, & Aronoff, 1996; Nicholas & Bieber, 1996; Wekerle & Wolfe, 1998;

Gilbert et al., 1997; Messman-Moore & Coates, 2007; Whitfield et al., 2003; Dutton et al., 1994). Fullerton-Sen et al. have theorized the use of relational aggression in the context of learning theory: through the interactions with unresponsive and inaccessible caregivers, individuals learn that love and affection can be used as a tool to negotiate closeness in a relationship. Love and affection can be given or withdrawn when they are confronted with perceived relational threats.

When a parental or attachment figure is unresponsive, inaccessible, unsupportive, rejecting, harsh, insensitive, intrusive, controlling or inconsistent—all characteristics of CM—children develop negative mental representations of themselves, others, and relationships, and they develop maladaptive coping and emotional regulation strategies (Bowlby, 1969, 1973, 1980; Thompson, 1991; Ainsworth et al., 1978; Carlson & Sroufe, 1995; DeWolff & van IJzendoorn, 1997). These early dynamics associated with CM are all related to insecure adult attachment styles, which is endorsed by higher rates in the CM population, and often marked with relational dysfunction, emotional maltreatment and psychological disorders (Carlson & Sroufe, 1995; Davis, Petretic-Jackson, & Ting, 2001; DiLillo, Lewis, & Di Lareto-Colgan, 2007; Riggs, 2010; Brennan, Clark, & Shaver, 1998; Lyons-Ruth & Block, 1996; Mickelson, Kessler, & Shaver, 1997; Riggs & Jacobvitz, 2002; Cloitre, Stovall-McClough, Zorbas, & Charuvastra, 2008; Hankin, 2005; Muller, Lemieux, & Sicoli, 2001; Schreiber & Lyddon, 1998).

CM inherently violates the relational process, which explains the increased risk of developing insecure attachments styles in adulthood, which often lead to poor mental health outcomes (Hankin, 2005; Muller, Gragtmans, & Baker, 2008; Swanson & Mallinckrodt, 2001). CM survivors with insecure attachment report more PTSD symptoms than survivors with secure

attachment (Muller, Sicoli, & Lemieux, 2000). Ogle, Rubin and Siegler (2015) found that insecure attachment styles, reported by adults with CM histories, predict more severe symptoms of PTSD and describe the variance in symptom severity when compared to other risk factors. These studies and others explore how insecure adult attachment increases trauma symptomatology in adulthood from CMS (Muller, Thornback, & Bedi, 2012; Roche, Runtz, & Hunter, 1999). Specifically, these findings suggest that individuals with histories of CM may be particularly vulnerable to the development of PTSD due to the disrupted formation of secure attachment (Goodman, Quas, & Ogle, 2010).

A history of CSA is associated with higher levels of trauma symptomatology and lower levels of attachment security in adult attachment relationships as well (Asplemeire, 2007). CSA survivors often report high levels of both types of insecure adult attachment (Limke, Shower, & Ziegler-Hill, 2010). Shapiro and Levendosky (1999) posits that most of the effects of CSA on interpersonal functioning were due to avoidant adult attachment, which had a significant direct effect on interpersonal conflict. Laine (2006) found that CSA survivors' maternal attachment played a buffering role in the relationship between trauma severity and marital dissatisfaction.

Research suggests that CSA trauma severity has a direct effect on marital dissatisfaction. Carson, Gertz, Donaldson, and Wonderlich, (1990) and Herman (1981) showed CSA females have higher levels of triangulation and hold unresolved emotional attachments within their families of origin. These studies and the work of James and Nasjleti (1983) also show that CSA survivors share less spousal intimacy, show less support and have an increased risk of unhealthy emotional attachments to their partner. Partners of CSA survivors often state that isolation, pain, anger, frustration, dissatisfaction, and communication problems are major relationship concerns



(Reid, Wampler & Taylor, Wampler, & Taylor, 1996). James and Nasjleti (1983) suggest female CSA survivors are less effective parents than their non-abused counterparts. Kwako, Noll, Putnam and Trickett (2010) found that children of CSA mothers used more “extreme anxious self-protective strategies” than children of non-CSA mothers.

Like CSA, CPA survivors report high rates of both types of insecure adult attachment and a lower rate of secure adult attachment than their non-abused counterparts. Of which nearly 85% could be classified as avoidant adult attachment style (Finzi et al., 2000, 2001, 2002; McLewin & Muller, 2006; Muller et al., 2008; Bacon & Richardson 2001; Howe, 2005). This seems to be true even when controlling for gender, social support and other forms of abuse (Unger & De Luca, 2014). Reinhert (2009) states that CPA is related to longer-term maladaptive and dysfunctional psychological and behavior outcomes (McLewin & Muller, 2006). There are also noted gender differences. Females reported a significant positive relationship between avoidant attachment to their mother and CPA. CPA male survivors tend to use externalized coping strategies, while females tend to internalize and often will triangulate others (Crittenden, Claussen & Sugarman, 1994). Both have an increased risk for substance use if CPA and insecure adult attachment are present (Reinhert, 2009). CPA is also associated with more negative views of both self and other and lower perception of social support (McLewin & Muller, 2006; Mullet et al., 2008).

Again, there is a limited amount of research on witnesses of domestic violence. In a review of the literature, Martin (2002) states that witnessing domestic violence undermines the child’s developmental need for safety and security, resulting in the child being chronically overwhelmed. MacIntosh (2002) further adds this pattern likely develops into disorganized

attachment for the child, as he/she struggles to reconcile both the need for comfort and the source of fear. This pattern may be the possible source for an intergenerational cycle of DV described in the Zeanah et al. (1999) study.

As is seen throughout the literature, attachment appears to mediate the impact of CM. Research suggests CM is correlated with heightened sensitivity to threat, social mistrust, mood-related changes and describes why childhood abuse often is related to couple dysfunction and poor relationship quality (McCarthy & Taylor 1999; Colman & Widom, 2004; DiLillo et al., 2009). Young adults with CM histories were found to use more insults and physical violence in their romantic relationships than non-abused counterparts (Styron & Janoff-Bulman 1997). Conversely, if a CM survivor reported having a close and confiding partner, they had a lower risk of depression, better overall mental health outcomes, engagement in social support, and higher levels of relationship quality (Whiffen, Judd, & Aube, 1999; DuMont, Widom, & Czaja, 2007). Also, Evans (2014) found males with CM histories, who reported higher levels of spousal support, had decreased trauma symptomatology. Similarly, Ngyugne et al. (2016) found if both partners reported CM histories, it was associated with higher relationship quality. Other studies have shown higher levels of family cohesion and secure attachment with secondary attachment figures, moderated adverse effects of CM (McGee & Wolfe, 1991; Morimoto & Sharma, 2004; Cicchetti & Rizley, 1981; McGee & Wolfe, 1991). Though this body of literature is small, it suggests the positive influence of secure attachment on CM outcomes. Overall there is still a lack of direct mediational exploration in the CM and adult attachment literature (Wright, Crawford, & Del Castillo, 2009).

**Relational violence and aggression.** The literature suggests adult attachment is a significant predictor of RV. Some research suggests a circular relationship, whereas insecure attachment precedes RV, and RV creates insecure adult attachment (Logan, 2006; Rothbaum, Weisz, Pott, Miyake, & Morelli, 2000, Oka & Whiting, 2011; Stith, McCollum, & Rosen, 2011). Other research proposes that RA, in the absence of violence, affects survivors as much or more than RV (Arias & Pape, 1999; Follingstad, Rutledge, Berg, Hause, & Polek, 1990; Sackett & Saunders, 1999).

There has been an increase in the research investigating the interactional pattern of adult attachment and RV in a relational context (Oka & Whiting, 2012; Godbout, Dutton, Lussier, & Sabourin, 2009). Bond and Bond (2004) suggest when both partners are insecurely attached the risk of RV increases as they both are more likely to attempt to regulate attachment through violence. Mutually aggressive couples are particularly vulnerable to violence when attempting to manage conflicts constructively and prevent escalation in the context of the relationship, which is consistent with other research findings (Goldstein, 2011; O'Leary et al., 1989). Knobloch, Solomon and Cruz (2001) suggest that lack of trust and insecure adult attachment may result in preoccupation with the relationship and promote the cyclic nature of the violence.

While the literature often has focused on relational violence, Carroll et al. (2010) argues that RA, even more than RV, strikes at the core of attachment needs, or the need to belong. Their study suggests that higher levels of love withdrawal and social sabotage (RA behaviors) were associated with of lower levels marital quality and stability for both partners. Furthermore, Oka et al., (2014) added to this finding by describing RA as a maladaptive attempt to manage closeness. Along with White, Smith, Koss, & Figueredo (2000), Oka et al. (2014) suggests

attachment, in her study conceptualized as attachment behaviors, is the key mediator in the relationship between RA and RV. As such, the Oka et al. (2014) study provides the initial framework for the current study.

**Gender differences.** The current study looks at both partners within the couple relationship, therefore it is important to understand that both genders may use RA and RV to manage closeness; however, the use of RA and RV appears to differ between males and females. Female survivors of RV are more likely to describe themselves as having insecure adult attachment styles (Alexander, 2009; Gidycz, Coble, Latham, & Layman, 1993). Similarly, males who perceived higher levels of partner closeness (a secure attachment behavior) show decreases in RV (Lawson, 2008). Whereas, the level of insecure adult attachment correlated to the degree and severity of violence perpetrated by males (Mikulincer, 1998a). Burk and Seiffge-Krenke (2015) found 20% of their dyadic sample was characterized by unilaterally relationally violent females, and “moderately” aggressive/violent males were about 20% of the sample. However, this finding was linked to the idea of the stereotypes of male dominance and female submissiveness (Herrera, Wiersma, & Cleveland, 2008). Additionally, research on the double standard of violent behaviors, female violence is often not taken seriously or is seen and used as a defensive strategy; whereas, male violence self-reported to be used in anger and is criticized and abusive (Sears, Byers, & Price, 2007 O’Keefe, 2005).

Additionally, Sullivan, Lawrence, Pasch and Bradbury (2015) indicated that, for husbands and wives, aggression was associated with supportive behavior from self and partner. Oka et al. (2014) also highlight gender differences in couples dynamics, finding that the “total effect of women’s negative attachment behaviors on men’s physical aggression was stronger than

the total effect of men's attachment behaviors on their physical aggression (direct and indirect).” Overall, these findings suggest two valuable concepts worth further exploration: although violence is frequently two-sided, male and female contributions to the process may be different, and violence can be a maladaptive strategy common within attached adults. The current study aims to expand on the research gender differences and multiple forms of RA and RV in couple relationships.

**Attachment behavior.** Where it is evident in the literature that attachment style is a key relational construct, new research is arguing for the importance of identifying relationship-specific attachment behavior (Johnson & Greenman, 2013; Knapp, Sandberg, Novak & Larson, 2015) as a means for understanding relational interactions, including RV and RA (Oka et al., 2014). Johnson (2008) describes how this process is similar in a romantic relationship as in childhood, with demonstrated accessibility and responsiveness in both partners, leading to a secure base. A secure attachment with one's partner involves engaging in meaningful interactions, confiding in each other and taking emotional risks. Unsurprisingly, couples with secure attachment and more secure attachment behaviors report higher relationship quality (Feeny, 2008; Sandberg, Novak, Davis & Busby, 2016). Increased levels of perceived attachment behaviors have been found to predict secure attachment styles in adulthood as well (Sandberg, Busby, Johnson, & Yoshida, 2012); these adult relationships are more satisfying and have increased levels of trust.

Knapp et al. (2015) suggest attachment-behaviors influence relationship satisfaction beyond attachment styles. Additionally, they found that family-of-origin quality, which is often poor in abusive families, is associated with attachment behaviors in adulthood, for both partners

in a relationship. The Knapp et al. (2015) study further reported that family history, like childhood abuses, impact attachment behaviors (see also, Dinero, Conger, Shaver, Widaman & Larson-Rife., 2008). Sandberg, Bradford, and Brown (in press) report attachment behaviors predict relationship satisfaction beyond and in addition to attachment styles. Therefore, the current study will use attachment behavior and its conceptualization in the analysis.

Throughout the literature review, it is clear that there is a significant and possibly circular, relationship between CM and relational aggression and violence. There is support that insecure attachment leads to increased risks of relational aggression and violence. However, these variables have not been explored together. This study aims to better understand these relationships.

### **Statement of Purpose**

The current study examines the relationship between three types of abuse in childhood—witnessing domestic violence, physical abuse and total in-home violence, sexual abuse—and couple relational violence. Using serial multiple mediation approach, this study examines the mediating roles attachment behaviors and romantic relational aggression.

This current study's theoretical and structural foundation parallels the work of Oka and colleagues (2014), which found lower levels of attachment behaviors (for men and women) and higher levels of relational aggression (for men and women) were positively associated with physical aggression (Oka et al., 2014). In the current study, partner reports of relational violence and relational aggression were used, because as previously noted, partner reports of violence tend to be more accurate depiction of the relational dynamic. Self-reported variables will be used in the analyses relating to attachment behaviors and childhood maltreatment. This study will use

an actor-partner interdependence model (APIM; Kenny, Kashy, & Cook, 2006) and serial multiple mediation (Hayes, 2013) to address the following research questions (See Figure 1):

1. It was hypothesized that actor/partner childhood abuse experiences would be associated with relational violence for male and female partners.
2. It was hypothesized that both actor/partner attachment behaviors would mediate the relationship between abuse types and actor/partner violence.
3. It was hypothesized that both actor/partner relational aggression would mediate the relationship between abuse types and actor/partner violence.
4. It was hypothesized that both attachment behaviors and romantic relational aggression would mediate links between abuse types and relational violence for male and female partners. Both actor and partner mediating paths were anticipated to show significant mediation.

## **Methods**

### **Sample**

Participant data was collected using the online RELATionship Evaluation (RELATE; Holman, Busby, Doxey, Klein, & Loyer-Carlson, 1997) from 2011 to 2014, at which time the final revised BARE questionnaire was added. The RELATE is an online questionnaire that had more than 300 items during this time period, pooled from established measures. RELATE is offered to both those in relationships and those who are not, as an evaluative tool to improve current and future relationships. The items ask about individual and partner characteristic that are relevant to romantic relationships. Participants are referred to RELATE by educators, therapist, clergy or family and friends. There was no additional compensation to participate in the survey than a better understanding of their relational dynamics through an output given after the

completion of the assessment. The instructions state for each partner to fill out the assessment separately, although the researchers cannot control this. Four components of RELATE ask about individual, couple, family and social context for both themselves and their partners. This study includes only couples that through the RELATE assessment consented to have their data analyzed.

### **Participants**

There were 1,658 paired couples in this study. Of the couples 98.6% of males and 96.5% of females report heterosexual preferences, .5% males and 1.4% females report bisexual preference and .9% and 2.1% of females reported homosexual preferences, with 22 male and 2 females not disclosing this information. When asked “what is your current relationship to the person about whom you will answer ‘partner’ questions for?” .9% male and .8% reported casually/occasionally dating, 29.5% of male and 28.9% of females reported serious dating relationship, 39.5% of males and 40.2% of females reported engaged or committed to marry, 29.3% of males and 29.1% of females reported married, .7% of males and 1% of females reported friends not dating, .1% of males and .1% of females reports just acquaintances, with 21 males and 5 females did not report the relationship.

The majority of individual identified as single, never married (male=42.7%, female=41.5%), married, first (male=24.1%, female=23.7%) cohabiting (male=22.4, female=21.4%), divorced (male=5.4%, female=7.3%), remarried (males=4.7%, female=5.2%), married but separated (male=.5%, female=.7%), widowed (male=.2%, female=.3%), with 3 males and 20 females not disclosing this data. Couple who were married reported being married less than a year (male=31.2%, female= 30.1%), 1 to 5 years (male=31.0%, female= 30.2%), 6 to



10 years (male=11.1%, female=11.4%), 11 to 20 years (male=11.8%, female=12.9%), 21 or more (male=14.9%, female=15.4%). When asked how long the couple has been dating or dated before marriage, 19 males and 2 females did not disclose; however, others indicated 1 year or less (male=40.4%, female=41.7%), 1 to 5 years (male=52.5%, female=51.4%), 6 to 10 years (male=6.2%, female=6.2%), and 11 or more years (male=.9%, female=.7%).

The mean age for males was 31.35 ( $SD=10.51$ ), ranging from 18 to 79; the mean age for females was 29.10 ( $SD=9.63$ ), ranging from 18 to 75. Of these, 19 couples had missing gender information for at least partner. The major of the couples self-identified as Caucasian (male=85.5%; female=82.2%), then African (male=3.9%; female=3.2%), Latino (male=3.9%; female=3.8%), Asian (male=3.4; female=6.2%), Biracial/Mixed (male=2.5%; female=4.0%), Native American (male=0.4%; female=0.4%), and Other (male=0.3%; female=0.3%). Out of the 1,685 couples, 51 males and 22 females chose not to disclose their race or ethnicity. Of the males 131 (7.9%) did not disclose religious affiliation; however, 38.2% identified as Latter-day Saints, 22.7% Protestant, 18.2% none, 14.2% Catholic, 3.5% Jewish, and 3.2% Other, Islamic, Buddhist, or Hindu. Of the females 136 (8.2%) did not disclose religious affiliation; however 38.4% identified as Latter Day Saint, 26% as Protestant, 14.7% Catholic, 14.6% none, 3% Jewish, 1.4% other, 0.9% Buddhist, 0.6% Hindu and 0.4% Islamic.

Most participants had some college—currently enrolled (male=26%, female=32.1%), then have a bachelor's degree (male=24.4%, female=22.3%), graduate or professional degree—completed (male=20.5%, female=8.2%), some college—not currently enrolled (male=11%, female=7.4%), graduate or professional degree—not completed (male=7.3%, female=20.5%), associate's degree (male=5.5%, female=6.8%), high school diploma, GED or less than high

school (male=6.2%, female=2.8%), and did not disclose education level (male=1.3%, female=0.1%). Among the males 2.4% of the 1,658 did not disclose income information, where 28.1% of the reporting males made <\$20k; 16.1% from \$20k-\$39,999; 15.2% from \$40k-\$59,999; 9.6% from \$60k-79,999; 7.2% from \$80k-\$99,999; 5.1% from \$100k-\$119,999; 4.1% reported no current income; 3.6% from \$160k-\$199,999; 3.2% from \$120k-\$149,999; 3% greater than \$300k; 2.6% from \$200k-\$299,999; and 2.2% from \$140k-\$159,999. Among the 1,658 females in this study 0.8% did not disclose income information, where 38.5% of the reporting females made <\$20k; 15.6% from \$20k-\$39,999; 12.5% from \$40k-\$59,999; 11.7% reported no current income; 8.4% from \$60k-79,999; 4.6% from \$80k-\$99,999; 2.7% from \$100k-\$119,999; 1.4% greater than \$300k; 1.2% from \$120k-\$149,999; 1.1% from \$140k-\$159,999; 1.1% from \$160k-\$199,999; and 1% from \$200k-\$299,999.

## Measures

**Childhood abuse types.** The three types of abuse categories come from the Family Violence Scale. Each construct is a summation of two items in the scale, coded with higher score indicating higher levels of abuse. The scale ranged from “Never” to “Very Often.” Witnessing Parental Domestic Violence (MDV and FDV) is a summation of following two items: “How often was your father violent toward your mother?” and “How often was your mother violent toward your father?” Physical Abuse and Total In-Home Violence is a two item observed variable (MPAV and FPAV): “How violent toward you was the person you selected in the previous question?” and “Considering all of your experiences while growing up in your family, how would you rate the general level of violence in your home?” Sexual Abuse (MSA and FSA) was a summation of: “How often was the person you selected in the previous question sexually

abusive toward you?” and “How often was someone outside your family (not your partner) sexually abusive toward you?” As the first question is a followup to the participants selecting a specific family member being abusive, only those who selected a person would answer the question. As only 147 males and 252 females answered the first question, the majority selected “-1 Does not apply.” These responses were recoded to 0. There were 6 females and 5 males that did not respond to this question, these were coded missing “99.” There were 3 females and 1 male that selected a family member in the prompting question but did not give answer to how often, these responses were also coded missing “99.” Confirmatory factor analysis was used for males and females (See Table 1).

**Attachment behaviors.** Following precedent of Oka et al. (2014), attachment behaviors in this study was a latent construct measured by items from the self-reports in the Brief Accessibility, Responsiveness, and Engagement (BARE) Scale (Sandberg, et al., 2012). The BARE measures three sub-scales of specific attachment behaviors: accessibility, responsiveness, and engagement, examine attachment specific to the current romantic relationship. The study used self-report of attachment as Oka et al. (2014) stated “self-perceptions of attachment have a bigger impact on one’s propensity for violence than partner perceptions of the self’s attachment.” There are five items used in this scale, some of these items are: “I am rarely available to my partner”; “I listen to my partner when my partners shares her/his deepest feelings”; “It is hard for me to confide in my partner.” The scoring ranges from 1 “Never True” to 5 “Always True,” scores were reverse coded so that higher scores indicate higher levels of secure attachment. Sandberg et al. (2012) has shown this measure to have good reliability (Cronbach’s between .66 and .85; test–retest of .60 to .75) and construct validity with good model fit (CFI/TLI above .95

and RMSEA below .05). Confirmatory factor analysis was used for males (MAT) and females (FAT) (see Table 1), with Cronbach's alpha for males being .49 and .49 for females.

**Romantic relational aggression.** The current study, again used the same latent constructed measured items by Nelson and Carroll's (2006) Couples Relational Aggression and Victimization Scale (CRAVIS) to measure romantic relation aggression. The CRAVIS was specifically a modification of the Self-Report of Aggression and Victimization measure (Morales & Crick, 1998), to measure relational aggression in romantic relationships. However, the current study departs from Oka et al., (2014) analysis as this used the partner scale for analysis, as reporting on partners seems to be a more accurate representation than if the person reports on self (Oka et al., 2014). There are seven items used in this scale, some of these items are: "My partner has threatened to end our relationship in order to get him/her to do what I wanted"; "My partner has intentionally ignored me until I give into his/her way about something"; "My partner has spread rumors or negative information about me to be mean." The scoring ranges from 1 "Never" to 5 "Very Often." Items were recoded so that higher scores on the scale indicate higher levels of romantic relational aggression. Confirmatory factor analysis was used for males (MRA) and females (FRA) (see Table 1), with Cronbach's alpha for males being .84 and .81 for females.

**Relational violence.** Following the framework of Oka et al. (2014) partner reports of relational violence were used for this analysis as literature suggests that the violent partner is more likely to misrepresent their own violent behaviors (Whiting, Oka, & Fife, 2012). Thus, partner reports are more accurate representation of the violence (Cui, Lorenz, Conger, Melby, & Bryant, 2005; Sugarman & Hotaling, 1997). Relational violence was measured using a latent construct of partners report on three items from the physical assault scale of the Revised Conflict

Tactics Scale (CTS-2; Straus, Hamby, Boney-McCoy, & Sugarman, 1996). These were the only items from the CTS-2 that were included in the larger RELATE measure. These items are: “My partner threw something at me that could hurt,” “My partner pushed or shoved me,” “My partner punched or hit me with something that could hurt.” The scale ranges from (0) “This never happen,” “Not in the past year but it did happen before,” “Once in the past year,” “Twice in the past year,” “3–5 times in the past year,” “6–10 times in the past year,” and “11–20 times in the past year” and (7) “More than 20 times in the past year.” Confirmatory factor analysis was used for males (MRV) and females (FRV) (see Table 1), with Cronbach’s alpha for males being .82 and .68 for females. It is also important to note that in this community sample, as is common, not all the items of abuse, aggression, and violence were highly endorsed (please see Table 3 for specific details).

### **Analytic Strategy**

It is important when examining people in a relationship that researchers use an appropriate approach to the non-independence of the data (Friedlander, Kivilghan, & Shaffer, 2012; Oka & Whiting, 2013; Wittenborn, Dolbin-MacNabb, & Keiley, 2012). As such, the primary analytic approach is an Actor-Partner Interdependence Model (APIM; See Figure 1). This type of structural equation modeling (SEM) method takes into account the relatedness of the couples scores, by using the couple itself as the unit of analysis (Kenny, Kashy, & Cook, 2006). The analysis was conducted in Mplus 7.1 (Muthen & Muthen, 2012). In the model, I examined the relationship of each partner's self-reported history of childhood abuses, to their own and partners self-reports of attachment behaviors, to the outcome variables of partner reported scores of romantic relational aggression and relational violence (See Figure 1). Confirmatory factor

analysis was performed for each of the three latent outcome variables and a summation of scores after confirmation for the three predictor variables. To confirm indirect mediation effects after the final model was chosen, bootstrapping (at 5,000 draws; Hu & Bentler, 1999) was used to examine the relationships of childhood abuses and relational violence through attachment and relational aggression. Age, income, and educational level were included as covariates and controlled.

The goodness of fit was determined using comparative fit index (CFI; Bentler, 1990), the non-normed fit index (NNFI or TLI in Mplus; Bentler & Bonett, 1980), the root mean square error of approximation (RMSEA) and Standardized Root Mean Square Residual (SRMR). For CFI greater than .95 and TLI between .9 to 1.0 are characterized as having a good fit (Hu & Bentler, 1999), where RMSEA less than .08 is acceptable, better under .06 and ideal under .03 and SRMR less than .08, and closer to zero indicates good fit. Model fit was determined by constraining paths. If model fit worsened with the addition of a constraint, it was removed, and equivalence of other paths was tested. If model fit did not worsen with each constraint, it was retained as other constraints were tested for the final model. After a final model had been selected (using fit indices described in Hu & Bentler, 1999), mediation was tested using bootstrapping (Hayes, 2013) to examine the indirect effects.

## Results

Frequencies and descriptive statistics for each categorical indicator for each of the latent variables, for both males and females, were estimated prior to fitting the full model. The measure model, see Figure 1, indicates high level of model fit with a  $\chi^2 = 871.103$ ,  $df = 495$ ,  $p = .000$ , CFI = .96, TLI = .94, RMSEA = .03, 90% C.I. (.25 to .031),  $p = 1.0$  and SRMR = .05. Additionally, factor

loadings for all latent variables were within the range of .446 to .845 meaning these latent variables are capturing the indicators accurately (See Table 1). The following are the standardized estimate results for both the direct and indirect pathways (see Table 2).

### **Direct Effects**

This model indicates good model fit with a  $\chi^2= 1036.557$ ,  $df=639$ ,  $p=.000$ , CFI= .96, TLI= .94, RMSEA=.025, 90% C.I. (.023 to .028),  $p=1.0$  and SRMR=.05 (See Figure 2).

**Sexual abuse.** The only significant path found was between females with a history of sexual abuse and females report of males' violence in the relationship ( $\beta=.112$  (.048),  $p=.021$ ). This suggests a history of childhood abuse for females may increase the likelihood of her being in a violent relationship, where this is not the case for males.

**Physical abuse and total in-home violence.** There were two significant paths found with females with high scores of physical abuse and total in-home violence in childhood; specifically, an increase in physical abuse and total in-home violence was related to a decrease in both her own attachment behaviors ( $\beta=-.183$  (.056),  $p=.001$ ) and to her partner's expression of his attachment behaviors ( $\beta=-.137$  (.063),  $p=.028$ ). Again, higher levels of attachment behaviors indicate more secure and healthy partner attachment. This suggests increased levels of physical abuse and total in-home violence for women are associated with a decrease in both partners' expression and self-perception of healthy and secure attachment behaviors. Similarly, higher scores of physical abuse and total in-home violence for males was related to his partner's report of his relational aggression ( $\beta=.107$  (.059),  $p=.070$ ), suggesting that as his physical abuse and total in-home violence level increases so does, his partners report of his relational aggression.

**Witnessing parental domestic violence.** No significant results were found for either males or females who witnessed high levels of parental violence.

**Control variables.** For males, increased levels of income were significantly associated with self-reported decreases in expression of attachment behaviors ( $\beta = -.118$  (.061),  $p = .047$ ). Additionally, increases in both male ( $\beta = -.095$  (.077),  $p = .000$ ) and female ( $\beta = -.088$  (.048),  $p = .065$ ) levels of education showed trend level decreases in the likelihood of female relational violence.

**Attachment behaviors.** Females reporting higher levels of secure and healthy attachment behaviors was significantly and negatively correlated with relational aggression for both the males ( $\beta = -.475$  (.086),  $p = .000$ ) and females ( $\beta = -.194$  (.062),  $p = .002$ ). Increases in positive attachment behaviors were significantly associated with lower reports of both partners' romantic relational aggression. Similarly, higher levels of healthy attachment behaviors for him were significantly and negatively related to his report of her relational aggression ( $\beta = -.377$  (.059),  $p = .000$ ). Increased reports of positive attachment behaviors were significantly associated with decreases in males reporting relational aggression from the female partners. Moreover, her attachment behaviors were associated with decreases in partner reports on female relational violence ( $\beta = -.148$  (.092),  $p = .090$ ). These findings suggest the higher levels of healthy attachment behaviors mediate the relationship between some childhood abuses and relational aggression, and seemingly, attachment behaviors play an important function.

**Romantic relational aggression.** Reports of male relational aggression were significantly associated with increased report of male relational violence ( $\beta = .414$  (.180),  $p = .021$ ). No other significant relationships were found for romantic relational aggression.



### **Indirect Effects**

The model results suggest that attachment and relational aggression do not fully mediate the relationship between childhood abuses and relational violence; therefore the indirect effects were tested using bootstrapping to examine these effects. Two significant indirect paths were found, both through females' physical abuse and total in-home violence. The first indirect effect from female physical abuse and total in-home violence is to partner reports of female relational violence ( $\beta=.065 (.024)$ ,  $p=.007$ ) and the second is to partner reports of male relational aggression ( $\beta=.087(.035)$ ,  $p=.012$ ). As these findings were the summation of the paths, this shows none of the specific indirect pathways were individually statistically significant, but a combination of them is. Meaning no specific pathway in the model was found to mediate any of the pathways significantly, but there was an overall effect on those outcomes.

### **Discussion**

As the current study builds on the work of Oka et al. (2014), it was expected to find similar associations in the relationships among attachment behaviors, romantic relational aggression, and relational violence. However, as the current study used partner reports of romantic relational aggression, I would expect to find some differences in these relationships as well. As expected, there were both similarities and differences. Additionally, the current study examined how adverse childhood maltreatment experiences could help to explain better the associations among variables previously reported by Oka et al. (2014) and provide new insight to these associations.

**Hypothesis 1**

*It was hypothesized that actor/partner childhood abuse experiences would be associated with relational violence for male (M) and female (F) partners.*

This hypothesis was partially supported. One of the most poignant findings of this study was females who report higher levels of childhood sexual abuse (CSA) reported more violence from their partners. This finding holds even in the presence of attachment behaviors (ATT) and romantic relational aggression (RRA). However, no other types of childhood abuses were found to have significant direct paths to relational violence (RV). Finding only a significant path for FCSEA suggests we, as a field, may understand even less about its association with relational violence than previous literature has claimed. The relationship between FCSEA survivors and dysfunctional and/or violent adult relationships is well-documented (Paolucci, Genuis, & Violato, 2001; Rumstein-McKean & Hunsley, 2001; Hunter, 2006; Mullen, Martin, Anderson, Romans, & Herbison, 1996; Williamson, 2009); and this study confirms these findings for women. However, it is not known why this relationship would be non-significant for men. Perhaps there is some protective factor that is accounted for by attachment that is unique to the males. Though a very controversial debate exists within the literature (Hamberger & Larsen, 2015), it may also be that women are simply more likely to experience physical aggression in romantic relationships, regardless of what the mediating variables proposed in this study (Domestic Violence Resource Center, 2011; Selic, Pesjak, & Kersnik, 2011; Walton et al., 2009). It is important to highlight that only FCSEA, and no other forms of CM, for either partner, was significantly related to relational violence.

**Hypothesis 2**

*It was hypothesized that both actor/partner attachment behaviors would mediate the relationship between abuse types and actor/partner violence.*

Hypothesis 2 was also partially supported by the data. The current study found for both male and female self-reports of attachment behaviors that there was a significant negative association with FPAV (female physical abuse and total in-home violence). This means reported higher levels of FPAV were correlated with lower levels of positive attachment behaviors reported by either partner.

In previous research, Knapp et al. (2015) suggested that family-of-origin quality and family history do affect attachment behavior. Additionally, the literature supports the relationship between childhood physical abuse (CPA) and increased victimization of abuse experiences as an adult (Bensley, Van Eenwyk & Wynkoop-Simmon, 2003; Renner & Slack, 2006). Other research suggests CPA and witnessing domestic violence (DV) in childhood experiences are related to increases in the level of violence reported in the adult survivor's own home (Sahin, Baloglu, & Unalmis, 2010). The findings were, in part, consistent with the previous literature, namely reports of positive attachment behaviors for the couples who are lower when the females report higher levels of physical abuse and total in-home violence.

However, one of the main contributions of the current study is to extend the findings of Oka et al. (2014), namely, that attachment behaviors have a mediating influence on the relationship between FPAV and MRV (male relational violence). As previously noted, the relationship between attachment and relational aggression is likely an important stepping stone toward actual relational violence (Oka et al., 2014). It is possible this pattern is more clearly seen

in regards to male violence as there are several studies that suggest males use more violent tactics—grabbing, beating, burning, strangling/choking, use of weapon— and that women are more likely to report to others (police, hospitals, etc.) about the violence (Melton & Sillito, 2012; Feder & Henning, 2005; Phelan et al., 2005; Gondolf, 2012). Oka et al. (2014) posit “while partner violence may be two-sided, men and women may have different contributions to the pattern. Both partners must take responsibility for their contributions to that pattern (pg. 14).”

It is also important to discuss that, the current study, did not find any significant results for witnessing of parental violence (DV). This means that DV did not predict attachment behaviors, romantic relational aggression or relational violence. This is somewhat surprising. Previous literature supports significant negative associations in the intergenerational cycle of DV, specifically in the modeling of poor attachment behaviors (Zeanah et al., 1999). The literature suggests violent adult relational outcomes for those that witness domestic violence in childhood (Arbetter, 1995; Miller, Handal, Gilner, & Cross, 1991; Purvin, 2003; Maker et al., 1998). One potential explanation for the lack of significant findings could be the way witnessing domestic violence was measured in the current study. Perhaps the two questions were not precise enough to access the aspects of domestic violence in childhood that are most clearly related to relationship violence in adulthood. Also, it may be that the ameliorating influence of attachment behavior accounted for the influence of witnessing abuse as a child may have on later romantic relationship aggression.

Another similarity to the findings of Oka et al. (2014), was a significant negative association between female attachment behaviors and romantic relational aggression, for both partners. Females who self-report less positive attachment behaviors were more likely to report

higher levels both self-reported and partner-reported RRA. Similarly, male self-reported attachment behaviors were negatively associated with partner-reported FRRA. As males expressed more insecure attachment behaviors, they reported an increase in their partner's relational aggression toward them. Thus, the more insecure they feel in their relationship, as manifested through fewer attachment behaviors, the more RRA they reported. This association is supported by the literature (Allison, Bartholomew, Maysless, & Dutton, 2008; Pistole, 1994). These results, too, seem consistent with the literature reports lower levels of attachment behaviors predict relationship satisfaction, beyond and in addition to attachment styles (Sandberg, Bradford, & Brown, in press).

What is puzzling, and is contrary to the general literature is the non-significant relationship from MATT to MRRA. No current literature has explored this confusing finding. One possible explanation may be the distinction between males and females in attunement to their aggressive behaviors. Another possible explanation is that males may not be using RRA in a relationally motivated way. Therefore, it may be that the women in this sample used relational aggression in an attempt to motivate males to change their level of attachment behaviors (Oka et al., 2014), but this is not the same for males.

### **Hypothesis 3**

*It was hypothesized that both actor/partner relational aggression would mediate the relationship between abuse types and actor/partner violence.*

This hypothesis was also partially supported. First, the study found a significant association between males reporting PAV and their partner's reports of their RRA at trend level. When males report higher levels of physical abuse and total in-home violence, their partner's

reported higher levels of relational aggression from them. This finding represents differences in gender groups as females' PAV was not related to RRA but was associated with lower levels of attachment behaviors. These findings would suggest PAV is a significant factor in the path toward relational violence; however, the current findings indicate differences in the associations in the male and female groups.

Although this has yet to be tested within the literature, one explanation for MPAV's relationship to RRA could be supported through social learning theory. Social learning theory suggests those that witness violence or any repeated aggressive behaviors are more likely to repeat that behavior as an ascription of an intergenerational (Ehrensaft et al., 2003). Whereas, females tend to internalize and will often triangulate others (Crittenden, Claussen & Sugarman, 1994). The findings around PAV in this study begin to distinguish male and female group differences in both processes and outcomes of different types of childhood abuses.

The study also found a significant association between (partner-reported) male relational aggression and relational violence. This is a critical finding and is consistent with the Oka, et al., (2014) study. Whether or not males self-reported (as in Oka et al. 2014) or partner-reported higher levels of romantic relational aggression (as in the current study), MRRA was associated with higher levels of partner-reported violence from the males. This suggests that male aggression is significantly associated with men acting out in physically violent ways. It is critical to highlight that RRA and RV, at least for males, may occur together. This finding is interesting, as it seems to hold true regardless of whether the partner or actors is reporting the male RA. These two findings suggest male and female group-specific effects and are consistent with previous literature that suggests males and females use RA differently and may have different

precursors to its use in romantic relationships (Alexander, 2009; Gidycz, Coble, Latham, & Layman, 1993; Herrera, Wiersma, & Cleveland, 2008).

This finding also supports the concept that romantic relational aggression is associated with and is a distinct construct from relational violence, for males (Oka et al., 2014). Previous literature showed aggression/violence may be a way to manage distance and closeness in the relationship (Allison, Bartholomew, Maysless, & Dutton, 2008; Pistole, 1994), while others have found that aggression/violence often occurs when a partner fears abandonment (Dutton & Kerry, 1999; Holtzworth-Munroe & Anglin, 1991). It is possible that males and females use RA indifferently to negotiate closeness in the relationship. Additionally, as other researchers posit, females are more bothered by relational aggression than males (Salmivalli & Kaukiainen, 2004), which could account for the association found in this study of MRRA and MRV, as in the current study both variables were measured by the females' report of these experiences. Similarly, we might not see high rates of female to male violence because female violence is not taken as seriously as male violence (Sears, Byers, & Price, 2007; O'Keefe, 2005). Together this may help explain the male and female group differences for PAV in the current study.

#### **Hypothesis 4**

*It was hypothesized that both attachment behaviors and romantic relational aggression would mediate links between abuse types and relational violence for male and female partners. Both actor and partner mediating paths were anticipated to show significant mediation.*

The study found only two significant indirect relationships. Specific indirect effects between FPAV and MRRA were small and non-significant. However, the sum of the indirect effects, although also small ( $\beta = .087$ ) was statistically different from zero, suggesting that when

all indirect effects were considered jointly, there was a significant link between FPAV and MRRA. Additionally, the specific indirect effects between FPAV and FRV were small and non-significant. Likewise, the sum of the indirect effects, although also small ( $\beta = .065$ ) was statistically different from zero, suggesting that when all indirect effects were considered jointly, there was a significant link between FPAV and FRV. These findings likely indicate a small effect size of the data.

### **Control Variables**

While not illustrated in Figure 2, it is interesting to note that males with higher incomes self-reported lower positive attachment behaviors. Theoretically, this connection is outside the scope of the literature review but, is worth noting for further exploration. Additionally, both males and females with higher levels of education were associated with lower levels of partner reports of female violence. The literature suggests those with less education tend to be more violent and that in cases of non-reciprocal violence, women perpetrated more than 70% of the time (Whitaker, Haileyesus, Swann, & Saltzman, 2007). Johnson (2008) found a negative association between intimate terrorism and educational level, as well as situational couple violence and educational level. The current study's findings suggest education for either partner may reduce the occurrence of males reporting on FRV. It is of interest that the current study only found this association for reports of FRV and not MRV. As such, the data suggest this hypothesis was partially supported by the results.

The current study suggests mediation does indeed occur between these variables, it is also of interest where significance was not found (e.g., M/F-DV to RV, MSA to RV). This bears the question of what other factors may be at play in CM types and relational violence. Attachment



theory would suggest that CM compromises the attachment system, which has biological implications (see Appendix A). Whether it is learned behavior (modeling) or deregulation of the system that dictates healthy adult relationship, CM compromises that system (Dinero, Conger, Shaver, Widaman & Larson-Rife., 2008). With an altered attachment system, the use of aggression and violence may increase, in an attempt to negotiate closeness and connection (Johnson, 2008; Goldstein, 2011; O’Leary et al., 1989). I would speculate that some of the differences seen in the current study results of CM may have to do with sense of violation that occurs with different types of abuse, namely that CSA survivors often report high levels of internalized shame and self blame for the victimization (Webster & Harper, in review). CSA may differ from other forms of abuse in this regard. It may be that witnessing parental violence does not carry that same sense of personal “fault.” Those with an internalized shame schema may have rated the importance of attachment behaviors differently, thereby influencing the mediating paths. As others have suggested there is likely an intergenerational cycle to high shame based CM, that continue the transmission of poor attachment behaviors in adulthood (Elbow, 1982; Kantor & Jasinski, 1998; Straus, Gelles, & Steinmetz, 1980).

### **Clinical Implications**

First, it is critical to acknowledge the ethical concerns for the clinical treatment of couples where violence is present in the relationship or where there is a history of violence. Stith et al. (2012) mention there is often a difference between how a clinician may wish to conceptualize or understand relational violence and what is best practice. In the more rare cases where the violence is unidirectional, dyadic therapy is often not best practice, as the victim can feel shamed, blamed and/or pressured to stay in that relationship (Loseke & Kurz, 2005). Being

vulnerable and open with an abusive partner can lead to greater risk of retaliation violence (Johnson, 2004).

Also, those couples who reciprocate violence have a higher risk of inflicting serious injury (Whitaker et al., 2007). Thus, it is essential that therapists screen for Intimate Partner Violence before beginning therapy. Todahl and Walter (2011) provide a systemic review of IPV research, guidelines, and screening methods that are seen as best practice. This researcher would also suggest that assessing for relational aggression is likewise crucial, as the current study suggests aggression maybe a stepping stone to violence. Unfortunately, a clinical screening tool for RA has yet to be developed. Clinicians are also responsible for knowing and understanding individual state laws regarding the treatment of IPV.

Second, like Oka et al. (2014) the current study found several significant relationships among attachment behavior, romantic relational aggression, and relational violence. Also like Oka et al. (2014), the current study used and suggests the conceptual framework of attachment theory to better understand relational aggression and relational violence in romantic couples. This attachment framework can help couples increase secure attachment styles and expression of positive attachment behaviors. As Oka et al. (2014) describes “relational aggression may take the form of colluding with the therapist to exclude a partner. Therapists may wish to identify this collusion as an en vivo example of relational aggression and help couples describe it in attachment terms, focusing on the hoped-for outcome of such behavior (pg. 14).”

This may be achieved by the use of experiential and attachment based questioning. For example, “at the moment right before you said (or did) the aggressive thing, what were you longing for from your partner?” Tilley and Palmer (2012) suggest that this type of questioning

can help a partner to see the aggression as a bid for closeness, where this may not have been understandable before. The patterned, pursue-distance cycle is directly and inherently connected to the couples attachment needs (Johnson, 2004). As previously suggested, this framework too can allow for each individual to take responsibility for their own pieces of a dysfunctional pattern.

Lastly, the current study also suggests an important role of childhood abuses as it related to attachment behaviors, romantic relational aggression, and relational violence. Often, when working with adult survivors of childhood abuse or relationship violence victims, there is a tendency to treat them using the same trauma paradigm. This research would suggest the “sameness of trauma” approach may not be best practice. For example, I hypothesized in this study that witnessing parental domestic violence would have significant effects on how a person would express attachment behaviors toward their partner, when compared with the effects of individuals coming from highly physically abusive or generally highly violent homes. The theory that watching parents be violent to each other would affect individuals’ own adult attachment (Dutton, 2006) was not supported in the current study. Thus, it is clinically important to understand the specifics of the type of violence witnessed and whether those individuals directly felt endangered by those experiences or not. There seems to be key differences in how this plays out in their own adult relationships.

Unfortunately, there is limited research on specific best practices for working with adult survivors in the couples context. Webster (in review) found out of 75 years of publications in the *Journal of Marital and Family*; there were only 7 articles that discuss specifically working with adult survivors in the couples context. Some of these papers have theoretical underpinnings of

narrative therapy; emotion-focused couples therapy and group therapy. Thematically, Webster (in review) found 15 important clinical factors across these 7 papers, which includes a heightening the sense of therapeutic safety, involving the partner in therapy from the onset (unless otherwise constrained), addressing benevolent blame, and for dual survivors couples—the “double whammy” of emotional avoidance. This researcher would again suggest an attachment based framework for working with the complexity that surrounds adult survivor couples.

What is critical to understand both clinically and theoretically, is working with adult survivors of childhood abuse in a couple setting and working with couples that are using violence and aggression are both very complex and delicate clinical issues. The combination of their characteristics in a couple can be extremely complicated. Having a solid attachment conceptualization to guide this work, in this researcher’s opinion, is essential.

### **Limitations**

The sample of this data set is a largely homogeneous group of heterosexual, Caucasian, Christian, college-educated individuals. This effectively makes it difficult to generalize the findings to any minority populations within the United States. Like Oka et al. (2014) mention, there is conflicted research on whether or not and how ethnicity and violence are related. And though there is evidence supporting higher levels of education reduce couple violence, the majority sampling of the current study may limit the amount of violence reported in the couples. Additionally, there could be differences in the reports of attachment and attachment behaviors for those that are in dating relationships vs. those who are married, and the current study does lump these categories together. It is important to note that this data was cross-sectional, non-longitudinal, and correlational. As such we cannot assume or allow predictions of causation.

Similarly, while this study has clinical implications, the sample is a community sample, not a clinical one. If the study were to sample from a clinical population, it would likely show higher rates of violence, and would be less skewed (Stith et al., 2011). It would also more likely show increased rates of insecure and unhealthy attachment styles and behaviors (Pielage, Luteijn, & Arrindell, 2005). Similarly, longitudinal data would likely show higher rates of violence and insecure attachment styles and behaviors, though a longitudinal study has yet to explore these relationships.

Secondly, the creation of the abuse types scale was constructed from limited questions embedded within the RELATE dataset. These limited questions may not capture the full entirety of the abuses that occurred. Specifically, the questions regarding physical abuse and total in-home violence come from the physical abuse scale within RELATE but are a combination of physical abuse and witnessing violence. Removing either question to create a more clear construct disrupted the model. Each question had so few who reported any type of abuse that was further limiting the model made it too unstable to run. This was a concern for each of the abuse constructs; for example, the sexual abuse scale only had 399 individuals that answered either one of the questions. Thus the sample for abuse survivors was small within the whole of the sample. This limited running the analysis variables as categorical latent variables, which may provide different results. The low abuse samples do, however, fit with the consistent concern of underreporting of all types of childhood abuses. Likewise, some of the scaled latent variables had lower cronbach's alphas, and therefore should be interpreted with caution, even though the confirmatory factor analyses seemed to support the use of these variables.

Similarly, the small sample of couples in the RELATE dataset who reported violence and had also reported on both romantic relational aggression and attachment behaviors limited the study, even though the reporting of violence in the sample matched that of national violence surveys (Tjaden & Thoennes, 2000). Further, while the study was able to control for some of the correlates of relational violence in this study, it did not control for all of them (i.e., alcohol and drug use).

There are some concerns regarding the model used. Though this article pushes forward the accumulative effects of these constructs, the model is complex. Due to its complexity, it will have to be simplified in the future to understand specific relationships furthermore clearly. Possible ways to clarify would run the same variables as a non-partner model, exploring more in-depth one partner's experience. Additionally, running the APIM model with a single mediator of attachment behavior with the outcome of RRA or the outcome of RV, would be potential ways to simplify the model. Lastly, running the model with the CM variables collapsed, to examine more detail the mediation of ATT and RRA on RV. Each of these options would potentially provide more specific insight into these relationships.

### **Future Research**

As the abuse variables in this study are somewhat limited, creating or using more specific and direct measures of different types of abuse would allow for further clarity in the relationships between attachment, aggression, and violence. Potentially looking at more than just abuse, but using adverse childhood experiences questionnaires (ACES; CDC, 2009), could also shed light on the frequency, duration and intensity of specific events that may alter the relationship between childhood experiences and adult relational violence.

It would be interesting to explore the relationship between attachment style and attachment behaviors in these relationships. Where the research supports that attachment behaviors predict more about couples' relationship quality (Sandberg, Bradford, and Brown, in press), using attachment styles would fit this story into the greater context of current literature.

Specifically, the current study's finding that males who reported higher levels of income self-reported lower levels of attachment behaviors is of particular interest. While there are studies addressing poverty and income as they relate to attachment styles, there are no studies to date exploring this specific relationship. Possibly looking at partner report instead of self-report of attachment behaviors or exploring other mediating factors could also be beneficial.

Most importantly, using a more diverse sample would allow for better generalization of the results. The possibility of exploring subjects of a clinical sample, and getting data from identified relational violence victims or identified childhood abuse survivors would likely change the perspective and relationship of these variables. Similarly, utilizing longitudinal data would allow for predictions of direction and causation. To further ascribe meaning and understand the use of aggression, violence and attachment behaviors conducting in-depth qualitative interviews would too, be of significant value.

### **Conclusion**

Childhood abuse types, relational violence, aggression, and attachment are interrelated in important ways. The current study found results that are consistent with the current body of literature, but also found associations that challenge the current understanding of how attachment mediates this relationship. The study further supported the importance of looking at aggression as a stepping stone toward violence, but possibly only for males. It is clear from the study that

there are significant male and female group differences in the ways that childhood abuse may affect adult romantic relationships and what attachment behaviors may mean within that process.

It is also clear that different types of childhood abuse have different outcomes as well. These differences are important and meaningful in the continuation of creating clinical best practices and facilitating healing.



### References

- Acosta, O. M., Albus, K. E., Reynolds, M. W., Spriggs, D., & Weist, M. D. (2001). Assessing the status of research on violence related problems among youth. *Journal of Clinical Child Psychology, 30*, 152–160.
- Afifi, T. O., Enns, M. W., Cox, B. J., Asmundson, G. J., Stein, M. B., & Sareen, J. (2008). Population attributable fractions of psychiatric disorders and suicide ideation and attempts associated with adverse childhood experiences. *American Journal of Public Health, 98*, 946–952.
- Agnew, R. (1985). A revised strain theory of delinquency. *Social Forces, 64*(1), 151-167.
- Agnew, R. (1992). Foundation for a general strain theory of crime and delinquency. *Criminology, 30*, 47-88.
- Agnew, R. (2002). Experienced, vicarious, and anticipated: An exploratory study on physical victimization and delinquency. *Justice Quarterly, 19*, 603–632.
- Ahmad, S. (2006). Adult psychosexual dysfunction as a sequela of child sexual abuse. *Sexual and Relationship Therapy, 21*(4), 405-418.
- Ainsworth, M. D. S. (1967). *Infancy in Uganda: Infant care and the growth of love*. Baltimore: Johns Hopkins University Press.
- Ainsworth, M. D. S., Blehai, M. C., Waters, E., & Wall, S. (1978). *Patterns of attachment: A psychological study of the strange situation*. Hillsdale, NJ: Lawrence Erlbaum Assoc., inc.

- Ainsworth, M. D. S., & Wittig, B. A. (1969). Attachment and exploratory behavior of 1-year-olds in a strange situation. In B. M. Foss (ed.), *Determinants of infant behavior*, IV (pp. 111–136). London: Methuen.
- Alexander, P. C. (1992). Application of attachment theory to the study of sexual abuse. *Journal of Consulting and Clinical Psychology*, *60*, 185-195.
- Alexander, P. C. (1993). The differential effects of abuse characteristics and attachment in the prediction of long-term effects of sexual abuse. *Journal of Interpersonal Violence*, *8*, 346-362.
- Alexander, P. C. (2009). Childhood trauma, attachment, and abuse by multiple partners. *Psychological Trauma: Theory, Research, Practice, and Policy*, *1*(1), 78-88. <http://dx.doi.org/10.1037/a0015254>
- Alexander, P. C., Anderson, C. L., Brand, B., Schaeffer, C. M., Grelling, B. Z. & Kretz, L. (1998). Adult attachment and longterm effects in survivors of incest. *Child Abuse & Neglect*, *22*(1), 45-61.
- Alexander, P. C., Moore, S., & Alexander, E. R., III. (1991). What is transmitted in the intergenerational transmission of violence? *Journal of Marriage and the Family*, *53*(3), 657-667.
- Allison, C. J., Bartholomew, K., Mayseless, O., & Dutton, D. G. (2008). Love as a battlefield: Attachment and relationship dynamics in couples identified for male partner violence. *Journal of Family Issues*, *29*(1), 125–150.
- Arbetter, S. (1995). Family violence: When we hurt the ones we love. *Current Health*, *2*, 6-12.

- Archer, J. (2000). Sex differences in aggression between heterosexual partners: A meta-analytic review. *Psychological Bulletin*, *126*, 651–680.
- Arias, I., & Pape, K. T. (1999). Psychological abuse: Implications for adjustment and commitment to leave violent partners. *Violence and Victims*, *14*, 55–67.
- Aspelmeire, J.E., Elliott, A. N. & Smith, C. H. (2007). Childhood sexual abuse, attachment, and trauma symptoms in college females: The moderating role of attachment. *Child Abuse & Neglect*, *31*(5), 549-566.
- Babcock, J. C., Green, C. E., Webb, S. A., & Graham, K. H. (2004). A second failure to replicate the Gottman et al. (1995) typology of men who abuse intimate partners . . . and possible reasons why. *Journal of Family Psychology*, *18*, 396–400.
- Bacon, H., & Richardson, S. (2001). Attachment theory and child abuse: An overview of the literature for practitioners. *Child Abuse Review*, *10*(6), 377-39.
- Bagner, D., Storch, E., & Preston, A. (2007). Romantic relational aggression: What about gender? *Journal of Family Violence*, *22*(1), 19–24.
- Baldry, A.C. (2003). Bullying in schools and exposure to domestic violence. *Child Abuse & Neglect*, *27*(7), 713–732.
- Baron, S. W. (2009). Street youths' violent responses to violent personal, vicarious, and anticipated strain. *Journal of Criminal Justice*, *37*, 442–451.
- Bartels, L. (2010). *Emerging issues in domestic/family violence research: Research in practice report no. 10*. Australian Institute of Criminology, Canberra.

- Bartholomew, K., & Allison, C. J. (2006). An attachment perspective on abusive dynamics in intimate relationships. In M. Mikulincer, G. S. Goodman (Eds.), *Dynamics of romantic love: Attachment, caregiving, and sex* (pp. 102-127). New York, NY US: Guilford Press
- Beeman, S., Hagemester, A. & Edleson, J.L. (2001). Case assessment and service receipt in families experiencing both child maltreatment and woman battering. *Journal of Interpersonal Violence, 16*, 437-458.
- Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin, 107* (2), 238-246. doi:10.1037/0033-2909.107.2.238
- Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin, 88*(3), 588-606. doi:10.1037/0033-2909.88.3.588
- Bensley, L., Van Eenwyk, J., & Wynkoop-Simmons, K. (2003). Childhood family violence history and women's risk for intimate partner violence and poor health. *American Journal of Preventive Medicine, 25*, 38-44.
- Bevan, E. & Higgins, D.J. (2002). Is domestic violence learned? The contribution of five forms of child maltreatment to men's violence and adjustment. *Journal of Family Violence, 17*(3), 223-245.
- Blaauw, E., Winkel, F.W., Arensman, E., Sheridan, L., & Freeve, A. (2002). The toll of stalking: The relationship between features of stalking and psychopathology of victims. *Journal of Interpersonal Violence, 17*, 50-63.
- Black, D. A., Heyman, R. E. & Smith Slep, A. M. (2001). Risk factors for child psychological abuse. *Aggression and Violent Behavior, 6*(2-3), 189-201.

- Boisset-Pioro, M. H., Esdaile, J. M., & Fitzcharles, M. A. (1995). Sexual and physical abuse in women with fibromyalgia syndrome. *Arthritis and Rheumatism*, *38*, 235–241.
- Bond, S. B. & Bond, M. (2004). Attachment styles and violence in couples. *Journal of Nervous and Mental Disease*, *192*(12), 857-863.
- Bonomi, A. E., Thompson, R. S., Anderson, M. L., Reid, R. J., Carrell, D., Dimer, J. A., & Rivera, F. P. (2006). Intimate partner violence and women's physical, mental, and social functioning. *American Journal of Preventive Medicine*, *30*, 458–466.
- Bowlby, J. (1969). *Attachment and loss: Vol. I. Attachment*. New York, NY: Basic Books.
- Bowlby, J. (1973). *Attachment and loss: Vol. II. Separation, anxiety and anger*. New York: Basic Books.
- Bowlby, J. (1980). *Attachment and loss. Vol. III. Loss, sadness and depression*. London: The Hogarth Press and the Institute of Psycho-Analysis.
- Bowlby, S. R., & King, P. (2004). *Fifty years of attachment theory*. London, GB: Karnac Books.  
Retrieved from <http://www.ebrary.com>
- Breiding, M. J., Black, M.C., & Ryan, G.W. (2008). Chronic disease and health risk behaviors associated with intimate partner violence—18 U.S. states/territories, 2005. *Annals of Epidemiology*, *18*, 538–544.
- Brennan, K., Clark, C., & Shaver, P. R. (1998). Self-report measurement of adult attachment: An integrative overview. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships*, 46-76. New York, NY: Guilford.
- Briere, J. & Runtz, M. (1989). The Trauma Symptom Checklist (TSC-33): Early data on a new scale. *Journal of Interpersonal Violence*, *4*(2), 151-163.

- Browne, A., & Finkelhor, D. (1986). Impact of child sexual abuse: A review of the literature. *Psychological Bulletin, 99*, 55-77.
- Burk, W. J. & Seiffge-Krenke, I. (2015). One-sided and mutually aggressive couples: Differences in attachment, conflict prevalence, and coping. *Child Abuse and Neglect, 50*, 254-266.
- Burnette, M. L., & Reppucci, N.D. (2009). Childhood abuse and aggression in girls: The contribution of borderline personality disorder. *Development and Psychopathology, 21*, 309–317. doi:10.1017/S0954579409000170
- Busby, D. M., & Holman, T. B. (2009). Perceived match or mismatch on the Gottman conflict styles: Associations with relationship outcome variables. *Family Process, 48*(4), 1-16.
- Byrne, M., & Carr, A. (2000). Depression and power in marriage. *Journal of Family Therapy, 22*, 408–427. doi:10.1111/1467-6427.00161
- Caesar, P. L. (1988). Exposure to violence in the families-of-origin among wife-abusers and martially nonviolent men. *Violence and Victims, 3*(1), 49–63.
- Capaldi, D. M. & Clark, S. (1998). Prospective family predictors of aggression toward female partners for at-risk young men. *Developmental Psychology, 34*, 1175–1188.
- Carbone, D. J. (2010). Using cognitive therapies to treat unstable attachment patterns in adults with childhood histories of social rejection. *Journal of Aggression, Maltreatment, and Trauma, 19*(1), 105-134.
- Carlson, E., & Sroufe, L. A. (1995). The contribution of attachment theory to developmental psychopathology. In D. Cicchetti & D. Cohen (Eds.), *Developmental processes and psychopathology: Vol. 1. Theoretical perspectives and methodological approaches* (pp. 581-617). New York: Cambridge University Press.

- Carlson, B. E. (1984). Children's observations of interparental violence. In A. R. Roberts (Ed.), *Battered women and their families*, (pp. 147-167), New York: Springer.
- Carroll, J. S., Nelson, D. A., Yorgason, J. B., Harper, J. M., Ashton, R., & Jensen, A. C. (2010). Relational aggression in marriage. *Aggressive Behavior*, *36*(5), 315–329.
- Carson, D. K., Gertz, L. M., Donaldson, M. A., & Wonderlich, S. A. (1990). Intrafamilial sexual abuse: Family-of-origin and family-of-procreation characteristics of female adult victims. *The Journal of Psychology*, *125*(5), 579–597.
- Carter, S. D., Crabtree, N. L., Epps, J., & Roberts-Davis, A. M. (2014). Age of onset of physical abuse: Implications for adult anger and aggression. *Universal Journal of Psychology*, *2*(4), 131–135.
- Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, Division of Violence Prevention. (2016). *Childhood maltreatment*. Retrieved from <http://www.cdc.gov/violenceprevention/childmaltreatment/index.html>
- Centers for Disease Control and Prevention. (2009). *Intimate partner violence surveillance uniform definitions and recommended data elements*. Retrieved from <http://www.cdc.gov/violenceprevention/pdf/intimatepartnerviolence.pdf>.
- Center for Disease Control (CDC) (2009). Adverse childhood experiences reported by adults --- Five states, 2009. *Weekly morbidity and mortality report*, *59*(49), 1609-1613. Retrieved from: <https://www.cdc.gov/mmwr/preview/mmwrhtml/mm5949a1.htm#tab1>
- Chen, P. P., Coccaro, E. F., Lee, R. R., & Jacobson, K. C. (2012). Moderating effects of childhood maltreatment on associations between social information processing and adult

aggression. *Psychological Medicine*, 42(6), 1293-1304. doi:10.1017/

S0033291711002212

Cicchetti, D. & Rizley, R. (1981). Developmental perspectives on the etiology, intergenerational transmission, and sequelae of child maltreatment. *New Directions for Child and Adolescent Development*, 11, 31-55.

Cicchetti, D. & Toth, S.L. (2005). Child maltreatment. *Annual Review of Clinical Psychology*, 1, 409–438.

Cloitre, M., Stovall-McClough, C., Zorbas, P., & Charuvastra, A. (2008). Attachment, organization, emotion regulation, and expectations of support in a clinical sample of women with childhood abuse histories. *Journal of Traumatic Stress*, 21, 282-289. doi: 10.1002/jts

Coffey, P., Leitenberg, H., Henning, K., Turner, T., & Bennett, R. (1996). Mediators of long-term impact of child sexual abuse: Perceived stigma, betrayal, powerlessness and self-blame. *Child Abuse and Neglect*, 20(5), 447-455.

Coker, A. L., Smith, P. H., McKeown, R. E., & Melissa, K. J. (2000). Frequency and correlates of intimate partner violence by type: Physical, sexual, and psychological battering. *American Journal of Public Health*, 90, 553–559.

Coker, A. L., Weston, R., Creson, D. L., Justice, B., & Blakeney, P. (2005). PTSD symptoms among men and women survivors of intimate partner violence: The role of risk and protective factors. *Violence and Victims*, 20, 625–643.

Colman, R. A., & Widom, C. S. (2004). Childhood abuse and neglect and adult intimate relationships: A prospective study. *Child Abuse & Neglect*, 28, 1133–1151. <http://>



[dx.doi.org/10.1016/j.chiabu.2004.02.005](https://doi.org/10.1016/j.chiabu.2004.02.005)

Connolly, C. D., Hazen, A. H., Coben, J. H., Kelleher, K. J., Barth, R. P., & Landsverk, J. A.

(2006). Persistence of intimate partner violence among families referred to child welfare.

*Journal of Interpersonal Violence, 21*(6), 774–797.

Copenhaver, M. M., Lash, S. J., & Eisler, R. M. (2000). Masculine gender-role stress, anger, and male intimate abusiveness: Implications for men's relationships. *Sex Roles, 42*, 405–414.

doi:10.1023/A: 1007050305387

Cogle, J. R., Resnick, H., & Kilpatrick, D. G. (2009). Does prior exposure to interpersonal

violence increase risk of PTSD following subsequent exposure? *Behaviour Research and*

*Therapy, 47*, 1012-1017.

Courtois, C. A. (1988). *Healing the incest wound*. New York NY: W. W. Norton & Company.

Covey, H. C., Menard, S., & Franzese, R.J. (2013). Effects of adolescent physical abuse,

exposure to neighborhood violence, and witnessing parental violence on adult

socioeconomic status. *Child Maltreatment, 18*, 85-97. doi: 10.1177/1077559513477914

Coyne, S. M., Nelson, D. A., Graham-Kevan, N., Keister, E., & Grant, D. M. (2010). Mean on the screen: Psychopathy, relationship aggression, and aggression in the media.

*Personality and Individual Differences, 48*, 288–293.

Coyne, S. M., Nelson, D. A., Graham-Kevan, N., Tew, E., Meng, K., & Olsen, J. A. (2011).

Media depictions of physical and relational aggression: Connections with aggression in

young adults' romantic relationships. *Aggressive Behavior, 37*(1), 56-62. doi:10.1002/ab.

20372.

- Crick, N. R., & Grotpeter, J. K. (1995). Relational aggression, gender, and social-psychological adjustment. *Child Development, 66*(3), 710–722. doi:10.1111/1467-8624.ep9506152720
- Crittenden, P. M., Claussen, A. H., & Sugarman, D. B. (1994). Physical and psychological maltreatment in middle and adolescence. *Development and Psychopathology, 6*, 145-164.
- Crosson-Tower, C. (2005). *Understanding child abuse and neglect*. Boston: Allyn and Bacon
- Cui, M., Lorenz, F. O., Conger, R. D., Melby, J. N., & Bryant, C. M. (2005). Observer, self-, and partner reports of hostile behaviors in romantic relationships. *Journal of Marital and Family Therapy, 67*, 1169–1181.
- Cunningham, A. & Baker, L. (2004). *What about me: Seeking to understand a child's view of violence in the family*. London: Centre for Children and Families in the Justice System.
- Currie, C. L. (2006). Animal cruelty by children exposed to domestic violence. *Child Abuse & Neglect, 30*(4), 425-435.
- Czar, K. A., Dahlen, E. R., Bullock, E. E., & Nicholson, B. C. (2011). Psychopathic personality traits in relational aggression among young adults. *Aggressive behavior, 37*(2), 207–214.
- Dannowski, U., Stuhrmann, A., Beutelmann, V., Zwanzger, P., Lenzen, T., Grotegerd, D., et al. (2012). Limbic scars: Long-term consequences of childhood maltreatment revealed by functional and structural magnetic resonance imaging. *Biological Psychiatry, 71*, 286–293.
- Davis, J. L., Petretic-Jackson, P. A., & Ting, L. (2001). Intimacy dysfunction and trauma symptomatology: Long-term correlates of different types of child abuse. *Journal of Traumatic Stress, 14*, 63-79.

- Desai, S., Arias, I., Thomson, M. P., & Basile, K. C. (2002). Childhood victimization and subsequent adult revictimization assessed in a nationally representative sample of women and men. *Violence and Victims, 17*, 639–653.
- De Wolff, M., & van IJzendoorn, M. H. (1997). Sensitivity and attachment: A meta-analysis on parental antecedents of infant attachment. *Child Development, 68*, 571-591.
- Diamond, T., & Muller, R. T. (2004). The relationship between witnessing parental conflict during childhood and later psychological adjustment among university students: Disentangling confounding risk factors. *Canadian Journal of Behavioural Science-Revue Canadienne Des Sciences Du Comportement, 36*(4), 295-309.
- DiLillo, D., Lewis, T., & DiLoreto-Colgan, A. (2007). Child maltreatment history and subsequent romantic relationships: Exploring a psychological route to dyadic difficulties. *Journal of Aggression, Maltreatment & Trauma, 15*, 19–36.
- DiLillo, D., Peugh, J., Walsh, K., Panuzio, J., Trask, E., & Evans, S. (2009). Child maltreatment history among newlywed couples: A longitudinal study of marital outcomes and mediating pathways. *Journal of Consulting and Clinical Psychology, 77*, 680–692. <http://dx.doi.org/10.1037/a0015708>
- Dinero, R. E., Conger, R. D., Shaver, P. R., Widaman, K. F., & Larsen-Rife, D. (2008). Influence of family of origin and adult romantic partners on romantic attachment security. *Journal of Family Psychology, 22*, 622–632.
- Dodge, R. N. (2011). Childhood emotional maltreatment and later intimate relationships: Themes from the empirical literature. *Journal of Aggression and Maltreatment Trauma, 19*, 224-242.

- Domestic Violence Resource Center. (2011). *Domestic violence statistics*. Retrieved October 10, 2016, from <http://www.dvrc-or.org/domestic/violence/resources/C61/#hom>.
- Douglas, A., Matson, I. & Hunter, S. (1989). Sex therapy for women incestuously abused as children. *Sexual and Marital Therapy, 4*, 143-159.
- Drossman, D. A., Leserman J., Nagcman G., Li Z. M., Gluck H., Toomey T. C. & Mitchell C. M. (1990). Sexual and physical abuse in women with functional or organic gastrointestinal disorders. *Annals of Internal Medicine, 113*, 828–833.
- Dube, S. R., Anda, R. F., Felitti, V. J., Chapman, D., Williamson, D. F., & Giles, W. H. (2001). Childhood abuse, household dysfunction and the risk of attempted suicide throughout the life span: Findings from the Adverse Childhood Experiences Study. *Journal of the American Medical Association, 286*, 3089-3096.
- Dube, S. R., Anda, R. F., Whitfield, C. L., Brown, D. W., Felitti, V. J., & Dong, M. (2005). Long-term consequences of childhood sexual abuse by gender of victim. *American Journal of Preventive Medicine, 28*, 430–438.
- DuMont, K. A., Widom, C. S., & Czaja, S. J. (2007). Predictors of resilience in abused and neglected children grown-up: The role of individual and neighborhood characteristics. *Child Abuse & Neglect, 31*, 255–274. <http://dx.doi.org/10.1016/j.chiabu.2005.11.015>
- Dutton, D. G. (2006). *The abusive personality, second edition: Violence and control in intimate relationships*. New York, US: The Guilford Press.
- Dutton, D. G. (2011). Attachment and violence: An anger born of fear. In P. R. Shaver, M. Mikulincer, P. R. Shaver & M. Mikulincer (Eds.), *Human aggression and violence:*

- Causes, manifestations, and consequences* (pp. 259– 275). Washington, DC: American Psychological Association.
- Dutton, D. G., & Kerry, G. (1999). Modus operandi and personality disorder in incarcerated spousal killers. *International Journal of Law and Psychiatry*, 22, 287–300.
- Dutton, D. G., & White, K. R. (2012). Attachment insecurity and intimate partner violence. *Aggression and Violent Behavior*, 17(5), 475-481. doi:10.1016/j.avb.2012.07.003
- Dutton, D. G., Saunders, K., Starzomski, A., & Bartholomew, K. (1994). Intimacy-anger and insecure attachment as precursors of abuse in intimate relationships. *Journal of Applied Social Psychology*, 24, 1367-1386.
- Edleson, J. L. (1999). Children's witnessing of adult domestic violence. *Journal of Interpersonal Violence*, 14(8), 839-870.
- Edwards, J. (1992). Men get battered, too. *Chat*, 48-49
- Egeland, B., Yates, T., Appleyard, K., & van Dulmen, M. (2002). The long-term consequences of maltreatment in the early years: A developmental pathway model to antisocial behavior. *Children's Services*, 5(4), 249-260.
- Ehrensaft, M. K., Cohen, P., Brown, J., Smailes, E., Chen, H., & Johnson, J. G. (2003). Intergenerational transmission of partner violence: A 20-year prospective study. *Journal of Consulting and Clinical Psychology*, 71, 741–753.
- Ehrensaft, M. K., Cohen, P., & Johnson, J. G. (2006). Development of personality disorder symptoms and the risk for partner violence. *Journal of Abnormal Psychology*, 115(3), 474–483.

- Eitle, D., & Turner, R. J. (2002). Exposure to community violence and young adult crime: The effects of witnessing violence, traumatic victimization, and other stressful life events. *Journal of Research in Crime and Delinquency, 39*, 214–237.
- Elbow, M. (1982). Children of violent marriages: The forgotten victims. *Social Casework, 63*, 465-471.
- Epps, J., Carlin, A. S., & Ward, N. G. (1999). Adult anger expression and childhood physical abuse history: The effects of event memory vs. self-labeling. *Journal of Mental Health and Aging, 5*(2), 175-185.
- Ernst, A. A., Weiss, S. J., Del Castillo, C., Aagaard, J., Valls, E., Angelo, J., Combs, S., Feuchter, A., Hegyi, M., Clark, R., et al. (2007). Witnessing intimate partner violence as a child does not increase the likelihood of becoming an adult intimate partner violence victim. *American Journal of Emergency Medicine, 14*, 411–418.
- Ernst, A. A., Weiss, S. J., Hall, J., Clark, R., Coffman, B., Goldstien, L., & Valdez, M. (2009). Adult intimate partner violence perpetrators are significantly more likely to have witnessed intimate partner violence as a child than non perpetrators. *American Journal of Emergency Medicine, 27*, 641- 650.
- Evans, S. E., Steel, A. L., Watkins, L. E., & DiLillo, D. (2014). Childhood exposure to family violence and adult trauma symptoms: The importance of social support from a spouse. *Psychological Trauma: Theory, Research, Practice, and Policy, 6*, 527–536. <http://dx.doi.org/10.1037/a0036940>
- Evans, S. E., Davies, C., & DiLillo, D. (2008). Exposure to domestic violence: A meta-analysis of child and adolescent outcomes. *Aggression and Violent Behavior, 13*, 131–140.

- Fang, X., Brown, D.S., Florence, C. S., & Mercy, J. A. (2012). The economic burden of child maltreatment in the United States and implications for prevention. *Child Abuse & Neglect*, *36*, 156–165. doi:10.1016/j.chiabu.2011.10.006
- Farmer, E. and Owen, M. (1995). *Child protection practice: Private risks and public remedies*. London, HMSO.
- Feder, L., & Henning, K. (2005). A comparison of male and female dually arrested domestic violence offenders. *Violence and Victims*, *20*, 153–171.
- Feeney, J. A. (2008). Adult romantic attachment: Developments in the study of couple relationships. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (pp. 456-481). New York, NY: The Guilford Press.
- Feeney, J. A., & Noller, P. (1990). Attachment style as a predictor of adult romantic relationship. *Journal of Personality and Social Psychology*, *58*, 281–291.
- Feeney, J. A., & Noller, P. (1996). *Adult attachment*. Thousand Oaks, CA: Sage
- Felitti, V. J. (1991). Long-term medical consequences of incest, rape, and molestation. *Southern Medical Journal*, *84*, 328-331.
- Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., Koss, M. P., & Marks, J. S. (2001). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults. In K. Franey, R. Geffner, & R. Falconer (Eds.), *The cost of child maltreatment: Who pays? We all do* (pp.53-69). San Diego, CA: Family Violence and Sexual Assault Institute.
- Fergusson, D. M., Boden, J. M., & Horwood, L.J. (2006). Cannabis use and other illicit drug use: Testing the cannabis gateway hypothesis. *Addiction*, *101*, 556–569.

- Fergusson, D. M., & Horwood, L. J. (1998). Early conduct problems and later life opportunities. *Journal of Child Psychology and Psychiatry*, *39*, 1097-1108.
- Finkelhor, D. (1994). The international epidemiology of child sexual abuse. *Child Abuse & Neglect*, *18* (5), 409-417.
- Finkelhor, D., & Browne, A. (1985). The traumatic impact of child sexual abuse: A conceptualization. *American Journal of Orthopsychiatry*, *55*, 530-541.
- Finkelhor, D., & Dzuiba-Leatherman, J. (1994). Children as victims of violence: A national survey. *Pediatrics*, *94*, 413-420.
- Finkelhor, D., Turner, H. A., Ormrod, R. K., & Hamby, S. L. (2009). Violence, crime, and exposure in a national sample of children and youth. *Pediatrics*, *124*(5).
- Finkelhor, D., Turner, H. A., Ormrod, R., Hamby, S. L., & Kracke, K. (2009). Children's exposure to violence: A comprehensive national survey. *Bulletin*. Washington, DC: U.S. Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention.
- Finzi, R., Cohen, O., Sapir, Y., & Weizman, A. (2000). Attachment styles in maltreated children: A comparative study. *Child Psychiatry & Human Development*, *31*, 113-128.
- Finzi, R., Har-Even, D., Shnit, D., & Weizman, A. (2002). Psychosocial characterization of physically abused children from low socio-economic households in comparison to neglected and non-maltreated children. *Journal of Child and Family Studies*, *11*, 441-453.
- Finzi, R., Ram, A., Har-Even, D., Shnit, D., & Weizman, A. (2001). Attachment styles in physically abused and neglected children. *Journal of Youth and Adolescence*, *30*, 769-786.



- Follingstad, D. R., Rutledge, I. L., Berg, B. J., Hause, E. S., & Polek, D. S. (1990). The role of emotional abuse in physically abusive relationships. *Journal of Family Violence, 5*, 107-120.
- Fonagy, P., Leigh, T., Steele, M., Steele, H., Kennedy, R., Mattoon, G., Target, M., & Gerber, A. (1996). The relation of attachment status, psychiatric classification, and response to psychotherapy. *Journal of Consulting and Clinical Psychology, 64*, 22–31.
- Fournier, B., Brassard, A., & Shaver, P. R. (2011). Attachment and intimate partner violence: The demand-withdraw communication pattern and relationship satisfaction as mediators. *Journal of Interpersonal Violence, 26*, 1982-2003.
- Fraley, R. C., & Shaver, P. R. (1997). Adult attachment and the suppression of unwanted thoughts. *Journal of Personality and Social Psychology, 73*, 1080-1091.
- Friedlander, M. L., Kivilghan, D. M., & Shaffer, K. S. (2012). Exploring actor-partner interdependence in family therapy: Whose view (parent or adolescent) best predicts treatment progress? *Journal of Counseling Psychology, 59*, 168–175.
- Fullerton-Sen C., Cassidy A. R., Murray-Close D., Cicchetti D., Crick N. R., & Rogosch F. A. (2008). Childhood maltreatment and the development of relational and physical aggression: The importance of a gender-informed approach. *Child Development, 79*, 1736–175. doi:110.1111j1467-8624.2008.01222.x
- Gauthier, L., Stollak, G., Messe, L., & Aronoff, J. (1996). Recall of childhood neglect and physical abuse as differential predictors of current psychological functioning. *Child Abuse & Neglect, 20*, 549–559.

- Geffner, R., Igelman, R. S., & Zellner, J. (2003). Children exposed to inter-parental violence: A need for additional research and validated treatment programmes. In R. Geffner, R. S. Igelman, & J. Zellner (Eds.), *The effects of intimate partner violence on children* (pp. 1–10). Binghamton, NY: Haworth Maltreatment & Trauma Press.
- Gewirtz, A., & Edleson, J. (2007). Young children's exposure to intimate partner violence: Towards a developmental risk and resilience framework for research and intervention. *Journal of Family Violence, 22*(3), 151–163.
- Gidycz, C. A., Coble, C. N., Latham, L., & Layman, M. J. (1993). Sexual assault experience in adulthood and prior victimization experiences: A prospective analysis. *Psychology of Women Quarterly, 17*, 151–168.
- Gilbert, L., El-Bassel, N., Schilling, R. F., & Friedman, E. (1997). Childhood abuse as a risk for partner abuse among women in methadone maintenance. *The American Journal of Drug & Alcohol Abuse, 23*(4), 581–595.
- Gil-González, D., Vives-Cases, C., Ruiz, M. T., Carrasco-Portiño, M. & Álvarez-Dardet, C. (2007). Childhood experiences of violence in perpetrators as a risk factor of intimate partner violence: A systematic review. *Journal of Public Health, 30*(1), 14–22.
- Godbout, N., Dutton, D., Lussier, Y., & Sabourin, S. (2009). Early experiences of violence as predictors of intimate partner violence and marital adjustment, using attachment theory as a conceptual framework. *Personal Relationships, 16*, 365–384.
- Golding, J. M. (1999). Intimate partner violence as a risk factor for mental disorders: A meta-analysis. *Journal of Family Violence 14*, 99–132.

- Goldstein, S. E. (2011). Relational aggression in young adults friendships and romantic relationships. *Personal Relationships, 18*(4), 645-656.
- Goldstein, S. E., Chesir-Teran, D., & McFaul, A. (2008). Profiles and correlates of relational aggression in young adults' romantic relationships. *Journal of Youth & Adolescence, 37*(3), 251-265. doi:10.1007/s10964-007-9255-6
- Goldstein, S. E., & Tisak, M. S. (2004). Adolescents' outcome expectancies about relational aggression within acquaintanceships, friendships, and dating relationships. *Journal of Adolescence, 27*, 283-302.
- Gondolf, E. (2012). Physical tactics of female partners against male batterer program participants. *Violence Against Women, 18*, 1027-1044.
- Goodman, G. S., Quas, J. A., & Ogle, C. M. (2010). Child maltreatment and memory. *Annual Review of Psychology, 61*, 325-351. doi:10.1146/annurev.psych.093008.100403
- Gorey K. M. & Leslie, D. R. (1997). The prevalence of child sexual abuse: Integrative review adjustment for potential response and measurement biases. *Child Abuse & Neglect, 21*, 391-398.
- Gottman, J. M. (1994). *What predicts divorce?: The relationship between marital processes and marital outcomes*. Hillsdale, NJ: Erlbaum.
- Gottman, J. M. (1999). *Couple's handbook: Marriage survival kit couple's workshop*. Seattle, WA: Gottman Institute.
- Gratz, K. L., Paulson, A., Jakupcak, M., & Tull, M. T. (2009). Exploring the relationship between childhood maltreatment and intimate partner abuse: Gender differences in the mediating role of emotion dysregulation. *Violence and Victims, 24*, 68-82.

- Guille, L. (2004). Men who batter and their children: An integrated review. *Aggression and Violent Behaviour, 9*, 129–163.
- Hamberger, L. K. & Larsen, S. E. (2015). Men's and women's experience of intimate partner violence: A review of ten years of comparative studies in clinical samples; Part 1. *Journal of Family Violence, 30*, 699-717. DOI 10.1007/s10896-015-9732-8
- Hammill, C. (2010). The relationship of childhood maltreatment and adult style to functional recovery in chronic fatigue syndrome and fibromyalgia. *Dissertation abstracts international: Section B: The sciences and engineering, 70*(9-B), 5820.
- Hankin, B. L. (2005). Childhood maltreatment and psychopathology: Prospective tests of attachment, cognitive vulnerability, and stress as mediating processes. *Cognitive Therapy and Research, 29*, 645–671.
- Hay, C., & Evans, M. M. (2006). Violent victimization and involvement in delinquency: Examining predictions from general strain theory. *Journal of Criminal Justice, 34*, 261–274.
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York, NY: Guilford.
- Hazan, C. & Shaver, P. R. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology, 52*, 511–524.
- Hazan, C., & Shaver, P. R. (1990). Love and work: An attachment theoretical perspective. *Journal of Personality and Social Psychology, 59*, 270-280.
- Herman, J. (1981). *Father daughter incest*. Harvard University Press, Cambridge Mass.

- Herrenkohl, R. C., Egolf, B. P., & Herrenkohl, E. C. (1997). Preschool antecedents of adolescent assaultive behavior: A longitudinal study. *American Journal of Orthopsychiatry*, 67, 422–432.
- Herrera, V. M., Wiersma, J.D., & Cleveland, H. H. (2008). The influence of individual and partner characteristics on the perpetration of intimate partner violence in young adult relationships. *Journal of Youth and Adolescence*, 37, 284–296.
- Hester, M., Pearson, C., & Harwin, N. (2007). *Making an impact: Children and domestic violence: A reader*. London: Jessica Kingsley.
- Hollist, C. S., & Miller, R. B. (2005). Perceptions of attachment style and marital quality in midlife marriage. *Family Relations*, 54(1), 46-57. 10.1111/j.0197-6664.2005.00005.x
- Holman, T. B., Busby, D. M., Doxey, C., Klein, D. M., & Loyer-Carlson, V. (1997). *RELATionship evaluation*. Provo, UT: Family Studies Center.
- Holtzworth-Munroe, A., & Anglin, K. (1991). The competency of responses given by maritally violent men versus nonviolent men to problematic situations. *Violence and Victims*, 6, 257-268.
- Holtzworth-Munroe, A., & Stuart, G. L. (1994b). Typologies of male batterers: Three subtypes and the differences among them. *Psychological Bulletin*, 116, 476-497.
- Hotaling, G.T. & Sugarman, D.B. (1986). An analysis of risk markers in husband to wife violence: The current state of knowledge. *Violence and Victims*, 1, 101-124.
- Howe, D. (2005). *Child abuse and neglect: Attachment, development and intervention*. Basingstoke: Palgrave MacMillan.

- Hu, L. M. & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus. *Structural Equation Modeling*, 6(1), 1.
- Hughes, H. M. (1988). Psychological and behavioral correlates of family violence in child witness and victims. *American Journal of Orthopsychiatry*, 58, 77-90.
- Humphreys, C. (2010). Crossing the great divide: Response to Douglas and Walsh. *Violence Against Women*, 16(5), 509–515.
- Hunter, A. V. (2006). Understanding the complexity of child sexual abuse: A review of the literature with implications for family counseling. *The Family Journal*, 14, 349-358.
- Huth-Bocks, A. C., Levendosky, A. A., & Semel, M. A. (2001). The direct and indirect effects of domestic violence on young children's intellectual functioning. *Journal of Family Violence*, 16(3), 269–290.
- Iverson, K.M., Jimenez, S., Harrington, K.M., & Resick, P. (2011). The relative contribution of childhood family violence on later intimate partner violence among robbery victims. *Violence and Victims*, 26, 73–87. <http://dx.doi.org/10.1891/0886-6708.26.1.73>.
- James, K. & Nasjleti, M. (1983). *Treating sexually abused children and their families*. Palo Alto, CA: Consulting Psychologist Press.
- Johnson, M. P. (2006). Conflict and control: Gender symmetry and asymmetry in domestic violence. *Violence Against Women*, 12, 1003–1018.
- Johnson, M. P. (2008). *A typology of domestic violence: Intimate terrorism, violent resistance, and situational couple violence*. Lebanon, NH: Northeastern University Press.
- Johnson, M. P. & Ferraro, K. (2000). Research on domestic violence in the 1990s: Making distinctions. *Journal of Marriage and the Family*, 62, 948-963.

- Johnson, S. M. (2004a). Attachment theory: A guide for healing couple relationships. In W. S. Rholes & J. A. Simpson (Eds.), *Adult attachment: Theory, research, and clinical implications* (pp. 367–387). New York, NY: Guilford Publications.
- Johnson, S. M. (2004b). *The practice of emotionally focused couple therapy* (2nd ed). New York: Brunner-Routledge.
- Johnson, S. M. (2008). *Hold me tight: Seven conversations for a lifetime of love*. New York: Little, Brown & Co.
- Johnson, S., & Greenman, P. (2013). Commentary: Of course it is all about attachment!. *Journal of Marital and Family Therapy*, 39, 421–423.
- Jose, A., & O’Leary, K. D. (2009). Prevalence of partner aggression in representative and clinic samples. In K. D. O’Leary & E. M. Woodin (Eds.), *Psychological and physical aggression in couples: Causes and interventions* (pp. 15-35). Washington, DC: American Psychological Association. doi: 10.1037/11880-00
- Jouriles, E. N., Garrido, E., Rosenfield, D., & McDonald, R. (2009). Experiences of psychological and physical aggression in adolescent romantic relationships: Links to psychological distress. *Child Abuse & Neglect*, 33, 451-460.
- Kalmuss, D. (1984). The intergenerational transmission of marital aggression. *Journal of Marriage and the Family*, 46, 11-19.
- Kantor, G. K., & Jasinski, J. L. (1998). Dynamics and risk factors in partner violence. In: Jasinski, J.L. & Williams, L.M. (Eds). *Partner violence: A comprehensive review of 20 years of research*. Thousand Oaks (CA): Sage.

- Kantor, K. G., & Little, L. (2003). Defining the boundaries of child neglect: When does domestic violence equate with failure to protect? *Journal of Interpersonal Violence, 18*(4), 338–355.
- Karakurt, G., Keiley, M., & Posada, G. (2013). Intimate relationship aggression in college couples: Family-of-origin violence, egalitarian attitude, attachment security. *Journal of Family Violence, 28*, 561-575. DOI 10.1007/s10896-013- 9526-9
- Kaufman, J., & Zigler, E. (1987). Do abused children become abusive parents? *American Journal of Orthopsychiatry, 57*(2), 186–192.
- Keene, A. C. & Epps, J. (2016). Childhood physical abuse and aggression: Shame and narcissistic vulnerability. *Child Abuse & Neglect, 51*, 276-283.
- Kellogg, N. D., & Menard, S. W. (2003). Violence among family members of children and adolescents evaluated for sexual abuse. *Child Abuse & Neglect, 27*, 1367–1376.
- Kendall-Tackett, K. A. (2000). Physiological correlates of childhood abuse: Chronic hyperarousal in PTSD, depression and irritable bowel syndrome. Invited review. *Child Abuse & Neglect, 24*, 799-810.
- Kendall-Tackett, K. A., Marshall, R., & Ness, K. E. (2000). Victimization, healthcare use, and health maintenance. *Family Violence & Sexual Assault Bulletin, 16*, 18-21.
- Kendall-Tackett, K. A., Williams, L. M., & Finkelhor, D. (1993). Impact of sexual abuse on children: A review and synthesis of recent empirical studies. *Psychological Bulletin, 113*(1), 164–180.
- Kenny, D. A., Kashy, D. A., & Cook, W. L. (2006). *Dyadic data analysis*. New York: Guilford.



Kernic, M. A., Wolf, M. E., Holt, V. L., McKnight, B., Huebner, C. E., & Rivara, F. P. (2003).

Behavioral problems among children whose mothers are abused by an intimate partner.

*Child Abuse & Neglect, 27*(11), 1231-1246.

Kilpatrick, K. L., & Williams, L. M. (1998). Potential mediators of posttraumatic stress disorder

in child witnesses to domestic violence. *Child Abuse and Neglect, 22*, 319-330.

Kinzl, J. F., Traweger, C., & Biebl, W. (1995). Sexual dysfunctions: Relationship to childhood

sexual abuse and early family experiences in a nonclinical sample. *Child Abuse &*

*Neglect, 19*(7), 785–792.

Knapp, D. J., Sandberg, J. G., Novak, J., & Larson, J. H. (2015). The mediating role of

attachment behaviors on the relationship between family-of-origin and couple

communication: Implications for couples therapy. *Journal of Couple & Relationship*

*Therapy: Innovations in Clinical and Educational Interventions, 14*(1), 17–38.

Knobloch, L. K., Solomon, D. H., & Cruz, M. G. (2001). The role of relationship development

and attachment in the experience of romantic jealousy. *Personal Relationships, 8*,

205-224.

Kolko, D. (2002). *Handbook on firesetting in children and youth*. Boston, MA: Academic Press.

Kroll, P. D., Stock, D. F., & James, M. E. (1985). The behavior of adult alcoholic men abused as

children. *Journal of Nervous and Mental Disease, 173*, 689-693.

Kwako, L. E., Noll, J. G., Putnam, F. W. & Trickett, P. K. (2010). Childhood sexual abuse and

attachment: An intergenerational perspective. *Clinical Child Psychology and Psychiatry,*

*15*(3), 407-422. doi: 10.1177/1359104510367590.

- Lansford, J. E., Miller-Johnson, S., Berlin, L. J., Dodge, K. A., Bates, J. E., & Pettit, G. S. (2007). Early physical abuse and later violent delinquency: A prospective longitudinal study. *Child Maltreatment, 12*, 233-245.
- Lawson, D. M. (2008). Attachment, interpersonal problems, and family of origin functioning: Differences between partner violent and nonpartner violent men. *Psychology of Men & Masculinity, 9*, 90–105.
- Levendosky, A. A., & Graham-Bermann, S. A. (1998). The moderating effects of parenting stress on children's adjustment in woman-abusing families. *Journal of Interpersonal Violence, 13*(3), 383-397.
- Limke, A., Showers, C. J. & Zeigler-Hill, V. (2010). Emotional and sexual maltreatment: Anxious attachment mediates psychological adjustment. *Journal of Social and Clinical Psychology, 29*(3), 347-367.
- Linder, J., Crick, N. R., & Collins, W. (2002). Relational aggression and victimization in young adults' romantic relationships: Associations with perceptions of parent, peer, and romantic relationship quality. *Social Development, 11*(1), 69–86.
- Lipschitz, D. S., Winegar, R. K., Hartnick, E. M., Foote, B., & Southwick, S. (1999). Posttraumatic stress disorder in hospitalized adolescents: Psychiatric comorbidity and clinical correlates. *Journal of the American Academy of Child and Adolescent Psychiatry, 38*, 385–392.
- Loseke, D. R., & Kurz, D. (2005). Men's violence toward women is the serious social problem. In D. R. Loseke, R. J. Gelles & M. M. Cavanaugh (Eds.), *Current controversies on family violence* (2nd ed). Thousand Oaks, CA: Sage.

- Logan, T. K. (2006). *Women and victimization: Contributing factors, interventions, and implications*. Washington D.C.: American Psychological Association.
- Lyons-Ruth, K. & Block, D. (1996). The disturbed caregiving system: Relations among childhood trauma, maternal caregiving, and infant affect and attachment. *Infant Mental Health Journal, 17*, 257–275.
- MacMillan, H. L., Fleming, J., Trocmé, N., Boyle, M., Wong, M., Racine, Y., ... Offord, D. (1997). Prevalence of child physical and sexual abuse in the community: Results from the ontario health supplement. *JAMA, 278*(2), 131–135. doi:10.1001/jama.1997.03550020063039
- Maker, A., Kemmelmeier, M. & Peterson, C. (1998). Long term psychological consequences in women of witnessing parental physical conflict and experiencing abuse in childhood. *Journal of Interpersonal Violence, 13*, 574-589.
- Maneta, E., Cohen, S., Schulz, M. & Waldinger, R.J. (2012). Links between childhood physical abuse and intimate partner aggression: The mediating role of anger expression. *Violence and Victim, 27*(3), 315-328.
- Manly, J. T., Kim, J. E., Rogosch, F. A., & Cicchetti, D. (2001). Dimensions of child maltreatment and children's adjustment: Contributions of developmental timing and subtype. *Development and Psychopathology, 13*(4), 759–782.
- Marsee, M. A., Silverthorn, P., & Frick, P. J. (2005). The association of psychopathic traits with aggression and delinquency in non-referred boys and girls. *Behavioral Sciences and the Law, 23*, 803–817.

- Martin, M. P., Miller, R. B., Kubricht, B., Yorgason, J.B., & Carroll, J. S. (2015). Relational aggression and self-reported spousal health: A longitudinal analysis. *Contemporary Family Therapy, 37*, 386-395. doi:10.1007/s10591-015-9348-4
- Martin, S. G. (2002). Children exposed to domestic violence: Psychological considerations for health care practitioners. *Holistic Nursing Practice, 16*(3), 7–15.
- Maunder, R. G., Lancee, W. J., Nolan, R. P., Hunter, J. J., & Tannenbaum, D. W. (2006). The relationship of attachment insecurity to subjective stress and autonomic function during standardized acute stress in healthy adults. *Journal of Psychosomatic Research, 60*, 283–290. doi: 10.1016/j.jpsychores.2005.08.013
- McCarthy, G. & Taylor, A. (1999). Avoidant/ambivalent attachment style as a mediator between abusive childhood experiences and adult relationship difficulties. *Journal of Child Psychology and Psychiatry, 40*, 465-478.
- McCauley, J., Kern, D. E., Kolodner, K., Dill, L., Schroeder, A. F., DeChant, H. K., Ryden, J., Derogatis, L. R., & Bass, E. B. (1997). Clinical characteristics of women with a history of childhood abuse: Unhealed wounds. *JAMA, 277*(17), 1362-1368.
- McCloskey, L. A., Figueredo, A., & Koss, M. (1995). The effects of systemic family violence on children's mental health. *Child Development, 66*(5), 1239- 1261.
- McCloskey, L. A. & Lichter, E. L. (2003). The contribution of marital violence to adolescent aggression across different relationships. *Journal of Interpersonal Violence, 18*, 390–412.
- McDonald, R., Jouriles, E. N., Ramisetty-Mikler, S., Caetano, R., & Green, C. E. (2006). Estimating the number of American children living in partner-violent families. *Journal of Family Psychology, 20*, 137–142.

- Mcevoy, D. (2005). Attachment styles among violent and non-violent mentally ill and non-mentally ill jail inmates. *Dissertation abstracts international Section B*, 65, 4839.
- McGee, C. (2000). *Childhood experiences of domestic violence*. London: Jessica Kingsley Publishers.
- McGee, R. A., & Wolfe, D. A. (1991). Psychological maltreatment: Toward an operational definition. *Development and Psychopathology*, 3, 3–18.
- McLewin, L. A., & Muller, R. T. (2006). Childhood trauma, imaginary companions, and the development of pathological dissociation. *Aggression and Violent Behaviour*, 11, 531–545. doi:10.1016/j.avb.2006.02.001
- Melton, H. C., & Sillito, C. L. (2012). The role of gender in officially reported intimate partner abuse. *Journal of Interpersonal Violence*, 27, 1090–1111.
- Menard, S., Weiss, A. J., Franzese, R. J., & Covey, H. C. (2014). Types of adolescent exposure to violence as predictors of adult intimate partner violence. *Child Abuse & Neglect*, 38, 627–639.
- Messman-Moore, T. L., & Coates, A. A. (2007). The impact of childhood psychological abuse on adult interpersonal conflict: The role of early maladaptive schemas and patterns of interpersonal behavior. *Journal of Emotional Abuse*, 7, 75-92.
- Mickelson, K. D., Kessler, R. C., & Shaver, P. R. (1997). Adult attachment in a nationally representative sample. *Journal of Personality and Social Psychology*, 73, 1092-1106.
- Mihalic, S. W., & Elliott, D. (1997). A social learning theory model of marital violence. *Journal of Family Violence*, 12(1), 21-47.

- Mikulincer, M. (1998a). Adult attachment style and individual differences in functional versus dysfunctional experiences of anger. *Journal of Personality and Social Psychology, 74*, 513-524.
- Mikulincer, M. (1998b). Adult attachment style and affect regulation: Strategic variations in self-appraisals. *Journal of Personality and Social Psychology, 75*, 420-435.
- Mikulincer, M., Florian, V., & Weller, A. (1993). Attachment styles, coping strategies, and posttraumatic psychological distress: The impact of the Gulf war in Israel. *Journal of Personality and Social Psychology, 64*, 817-826.
- Mikulincer, M., Gillath, O., & Shaver, P. R. (2002). Activation of the attachment system in adulthood: Threat-related primes increase the accessibility of mental representations of attachment figures. *Journal of Personality and Social Psychology, 83*(4), 881-895.
- Mikulincer, M., & Shaver, P. R. (2007a). *Attachment in adulthood: Structure, dynamics, and change*. New York: Guilford Press.
- Mikulincer, M., & Shaver, P. R. (2007b). Contributions of attachment theory and research to motivation science. In J. Shah & W. Gardner (Eds.), *Handbook of motivation science*. New York: The Guilford Press.
- Miller, T. R., Handal, P. J., Gilner, F. H. & Cross, J. F. (1991). The relationship of abuse and witnessing violence on the Child Abuse Potential Inventory with Black adolescents. *Journal of Family Violence, 6*, 351-363.
- Morales, J. R., & Crick N. R. (1998). Self-report measure of aggression and victimization. Unpublished measure.

- Morimoto, Y., & Sharma, A. (2004). Long-term outcomes of verbal aggression: The role of protective factors. *Journal of Emotional Abuse, 4*(2), 71–99.
- Mullen, P., Martin, J., Anderson, S., Romans, S., & Herbison, G. (1996). The long-term impact of the physical, emotional, and sexual abuse of children: A community study. *Child Abuse and Neglect, 20*, 7-21.
- Mullender, A., Hague, G., Imam, U., Kelly, L., Malos, E. & Regan, L. (2002). *Children's perspectives on domestic violence*. London: Sage.
- Müller, J., Moergeli, H., & Maercker, A. (2008). Disclosure and social acknowledgement as predictors of recovery from posttraumatic stress: A longitudinal study in crime victims. *The Canadian Journal of Psychiatry/La revue canadienne de psychiatrie, 53*(3), 160–168.
- Muller, R. T., Gragtmans, K., & Baker, R. (2008). Childhood physical abuse, attachment, and adult social support: Test of a mediational model. *Canadian Journal of Behavioural Science, 40*, 80–89. <http://dx.doi.org/10.1037/0008-400X.40.2.80>
- Muller, R. T., Lemieux, K. E., & Sicoli, L. A. (2001). Attachment and psychopathology among formerly maltreated adults. *Journal of Family Violence, 16*, 151–169.
- Muller, R. T., Sicoli, L. A., & Lemieux, K. E. (2000). Relationship between attachment style and posttraumatic stress symptomatology among adults who report the experience of childhood abuse. *Journal of Traumatic Stress, 13*, 321–332.
- Muller, R. T., Thornback, K., & Bedi, R. (2012). Attachment as a mediator between childhood maltreatment and adult symptomatology. *Journal of Family Violence, 27*(3), 243-255.  
doi:10.1007/s10896-012-9417-5

- Murphy, C. M., & Cascardi, M. (1999). Psychological abuse in marriage and dating relationships. In R.L. Hampton (Ed.), *Family violence prevention and treatment* (2nd ed., pp.198-226). Beverly Hills, CA: Sage.
- Murphy, C. M., & O'Farrell, T. J. (1994). Factors associated with marital aggression in male alcoholics. *Journal of Family Psychology*, 8, 321–335.
- Murray-Close, D., Ostrov, J. M., Nelson, D. A., Crick, N. R., & Coccaro, E. F. (2010). Proactive, reactive, and romantic relational aggression in adulthood: Measurement, predictive validity, gender differences, and association with Intermittent Explosive Disorder. *Journal of Psychiatric Research*, 44, 393-404.
- Murray-Close, D., & Rellini, A. H. (2012). Cardiovascular reactivity and proactive and reactive relational aggression among women with and without a history of sexual abuse. *Biological Psychology*, 89(1), 54-62.
- Muthen, L. K., & Muthen, B. (2012). *Mplus: Statistical analysis with latent variables*. Los Angeles, CA: Muthen & Muthen.
- Nelson, D. A., & Carroll, J. S. (2006). *Couples relational aggression and victimization scale (CRAViS)*. Provo, UT: RELATE Institute.
- Nelson, E. C., Heath, A. C., & Madden, P. A. F. (2002). Association between self-reported childhood sexual abuse and adverse psychosocial outcomes. *Archives of General Psychiatry*, 59, 139-145.
- Nicholas, K. B. & Bieber, S. L. (1996). Parental abusive versus supportive behaviors and their relation to hostility and aggression in young adults. *Child Abuse and Neglect*, 20(12), 1195-1211.



- Noll, J. G. (2005). Does childhood sexual abuse set in motion a cycle of violence against women? *Journal of Interpersonal Violence, 20*(4), 455–462.
- Noll, J. G., Trickett, P. K., & Putnam, F. W. (2003). A prospective investigation of the impact of childhood sexual abuse on the development of sexuality. *Journal of Consulting and Clinical Psychology, 71*, 575–586.
- Norman, R. E., Byambaa, M., De, R., Butchart, A., Scott, J., & Vos, T. (2012). The long-term health consequences of child physical abuse, emotional abuse, and neglect: A systematic review and meta-analysis. *PLOS Medicine, 9*(11). <http://dx.doi.org/10.1371/journal.pmed.1001349>
- O'Brien, M., John, R. S., Margolin, G., & Erel, O. (1994). Reliability and diagnostic efficacy of parents' reports to assess children's exposure to interparental aggression. *Violence and Victims, 9*, 45-62.
- O'Keefe, M. (2005). *Teen dating violence: A review of risk factors and prevention efforts*.  
VAWnet: The National Online Resource Center on Violence Against Women.
- O'Leary, K. D. (1988). Physical aggression between spouses: A social learning perspective. In V. B. Van Hasselt, R. L. Morrison, A. S. Bellack, & M. Hersen (Eds.), *Handbook of family violence* (pp 31-55). Plenum Press.
- O'Leary, K. D., Barling, J., Arias, I., Rosenbaum, A., Malone, J. & Tyree, A. (1989). Prevalence and stability of marital aggression between spouses: A longitudinal analysis. *Journal of Consulting and Clinical Psychology, 57*, 263-268.

- O'Leary, K. D., & Slep, A. M. S. (2003). A dyadic longitudinal model of adolescent dating aggression. *Journal of Clinical Child and Adolescent Psychology, 32*(3), 314-327.  
doi: 10.1207/S15374424JCCP3203\_01
- Ogle, C. M., Rubin, D. C., & Siegler, I. C. (2015). The relation between insecure attachment and posttraumatic stress: Early life versus adulthood traumas. *Psychological Trauma, 7*(4), 324-32. doi: 10.1037/tra0000015.
- Oka, M., Brown, C. C. & Miller, R. B. (2016). Attachment and relational aggression: Power as a mediating variable. *The American Journal of Family Therapy, 44*(1), 24-35.
- Oka, M., Sandberg, J. G., Bradford, A. B., & Brown, A. (2014). Insecure attachment behavior and partner violence: Incorporating couple perceptions of insecure attachment and relational aggression. *Journal of Marital and Family Therapy, 40*(4), 412–429.
- Oka, M., & Whiting, J. B. (2011). Contemporary MFT theories and intimate partner violence: A review of systemic treatments. *Journal of Couple & Relationship Therapy, 10*(1), 34-52.  
doi:10.1080/15332691.2011.539173
- Oka, M., & Whiting, J. B. (2013). Bridging the clinician/researcher gap with systemic research: The case for process research, dyadic, and sequential analysis. *Journal of Marital and Family Therapy, 39*, 17–27.
- Osofsky, J. D. (1999). The impact of violence on children. *The Future of Children, 9*(3), 33–49.
- Osofsky, J. D. (2003). Prevalence of children's exposure to domestic violence and child maltreatment: Implications for prevention and intervention. *Clinical Child and Family Psychology Review, 6*(3), 161–170.

- Osofsky, J. D. (2005). *The effects of violence exposure on children: What to look for: "Red Flags."* Judges' Page, National Council of Juvenile and Family Court Judges Website. Retrieved from [http://www.traumacenter.org/products/pdf\\_files/casajanicearticle\\_2.pdf](http://www.traumacenter.org/products/pdf_files/casajanicearticle_2.pdf)
- Paolucci, E. O., Genuis, M. L., & Violato, C. (2001). A meta-analysis of the published research on the effects of child sexual abuse. *Journal of Psychology, 135*(1), 17–36.
- Phelan, M. B., Hamberger, L. K., Guse, C. E., Edwards, S., Walczak, S., & Zozel, A. (2005). Domestic violence among male and female patients seeking emergency medical services. *Violence and Victims, 20*, 187–206.
- Pielage, S. B., Gerlsma, C. & Schaap, C. (2000). Insecure attachment as a risk factor for psychopathology: The role of stressful events. *Clinical Psychology and Psychotherapy, 7*, 296–302. doi: 10.1002/1099-0879(200010)7
- Pielage, S. B., Luteijn, F., & Arrindell, W. A. (2005). Adult attachment, intimacy and psychological distress in a clinical and community sample. *Clinical Psychology & Psychotherapy, 12*, 455–464.
- Pinheiro, P. S. (2006). *World report on violence against children*. United Nations Secretary-General's Study on Violence against Children, Geneva.
- Pistole, M. (1994). Adult attachment styles: Some thoughts on closeness-distance struggles. *Family Process, 33*(2), 147-159. doi:10.1111/j.15455300.1994.00147.x
- Pompili, M., Ilceto, P., Innamorati, M., Rihmer, Z., Lester, D., Akiskal, H. S., Girardi, P., Ferracuti, S., & Tatarelli, R. (2009). Suicide risk and personality traits in physically and/or sexually abused acute psychiatric inpatients: A preliminary study. *Psychological Reports, 105*, 554–568.

- Powell, A. & Murray, S. (2008). Sexual assault and adults with a disability: Enabling recognition, disclosure and a just response. *Australian Centre for the Study of Sexual Assault: Australian Institute of Family Studies, 9, 1-19.*
- Prinstein, M. J., Boergers, J., & Vernberg, E. M. (2001). Overt and relational aggression in adolescents: Social-psychological adjustment of aggressors and victims. *Journal of Clinical Child Psychology, 30, 479-491.*
- Pulverman, C. S., Lorenz, T. A., & Meston, C. M. (2015). Linguistic changes in expressive writing predict psychological outcomes in women with history of childhood sexual abuse and adult sexual dysfunction. *Psychological Trauma: Theory, Research, Practice, and Policy, 7(1), 50-57.*
- Purvin, D. (2003). Weaving a tangled safety net: The intergenerational legacy of domestic violence. *Violence Against Women, 9(10), 1263-1277.*
- Rebellon, C. J., & Van Gundy, K. (2005). Can control theory explain the link between parental physical abuse and delinquency? A longitudinal analysis. *Journal of Research in Crime and Delinquency, 42(3), 247-274.*
- Reid, K. S., Wampler, R. S., & Taylor, D. K. (1996). The “Alienated” partner: Responses to traditional therapies for adult sex abuse survivors. *Journal of Marital and Family Therapy, 22(4), 443-453.* doi:<http://dx.doi.org/10.1111/j.1752-0606.1996.tb00219.x>
- Reis, S. & Grenyer, B. (2004). Fear of intimacy of women: Relationship between attachment style and depressive symptoms. *Psychopathology, 37(6), 299-303.*

- Renner, L. M., & Slack, K. S. (2006). Intimate partner violence and child maltreatment: Understanding intra- and intergenerational connections. *Child Abuse and Neglect, 30*(6), 599-617. 10.1016/j.chiabu.2005.12.005
- Richards, K. (2011). Children's exposure to domestic violence in Australia. *Trends and Issues in Crime and Criminal Justice, 419*, 1-5.
- Riggs, S. A. (2010). Childhood emotional abuse and the attachment system across the life cycle: What theory and research tell us. *Journal of Aggression, Maltreatment & Trauma, 19*(1), 5-51. Doi: 10.1080/10926770903475968
- Riggs, S. A., & Jacobvitz, D. (2002). Expectant parents' representations of early attachment relationships: Associations with mental health and family history. *Journal of Consulting and Clinical Psychology, 70*, 195-204.
- Rivara, F. P., Anderson, M. L., Fishman, P., Bonomi, A. E., Reid, R. J., Carrell, D., & Thompson R. S. (2007). Healthcare utilization and costs for women with a history of intimate partner violence. *American Journal of Preventive Medicine, 32*(2), 89-96.
- Rivera, P. M. & Fincham, F. (2015). Forgiveness as a mediator of intergenerational transmission of violence. *Journal of Interpersonal Violence, 30*(6), 895-910.
- Roche, D. N., Runtz, M. G., & Hunter, M. A. (1999). Adult attachment: A mediator between child sexual abuse and later psychological adjustment. *Journal of Interpersonal Violence, 14*(2), 184-207.
- Rothbaum, F., Weisz, J., Pott, M., Miyake, K., & Morelli, G. (2000). Attachment and culture: Security in the United States and Japan. *American Psychologist, 55*, 1093.

- Roy, A. (2001). Childhood trauma and suicidal behavior in male cocaine dependent patients. *Suicide and Life-Threatening Behavior, 31*, 194–196.
- Rumstein-McKean, O., & Hunsley, J. (2001). Interpersonal and family functioning of female survivors of childhood sexual abuse. *Clinical Psychology Review, 21*(3), 471-490.
- Russell, D., Springer, K., & Greenfield, E. (2010). Witnessing domestic violence in childhood as an independent risk factor for depressive symptoms in young adulthood. *Child Abuse and Neglect, 34*(6), 448-453.
- Sackett, L. A. & Saunders, D. G. (1999). The impact of different forms of psychological abuse on battered women. *Violence and Victims, 14*, 105-117.
- Sahin, R., Baloglu, M. & Unalmis, M. (2010). Turkish adolescents' attitudes toward violence. *Procedia Social and Behavioral Sciences, 2*, 2092-2098.
- Salmivalli, C., & Kaukiainen, A. (2004). “Female aggression” revisited: Variable- and person-centered approaches to studying gender differences in different types of aggression. *Aggressive Behavior, 30*, 158–163.
- Sandberg, J. G., Bradford, A. & Brown, A. (in press). Differentiating between attachment styles and behaviors and their association with marital quality. *Family Process*.
- Sandberg, J. G., Busby, D. M., Johnson, S. M., & Yoshida, K. (2012). The brief accessibility, responsiveness, and engagement (BARE) scale: A tool for measuring attachment behavior in couple relationships. *Family Process, 51*(4), 512-526. doi:10.1111/j.1545-5300.2012.01422.x
- Sandberg, J. G., Novak, J. R., Davis, S. Y., & Busby, D. M. (2016). The Brief Accessibility, Responsiveness, and Engagement Scale: A tool for measuring attachment behaviors in

- clinical couples. *Journal of Marital and Family Therapy*, 42(1), 106-122. doi:10.1111/jmft.12151.
- Scarpa, A., Haden, S. C., & Abercromby, J. M. (2010). Pathways linking child physical abuse, depression, and aggressiveness across genders. *Journal of Aggression, Maltreatment, & Trauma*, 19, 757-776.
- Schad, M. M., Szewedo, D. E., Antonishak, J., Hare, A., & Allen, J. P. (2008). The broader context of relational aggression in adolescent romantic relationships: Predictions from peer pressure and links to psychosocial functioning. *Journal of Youth and Adolescence*, 37(3), 346–358. doi: 10.1007/s10964-007-9226-y.
- Schafer, J., Caetano, R., & Clark, C. L. (1998). Rates of intimate partner violence in the United States. *American Journal of Public Health*, 88, 1702–1704.
- Scher, C., Forde, D., McQuaid, J., & Stein, M. (2004). Prevalence and demographic correlates of childhood maltreatment in an adult community sample. *Child Abuse & Neglect*, 28, 167–180.
- Schmeelk, K. M., Sylvers, P., & Lilienfeld, S. O. (2008). Trait correlates of relational aggression in a nonclinical sample: DSM-IV personality disorders and psychopathy. *Journal of Personality Disorders*, 22(3), 269-283. doi:10.1521/pedi.2008.22.3.269
- Schreiber, R., & Lyddon, W. J. (1998). Parental bonding and current psychological functioning among childhood sexual abuse survivors. *Journal of Counseling Psychology*, 45(3), 358–362.

- Sears, H. A., Byers, E. S., & Price, E. L. (2007). The co-occurrence of adolescent boys' and girls' use of psychologically, physically, and sexually abusive behaviors in their dating relationships. *Journal of Adolescence, 30*(3), 487–504.
- Sedlar, G. & Hansen, D. J. (2001). Anger, child behavior, and family distress: Further evaluation of the Parental Anger Inventory. *Journal of Family Violence, 16*, 361–373.
- Selic, P., Pesjak, K., & Kersnik, J. (2011). The prevalence of exposure to domestic violence and the factors associated with co-occurrence of psychological and physical violence exposure: A sample from primary care patients. *BMC Public Health, 11*. <http://www.biomedcentral.com/1471-2458/11/621>.
- Shapiro, D. L., & Levendosky, A. A. (1999). Adolescent survivors of childhood sexual abuse: The mediating role of attachment style and coping in psychological and interpersonal functioning. *Child Abuse & Neglect, 23*, 1175–1191.
- Shaver, P. R., & Mikulincer, M. (2008). Augmenting the sense of security in romantic, leader-follower, therapeutic, and group relationships: A relational model of psychological change. In J. P. Forgas & J. Fitness (Eds.), *Social relationships: Cognitive, affective, and motivational processes* (pp. 55-74). New York: Psychology Press.
- Shepard, M. & Raschick, M. (1999). How child welfare workers assess and intervene around issues of domestic violence. *Child Maltreatment, 4*(2), 148-156.
- Shields, A., & Cicchetti, D. (2001). Parental maltreatment and emotion dysregulation as risk factors for bullying and victimization in middle childhood. *Journal of Clinical Child Psychology, 30*, 349-363.



- Silverman, A. B., Reinherz, H. Z., Giaconia, R. M. (1996). The long-term sequelae of child and adolescent abuse: A longitudinal community study. *Child Abuse and Neglect*, 20(8), 709-723.
- Silvern, L., Karyl, J., Waelde, L., Hodges, W. F., Starek, J., Heidt, E., & Min, K. (1995). Retrospective reports of parental partner abuse: Relationships to depression, trauma symptoms and self-esteem among college students. *Journal of Family Violence*, 10, 177-202.
- Simons, R. L., Johnson, C., Conger, R. D., & Elder, G. H., Jr. (1998). A test of latent trait versus life course perspectives on the stability of adolescent antisocial behavior. *Criminology*, 36, 217-243.
- Simpson, J. A., Rholes, W. S., & Nelligan, J. S. (1992). Support seeking and support giving within couples in an anxiety-provoking situation: The role of attachment styles. *Journal of Personality and Social Psychology*, 62, 434-446.
- Spataro, J., Mullen, P. E., Burgess, P. M., Wells, D. L., & Moss, S. A. (2004). Impact of child sexual abuse on mental health: Prospective study in males and females. *British Journal of Psychiatry*, 184(5), 416-421.
- Springer, K. W., Sheridan, J., Kuo, D., & Carnes, M. (2007). Long-term physical and mental health consequences of childhood physical abuse: Results from a large population-based sample of men and women. *Child Abuse & Neglect*, 31, 517-530.
- Stephenson, K. R., Pulverman, C., & Meston, C. M. (2014). Assessing the association between childhood sexual abuse and adult sexual experiences in women with sexual difficulties. *Journal of Traumatic Stress*, 27, 274-282.

- Stevens, J. S., Jovanovic, T., Fani, N., Ely, T. D., Glover, E. M., Bradley, B., Ressler, K. J. (2013). Disrupted amygdala-prefrontal functional connectivity in civilian women with posttraumatic stress disorder. *Journal of Psychiatric Research*, *47*(10), 1469–1478.
- Stith, S. M., McCollum, E. E., Amanor-Boadu, Y., & Smith, D. B. (2012). Systemic perspectives on intimate partner violence treatment. *Journal of Marital and Family Therapy*, *38*(1), 220–240.
- Stith, S. M., McCollum, E. E., & Rosen, K. H. (2011). Session 5: Escalation and negotiated time-out. In Stith, S. M., McCollum, E. E., & Rosen, K. H. (Eds.), *Couples therapy for domestic violence: Finding safe solutions* (p. 87-108). Washington D.C.: American Psychological Association.
- Stith, S. M., Rosen, K. H., Middleton, K. A., Busch, A. L. Lundeberg, K., & Carlton R. P. (2000). The intergenerational transmission of spouse abuse: A meta-analysis. *Journal of Marriage and the Family*, *62*(3), 640–654.
- Storch, E. A., Masia-Warner, C., & Brassard, M. R. (2003). The relationship of peer victimization to social anxiety and loneliness in adolescence. *Child Study Journal*, *33*, 1-18.
- Straus, M. A. (1976). Sexual inequality, cultural norms, and wife beating. *Victimology*, *1*, 54–76.
- Straus, M. A. (2004). Prevalence of violence against dating partners by male and female university students worldwide. *Violence Against Women*, *10*(7), 790–811.
- Straus, M. A., Gelles, R., & Steinmetz, S. (1980). *Behind closed doors: Violence in the American family*. New York: Anchor Books.

- Straus, M. A., Hamby, S. L., Boney-McCoy, S., & Sugarman, D. B. (1996). The revised conflict tactics scales (CTS2). *Journal of Family Issues, 17*, 283–316.
- Styron, T., & Janoff-Bulman, R. (1997). Childhood attachment and abuse: Long-term effects on adult attachment, depression, and conflict resolution. *Child Abuse & Neglect, 21*, 1015–1023. [http://dx.doi.org/10.1016/S0145-2134\(97\)00062-8](http://dx.doi.org/10.1016/S0145-2134(97)00062-8)
- Sugarman, D. B., & Hotaling, G. T. (1989). Dating violence: Prevalence, context, and risk markers. In A. A. Pirog-Good & J. E. Stets (Eds.). *Violence in dating relationships: Emerging social issues* (pp. 3-31). New York: Praeger.
- Sugarman, D. B., & Hotaling, G. T. (1997). Intimate violence and social desirability: A meta-analytic review. *Journal of Interpersonal Violence, 12*, 275–290.
- Sullivan, K. T., Lawrence, E., Pasch, L. A., & Bradbury, T. N. (2015). Physical aggression, compromised social support, and 10-year marital outcomes: Testing a relational spillover model. *Journal of Family Psychology, 29*(6), 931–937.
- Swogger, M. T., You, S., Cashman-Brown, S., & Conner, K. R. (2011). Childhood physical abuse, aggression, and suicide attempts among criminal offenders. *Psychiatry Research, 185*, 363–367.
- Swanson, B. & Mallinckrodt, B. (2001). Family environment, love withdrawal, childhood sexual abuse, and adult attachment. *Psychotherapy Researcher, 11*, 455–472.
- Teisl, M., & Cicchetti, D. (2008). Physical abuse, cognitive and emotional processes, and aggressive/disruptive behavior problems. *Social Development, 17*, 1–23.
- Thompson, R. A. (1991). Emotional regulation and emotional development. *Educational Psychology Review, 3*(4), 269-307.

- Tilley, D., & Palmer, G. (2012). Enactments in emotionally focused couple therapy: Shaping moments of contact and change. *Journal of Marital and Family Therapy, 39*, 299–313.
- Tjaden, P., & Thoennes, N. (2000). *Full report of the prevalence, incidence, and consequences of intimate partner violence against women: Findings from the National Violence Against Women Survey*. Report for grant 93-IJ-CX- 0012, funded by the National Institute of Justice and the Centers for Disease Control and Prevention. Washington, DC: NIJ.
- Todahl, J., & Walters, E. (2011). Universal screening for intimate partner violence: A systematic review. *Journal of Marital and Family Therapy, 37*, 355–369.
- Tremblay, I. & Sullivan, M. (2010). Attachment and pain outcomes in adolescents: The mediating role of pain catastrophizing and anxiety. *The Journal of Pain, 11*(2), 160-171.
- Unger, J. A. M., & De Luca, R. V. (2014). The relationship between childhood physical abuse and adult attachment styles. *Journal of Family Violence, 29*(3), 223-234.
- U.S. Census Bureau. (2013). *State and county quickfacts*. Retrieved May 20, 2012 from <http://quickfacts.census.gov/qfd/states/00000.html>
- U.S. Department of Health and Human Services: Administration for Children & Families. (2013). *Child Maltreatment 2013*. <http://www.acf.hhs.gov/programs/cb/resource/child-maltreatment-2013>
- Van Houdenhove, B., Neerinckx, E., Lysen, R., Vertommen, H., Van Houdenhove, L., Onghena, P., et al. (2001). Victimization in chronic fatigue syndrome and fibromyalgia intertiary care: A controlled study on prevalence and characteristics. *Psychosomatics, 42*(1), 21–28.

- Verona, E., & Sachs-Ericsson, N. (2005). The intergenerational transmission of externalizing behaviors in adult participants: The mediating role of childhood abuse. *Journal of Consulting and Clinical Psychology, 73*, 1135–1145.
- Walton, M. A., Murray, R., Cunningham, R. M., Chermack, S. T., Barry, K. L., Booth, B. M., Ilgen, M. A., Wojnar, M., & Blow, F. C. (2009). Correlates of intimate partner violence among men and women in an inner city emergency department. *Journal of Addictive Diseases, 28*, 366–381.
- Webster, T. N. (2016). *A qualitative look at treatment guidelines for couples therapy with survivors of childhood physical and sexual abuse*. Manuscript submitted for publication.
- Webster, T. N. & Harper, J. (2016). *Shame not the same for different styles of blame: Shame as a mediating variable for severity of childhood sexual abuse and trauma symptoms in three attribution of blame groups*. Manuscript submitted for publication.
- Wei, M., Russell, D. W., Mallinckrodt, B., & Vogel, D. L. (2007). The experiences in Close Relationship Scale (ECR)-Short Form: Reliability, validity, and factor structure. *Journal of Personality Assessment, 88*, 187-204.
- Weiss, D. I. (2006). *Romantic relational aggression in adults: Links to childhood relational aggression, retrospective parent attachment, and current attachment relationships*. (Order No. 3220837, Alliant International University, Los Angeles). ProQuest Dissertations and Thesis.
- Weiss, B., Dodge, K. A., Bates, J. E., Pettit, G. S. (1992). Some consequences of early harsh discipline: Child aggression and a maladaptive social information processing style. *Child Development, 63*, 1321-1335.

- Wekerle, C. & Wolfe, D.A. (1998). Prevention of physical abuse and neglect: Windows of opportunity. In P.K. Tricot & C. Schellenbach (Eds.), *Violence against children in the family and the community*. New York: APA Books.
- Welsh, D. P., Grello, C. M., & Harper, M. S. (2003). When love hurts: Depression and adolescent romantic relationships. In: Florsheim P (Ed.). *Adolescent romantic relations and sexual behavior: Theory, research and practical implications*. Mahwah, NJ: Lawrence Erlbaum.
- Werner, N. E., & Crick, N. R. (1999). Relational aggression and social-psychological adjustment in a college sample. *Journal of Abnormal Psychology, 108*, 615–623.
- Whiffen, V. E., Judd, M. E., & Aube, J. A. (1999). Intimate relationships moderate the association between childhood sexual abuse and depression. *Journal of Interpersonal Violence, 14*, 940–954. <http://dx.doi.org/10.1177/088626099014009002>
- Whitaker, D. J., Haileyesus, T., Swahn, M., & Saltzman, L. S. (2007). Difference in frequency of violence and reported injury between relationships with reciprocal and nonreciprocal intimate partner violence. *American Journal of Public Health, 97*, 941–947.
- White, J. W., Smith, P. H., Koss, M. P., & Figueredo, A. J. (2000). Intimate partner aggression: What have we learned? Comment on Archer (2000). *Psychological Bulletin, 126*, 690–696.
- Whitfield, C. L., Anda, R. F., Dube, S. R., & Felitti, V. J. (2003). Violent childhood experiences and the risk of intimate partner violence in adults. *Journal of Interpersonal Violence, 18*, 166-185.

- Whiting, J. B., Oka, M., & Fife, S. T. (2012). Appraisal distortions and intimate partner violence: Gender, power, and interaction. *Journal of Marital and Family Therapy*, 38, 133–149.  
doi: 10.1111/j.1752-0606.2011.00285.x
- Williamson, S. (2009). *The relationship between severity of childhood sexual abuse and adult perceptions of intimacy with internalized shame as a mediator*. (Unpublished master's thesis). Brigham Young University, Provo, UT.
- Wilson, J. B. (2010). *Exploring the influence of dyadic adult attachment on physical, sexual, and relational aggression within romantic relationships*. ProQuest Dissertations and Theses. (Publication No. AAT 1489479)
- Wittenborn, A., Dolbin-MacNab, M., & Keiley, M.K. (2013). Dyadic research in marriage and family therapy: Methodological and analytical considerations. *Journal of Marital and Family Therapy*, 39, 5-16.
- World Health Organization. (1999). *Guidelines for medico-legal care for victims of sexual abuse*. Retrieved from: [http://www.who.int/violence\\_injury\\_prevention/resources/publications/en/guidelines\\_chap7.pdf](http://www.who.int/violence_injury_prevention/resources/publications/en/guidelines_chap7.pdf). June 18, 2016.
- Wright, E. M., & Benson, M. L. (2010). Immigration and intimate partner violence: Exploring the immigrant paradox. *Social Problems*, 57(3), 480-503.
- Wright, M., Crawford, E., & Del Castillo, D. (2009). Childhood emotional maltreatment and later psychological distress among college students: The mediating role of maladaptive schemas. *Child Abuse & Neglect*, 33(1), 59-68.

- Yllo, K. A. (2005). Through a feminist lens: Gender, diversity, and violence. In D. R. Loseke, R. J. Gelles & M. M. Cavanaugh (Eds.), *Current controversies on family violence* (2nd ed). (pp. 19–34). Thousand Oaks, CA: Sage.
- Yoder, K.A. (1999). Comparing suicide attempters, suicide ideators, and nonsuicidal homeless and runaway adolescents. *Suicide and Life-Threatening Behavior*, 29, 25–36.
- Ystgaard, M., Hestetun, I., Loeb, M., & Mehlum, L. (2004). Is there a specific relationship between childhood sexual and physical abuse and repeated suicidal behaviour? *Child Abuse & Neglect*, 28, 863–875.
- Zeanah, C. H., Danis, B., Hirshberg, L., Benoit, D., Miller, D., & Heller, S. S. (1999). Disorganized attachment associated with partner violence: A research note. *Infant Mental Health Journal*, 20, 77–86.



### **Appendix A: Physical Health Effects of Childhood Maltreatment**

In addition to psychosocial effects, research suggest many physical health effects of CM. Felitti and colleagues (2001) found an increased risk for a broad range of conditions associated with four or more adverse childhood events, including ischemic heart disease, cancer, stroke, chronic bronchitis, emphysema, diabetes, skeletal fractures, and hepatitis. Researchers have found that women who report a history of childhood maltreatment experienced a variety of health concerns, including nightmares, sleeping problems, frequent tiredness, back, chest or face pain, headaches, genital or pelvic pain and discharge, problems urinating, binge eating, vomiting, loss of appetite, stomach pain, diarrhea or constipation (often irritable bowel syndrome), frequent or serious bruises, choking sensation, shortness of breath fibromyalgia, and chronic fatigue syndrome (Coffey, Leitenberg, Henning, Turner, & Bennett, 1996; Dube et al., 2005 McCauley, Kearn, Kolodner, et al., 1997; Van Houdenhove, Neerinckx, Lysen, et al., 2001; Boisset-Piolo, Esdaile, & Fitzcharles, 1995; Drossman et al., 1990).

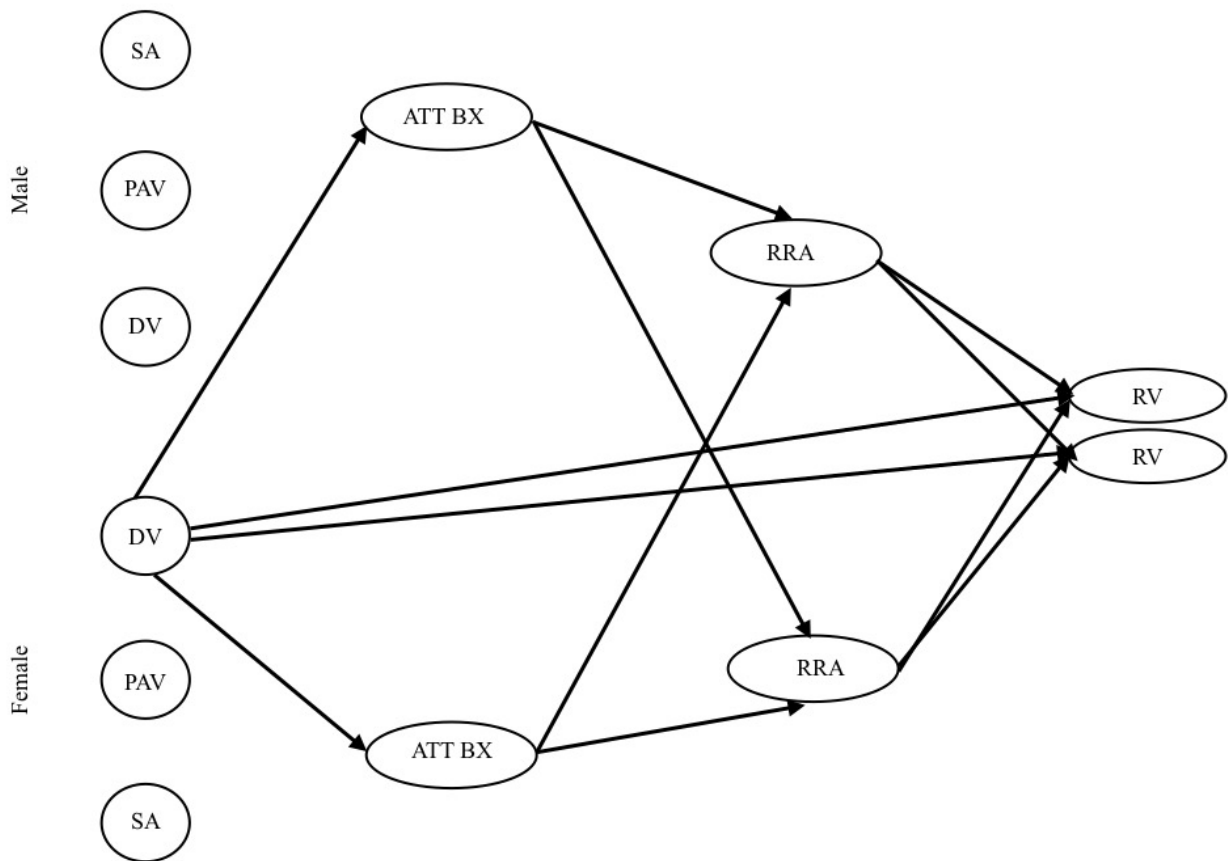
Another common physical health effect for CSA survivors is sexual dysfunction; it is estimated up to 82% of this population struggles in this way (Douglas, Matson, & Hunter, 1989; Herman, 1981; Ahmad, 2006; Pulverman, Lorenz, & Meston, 2015). Often CSA survivors wrestle with the desire to engage in romantic relationships even though they face fears of closeness and an inability to trust themselves (Alexander, 1992; Browne & Finkelhor, 1986). Also, sexual and emotional intimacy can trigger flashbacks and somatic memories, re-traumatizing the survivor (Finkelhor & Browne, 1985; Kendall-Tackett, Williams, & Finkelhor, 1993; Kinzl, Traweger, & Biebl, 1995; Pulverman, Lorenz, & Meston, 2015). These findings

point to higher levels of sexual dissatisfaction, contributing to higher rates of separation and divorce (Browne & Finkelhor, 1986; Courtois, 1988; Stephenson, Pulver, & Meston, 2014).

There is growing research on the neurobiological effects of CM as well. In a morphometric—a type of tissues sampling—analysis, among subjects with high abuse scores, Dannlowski et al. (2012) found heightened amygdala responsiveness to threat-related facial expressions, and reductions in gray matter volume in the hippocampus, insula, orbitofrontal cortex, anterior cingulate gyrus, and caudate. This suggests CM is related to marked functional and structural changes in the brain during adulthood. These are similar findings to the depression and PTSD neuroimaging literature, which suggests that CM has a similar impact on the brain as emotional disorders. Also, CM survivors are sick more often and have higher health care utilization (Felitti, 1991).

Appendix B: Figures and Tables

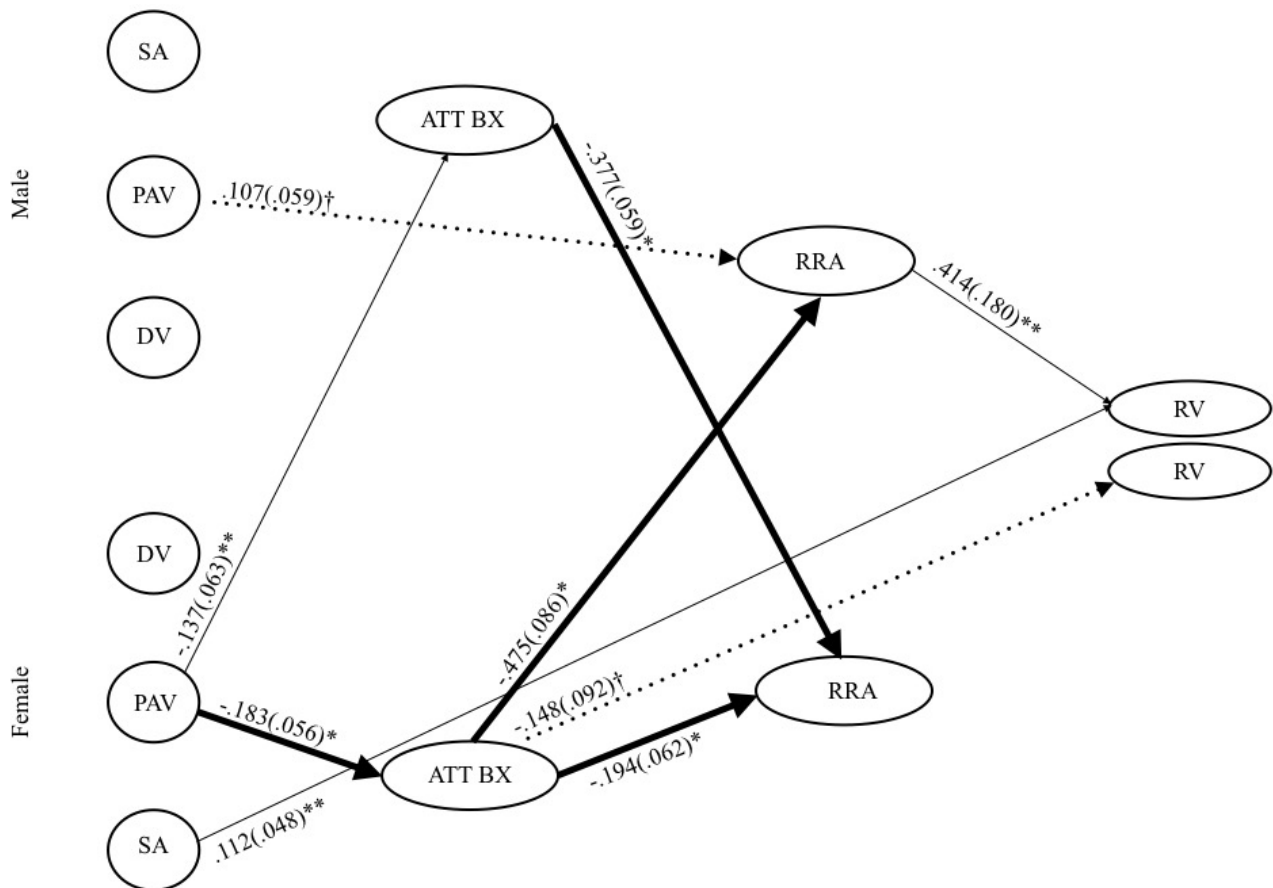
Figure 1. Hypothesized Model



Hypothesized SEM Model- Paths would be expected from each predictor.

Note. SA=Sexual Abuse, PAV=Physical Abuse and Total In-home Violence, DV= Witnessing Parental Domestic Violence  
 ATT BX= Attachment Behaviors, RRA= Romantic Relational Aggression, RV= Relational Violence

Figure 2. Results SEM Model



Final SEM Results

Note. Standardized coefficients (Standard Errors)

\*  $p < .01$  (bolded line); \*\*  $p < .05$  (thin line); †  $p < .10$  (broken line)

SA=Sexual Abuse, PAV=Physical Abuse and Total In-home Violence, DV= Witnessing Parental Domestic Violence

ATT BX= Attachment Behaviors, RRA= Romantic Relational Aggression, RV= Relational Violence

Table 1. Factor Loadings

Table 1 <i>Standardized Factor Loadings (and Standard Errors) for Measurement Model</i>		
	<b>Male</b>	<b>Female</b>
<u>Attachment Behaviors (*reverse coded)</u>		
I am rarely available to my partner. *	.530(.033)	.514(.032)
It is hard for my partner to get my attention.*	.525(.033)	.446(.034)
I listen when my partner shares her/his deepest feelings.	.463(.035)	.567(.030)
It is hard for my partner to confide in me. *	.707(.027)	.751(.024)
I struggle to feel close and engaged in our relationship. *	.738(.026)	.766(.024)
<u>Romantic Relational Aggression: My partner has...</u>		
threatened to end our relationship in order to get me to do what he/she wanted.	.581(.029)	.761(.025)
gone “behind my back” and shared private information about me with other people.	.485(.031)	.651(.023)
given me the silent treatment or “cold shoulder” when I hurt his/her feelings or made him/her angry in some way.	.592(.033)	.463(.032)
When...been mad at me, he/she has recruited other people to “take sides” with him/her and get them upset with me too.	.769(.024)	.619(.027)
intentionally ignored me until I give into his/her way about something.	.669(.028)	.604(.027)
withheld physical affection from me when he/she was angry with me.	.677(.028)	.808(.022)
spread rumors or negative information about me to be mean.	.522(.034)	.497(.031)
<u>Relational Violence: My partner...</u>		
threw something at me that could hurt.	.730(.033)	.797(.027)
pushed or shoved me.	.734(.034)	.744(.030)
punched or hit me with something that could hurt.	.773(.030)	.845(.022)
<i>Note.</i> Full Model Fit: $\chi^2(495)=871.103$ ; CFI=.96; TLI=.95; RMSEA= .03; SRMR=.05		

Table 2. Correlations

Table 2 Bivariate Correlations of Latent Variables												
	1	2	3	4	5	6	7	8	9	10	11	12
1. MRV	1.000											
2. MRA	.370*	1.000										
3. MAT	-.159*	-.303*	1.000									
4.M DV	.011	.025	-.091	1.000								
5. MPA	.029	.144*	-.117**	.323*	1.000							
6. MSA	.021	.059	-.060	.137*	.122*	1.000						
7. FRV	.719*	.264*	-.233*	.063	.090**	.095*	1.000					
8. FRA	.173*	.672*	-.488*	.071	.100**	.097*	.308*	1.000				
9. FAT	-.260*	-.508*	.561*	-.097†	-.104†	-.102**	-.269*	-.412*	1.000			
10. FDV	.003	.107**	-.074	.055	-.090	.043	.070	.042	-.082†	1.000		
11. FPA	.037	.146*	-.161*	.129**	.061	.042	.031**	.138*	-.218*	.411*	1.000	
12. FSA	.124*	.068†	-.006	.061	.069†	.120*	.041	.022	-.081**	.126*	.256*	1

*Note.* M= Male; F= Female; RV= Relational Violence; RA=Romantic Relational Aggression;  
 AT=Adult Attachment Behaviors; DV= Witnessing Parental Domestic Violence;  
 PA= Physical Abuse and Total In-Home Violence; SA=Sexual Abuse.

†p<.10; \*\*p<.05;\*p<.01

Table 3. Descriptive Statistics of Latent Variables

Table 3 Frequencies of Categorical Latent Variable Indicators, Means, and Standard Deviations															
	<i>n</i>	0	%	1	%	2	%	3	%	4	%	5	%	<i>M</i>	<i>SD</i>
<u>Witnessing Parental Domestic Violence (DV)<sup>a</sup></u>															
Male															
How often was your father violent toward your mother?	837			500	59.7	201	24.0	102	12.2	25	3.0	9	1.1	1.62	0.89
How often was your mother violent toward your father?	838			574	68.5	194	23.3	53	6.3	14	11.7	3	0.4	1.42	0.72
Female															
How often was your father violent toward your mother?	854			510	59.7	165	19.3	103	12.1	47	5.5	29	3.4	1.74	1.08
How often was your mother violent toward your father?	852			587	68.9	169	19.8	68	8.0	22	2.6	6	0.7	1.46	0.81
<u>Physical Abuse &amp; Total In-Home Violence (PA)<sup>b</sup></u>															
Male															
How violent toward you was the person you selected in the previous questions?	845	148	17.5			58	6.9	245	29.0	383	45.3	11	0.7	2.1	1.17
How would you rate the general violence level in your home?	1639			12	0.8	51	3.1	216	13.0	507	30.6	852	51.4	1.7	0.87
Female															
How violent toward you was the person you selected in the previous questions?	857	164	19.1			78	9.1	244	28.5	350	40.8	21	1.3	2.16	1.27
How would you rate the general violence level in your home?	1657			37	2.2	85	5.1	230	13.9	448	27.0	857	51.7	1.79	1.01
<u>Sexual Abuse (SA)</u>															
Male															
How often was the person you selected in the previous question sexually abusive toward you? <sup>b</sup>	1652	1602	96.6			4	0.2	14	0.8	37	2.2	1	0.01	0.08	0.46
How often was someone outside your family (not your partner) sexually abusive toward you? <sup>a</sup>	1636			1532	93.6	80	4.9	17	1.0	7	0.4	0	0	1.08	0.35
Female															
How often was the person you selected in the previous question sexually abusive toward you? <sup>b</sup>	1658	1485	89.6			18	1.1	38	2.3	107	6.5	10	0.6	0.27	0.85
How often was someone outside your family (not your partner) sexually abusive toward you? <sup>a</sup>	1658			1362	82.2	205	12.4	72	4.3	12	0.7	6	0.4	1.25	0.60

<i>Table 3. (Cont.)</i>	<i>n</i>	0%	1	%	2	%	3	%	4	%	5	%	<i>M</i>	<i>SD</i>
<u>Attachment Behaviors<sup>d</sup> (*reverse coded)</u>														
Male														
I am rarely available to my partner. *	1305		8	0.6	26	2.0	88	6.7	633	58.5	550	42.1	4.3	0.73
It is hard for my partner to get my attention.*	1305		3	0.2	31	2.4	121	9.3	631	48.4	519	39.8	4.25	0.74
I listen when my partner shares her/his deepest feelings.	1304		726	55.7	527	40.4	43	3.3	6	0.5	2	0.2	1.49	0.60
It is hard for my partner to confide in me. *	1303		14	1.1	80	6.1	135	10.4	545	41.8	529	40.6	4.15	0.91
I struggle to feel close and engaged in our relationship. *	1301		21	1.6	104	8.0	150	11.5	543	41.7	483	37.1	4.05	0.98
Female														
I am rarely available to my partner. *	1320		8	0.6	16	1.2	63	4.8	498	37.7	735	55.7	4.47	0.70
It is hard for my partner to get my attention.*	1317		4	0.3	20	1.5	70	5.3	535	40.6	688	52.2	4.43	0.69
I listen when my partner shares her/his deepest feelings.	1319		865	65.6	420	31.8	30	2.3	3	0.2	1	0.1	1.37	0.55
It is hard for my partner to confide in me. *	1317		12	0.9	70	5.3	105	8.0	506	38.4	624	47.4	4.26	0.88
I struggle to feel close and engaged in our relationship. *	1319		35	2.7	129	9.8	104	7.9	485	36.8	566	42.9	4.08	1.07
<i>Table 3. (Cont.)</i>	<i>n</i>	0%	1	%	2	%	3	%	4	%	5	%	<i>M</i>	<i>SD</i>
<u>Romantic Relational Aggression: My partner has...<sup>a</sup></u>														
Male														
threatened to end our relationship in order to get me to do what he/she wanted.	1637		1244	76.0	261	15.9	98	6.0	21	1.3	13	0.8	1.35	0.72
gone "behind my back" and shared private information about me with other people.	1635		1307	79.9	229	14.0	70	4.3	19	1.2	10	0.6	1.29	0.69
given me the silent treatment or "cold shoulder" when I hurt his/her feelings or made him/her angry in some way.	1043		325	31.2	366	35.1	255	24.4	72	6.9	25	2.4	2.14	1.01
When...been mad at me, he/she has recruited other people to "take sides" with him/her and get them upset with me too.	1043		815	78.1	143	13.7	62	5.9	13	1.2	10	0.6	1.52	0.83
intentionally ignored me until I give into his/her way about something.	1043		675	40.7	229	22.0	108	10.4	23	2.2	8	0.8	1.11	0.43
withheld physical affection from me when he/she was angry with me.	1040		397	38.2	280	26.9	227	21.8	94	9.0	42	4.0	1.33	0.73
spread rumors or negative information about me to be mean.	1041		962	92.4	52	5.0	20	1.9	5	0.5	2	0.2	2.14	1.14
Female														
threatened to end our relationship in order to get me to do what he/she wanted.	1656		1352	81.6	214	12.9	72	4.3	8	0.5	10	0.6	1.25	0.62
gone "behind my back" and shared private information about me with other people.	1656		1377	83.2	197	11.9	63	3.8	15	0.9	4	0.2	1.23	0.58
given me the silent treatment or "cold shoulder" when I hurt his/her feelings or made him/her angry in some way.	1050		470	44.8	324	30.9	187	17.8	50	4.8	19	1.8	1.88	0.98
When...been mad at me, he/she has recruited other people to "take sides" with him/her and get them upset with me too.	1051		919	87.4	86	8.2	31	2.9	11	0.7	4	0.4	1.36	0.75
intentionally ignored me until I give into his/her way about something.	1048		800	76.3	156	14.9	65	6.2	19	1.8	8	0.8	1.06	0.28
withheld physical affection from me when he/she was angry with me.	1049		609	58.1	249	23.7	134	12.8	36	3.4	21	2.0	1.19	0.57
spread rumors or negative information about me to be mean.	1050		1004	95.6	33	3.1	13	1.2	0	0	0	0	1.68	0.96



<i>Table 3. (Cont.)</i>	<i>n</i>	<i>0</i>	<i>%</i>	<i>1</i>	<i>%</i>	<i>2</i>	<i>%</i>	<i>3</i>	<i>%</i>	<i>4</i>	<i>%</i>	<i>5 (+)</i>	<i>%</i>	<i>M</i>	<i>SD</i>
<b>Relational Violence: My partner...<sup>c</sup></b>															
<b>Male</b>															
threw something at me that could hurt.	1637	949	57.8	581	35.5	75	4.6	22	1.3	9	0.5	4 (+)	0.2	0.52	0.74
pushed or shoved me.	1042	901	86.5	39	3.7	43	4.1	29	2.8	18	1.7	7 (+)	0.7	0.34	0.99
punched or hit me with something that could hurt.	1041	929	89.2	34	3.3	38	3.7	17	1.6	8	0.8	15(+)	1.5	0.27	0.93
<b>Female</b>															
threw something at me that could hurt.	1656	1004	60.6	514	31.0	113	6.8	17	1.0	7	0.4	1 (+)	0.1	0.50	0.72
pushed or shoved me.	1051	942	89.6	32	3.0	42	4.0	15	1.4	12	1.1	8 (+)	0.8	0.24	0.81
punched or hit me with something that could hurt.	1051	1022	97.2	10	1.0	8	0.8	4	0.4	5	0.5	2 (+)	0.1	0.06	0.44
<i>Note.</i> <sup>a</sup> 1=Never, 2=Rarely, 3=Sometimes, 4=Often, 5=Very Often;															
<sup>b</sup> 0=Does Not Apply, 1=Never, 2=Rarely, 3= Sometimes, 4=Often, 5=Very Often;															
<sup>c</sup> 0= This Never Happen, 1=Not in the past year, but happened before, 2=Once in past year, 3=Twice in past year, 4=3-5 Times past year, 5(+)= 6 or more times in the past year;															
<sup>d</sup> 1= Never True, 2=Rarely True, 3= Sometimes True, 4= Usually True, 5= Always True.															