

Emotion Dysregulation as a Mediator Between Insecure Attachment and Psychological
Aggression in Couples

Rachel E. Cheche

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Jeffrey B. Jackson, Chair
Mariana K. Falconier
Bertranna A. Muruthi

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Keywords: emotion dysregulation, adult attachment, psychological aggression, couples

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ABSTRACT

According to adult attachment theory (Hazan & Shaver, 1987), people's levels of insecure attachment—both anxious and avoidant—are associated with their abilities to regulate emotions in a relational context. This study is the first to test emotion dysregulation as a mediator for the relationships between levels of insecure attachment and psychological aggression using dyadic data. Cross-sectional, self-report data were collected from 110 couples presenting for couple or family therapy at an outpatient clinic. Data were analyzed using path analysis informed by the Actor-Partner Interdependence Mediation Model (APIMeM; Ledermann, Macho & Kenny, 2011). While the findings did not support a mediating role of emotion dysregulation between levels of anxious or avoidant attachment and psychological aggression, results indicated direct partner effects between people's own levels of anxious attachment and their partners' psychological aggression. Higher levels of anxious attachment were associated with higher levels of emotion dysregulation in both males and females; higher levels of avoidant attachment were only associated with higher levels of emotions dysregulation in females. Limitations and clinical implications for couple therapists are discussed.

Keywords: emotion dysregulation, adult attachment, psychological aggression, couples

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GENERAL AUDIENCE ABSTRACT

People have characteristic ways of interacting with their partners when experiencing distressing emotions—described as attachment dimensions—depending on factors like their comfort with vulnerability, self-worth, and confidence in their partners to provide support. Difficulties managing distressing emotions have been linked with psychological aggression between partners. This study examined if and how much difficulties managing emotions explain the relationships between people's attachment dimensions and psychological aggression between partners. Although difficulties managing emotions did not explain this relationship, they were related to people's own attachment orientations. People who were preoccupied with seeking reassurance from their partners, and who had low self-concept, were more likely to experience psychological aggression from their partners. Knowing that this way of interacting with partners is linked with increased likelihood of psychological aggression, couple therapists can work with partners to learn strategies to better self-regulate their own emotions and manage reactivity to each other to decrease psychological aggression.

Keywords: emotion dysregulation, adult attachment, psychological aggression, couples

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Table of Contents

Abstract	ii
General Audience Abstract	iii
Acknowledgements	iv
Table of Contents	v
List of Figures	viii
List of Tables	ix
CHAPTER I: INTRODUCTION	1
The Problem and its Setting	1
Significance.....	5
Rationale	5
Theoretical Framework	6
Purpose of the Study	8
CHAPTER II: LITERATURE REVIEW	9
Adult Attachment Theory	9
Emotion Dysregulation	11
Emotion Dysregulation and Insecure Attachment	12
Psychological Aggression	17
Insecure Attachment and Psychological Aggression	21
Insecure Attachment, Emotion Dysregulation, and Psychological Aggression	24
Hypotheses	25
CHAPTER III: METHODS	27
Design of the Study	27

Participants	28
Procedure	30
Measures	31
Insecure Attachment	31
Anxious Attachment Subscale	31
Avoidant Attachment Subscale	32
Emotion Dysregulation	32
Psychological Aggression	33
Analytic Strategy	35
Multivariate Analysis	35
Covariance	36
Control Variables	36
Multivariate Normality	37
Model Fit	39
Indirect Effects and Path Difference Tests	40
CHAPTER IV: RESULTS	40
Variable Characteristics	40
Descriptive Statistics	40
Model 1: Anxious Attachment and Emotion Dysregulation as Predictors of Psychological Aggression	41
Model 2: Avoidant Attachment and Emotion Dysregulation as Predictors of Psychological Aggression	46

CHAPTER V: DISCUSSION	49
Implications	54
Limitations and Future Directions	57
Conclusion	61
References	62
Appendix A: Instruments	79
Experiences in Close Relationships Scale	79
Difficulties in Emotion Regulation Scale	80
Revised Conflict Tactics Scale – Psychological Aggression Scale	81
Appendix B: Histograms	82
Distribution of Anxious Attachment for Males and Females	82
Distribution of Avoidant Attachment for Males and Females	83
Distribution of Emotion Dysregulation for Males and Females	84
Distribution of Psychological Aggression for Males and Females	85
Distribution of Relationship Distress for Males and Females	86
Appendix C: Permissions for Use of Copyrighted Materials	87
Experiences in Close Relationships Scale	87
Revised Conflict Tactics Scale – Psychological Aggression Scale	88

List of Figures

Figure 1: Conceptual Model for Anxious Attachment.....	26
Figure 2: Conceptual Model for Avoidant Attachment.....	27
Figure 3: Model 1: Standardized Results.....	43
Figure 4: Model 2: Standardized Results.....	46

List of Tables

Table 1: Correlations between Demographic Variables and Main Variables	38
Table 2: <i>T</i> -tests for Paired Samples.....	41
Table 3: Correlations and Descriptive Statistics.....	42
Table 4: Path Analysis for Model 1: Anxious Attachment and Emotion Dysregulation as Predictors of Psychological Aggression.....	44
Table 5: Effects Decomposition for Model 1: Emotion Dysregulation as a Mediator of Anxious Attachment and Psychological Aggression.....	45
Table 6: Path Analysis for Model 2: Avoidant Attachment and Emotion Dysregulation as Predictors of Psychological Aggression.....	47
Table 7: Effects Decomposition for Model 2: Emotion Dysregulation as a Mediator of Avoidant Attachment and Psychological Aggression.....	48

Chapter I: Introduction

The Problem and its Setting

Recent research indicates that emotion dysregulation is associated with higher rates of psychological aggression between partners, as emotion dysregulation involves having difficulties using skills that allow people to respond in non-aggressive ways when upset (Dutton & White, 2012; Shorey, McNulty, Moore & Stuart, 2015). Attachment researchers propose that people first learn the skills to regulate emotions through relationships with early attachment figures; these childhood experiences then influence their abilities to emotionally-regulate in the context of their adult relationships as well (Bowlby, 1988). Indeed, people with insecure attachment, whose previous attachment relationship experiences have led to a view of either the self as unworthy of love or others as emotionally unavailable—or both—are more likely to experience emotion dysregulation (Karakurt, Keiley & Posuda, 2013). In this study, emotion dysregulation is conceptualized as difficulties in one or more of the various dimensions of emotion regulation—awareness, understanding, and acceptance of emotions, as well as the ability to modify intensity of emotion and act in goal-directed ways when experiencing strong emotions—during an attachment-relevant situation like conflict with a partner (Gratz & Roemer, 2004). Given that insecure attachment is associated with emotion dysregulation in individuals, and emotion dysregulation has been shown to increase the risk for psychological aggression towards a partner, this study will examine the mediating role emotion dysregulation plays in the relationship between insecure attachment and psychological aggression in couples.

Recently, more support has been given to emotion dysregulation as an explanatory variable for the development and maintenance of various types of mental health disorders, including depression, anxiety, and substance abuse disorders, among others (Mondavia,

Robinson, Bradley, Ressler & Powers, 2016). It appears likely that emotion regulation—particularly the ability to regulate negative emotions and, in turn, increase flexibility in behavior—is an important aspect of healthy functioning for individuals (Hofmann, Sawyer, Fang & Asnaani, 2012). Emotion dysregulation has also been shown to mediate the relationship between low self-esteem and verbal aggression (Garofalo, Holden, Zeigler-Hill & Velotti, 2016). Given that low self-esteem is linked to insecure attachment (Passanisi, Gervasi, Madonia, Giovanni & Greco, 2015), emotion dysregulation may be a pathway through which people with insecure attachment become verbally aggressive.

There has also been increased interest in emotion dysregulation as a couple process, including emerging research about codysregulation, in which partners' emotions intensify and lead to emotional instability for both during an interaction (Reed, Barnard & Butler, 2015). Indeed, partners' moods, emotions, and even attachment dimensions are bidirectionally linked (Hudson, Fraley, Brumbaugh & Vicary, 2014; Schoebi, 2008). However, less is known about the regulatory processes, both within and between members of a couple, mediating psychological aggression. Therefore, more research is needed to understand the explanatory role emotion dysregulation may also have for psychological aggression in the context of romantic attachment relationships.

Psychological aggression, defined as verbal and nonverbal communications between partners intended to produce psychological pain, is a common issue in romantic relationships (Murphy & Cascardi, 1999; Vissing, Straus, Gelles & Harrop, 1991; Dumas, Pearson, Elgin & McKinley, 2008). Approximately 14% of women and 20% of men report experiencing psychological aggression by a partner within the previous year and the rates for psychological aggression are similar across clinical and community samples (Black et al., 2011; Lawrence,

Yoon, Langer & Ro, 2009). This high frequency is concerning given that psychological aggression is associated with negative mental health outcomes for individuals, such as increased risk for anxiety and depression, as well as negative relationship outcomes, such as decreases in satisfaction, stability, and emotional closeness between partners (Taft et al., 2006; Follingstad, 2009). Psychological aggression is also a risk factor for physical aggression in a relationship (Stith, Smith, Penn, Ward & Tritt, 2004).

Due to the detrimental effects of psychological aggression on the individuals in a relationship, as well as the relationship itself, it is beneficial to increase our understanding of factors, such as insecure attachment and emotion dysregulation, that have been implicated as predictor variables for psychological aggression (Taft et al., 2006). In this study, insecure attachment is conceptualized according to Hazan and Shaver's identified dimensions of insecure attachment within the context of romantic relationships, based on view of self and view of others: anxious attachment and avoidant attachment (1987). Anxious attachment is associated with perceiving the self as unworthy of love and being preoccupied with fear of abandonment by a partner. Avoidant attachment is associated with distrust in the dependability of others, as well as discomfort with closeness in relationships.

Hazan and Shaver's insecure adult attachment dimensions have been linked to characteristic dysfunctional emotion regulation strategies when people experience partner-related distress, such as rumination for those with anxious attachment and suppression for those with avoidant attachment (Shaver & Mikulincer, 2002). These maladaptive regulation strategies can, in turn, lead to the emotion dysregulation—for example, difficulty controlling impulses and a lack of clarity about emotional experience for men, plus difficulties in engaging in goal-directed behavior and limited emotion regulation strategies in women—that has been linked to using

psychological aggression against a partner (Karakurt, Keiley & Posuda, 2013; Bliton et al., 2016). In addition to characteristic emotion regulation strategies, people with insecure attachment also have characteristic ways of being psychologically aggressive towards their partners; for example, higher levels of jealousy and attempts to restrict partners' social activities are associated with anxious attachment, and behaviors that aim to decrease partners' self-esteem and relationship security are associated with avoidant attachment (McDermott, Cheng, Lopez, McKelvey & Schneider-Bateman, 2016).

Although research findings support associations between insecure attachment, emotion dysregulation, and psychological aggression in couples, there has been insignificant testing of a model incorporating the three constructs together with emotion dysregulation as a mediating factor. For example, a study that tested a model in which emotion dysregulation, as well as threatening and controlling behaviors, mediate the relationship between insecure attachment and psychological aggression proved to be inconclusive. Riebel (2015) found that threatening and controlling behaviors, but not emotion dysregulation, mediated the relationship between insecure attachment and psychological aggression in a sample of mixed-gender undergraduate students. Given Riebel's counterintuitive findings in light of previously supported connections between insecure attachment, emotion dysregulation, and psychological aggression, more research is needed to test a similar mediational model. This study will approach testing the mediational model of emotion dysregulation in a different way, by conceptualizing emotion dysregulation as a multi-dimensional construct and utilizing data from both partners—dyadic data—instead of individual data.

Significance

The findings of this study could benefit society at large, considering that about half of men and women in the United States report psychological aggression by a partner in their lifetime (Black et al., 2011). The demand for evidence-based practices in therapy justifies the need for research that investigates whether and to what degree a process such as emotion dysregulation mediates the relationship between insecure attachment and psychological aggression in couples presenting for therapy. If emotion dysregulation is found to be a significant mediating factor, the outcome could provide a foundation for future clinical research identifying effective interventions to improve emotion regulation skills for partners through therapy. This increased insight into the processes involved in couple conflict, like insecure attachment and emotion dysregulation, may have implications for preventing psychological aggression between partners during conflict and decreasing their exposure to its negative health, mental health, and relationship outcomes.

Rationale

This study employs a quantitative design to test a mediational model of emotion dysregulation on the relationship between insecure attachment—both anxious attachment and avoidant attachment—and psychological aggression in couples. By including dyadic data in the mediational model, the results provide a comprehensive map for how Partner A's attachment dimensions and level of emotion dysregulation impact both Partner A's own variables (actor effects), as well as Partner B's variables (partner effects). The necessary interdependence of dyadic data is controlled for by utilizing the *actor-partner interdependence mediational model* [APIMeM], which also allows for the modeling of complex relationships among variables, including actor effects, partner effects, and mediational effects (Parkinson & Manstead, 2015).

Furthermore, this study uses self-report and partner-report data from a clinical sample of couples who have presented for therapy at an outpatient training. Given that the sample includes couples seeking couple therapy or family therapy, it is logical to assume that there will be differences among individuals for the study constructs of insecure attachment, emotion dysregulation, and psychological aggression, providing more variability for statistical analysis. By using a clinical sample of couples, it increases the likelihood that the observed results could pertain to other couples presenting for therapy as well.

Theoretical Framework

Given its comprehensive and empirically supported descriptions of adult romantic relationship behavior, adult attachment theory continues to influence research about both emotion regulation and psychological aggression in couples (Doumas et al., 2008; Pascuzzo, Cyr & Moss, 2013). For this study, attachment theory provides a framework to understand how and why emotion dysregulation may be a mediating factor for the relationship between insecure attachment orientations and psychological aggression. Researchers have used attachment theory to describe and explain the behaviors people engage in when experiencing distress related to their partners, including attempts to regulate emotion, by integrating research on childhood attachment and research on romantic relationship behavior in adults (Mikulincer & Shaver, 2008).

In attachment theory, the attachment system is an instinctual set of behaviors in infants that is activated when children experience distress in order to elicit comforting responses from a caregiver (Bowlby, 1969). Interactions with childhood caregivers through the attachment system effect people's beliefs and expectations about close relationships, leading to "internal working models" about worthiness of self and dependability of others that influence their behavior in

future relationships (Bowlby, 1973, 1980). Depending on their caregivers' abilities to respond to their needs and help them emotionally-regulate, people develop secure or insecure attachment (Bowlby, 1988; Ainsworth, Blehar, Waters & Wall, 1978). Between childhood and adulthood, people's most important attachment relationship typically shifts from caregiver to partner and the attachment developed during childhood to their caregivers impacts people's relationships with their partners (Mikulincer & Shaver, 2008). For example, people with secure attachment assume they will experience support and acceptance in their partner relationships; people with insecure attachment assume they will experience rejection or criticism—or both—in their partner relationships (Collins & Read, 1990). There may be some variability in attachment style from childhood to adulthood, due to the experience of significant life events with potentially damaging consequences, like the death of a caregiver or parental divorce, or reparative consequences, such as adoption into a more supportive caregiving environment (Waters, Merrick, Treboux, Crowell & Albersheim, 2000; Egeland & Sroufe, 1981). However, secure or insecure attachment styles tend to persist from childhood to adulthood, as well as form default ways for people to regulate their emotions and interact with significant others, including tendencies to engage in certain types of psychological aggression (Hazan & Shaver, 1994; Shaver & Mikulincer, 2002; McDermott et al., 2016).

A person's level of anxious attachment or avoidant attachment is associated with his or her ability to self-regulate emotions when experiencing distress—particularly distress in the context of an attachment relationship with a partner (Shaver & Mikulincer, 2002). The current study synthesizes previous findings that indicate associations between anxious or avoidant attachment and emotion dysregulation exist, as well as associations between emotion dysregulation and the tendencies to use or experience psychological aggression with a partner

(Karakurt et al., 2013). The models tested in the current study are based in the assumptions of adult attachment theory, including the influence of attachment orientation on both a person's emotion regulation abilities and the predictable ways a person behaves during relationship distress (Mikulincer & Shaver, 2008; Collins & Read, 1990). From an attachment perspective, psychological aggression may be viewed as a way for someone with a high level of anxious attachment to get a response from their partner or as a way for someone with a high level of avoidant attachment to create distance between themselves and a partner (Brennan, Clark & Shaver, 1998; Mikulincer & Florian, 1998).

Purpose of the Study

The purpose of this study is to examine whether emotion dysregulation mediates the relationships between dimensions of insecure attachment—both anxious attachment and avoidant attachment—and psychological aggression in couples, and, if so, to what extent emotion dysregulation explains the associations among dimensions of insecure attachment and psychological aggression.

Research aims:

1. What is the relationship between each partner's levels of anxious attachment and avoidant attachment and a) their own psychological aggression (direct actor effects) and b) their partner's psychological aggression (direct partner effects)?
2. To what extent does emotion dysregulation mediate the relationship between each partner's levels of anxious attachment and avoidant attachment and a) their own psychological aggression (indirect actor effects) and b) their partner's psychological aggression (indirect partner effects)?

Chapter II: Literature Review

Through the theoretical framework of attachment theory, this literature review includes current research on the separate constructs of emotion dysregulation and psychological aggression, as well as findings about the relationships between these constructs. Finally, it reviews the limited body of research investigating insecure attachment, emotion dysregulation, and psychological aggression together in the same model, particularly the research that examines emotion dysregulation as a mediator.

Adult Attachment Theory

The secure or insecure attachment that a person develops towards their childhood caregivers has been shown to influence the attachment security of their adult relationships as well (Hazan & Shaver, 1994). Depending on the internal working models of self and other developed through interactions with childhood caregivers, people's secure or insecure attachments have been shown to impact their beliefs about both their own worthiness of love, as well as the reliability of others to provide emotional support (Bowlby, 1973, 1980). The processes of developing attachment and learning emotion regulation skills are also connected; for example, the attachment system is activated when children experience distress in order to prompt their caregivers to provide comfort and protection, thus down-regulating their distress (Bowlby, 1969). These lessons learned about regulating oneself through contact with attachment figures often persist into adulthood; people with secure attachment assume they can seek emotional support through their partner relationships, while people with insecure attachment often find unhealthy ways to regulate their negative emotions (Brennan & Shaver, 1995).

Differences in adult attachment are best understood and measured as dimensions (Fraley, Hudson, Heffernan & Segal, 2015; Collins & Read, 1990). People with insecure attachment

have higher levels of *anxious* attachment or *avoidant* attachment, or both, in their relationship with their partner, whereas people with secure attachment fall on the lower ends of the spectrums for both dimensions (Fraley et al., 2015). Although the needs for security and distress relief from an attachment relationship are common to the majority of humans, people with secure attachment and insecure attachment have different strategies to fulfill these needs (Bowlby, 1982; Mikulincer & Shaver, 2008). Based on these strategies for seeking security through the attachment system, different ways of interacting with attachment figures during times of distress characterize secure, anxious, and avoidant attachment (Ainsworth et al., 1978; Mikulincer & Shaver, 2005).

A large body of research supports attachment researchers Mikulincer and Shaver's (2008) descriptions of the typical behaviors associated with insecure attachment in partner relationships (Fraley et al., 2015; Collins & Read, 1990). People with anxious attachment find fault in themselves and fear rejection by their partners; they are also highly aware of threats to the partner relationship, such as conflict or perceived abandonment (Collins & Read, 1990). To decrease distress, people with anxious attachment often depend on reassurance from their partners. For instance, partner A may angrily demand a response from partner B and partner B might feel criticized or overwhelmed (Mikulincer & Shaver, 2008). People with avoidant attachment do not expect that others can help with their distress and are uncomfortable with vulnerability, both in themselves and their partners. They are highly aware of threats to their independence, which protects them from getting hurt by a partner (Collins & Read, 1990). To decrease distress, people with avoidant attachment suppress negative feelings, such as sadness and hurt. Partner A with avoidant attachment may withdraw or shut down in response to partner B and partner B might feel rejected or unloved (Mikulincer & Shaver, 2008).

The attachment system described above is connected to emotion regulation in the brain; indeed, the areas of the brain that activate for the maintenance of attachment relationships appear to be the same areas that activate for emotion regulation (Coan, Schaefer & Davidson, 2006). The connection in the brain between attachment and emotion regulation is consistent with Bowlby's theory of attachment in which a caregiver serves to decrease distress, provide felt security, and, especially in the context of our ancestors, offer physical protection to a child from dangers in the world (Bowlby, 1980). Learning how to regulate negative emotions through seeking proximity to and support from an attachment figure as a child helps develop the ability to regulate emotions as an adult (Bowlby, 1988). Therefore, it is logical to conclude that the development of insecure attachment may increase the likelihood of emotion dysregulation.

Emotion Dysregulation

Emotion dysregulation can be conceptualized as difficulties in one or more of the various dimensions of emotion regulation—awareness, understanding, and acceptance of emotions, as well as the ability to modify intensity of emotion and act in goal-directed ways when experiencing strong emotions—during distress (Gratz & Roemer, 2004). This study considers emotion dysregulation during attachment-relevant situations, like conflict with a partner. However, before reviewing the findings about emotion dysregulation in the context of couple relationships, it is helpful to investigate the current research on individual emotion regulation.

In individuals, emotions are shifts in subjective experience, behavior, and physiology through time; they can be helpful by guiding a person's decision-making processes and determining socially appropriate responses to situations (Gross, 2015). However, emotional experience can also be maladaptive when the intensity, duration, frequency, or type of emotion is inappropriate for the context (Gross & Jazaieri, 2014). These maladaptive responses activate the

process of emotion regulation to manage the intensity, duration, frequency, or type of emotion; emotion regulation strategies include the following: situation selection (e.g. in a partner relationship, choosing to engage in or avoid a certain circumstance that may escalate to conflict); situation modification (e.g. changing the situation to lessen the probability of an aggressive outburst); attentional deployment (e.g. paying attention to certain aspects of a situation and ignoring others); cognitive change (e.g. reappraisal, or reinterpretation, of the situation); and response modulation (e.g. suppressing the expression of certain emotional reactions; Gross, 2015; Goldin & Gross, 2010).

Emotion dysregulation can occur during a breakdown in any of the following processes: determining when an emotion requires regulation, choosing a regulation strategy, and implementing the emotion regulation strategy (Gross, 2015). Emotion dysregulation also involves a person experiencing limitations in the following dimensions of emotion regulation: acceptance of one's own negative emotions, engagement in goal-directed behavior when distressed, control over one's behavior when experiencing negative emotions, awareness of emotional responses, understanding of one's own emotions, and access to strategies to regulate emotion (Gratz & Roemer, 2004). A person who often experiences emotion dysregulation may be highly sensitive and feel emotions intensely, as well as take longer to return to a neutral emotional state (Bliton et al., 2016). Often, people tend to experience emotion dysregulation during situations, like conflict, that threaten the security of their attachment relationships (Mikulincer & Shaver, 2005).

Emotion Dysregulation and Insecure Attachment

Secure attachment to a partner increases a person's ability to regulate emotions when distressed, either by drawing upon memories of partner support or directly seeking out support

(Mikulincer & Shaver, 2012). Therefore, adults who are able to acknowledge distress and ask for help from their partners experience decreased distress (Collins & Read, 1990). For example, the availability of a partner during a distressing situation diminishes the activity of the neural networks used for responding to threats; this diminishing effect is strongest in highly satisfied couples (Coan et al., 2006).

Conversely, insecure attachment to a partner is linked to various defensive and potentially dysfunctional strategies to manage distress and the perceived absence of the partner as an attachment figure; hyper-activation of the attachment system characterizes anxious attachment and de-activation of the attachment system characterizes avoidant attachment (Shaver & Mikulincer, 2002). For people with anxious attachment, relationship conflict and distress threaten their sense of security and exacerbate their fears of rejection; in attempts to regulate their emotional distress, people with anxious attachment hyper-activate the attachment system using strategies such as clinging, controlling, and angrily insisting on a response from their partners (Brennan et al., 1998; Mikulincer & Shaver, 2005). For people with avoidant attachment, relationship conflict and distress threaten their sense of independence; in attempts to regulate their emotional distress, people with avoidant attachment de-activate the attachment system by using strategies such as suppressing attachment-related worries and downplaying the significance of the conflict (Mikulincer & Florian, 1998; Brennan et al., 1998). A person with anxious attachment may need reassurance of his or her partner's commitment through words and behavior to decrease distress, whereas a person with avoidant attachment may need support and cooperation from their partners in non-intrusive ways to decrease distress (Overall & Simpson, 2015).

Given that people with insecure attachment use dysfunctional emotion regulation strategies when distressed, it follows that insecure attachment is linked to emotion dysregulation (Karakurt et al., 2013). Emotion dysregulation in people with insecure attachment has been connected to destructive strategies to regulate emotion, such as alcohol abuse for people with anxious attachment and avoidant attachment and eating disorders for people with anxious attachment (Brennan & Shaver, 1995). Emotion dysregulation also occurs in different ways for people with anxious attachment and avoidant attachment, based on their tendencies to hyper-activate and de-activate the attachment system, respectively (Shaver & Mikulincer, 2002). For example, people with anxious attachment report higher levels of rumination about negative emotions, as well as stronger negative emotional responses (Mikulincer & Shaver, 2005). The rumination and strong negative emotional responses characteristic of people with anxious attachment can negatively influence their perception of partner actions (Mikulincer & Orbach, 1995). Conversely, people with avoidant attachment tend to suppress their needs for emotional support from an attachment figure; however, their defenses come down when cognitive energy is diverted away by increased external stressors (Mikulincer, Birnbaum, Woddis & Nachmias, 2000). Despite the attachment needs for support from others that surface when under duress, people with avoidant attachment doubt that support from their partner will help them to feel better (Mikulincer & Shaver, 2005) and achieve distance through distraction and attempts to hold attachment needs out of awareness (Fraley, Garner & Shaver, 2000).

There has been more research about how people regulate their emotions individually than research about emotion regulation during interactions; however, researchers are calling for further study into emotion regulation occurring between two people (Gross, 2015; Parkinson & Manstead, 2015). For example, emotion regulation occurs between partners in a process called

interpersonal regulation; partners can seek emotional support from each other to help regulate distressing emotions (Butler & Randall, 2013). Conversely, partners who are in conflict can also become locked in a negative cycle in which the partners' physiological stress responses and emotional responses become associated with each other, a process called *codysregulation* (Reed et al., 2015). People's experiences of interpersonal dysregulation, or codysregulation, in early attachment relationships influence their experiences of interpersonal dysregulation, or codysregulation, in their adult attachment relationships as well (Zaki & Williams, 2013). Insecure attachment is also associated with higher levels of emotional reactivity (Schoebi & Randall, 2015), which can prime partners to become locked in patterns of codysregulation. Although the current study is limited to self-report and cross-sectional measures, the research into codysregulation, which typically involves analysis of sequences of interactions between partners, offers insight into regulatory processes that may be related to attachment and emotion dysregulation in couples.

Codysregulation and conflict may also occur when people with anxious attachment and people with avoidant attachment hyper-activate and de-activate their attachment systems, respectively (Shaver & Mikulincer, 2002). People with insecure attachment, who have been shown to experience difficulties with emotion regulation (Mikulincer & Shaver, 2005), tend to manage negative affect during conflict in ways that create problems in their relationships. For example, people with avoidant attachment often lack awareness of their own anger and instead attribute hostility to their partners; their self-reports of feeling neutral have been shown to be incongruent with objective measurement of their high physiological arousal level (Mikulincer & Orbach, 1995). For people with anxious attachment, anger arises from fear of rejection (Dutton & White, 2012) and their expression of anger may be aggressive, either psychologically or

physically, in order to evoke a response from their partner (Mikulincer & Orbach, 1995). From an adult attachment perspective, psychological aggression can be framed as a strategy for a person with insecure attachment to regulate anger, or other intense negative emotions, and get a response from his or her partner (Doumas et al., 2008).

Persistent relationship conflict tends to activate the attachment system (Feeney & Karantzas, 2017), and the inability to regulate a negative emotional response to relationship conflict can influence a person to respond aggressively to his or her partner (McNulty & Hellmuth, 2008). In fact, the emotional intensity of a situation impacts how people regulate their emotions (Sheppes, Scheibe, Suri & Gross, 2011) and, for people with insecure attachment, relationship conflict is a particularly threatening and emotionally intense experience (Shaver & Mikulincer, 2002). People may use aggression to manage their feelings of emotional vulnerability; for example, trying to regulate partner behavior through aggression externalizes distress instead of the people tending to their own internal emotional states (Shorey et al., 2015).

The presence of negative affect between partners increases the likelihood of a person using physical and psychological aggression if the person also lacks emotion regulation skills (Shorey et al., 2015; McNulty & Hellmuth, 2008). It follows that emotion dysregulation and emotional instability are associated with higher rates of intimate partner violence between partners, including psychological aggression (Dutton & White, 2012). Other predictors of psychological aggression include hostility in female partners and emotional flooding in male partners, as well as low relationship satisfaction (Sotskova, Woodin & Gou, 2015; Salis, Salwen & O'Leary, 2014).

It is important to note again that there are multiple dimensions of emotion regulation, including awareness, understanding, and acceptance of emotions, as well as the ability to modify

intensity of emotion and act in goal-directed ways when experiencing strong emotions (Gratz & Roemer, 2004). The current study utilizes a measure that includes items to assess participants' perceptions of their own difficulties in each of these areas; however, the extant research investigating the associations between the dimensions of insecure attachment and emotion dysregulation includes other ways of conceptualizing emotion dysregulation. For example, many of the previously mentioned studies use specific unhealthy emotion regulation strategies (e.g. rumination, suppression) or behaviors (e.g. eating disorders, substance abuse) to indicate emotion dysregulation. The current study includes other dimensions of emotion dysregulation beyond perceived limited access to emotion regulation strategies, because limited understanding of emotions and difficulties with impulse-control have also been associated with IPV between partners (Bliton et al., 2016). Additionally, difficulties in engaging in goal-directed behavior for males and limited emotional awareness for females have been linked to psychological aggression in couples (Shorey, Brasfield, Febres & Stuart, 2011). In the existing literature, there is precedent for using both a composite emotion dysregulation score, as well as specific subscale scores.

Psychological Aggression

Psychological aggression, defined as verbal and nonverbal communications between partners intended to produce psychological pain, is also conceptualized in this study as a strategy for a person with insecure attachment to get a response from his or her partner (Murphy & Cascardi, 1999; Vissing et al., 1991; Dumas et al., 2008). However, before reviewing the findings about psychological aggression related to insecure attachment and emotion dysregulation, it is helpful to provide background about the study of psychological aggression.

The research on psychological aggression includes various measures that range in inclusiveness of specific behaviors (Lagdon, Armour & Stringer, 2014; Follingstad, 2009). Not only are there many definitions of the behaviors that comprise psychological aggression, there are also multiple terms researchers use to describe similar constructs, including emotional abuse, emotional maltreatment, and psychological abuse (McHugh, Rakowski & Swiderski, 2013). Since previous research includes studies that set a precedent for using the terms psychological abuse and psychological aggression interchangeably, it can be difficult to generalize or compare results between studies in which other researchers make a distinction between the two by defining psychological abuse as more severe than psychological aggression (Jordan, Campbell & Follingstad, 2010). Differences in the measurement of, and possible distinction between, psychological aggression and psychological abuse also makes it more difficult to integrate the research findings about these variables as study results across the literature may be attributed to psychological aggression, psychological abuse, or both.

However, there are common themes that arise when reviewing conceptualizations of psychological aggression, such as descriptions of aggressive behaviors and negative effects on the recipient. For example, the Center for Disease Control and Prevention has defined psychological aggression as insulting, humiliating, controlling, or threatening a partner (Black et al., 2011); these acts target the recipient's sense of self and are intended to produce emotional harm (Murphy & Cascardi, 1999).

The term psychological aggression can describe behaviors ranging from rude and inconsiderate to severely threatening and denigrating; the more severe forms of psychological aggression encompass psychologically abusive behaviors, which also include restricting the freedom of a partner and withholding emotional support (Jordan et al., 2010). Although there is

no defined threshold between psychological aggression and abuse (Jordan et al., 2010), abusive acts are considered to be higher in frequency and intensity (DeHart, Follingstad & Fields, 2010) and occur as a pattern of behavior (McHugh et al., 2013). The current study will define psychological aggression as verbal and nonverbal communications between partners intended to produce psychological pain, a definition consistent with the research that formed the basis for the revised Conflict Tactics Scale (Vissing et al., 1991). Admittedly, this definition emphasizes denigration, as well as dominance and intimidation of a partner, over other aspects of psychological aggression and abuse that have been identified by researchers, including restrictive engulfment (isolation and restriction) and hostile withdrawal (emotional punishment; Murphy & Hoover, 1999).

More information is needed to develop a consensus about the level of psychological aggression that can be considered normative in a partner relationship, as opposed to abusive (Jordan et al., 2010), given that psychological aggression occurs even in non-clinical, satisfied couples (Lawrence et al., 2009). Although psychological abuse can be mutual between partners, psychological aggression tends to occur more equally between partners, often in reaction to each other (Follingstad, 2009; Fournier, Brassard & Shaver, 2011). The positive association between experiencing psychological aggression and using it against a partner suggests it has a reciprocal pattern (Follingstad & Edmundson, 2010; Arriaga & Schkeryantz, 2015). Therefore, psychological aggression, thought not as extreme as abuse, is a problem in partner relationships that is highly prevalent and bidirectional (Lawrence et al., 2009).

The most recent National Intimate Partner and Sexual Violence Survey [NISVS] showed about half of men (48.8%) and women (48.4%) in the United States experienced psychological aggression by a partner in their lifetime (Black et al., 2011). In fact, one in seven women and

one in five men reported experiencing psychological aggression by a partner within the previous year. Supporting the findings that psychological aggression tends to occur equally between partners, psychological aggression by women has been shown to be at least as prevalent as by men, if not more (Taft et al., 2006). Additionally, meta-analyses have shown small to moderate (.09-.55) effect sizes for gender differences in psychological aggression, as opposed to moderate to large effect sizes (.33-.84) for gender differences in physical aggression; this indicates that there is less of a difference between males and females for psychological aggression than for physical aggression (Hyde, 2005).

These high rates of psychological aggression are concerning due to the negative mental and physical health outcomes associated with this subtype of IPV. Psychological aggression is linked to higher levels of distress, anxiety, depression, post-traumatic stress disorder, and physical health symptoms (Taft et al., 2006; Lagdon et al., 2014). These negative effects are stronger than similar effects linked to physical aggression (Lawrence, Orengo-Aguayo, Langer & Brock, 2012; Lagdon et al., 2014). Given the tendency for nonviolent couples to stay together longer, nonviolent couples who engage in psychological aggression are often exposed to the detrimental effects related to psychological aggression for a longer duration of time than violent couples (Follingstad & Dehart, 2000). People who experience psychological aggression lack the physical injuries and immediate harm that make physical aggression visible; therefore, someone experiencing psychological aggression may not connect harmful mental and physical health effects to his or her partner's behavior (Arriaga & Schkeryantz, 2015).

Psychological aggression is also related to negative effects on relationships, such as a decrease in satisfaction, stability, and emotional closeness between partners (Follingstad, 2009). Indeed, there is a bidirectional relationship between psychological aggression and relationship

dissatisfaction (Yoon & Lawrence, 2013). Physical, sexual, and psychological aggression all contribute to marital dissatisfaction, but psychological aggression is linked to dissatisfaction more than physical and sexual aggression (Panuzio & DiLillo, 2010) and is more predictive of divorce than physical aggression (Follingstad, 2009). Although some degree of psychological aggression is relatively common in partner relationships, the negative effects impact both the recipient and the relationship (Panuzio & DiLillo, 2010). Psychological aggression is also associated with increased risk for physical aggression in a relationship as well (O’Leary & Maiuro, 2001).

Due to the negative individual and relationship outcomes associated with psychological aggression, more research is needed about the individual (e.g. actor effects for insecure attachment and emotion dysregulation) and interpersonal (e.g. partner effects for insecure attachment and emotion dysregulation) variables connected to psychological aggression (Lawrence et al., 2012). Insecure attachment and emotion dysregulation have both been independently linked to perpetration of IPV, including psychological aggression (Dutton & White, 2012; Camarenesi, 2016; Follingstad, Bradley, Helff & Laughlin, 2002).

Insecure Attachment and Psychological Aggression

The attachment system is activated during times of distress, such as relationship conflict, and the behavior patterns associated with insecure attachment may escalate conflict and further contribute to relationship problems like psychological aggression (Shaver & Mikulincer, 2002). During conflict, people with insecure attachment are more likely than those with secure attachment to behave aggressively towards their partners (Camarenesi, 2016). In fact, insecure attachment characterized by high anxiety, or combined anxiety and avoidance, is correlated with higher rates of IPV in general (Dutton & White, 2012). More specifically, psychological

aggression has been linked to both anxious and avoidant attachment (Turner & Langhinrichsen-Rohling, 2011; Lawson & Malnar, 2011). Insecure attachment also influences the forms of psychological aggression people engage in; for example, anxious attachment is linked to higher levels of jealousy and attempts to restrict partners' social activities, while avoidant attachment is associated with behaviors that aim to decrease partners' self-esteem and relationship security, such as distancing or dismissing partner concerns (McDermott et al., 2016).

Several actor and partner effects have been identified for the relationship between insecure attachment and psychological aggression; for example, insecure attachment can influence both a person's own and his or her partner's inclination toward psychological aggression (Peloquin, Lafontaine & Brassard, 2011; Miga, Hare, Allen & Manning, 2010; Karakurt et al., 2013). Furthermore, higher anxious attachment in male partners predicts higher psychological aggression in female partners (Peloquin et al., 2011). The partner effects associated with insecure attachment also impact a person's likelihood of experiencing psychological aggression; for example, experiencing psychological aggression is more likely for people with avoidant attachment whose partners have anxious attachment (Miga et al., 2010). People with insecure attachment, who also have difficulty regulating emotion, are more likely to experience psychological aggression in their relationships as well (Karakurt et al., 2013).

Mediating factors, such as ability to empathize with a partner, threatening behaviors, and communication patterns, also influence the actor and partner effects of insecure attachment on psychological aggression (Peloquin et al., 2011; Lawson & Malnar, 2011; Fournier et al., 2011). Difficulty taking the perspective of a partner partially mediates the relationship between insecure attachment and psychological aggression in women (Peloquin et al., 2011), and for men, threatening and controlling behaviors partially mediate the relationship between avoidant

attachment and psychological aggression (Lawson & Malnar, 2011). The “demand/withdraw” communication pattern—a pattern characteristic of insecurely attached partners in which the overwhelming need for reassurance associated with anxious attachment is coupled with the protective distancing of avoidant attachment—partially mediates the connection between attachment anxiety and psychological aggression (Fournier et al., 2011). These findings provide a better understanding of some of the mediating factors that influence the relationship between insecure attachment and psychological aggression. However, given that adult attachment provides a framework for understanding emotion regulation (Mikulincer & Shaver, 2005), more research is needed about mediating factors related to regulating emotions that could explain the association between insecure attachment and psychological aggression.

Emotion dysregulation has been evaluated as a mediating factor for other construct relationships that support that idea that aggression may be a strategy to manage distressing emotions; for example, it mediates the relationships between negative affect and physical aggression, as well as trauma and impulsive aggression (Donahue, Goranson, McClure & van Male, 2014; Miles et al., 2015). Emotion dysregulation is also an explanatory factor in the association between childhood maltreatment—which often leads to insecure attachment—and psychopathology (Hankin, 2005; Jennissen, Holl, Mai, Wolff & Barnow, 2016). Related to psychopathology, emotion dysregulation mediates the association between borderline personality disorder—a disorder characterized by emotion dysregulation related to attachment trauma—and both physical and psychological aggression (Buckheim et al., 2016; Scott, Stepp & Pilkonis, 2014). Emotion dysregulation has also been shown to mediate the relationship between low self-esteem and the following constructs: physical aggression, anger, hostility, and verbal aggression (Garofalo et al., 2016). Since low self-esteem is linked to insecure attachment (Passanisi et al.,

2015), it is logical to assume that emotion dysregulation could be a pathway through which people with insecure attachment become verbally aggressive.

Insecure Attachment, Emotion Dysregulation, and Psychological Aggression

More research is needed to understand the relationships between the three constructs of interest reviewed in the previous sections—insecure attachment, emotion dysregulation, and psychological aggression—and the potential for emotion dysregulation to explain the association between insecure attachment and psychological aggression between partners. Given the empirical support for the direct relationships between these variables, the current research tests a model of emotion dysregulation as a mediator between insecure attachment orientations and psychological aggression in partners.

One other study has tested a model in which emotion dysregulation, as well as threatening and controlling behaviors, mediate the relationship between insecure attachment and psychological aggression. In her dissertation study, Riebel (2015) found that threatening and controlling behaviors, but not emotion dysregulation, explained part of the association between insecure attachment and psychological aggression. The study used non-dyadic data—data from only one partner—to test the model of emotion dysregulation, as well as threatening and controlling behaviors, mediating the relationship between insecure attachment orientations and psychological aggression. Riebel (2015) hypothesized that the surprising lack of support for emotion dysregulation as a mediating factor may be due to her use of a non-standard measure of emotion dysregulation (i.e., Emotional Reactivity and Emotional Cutoff subscales of the Differentiation of Self Inventory [DSI]; Skowron & Friedlander, 1998). The non-standard measure used in the study conceptualized emotion dysregulation as both the degree to which a person responds with emotional flooding and hyperactivity, and well as the degree to which they

feel threatened by intimacy and isolate themselves from others. Given Riebel's counterintuitive findings, she suggested that a similar mediational model should be tested using a standard measure of emotion dysregulation that takes into account the multiple dimensions of emotion dysregulation (2015).

The current study replicates Riebel's mediational model of emotion dysregulation using a measure of emotion dysregulation—the Difficulties in Emotion Regulation Scale (DERS; Gratz & Roemer)—that has been widely used by emotion regulation researchers since its creation in 2004 (Bardeen, Fergus & Orcutt, 2012). The findings may confirm Riebel's counterintuitive results or provide an alternative understanding of the mediational model of emotion dysregulation between insecure attachment orientations and psychological aggression. In addition to using a more standard measure of emotion dysregulation with established psychometric properties, this replication includes responses from both partners for measures of insecure attachment, emotion dysregulation, and psychological aggression. Given that the research supports both actor and partner effects for insecure attachment, emotion dysregulation, and psychological aggression, using dyadic data to model actor and partner effects may increase the amount of variance explained. Further, more research is needed using data from both partners during interpersonal processes, such as conflict (Gonzales & Griffen, 2012). The actor-partner interdependence mediational model [APIMeM] allows researchers to test dyadic models of interpersonal processes, such as conflict between couples (Ledermann, Macho & Kenny, 2011).

Hypotheses

A research-informed APIMeM tested whether emotion dysregulation mediated the relationship between insecure attachment—both anxious attachment and avoidant attachment—

and psychological aggression for both actors and partners (see Figures 1 and 2). In order to differentiate between anxious attachment and avoidant attachment while counterbalancing a small sample size, the model was tested twice: once using participants' levels of anxious attachment in the model and a second time using participants' levels of avoidant attachment in the model. The purpose of the current study was to test the following hypotheses:

1. Each partner's levels of anxious attachment will have a direct positive association with a) their own psychological aggression (actor effects) and b) their partner's psychological aggression (partner effects).
2. Each partner's levels of anxious attachment will also have an indirect positive association with a) their own psychological aggression (actor effects) and b) their partner's psychological aggression through the mediating mechanism of their own emotion dysregulation (partner effects).

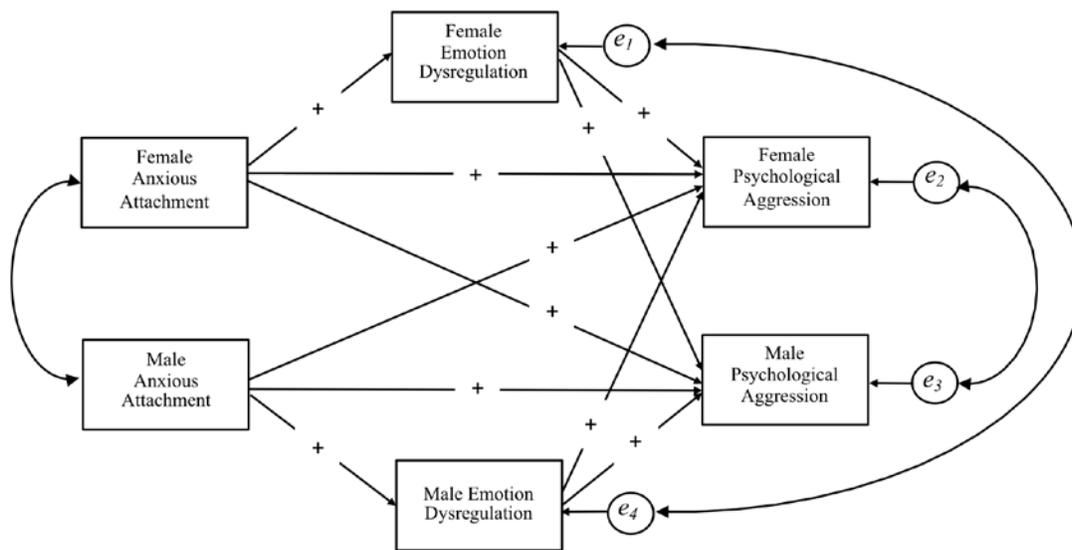


Figure 1. Conceptual Model for Anxious Attachment

Note. Positive statistical associations are depicted with “+.” The model includes covariances between partners’ anxious attachment, as well as residual covariances between the error terms of partners’ emotion dysregulation and partners’ psychological aggression.

3. Each partner's levels of avoidant attachment will have a direct positive association with a) their own psychological aggression (actor effects) and b) their partner's psychological aggression (partner effects).
4. Each partner's levels of avoidant attachment will also have an indirect positive association with a) their own psychological aggression (actor effects) and b) their partner's psychological aggression through the mediating mechanism of their own emotion dysregulation (partner effects).

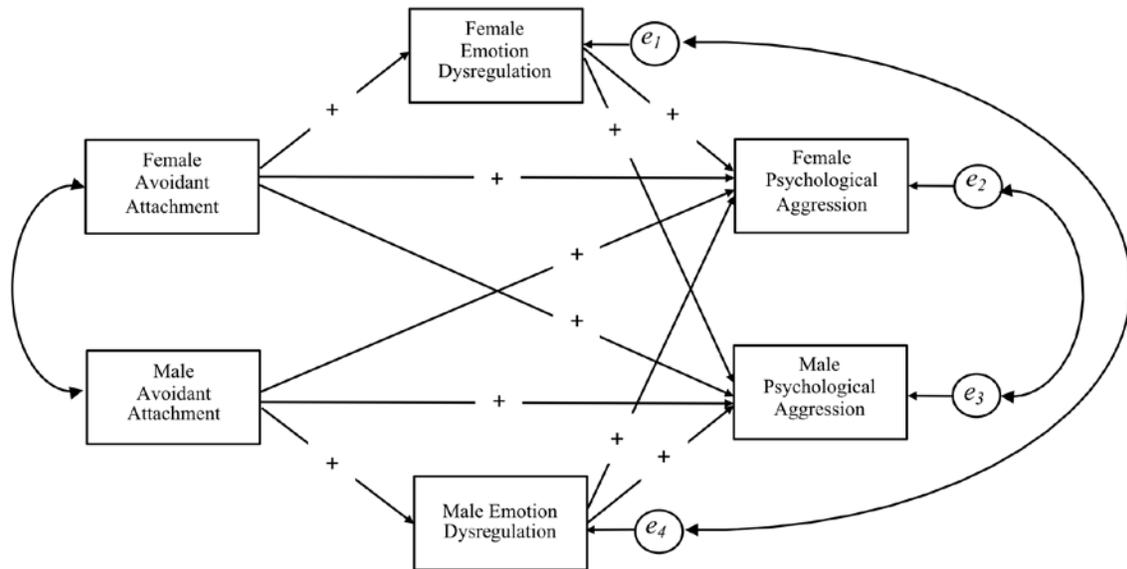


Figure 2. Conceptual Model for Avoidant Attachment

Note. Positive statistical associations are depicted with “+.” The model includes covariances between partners’ anxious attachment, as well as residual covariances between the error terms of partners’ emotion dysregulation and partners’ psychological aggression.

Chapter III: Methods

Design of the Study

This study utilized a cross-sectional path analysis design to analyze an existing set of secondary data and test a mediational model of emotion dysregulation for the relationships

between levels of anxious and avoidant attachment and psychological aggression. Demographic information and assessment data have been collected from clients presenting for therapy from 2009 through 2017 at the Center for Family Services [CFS], Virginia Tech University's outpatient training clinic associated with the marriage and family therapy Master's program. All couples seeking couple or family therapy at CFS completed an assessment package following their initial appointment that included questions about demographic information and various measures for constructs, including insecure attachment, emotion dysregulation, and psychological aggression.

Participants

Participants included in the study were 110 couples in the Washington, D.C. metropolitan area who attended at least an initial couple or family therapy session at CFS. Inclusion criteria included consent from both partners for their assessment responses being used for research purposes and adequate completion of the construct measures on an online data collection and storage platform. Gender, as reported by participants in the demographic questionnaire, was used as a variable to meaningfully distinguish between dyad members in the sample (Kenny, Kashy, Cook & Simpson, 2006). There was only 1 same-gender dyad in the 137 couples in the de-identified dataset who had consented to research; therefore, data from this same-gender couple was excluded, as opposed to including their data and subsequently needing to treat all the dyads as indistinguishable. Indistinguishable dyads require the use of alternate analytic techniques (Kenny et al., 2006) and would not have captured gender differences. Of the 136 mixed-gender couples in the de-identified data set in which both partners consented to research, 26 dyads were excluded due to having missing values for > 20% of the items on one or more of the measures (Sloan et al., 2007) for insecure attachment, emotion dysregulation, or

psychological aggression; these missing values would have impacted the calculation of the average scores for at least one of the main variables for each respondent. This left a final sample of 110 couples with 0.66% missing data.

Female partners' average age was 40.98 years ($SD = 14.17$) and male partners' average age was 41.91 years ($SD = 11.98$). The majority of participants identified as Caucasian (males = 58.2%, females = 57.3%). The largest proportions of participants also identified as Catholic in their religious beliefs (males = 26.4%, females = 30.9%), completed Bachelor's degrees (30.9% males, 34.5% females), and had a household income of at least \$100,000 (males = 27.3%, females = 22.7%).

Marital status was not included as a demographic variable due to lack of clarity in the language of the assessment question designed to elicit this information from participants. After the initial therapy session at CFS, participants also completed the Dyadic Adjustment Scale [DAS] as part of the assessment package to measure relationship consensus, cohesion, satisfaction, and affection level. For the DAS, the following guidelines for interpreting scores and associated relationship distress levels were used: mildly distressed (96 – 107), moderately distressed (80 – 95), and severely distressed (< 80; Wood, Crane, Schaalje & Law, 2005). Male partners' scores ranged from 36 – 147; on average, males reported moderate relationship distress ($M = 90.95$, $SD = 22.50$). For males, the distribution was fairly even for mild relationship distress (26.4%), moderate relationship distress (20.0%), and severe relationship distress (30.0%); additionally, 23.6% of males' scores fell above the cutoff for relationship distress. Female partners' scores ranged from 23 – 143; on average, females reported moderate relationship distress as well ($M = 86.32$, $SD = 23.85$). For females, the distribution was less even: mild relationship distress (20.0%), moderate relationship distress (21.8%), and severe

relationship distress (39.1%); 19.1% of females' scores fell above the cutoff for relationship distress (see Appendix B for histograms of relationship distress levels for males and females).

Procedures

Secondary data that has been collected from clients at CFS since 2009 was analyzed for the current study. Virginia Tech's Institutional Review Board [IRB] approved the overall clinical data collection in 2009 and the approval for continued data collection and research using human subjects is reviewed and renewed annually. IRB approval was gained in February 2017 to use the subsection of the overall clinical data needed for the current study's research questions, including couples' assessment data about relevant demographic information and measures of insecure attachment, emotion dysregulation, and psychological aggression.

In the initial therapy session, the therapist interns working at CFS and administering the assessments review the process with new clients; clients over 18 must sign an informed consent form for their assessment responses to be anonymously used for research purposes. Each client is given a number as a client identifier that will be used for the therapist intern to locate and review the responses for clinical purposes. The client identifier serves to protect client confidentiality and ensure that no identifying information is included in the assessment responses. After the initial therapy appointment, clients take the initial assessment package on laptops using an online data collection and storage platform. Clients are again prompted to provide consent for their answers to be included in the research pool when they begin the assessment package.

After the IRB approval was granted, CFS clinic staff provided the researcher with the de-identified assessment data in an excel spreadsheet. To maximize the sample size of responses to be included in the data analyses, only the couple data collected following the initial appointment

was used. In order to be included in analyses, both partners needed to both provide consent for their responses to be used for research purposes and adequately complete the assessment measures.

The de-identified dataset was first cleaned and sorted in Microsoft Excel, then imported into the Statistical Package for the Social Sciences [SPSS]. Within SPSS, the variables were coded to calculate the demographic information and measure scores for each construct being analyzed: anxious attachment, avoidant attachment, emotion dysregulation, and psychological aggression. The data structure was also organized into distinguishable dyads for each pair of partners, with both partners' responses included in the same row for subsequent analyses.

Measures

Participants completed an initial assessment package that included questions about demographic information including gender, age, race, education level, religion, and household income. Participants also completed pre-existing questionnaires to measure the constructs of insecure attachment, emotion dysregulation, and psychological aggression.

Insecure attachment. The Experiences in Close Relationships questionnaire (ECR; Brennan et al., 1998) is a 36-item self-report scale for measuring the 2 major dimensions of adult attachment: anxious attachment and avoidant attachment. Participants rated statements related to how they generally feel in romantic relationships using a seven-point Likert scale ranging from one (strongly disagree) to seven (strongly agree) for both of the following subscales.

Anxious attachment subscale. The anxious attachment subscale is measured using 18 statements related to participant negative view of self and preoccupation with relationships, such as *I need a lot of reassurance that close relationship partners really care about me* and *I do not often worry about being rejected or abandoned*. The anxious attachment subscale includes one

item that requires reverse scoring. The anxious attachment subscale has demonstrated high internal consistency, with Cronbach's $\alpha > .91$ (Brennan et al., 1998; Mallinckrodt & Wang, 2004; Alonso-Arbiol, Balluerka, Shaver & Gillath, 1998), as well as high test-retest reliability, with Pearson's correlations of .93 (2 week interval; Mallinckrodt & Wang, 2004). The anxious attachment subscale of the ECR demonstrated high internal consistency in the current study, with Cronbach's $\alpha = .88$ and $.89$ for males and females, respectively.

Avoidant attachment subscale. The avoidant attachment subscale is measured using 18 statements related to the participant's aversion to emotional closeness, such as *I prefer not to show a partner how I feel deep down* and *I tell my close relationship partners just about everything*. The avoidant attachment subscale includes eight items that require reverse scoring. The avoidant attachment subscale has demonstrated high internal consistency, with Cronbach's $\alpha > .94$ (Brennan et al., 1998; Mallinckrodt & Wang, 2004; Alonso-Arbiol et al., 1998), as well as high test-retest reliability, with Pearson's correlations of .92 (2 week interval; Mallinckrodt & Wang, 2004). The avoidant attachment subscale of the ECR demonstrated high internal consistency in the current study, with Cronbach's $\alpha = .92$ and $.89$ for males and females, respectively.

Averaged scores for each subscale ranged from 1-7 with higher scores indicating higher levels of anxious attachment or avoidant attachment, depending on the subscale. The ECR displays convergent validity with measures of relationship satisfaction, fear of intimacy, and romantic dependence, among other constructs (Lafontaine et al., 2016).

Emotion dysregulation. The Difficulties in Emotion Regulation Scale (DERS; Gratz & Roemer, 2004) is a 36-item self-report measure of emotion regulation functioning across 6 dimensions divided into the following 6 subscales: nonacceptance, goals, impulse, awareness,

strategies, and clarity. Participants rated 36 statements related to their experiences of feelings using a 5-item Likert scale ranging from 1 (almost never) reflecting 0-10% of the time to 5 (almost always) reflecting 91-100% of the time. In this study, the average of the item scores was used as a composite score of emotion dysregulation. The DERS includes subscale items such as *when I'm upset, I become angry with myself for feeling that way*, *When I'm upset, I can still get things done*, and *I have difficulty making sense out of my feelings*. The DERS requires reverse scoring for 11 of the 36 items.

Averaged composite scores ranged from 1-5, with higher scores indicating greater levels of emotion dysregulation. The DERS demonstrates high internal consistency, with a Cronbach's α of .93 for the total score and a Cronbach's α greater than .80 for each subscale; the DERS also demonstrates adequate construct and predictive validities, as well as good test-retest reliability (Gratz & Roemer, 2004). The DERS composite score demonstrated high internal consistency in the current study, with Cronbach's $\alpha = .94$ and $.93$ for males and females, respectively.

Psychological aggression. The Revised Couple Conflict Tactics Scale (CTS-2; Straus, Hamby, Boney-McCoy & Sugarman, 1996) is a 78-item self-report (39 items) and partner-report (39 items) measure of psychological and physical attacks on a partner in an adult romantic relationship, as well as the use of negotiation during conflict. The CTS-2 includes 5 scales: physical assault, injury, sexual coercion, negotiation, and psychological aggression. For this study, the 16-item (8 self-report and 8 partner-report items) scale of psychological aggression was used.

The creators of the CTS-2 emphasized denigration, as well as dominance and intimidation of a partner, as indicators of psychological aggression when choosing scale items; other aspects of psychological aggression that have been identified by researchers, including

restrictive engulfment (isolation and restriction) and hostile withdrawal (emotional punishment), are not included in the CTS-2 (Murphy & Hoover, 1999).

Participants were asked to rank the frequency of their own use of the psychologically aggressive behaviors described in the items, as well as their partners' frequency of use, using 8 response categories: 1 (once in the past 4 months), 2 (twice in the past 4 months), 3 (3-5 times in the past 4 months), 4 (6-10 times in the past 4 months), 5 (11-20 times in the past 4 months), 6 (more than 20 times in the past 4 months), 7 (not in the past 4 months, but it did happen before), and 0 (this has never happened). The psychological aggression scale includes statements such as *insulted or swore at my partner* and *threatened to hit or throw something at my partner*.

For each item, the participant's self-report and their partner's partner-report responses were averaged to create a single index of psychological aggression (Watson, Hubbard & Wiese, 2000); for example, Partner A's score was an average of Partner A's self-report and Partner B's report about Partner A's behavior on the same item. In the current study, the composite score of the averaged self- and partner-report item responses was used as an indicator of the amount of psychological aggression occurring in a relationship. Using a composite score for the CTS-2 has been shown to increase internal consistency (Cronbach's α of .82 for self-report psychological aggression and .81 for partner-report psychological aggression; Shorey, Brasfield, Febres, Cornelius & Stuart, 2012). The psychological aggression scale of the CTS-2 demonstrated an acceptable level of internal consistency in the current study, with Cronbach's $\alpha = .76$ for both males and females.

For this study, the response categories were also re-coded in order to include psychological aggression that occurred over 4 months ago at the time of the assessment: 1 (this has never happened), 2 (not in the past 4 months, but it did happen before), 3 (once in the past 4

months), 4 (twice in the past 4 months), 5 (3-5 times in the past 4 months), 6 (6-10 times in the past 4 months), 7 (11-20 times in the past 4 months), 8 (more than 20 times in the past 4 months). Thus, the psychological aggression scale was used as a continuous variable by averaging the item scores based on the average of both partner's reports; the composite scores ranged from 1 to 8, with higher scores indicating higher frequency of psychological aggression.

Analytic Strategy

Prior to testing the path analysis models described later in this section, bivariate correlations were calculated between the main variables and the demographic variables of age, income level, and education level (see Table 1). Paired samples *t*-tests were used to detect significant gender differences in the composite scores for anxious attachment, avoidant attachment, emotion dysregulation, and psychological aggression (see Table 2). Bivariate correlations were also calculated among all the main variables for male and female partners (see Table 3).

Multivariate analysis. Dyadic data analysis provides a detailed understanding of how people's responses are affected by both their own input and their partner's input—actor effects and partner effects, respectively (Kenny et al., 2006). Analyzing data from both partners often reveals significant effects that may not be significant when analyzing data from only one partner. APIMeM was used to inform path models that account for the interdependence between members of a couple for their scores on the predictor variables of anxious or avoidant attachment and the outcome variables of psychological aggression, as well as the mediating variables of emotion dysregulation (see Figures 1 and 2).

Given the sample size limitations, two modern path analysis models were tested: Model 1 included male and female partners' anxious attachment composite scores as predictor variables

and emotion dysregulation composite scores as mediators; and Model 2 included male and female partners' avoidant attachment composite scores as predictor variables and emotion dysregulation composite scores as mediators. The outcome variables for both models were the male and female psychological aggression composite scores.

Covariance. Covariance (bidirectional) paths between variables at the same stages in the models were included to account for the inherent interdependence of dyadic data. For example, the models included covariance paths between the predictor variables of anxious or avoidant attachment for males and females. The models also included covariance paths between the error terms of the mediator variables of emotion dysregulation for males and females (residual covariance), as well as between the error terms of the outcome variables of psychological aggression for males and females (residual covariance). Residual covariances were included to account for associations between partners' scores above and beyond what is explained by the model (Kenny et al., 2006).

Control variables. Bivariate correlations between the continuous demographic variables—age, education level, and household income—and the measure scores for anxious attachment, avoidant attachment, emotion dysregulation, and psychological aggression were calculated for both male and female partners. No demographic variables were controlled for in this study as none of them were correlated with more than one of the main variables (see Table 1; Falconier, 2013). One-way ANOVAs were calculated to detect differences in the main variables based on participant religion and race. Given the small sample size, multigroup comparisons could not be made and post-hoc tests could not be calculated for the one-way ANOVAs. In male partners, significant differences in levels of psychological aggression ($F(12,97) = 2.06, p < .05$) were detected between groups based on religion. However, there were no significant differences

detected between groups for males based on religion for levels of anxious attachment ($F(12,97) = 1.70, p = .078$), avoidant attachment ($F(12,97) = 0.69, p = .754$), or emotion dysregulation ($F(12,97) = 1.84, p = .052$). There were also no significant differences detected between groups for males based on ethnicity for levels of anxious attachment ($F(9,100) = 0.28, p = .979$), avoidant attachment ($F(9,100) = 1.28, p = .257$), emotion dysregulation ($F(9,100) = 0.42, p = .922$), or psychological aggression ($F(9,100) = 0.90, p = .530$). For females, there were no significant differences detected between groups based on religion for levels of anxious attachment ($F(10,99) = 0.75, p = .680$), avoidant attachment ($F(10,99) = 0.68, p = .744$), emotion dysregulation ($F(10,99) = 0.72, p = .703$), or psychological aggression ($F(10,99) = 1.15, p = .333$). There were also no significant differences detected between groups for females based on ethnicity for levels of anxious attachment ($F(9,99) = 0.44, p = .911$), avoidant attachment ($F(9,99) = 0.61, p = .789$), emotion dysregulation ($F(9,99) = 1.25, p = .277$), or psychological aggression ($F(9,99) = 0.69, p = .716$).

Multivariate normality. Mardia's multivariate skewness scores for Model 1 and Model 2 were $b_1 = 6.00$ and $b_1 = 7.63$, respectively, both reported at the $p < .001$ level. Higher absolute values than 0 for Mardia's multivariate skewness scores indicate that the distribution deviates from normal (Cain, Zhang & Yuan, in press). Mardia's multivariate kurtosis scores for Model 1 and Model 2 were $b_2 = 50.87$ ($p = .125$) and $b_2 = 55.35$ ($p < .001$), respectively. The multivariate kurtosis cutoff score is $p(p + 2)$, where p is the number of variables in the model; for Model 2, the kurtosis score was significantly higher than 48, indicating leptokurtic distribution of the multivariate data (Cain, Zhang & Yuan, in press). Given that that data were not normally distributed, the two models were analyzed using maximum likelihood robust [MLR] estimation within *Mplus* version 7.4.

Table 1

Age, Income Level, and Education Level: Correlations with Main Variables (N=110 couples)

	Age				Income Level				Education Level			
	Male		Female		Male		Female		Male		Female	
	<i>r</i>	<i>P</i>	<i>r</i>	<i>p</i>	<i>r_s</i>	<i>P</i>	<i>r_s</i>	<i>p</i>	<i>r_s</i>	<i>p</i>	<i>r_s</i>	<i>p</i>
Anxious Attachment	-.13	.182	-.13	.173	-.20*	.035	-.01	.887	-.12	.232	.08	.385
Avoidant Attachment	-.05	.636	.17	.086	-.05	.605	-.15	.111	-.14	.137	-.17	.082
Emotion Dysregulation	.03	.778	.11	.263	-.02	.815	-.13	.189	.03	.757	-.16	.102
Psychological Aggression	-.16	.088	-.20*	.038	-.10	.314	-.06	.540	-.04	.690	.10	.282

Note. Pearson's *r* correlations are listed for age and the main variables; Spearman's *r_s* correlations are listed for income level, education level, and the main variables. N = 110 males and 110 females.

**p* < .05.

Model fit. Given that the data did not follow a multivariate normal distribution, robust fit indices were used to assess model fit. We used the Yuan–Bentler scaled chi-square (χ_{YB}^2), an adjusted chi-square statistic used with non-normal data (Yuan & Bentler, 2000). The chi-square goodness-of-fit test indicates whether sample data are consistent with a hypothesized null distribution; a significant chi-square test statistic indicates that the variable relationships in the model are a poor fit for the data.

Standardized Root Mean Square Residual [SRMR] and Root Mean Square Error of Approximation [RMSEA] were also used as fit indices to test model fit. The SRMR is the square root of the difference between the residuals of the sample covariance matrix and a null model; a recommended SRMR value $\leq .08$ indicates that the model is an adequate fit and explains a sufficient amount of the variance-covariance occurring among the variables (Hu & Bentler, 1999; Hancock & Mueller, 2013; Kenny, 2015). The RMSEA evaluates discrepancies between observed and predicted covariances; a recommended RMSEA value $< .06$ with a 90% confidence interval indicates an adequate model fit for the data (Hancock & Mueller, 2013; Kenny et al., 2006). The 95% confidence interval for the RMSEA is not available in the software.

In addition to the χ_{YB}^2 goodness-of-fit test, and absolute fit indices of SRMR and RMSEA, the robust Comparative Fit Index [CFI] was used to test the fit of the models against a “null” model in which the correlations between variables are all zero. An adequate CFI indicates that the correlations that exist in the observed data are strong enough to require an explanation and that the model provides a better explanation than the null model (Hancock & Mueller, 2013; Kenny, 2015). A recommended CFI value $\geq .96$ indicates that the model is a good fit for the data (Hu & Bentler, 1999; Kenny et al., 2006).

Indirect Effects and Path Differences Tests. The significance levels of the indirect effects for each model were tested using bootstrapping (number of bootstrap draws = 5,000). Standardized indirect effects were computed for each of the 5,000 bootstrapped subsamples, and the 95% CI was computed by determining the indirect effects at the 2.5% and 97.5% percentiles. Models with constrained paths were tested using Wald tests of parameter constraints to determine if there were differences in the significant actor or partner effects based on gender.

Chapter IV: Results

Variable Characteristics

Means, standard deviations, and paired samples *t*-test results between males and females for the main variables are reported in Table 2. *T*-tests for paired samples indicated that females reported significantly higher levels of anxious attachment than males (females $M = 3.95$, $Mdn = 4.03$, $SD = 1.11$; males $M = 3.66$, $Mdn = 3.78$, $SD = 0.99$; $t = -2.02$, $p < .05$). Males' and females' scores on the measures of avoidant attachment, emotion dysregulation, and psychological aggression did not differ significantly.

Prevalence scores for psychological aggression were also calculated for male and female partners using participants' original self- and partner-report responses. Of males, 78.2% ($N = 86$) reported using psychological aggression with a partner in the previous 4 months; 83.6% ($N = 92$) reported experiencing psychological aggression from their partners. Of females, 88.2% ($N = 97$) reported using psychological aggression with a partner in the previous 4 months; 82.7% ($N = 91$) reported experiencing psychological aggression from their partners.

Descriptive statistics. The bivariate Pearson's correlations, median scores, univariate skewness and kurtosis scores, and internal consistency scores for the scales of anxious attachment, avoidant attachment, emotion dysregulation, and psychological aggression were

calculated for male and female partners (see Table 3). Significant correlation coefficients ranged from $r = .21$ to $r = .72$ for Models 1 and from $r = .36$ to $r = .72$ for Model 2. A strong significant

Table 2

Avoidant Attachment, Anxious Attachment, Emotion Dysregulation, and Psychological Aggression: T-tests for Paired Samples (N = 110 couples)

Variables	Males	Females	Mean Difference	<i>t</i>	<i>p</i>
Avoidant Attachment	3.31 (1.06)	3.22 (1.00)	0.09	0.64	.527
Anxious Attachment	3.66 (0.99)	3.95 (1.11)	-0.29	-2.02*	.046
Emotion Dysregulation	2.22 (0.63)	2.25 (0.59)	-0.03	-0.32	.754
Psychological Aggression	2.27 (0.83)	2.37 (0.87)	-0.10	-1.61	.111

Note. N = 110 males and 110 females. Mean scores are listed for males and females in respective columns; standard deviations are listed after mean scores in parentheses.

* $p < .05$.

correlation between scores of partners on the variable of psychological aggression ($r = .72$, $p < .001$) supported the use of APIMeM to control for partners' interdependence. For the multivariate analyses, the following guidelines for interpreting result effect sizes were used: small ($b^* \leq .10$), moderate ($.11 \leq b^* \leq .39$), and large ($b^* \geq .40$; Lipsey & Wilson, 2001).

Model 1: Anxious Attachment and Emotion Dysregulation as Predictors of Psychological Aggression

Results from the path model analysis indicated a good fit to the data [$\chi^2_{(2)} = 3.39$, $p = .183$; robust CFI = .991; SRMR = .034; RMSEA = .080 (.000, .221)] with no suggested modification indices to improve the model. The RMSEA value exceeded the recommended value of $< .06$ for good model fit. Standardized results with both statistically significant and

Table 3

Avoidant Attachment, Anxious Attachment, Emotion Dysregulation, and Psychological Aggression: Correlations and Descriptive Statistics (N = 110 couples)

Variables	1	2	3	4	5	6	7	8
1. Female Avoidant Attachment	1.00							
2. Male Avoidant Attachment	-.09	1.00						
3. Female Anxious Attachment	-.01	.04	1.00					
4. Male Anxious Attachment	-.01	-.03	.01	1.00				
5. Female Emotion Dysregulation	.36***	-.11	.56***	.06	1.00			
6. Male Emotion Dysregulation	-.08	.15	.13	.57***	.07	1.00		
7. Female Psychological Aggression	-.00	.02	.21*	.26**	.15	.15	1.00	
8. Male Psychological Aggression	-.10	.07	.25**	.16	.07	.09	.72***	1.00
Median	3.14	3.25	4.03	3.78	2.17	2.13	2.34	2.25
Skewness	0.83	0.57	-0.17	0.10	0.64	0.59	0.44	0.52
Kurtosis	0.84	0.31	-0.07	-0.58	0.00	-0.26	-0.19	0.07
α	.89	.92	.89	.88	.93	.94	.76	.76

Note. N = 110 males and 110 females.

* $p < .05$; ** $p < .01$; *** $p < .001$.

nonsignificant paths are shown in Figure 3. For Model 1, Table 4 provides the standardized coefficients, standard errors, and significance levels and Table 5 provides the direct, indirect, and total effects decomposition.

For both males and females, levels of anxious attachment were not significantly associated with levels of psychological aggression (hypothesis 1a; direct actor effects: male $b^* = .13$; female $b^* = .20$). Also, there were no significant indirect effects detected for the relationships between anxious attachment and psychological aggression in both males and females (indirect actor effects: male $b^* = .03$, $p = .591$, 95% CI [-.09, .15], female $b^* = .01$, $p = .862$, 95% CI [-.12, .16]; indirect partner effects: male $b^* = -.06$, $p = .293$, 95% CI [-.19, .05], female $b^* = -.02$, $p = .755$, 95% CI [-.15, .10]).

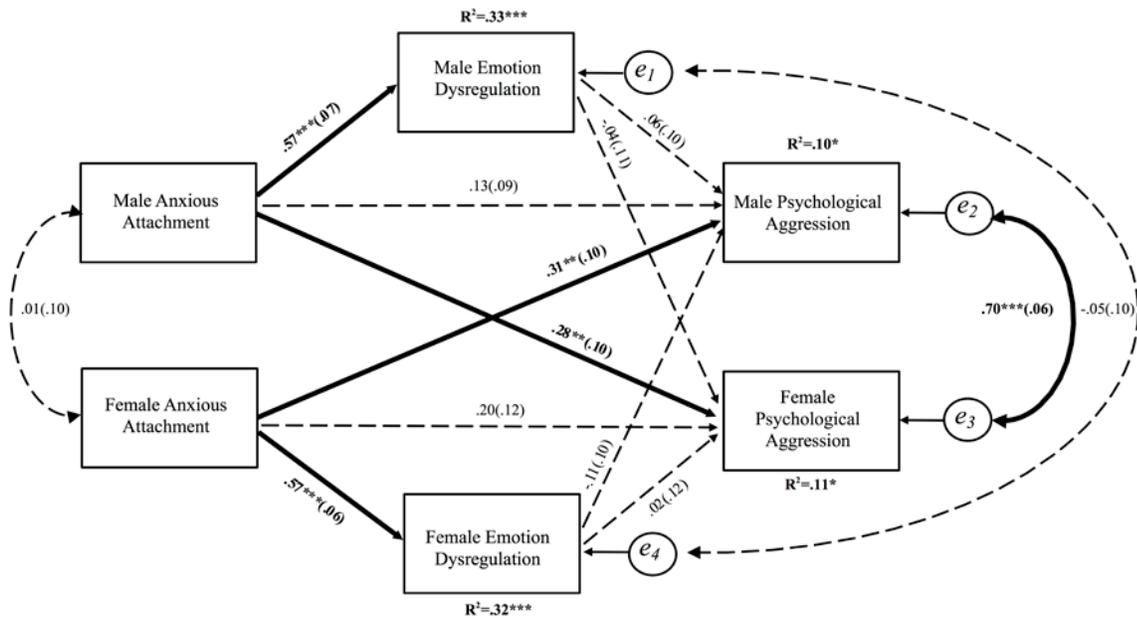


Figure 3. Model 1: standardized results with statistically significant paths. $\chi_{YB}^2(2) = 3.39$, $p = .183$; robust CFI = .991; SRMR = .034; RMSEA = .080 (.000, .221).

Note. Full lines depict significant paths (* $p < .05$, ** $p < .01$, *** $p < .001$) and broken lines depict nonsignificant paths.

Given the nonsignificance of the relationships between anxious attachment and psychological aggression for males and females (direct actor effects), as well as the lack of significant indirect effects between these variables, emotion dysregulation was not a mediating variable (actor and partner indirect effects; hypotheses 2a and 2b). However, actors' levels of anxious attachment were moderately associated with partners' levels of psychological aggression for both males ($b^* = .28$) and females ($b^* = .31$; hypothesis 1b; direct partner effects). Path model analyses also revealed a positive association between anxious attachment and emotion dysregulation; there was a large direct actor effect for both males ($b^* = .57$) and females ($b^* = .57$). Tests of models with path constraints did not show any significant differences between males and females for the direct actor effect between anxious attachment and emotion

Table 4

Path Analysis for Model 1: Anxious Attachment and Emotion Dysregulation as Predictors of Psychological Aggression

Variable	Female			Male		
	b^*	SE	p	b^*	SE	p
Actor emotion dysregulation on						
Actor anxious attachment	.57***	.06	.000	.57***	.07	.000
Actor psychological aggression on						
Actor emotion dysregulation	.02	.12	.857	.06	.10	.571
Actor anxious attachment	.20	.12	.066	.13	.09	.155
Partner emotion dysregulation	-.04	.11	.743	-.11	.10	.278
Partner anxious attachment	.28**	.10	.008	.31**	.10	.001

Note. b^* = standardized estimates. SE = standard error. p = significance level. * $p < .05$. ** $p < .01$. *** $p < .001$.

dysregulation ($\chi^2(1) = .928, p = .335$) or the direct partner effect between anxious attachment and psychological aggression ($\chi^2(1) = 0.01, p = .928$).

There was also a strong positive residual covariance between partners' levels of psychological aggression ($b^* = .70$); both the covariance between partners' levels of anxious attachment ($b^* = .01$) and the residual covariance between partners' levels of emotion dysregulation ($b^* = -.05$) were not significant. Model 1 accounted for 10% of male psychological aggression and 11% of female psychological aggression.

Table 5

Effects Decomposition for Model 1: Emotion Dysregulation as a Mediator of Anxious Attachment and Psychological Aggression (5,000 bootstrapped draws)

Effects	Female			Male		
	<i>b</i> *	<i>SE</i>	<i>p</i>	<i>b</i> *	<i>SE</i>	<i>p</i>
Actor psychological aggression on actor anxious attachment						
Direct	.20	.11	.076	.13	.10	.166
Indirect (actor emotion dysregulation)	.01	.07	.862	.03	.06	.591
Total	.21*	.09	.025	.16*	.08	.038
Actor psychological aggression on partner anxious attachment						
Direct	.28**	.10	.008	.31**	.10	.002
Indirect (partner emotion dysregulation)	-.02	.06	.755	-.06	.06	.293
Total	.26*	.08	.002	.25*	.10	.011

Note. *b** = standardized estimates. *SE* = standard error. *p* = significance level. **p* < .05. ***p* < .01. ****p* < .001.

Model 2: Avoidant Attachment and Emotion Dysregulation as Predictors of Psychological Aggression

Results from the second path model analysis indicated a good fit to the data [$\chi_{YB}^2(2) = 1.29, p = .524$; robust CFI = 1.000; SRMR = .022; RMSEA = .000 (.000, .166)] with no suggested modification indices to improve the model. However, Model 2 did not explain the outcome of psychological aggression for males or females. Standardized results with both statistically significant and nonsignificant paths are shown in Figure 4. For Model 2, Table 6 provides the standardized coefficients, standard errors, and significance levels and Table 7 provides the direct, indirect, and total effects decomposition.

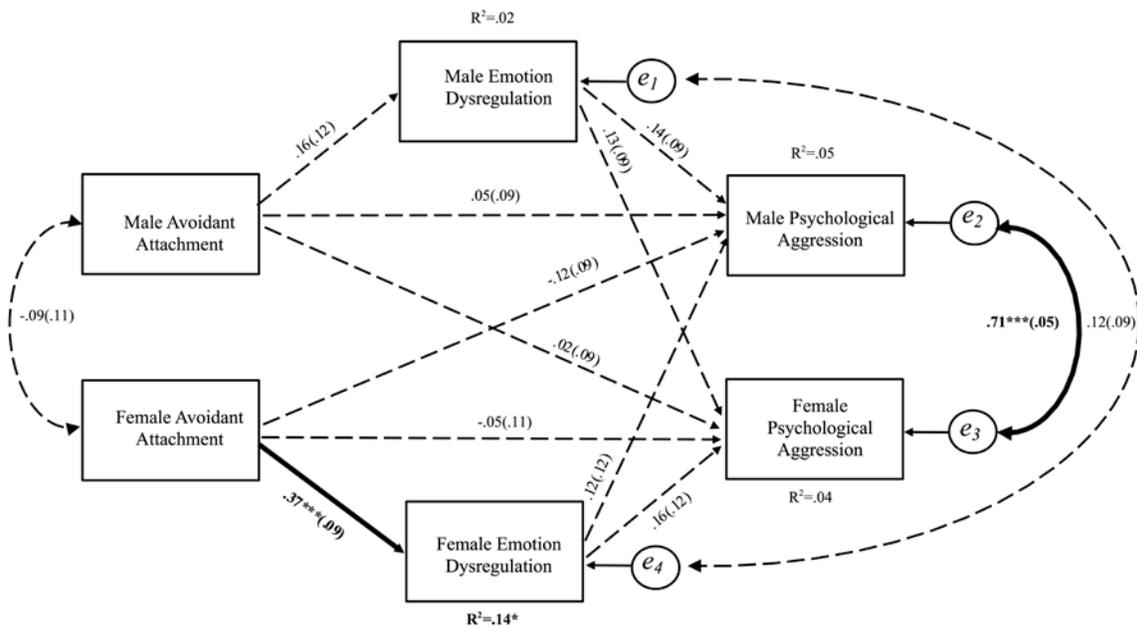


Figure 4. Model 2: standardized results with statistically significant paths. $\chi_{YB}^2(2) = 1.29, p = .524$; robust CFI = 1.000; SRMR = .022; RMSEA = .000 (.000, .166).

Note. Full lines depict significant paths (* $p < .05$, ** $p < .01$, *** $p < .001$) and broken lines depict nonsignificant paths.

No significant actor or partner effects for male and female levels of avoidant attachment on levels of psychological aggression were found (hypotheses 3a and 3b; direct actor effects: male $b^* = .05$, female $b^* = -.05$; direct partner effects: male $b^* = -.12$, female $b^* = .02$). Also, there were no indirect effects detected between avoidant attachment and psychological aggression in males or females (indirect actor effects: male $b^* = .02$, $p = .370$, 95% CI [-.01, .09], female $b^* = .06$, $p = .222$, 95% CI [-.02, .17]; indirect partner effects: male $b^* = .04$, $p = .367$, 95% CI [-.04, .14], female $b^* = .02$, $p = .326$, 95% CI [-.01, .09]). Therefore, emotion dysregulation did not mediate the relationship between avoidant attachment and psychological aggression (hypotheses 4a and 4b). However, there was a moderate direct actor effect in females ($b^* = .37$) for the positive association between avoidant attachment and emotion dysregulation.

Table 6

Path Analysis for Model 2: Avoidant Attachment and Emotion Dysregulation as Predictors of Psychological Aggression

Variable	Female			Male		
	b^*	SE	P	b^*	SE	p
Actor emotion dysregulation on						
Actor avoidant attachment	.37***	.09	.000	.16	.12	.145
Actor psychological aggression on						
Actor emotion dysregulation	.16	.12	.191	.14	.09	.139
Actor avoidant attachment	-.05	.11	.662	.05	.09	.552
Partner emotion dysregulation	.13	.09	.147	.12	.12	.343
Partner avoidant attachment	.02	.09	.874	-.12	.09	.170

Note. b^* = standardized estimates. SE = standard error. p = significance level. * $p < .05$. ** $p < .01$. *** $p < .001$.

Though the direct actor effect between avoidant attachment and emotion dysregulation was significant for females only, tests of models with path constraints did not show any significant differences for this effect based on gender ($\chi^2(1) = 2.42, p = .120$).

Table 7

Effects Decomposition for Model 2: Emotion Dysregulation as a Mediator of Avoidant Attachment and Psychological Aggression (5,000 bootstrapped draws)

Effects	Female			Male		
	<i>b</i> *	<i>SE</i>	<i>P</i>	<i>b</i> *	<i>SE</i>	<i>p</i>
Actor psychological aggression on actor avoidant attachment						
Direct	-.05	.11	.669	.05	.09	.562
Indirect (actor emotion dysregulation)	.06	.05	.222	.02	.02	.370
Total	.01	.11	.931	.07	.09	.406
Actor psychological aggression on partner avoidant attachment						
Direct	.02	.010	.879	-.12	.09	.188
Indirect (partner emotion dysregulation)	.02	.02	.326	.04	.05	.367
Total	.04	.10	.717	-.08	.08	.289

Note. *b** = standardized estimates. *SE* = standard error. *p* = significance level.
p* < .05. *p* < .01. ****p* < .001.

Similar to Model 1, there was a significant positive residual covariance between partners' levels of psychological aggression (*b** = .71); however, the covariance between partners' levels of anxious attachment (*b** = -.09) and the residual covariance between partners' levels of

emotion dysregulation ($b^* = .12$) were not significant. Model 2 did not account for as much of the outcome variable variance as Model 1; it accounted for 5% of male and 4% of female psychological aggression, but not at a statistically significant level.

When model tests did not support direct actor effects between levels of anxious attachment (Model 1) or levels of avoidant attachment (Model 2) and levels of psychological aggression, we tested APIM models for both levels of insecure attachment and psychological aggression without emotion dysregulation as a mediator. Removing emotion dysregulation from the model, there was a moderate direct actor effect for level of anxious attachment on psychological aggression for males ($b^* = .16$, $SE = .08$, $p = .040$) and females ($b^* = .20$, $SE = .09$, $p = .024$). However, the direct actor associations between levels of avoidant attachment and psychological aggression were still nonsignificant for males ($b^* = .06$, $SE = .09$, $p = .460$) and females ($b^* = -.00$, $SE = .11$, $p = .998$).

Chapter V: Discussion

This study examined the associations among levels of insecure attachment—both anxious and avoidant—emotion dysregulation, and psychological aggression in 110 couples. The purpose of the study was to clarify and extend previous findings that did not support a mediating role for emotion dysregulation (Riebel, 2015). This study is the first, to our knowledge, to examine a mediational model of emotion dysregulation for the relationships between levels of insecure attachment and psychological aggression using data from both partners.

This study supported Riebel's finding that emotion dysregulation does not explain the relationships between levels of insecure attachment and psychological aggression (2015). There were no significant indirect effects for either actors or partners in the current study, suggesting that emotion dysregulation is not the mediating mechanism through which levels of insecure

attachment predict psychological aggression between partners. The ability to regulate emotions when distressed, as well as how a person interacts with their partner when distressed, are important facets of adult attachment theory (Mikulincer & Shaver, 2012; Babcock, Jacobson, Gottman & Yerington, 2000). Therefore, it is surprising that emotion dysregulation does not at least partially mediate the relationships between levels of insecure attachment and psychological aggression in couples. Perhaps elevated levels of insecure attachment predict other types of maladaptive behavior in relationships instead of psychological aggression that could be mediated by emotion dysregulation, such as criticizing or stonewalling a partner. Psychologically aggressive behavior may create too much distance between people with elevated levels of anxious attachment and their partners—their maladaptive way of seeking support when dysregulated may look more like nagging or finding fault with their partner. Conversely, those with elevated levels of avoidant attachment may be more likely to lack awareness of their own dysregulation and shut down or withdraw from a partner when distressed, versus act out in a psychologically aggressive manner.

The results were not only surprising from a theoretical standpoint, but also in light of past research. Considering previous studies link emotion dysregulation and psychological aggression, as well as suggest a mediating effect of emotion dysregulation on the outcome of psychological aggression (Garofolo et al., 2016), the relationships among levels of insecure attachment, emotion dysregulation, and psychological aggression may interact differently than structured in the models tested during the current study. Past research indicates that other mediating mechanisms may exist for the associations between levels of insecure attachment and psychological aggression, including ability to experience empathy for a partner, threatening and controlling behaviors, and a demand/withdraw communication pattern between partners

(Peloquin et al., 2011; Lawson & Malnar, 2011; Fournier et al., 2011); these were not accounted for in the tested models.

Even using a multi-dimensional measure of emotion dysregulation produced similar nonsignificant results to Riebel's study; perhaps using a self-report questionnaire to measure internal experience of emotion dysregulation is not the most effective way to approach the problem of how people's difficulties managing their emotions impact their interactions with a partner. Assessing behaviors associated with emotion dysregulation may be a better method for measuring emotion dysregulation in a couple context than one's internal experience of and awareness around emotion dysregulation. For example, behaviors that indicate emotion dysregulation may be more apparent than internal experience for partners. Indeed, this could explain the nonsignificant direct partner effect between emotion dysregulation and psychological aggression; people's own perceptions of their emotion dysregulation were not associated with their partners' levels of psychological aggression. Adult attachment theory suggests that those who have higher levels of emotion dysregulation will engage in specific partner-directed behaviors towards the goal of regulating emotion and decreasing distress, however, we admittedly do not have information about the behaviors participants engaged in besides psychological aggression.

In addition to the nonsignificant mediating effect of emotion dysregulation, the results did not support direct relationships between one's own levels of insecure attachment—both anxious and avoidant—and one's own level of psychological aggression. The lack of support for an association between people's levels of insecure attachment and their own levels of psychological aggression was surprising if one conceptualizes psychological aggression as a way for people with higher levels of anxious or avoidant attachment to get a certain response from

their partners—either increased engagement from partners when used by people with higher levels of anxious attachment or increased distance when used by people with higher levels of avoidant attachment. As we hypothesized in the previous section, however, perhaps higher levels of insecure attachment are more likely to predict partner-directed behaviors like criticizing for those with anxious attachment and withdrawing for those with avoidant attachment. Although we can make sense of the findings in the context of adult attachment theory, the findings were counterintuitive from a research perspective considering the past research supporting an actor effect for anxious attachment (Miga et al., 2010, Karakurt et al., 2013; Lawson & Malnar, 2011). However, because past findings for direct relationships between avoidant attachment and psychological aggression have been inconclusive (Turner & Langhinrichsen-Rohling, 2011), the current study's nonsignificant results for a direct actor effect were less surprising. Although the current study's results did not support a mediating role of emotion dysregulation between levels of insecure attachment and psychological aggression or direct actor effects between levels of insecure attachment and psychological aggression, using APIMeM revealed other significant effects among the variables in the tested models.

The current study's findings converged with previous findings that show a direct partner effect between a person's own levels of anxious attachment or avoidant attachment and their partner's psychological aggression (Peloquin et al., 2011). Male levels of anxious attachment predicted female levels of psychological aggression; additionally, female levels of anxious attachment predicted male levels of psychological aggression. Findings further supported previous research indicating that people with higher levels of anxious attachment are more likely to experience psychological aggression from their partners (Karakurt et al., 2013; Miga et al., 2010). These findings make sense in the context of adult attachment theory based on the

behaviors that people with elevated levels of anxious attachment tend to use with their partners. For example, higher levels of anxious attachment are associated with the hyperactivation of the attachment system during distress; related behaviors like clinging, controlling, or angrily insisting on a response could prompt partners to respond with psychological aggression to create distance (Shaver & Mikulincer, 2002, Brennan et al., 1998). Conversely, the direct partner effect between levels of avoidant attachment and psychological aggression was not significant—perhaps due to behaviors associated with deactivation of the attachment system, such as suppressing needs to connect with a partner and downplaying conflict. Avoidant behavior may not elicit as much psychologically aggressive behavior in a partner, because, by nature, avoidant partners limit opportunities to engage in conflict.

The analyses revealed other significant findings for levels of anxious attachment and avoidant attachment as well. For both male and female partners, increased levels of anxious attachment predicted increased levels of emotion dysregulation. These findings linking levels of anxious attachment and emotion dysregulation converge with previous research (Karakurt et al., 2013) and make sense from an adult attachment theoretical perspective, given that the attachment behavioral system is activated when people experience distressing emotions. Anxious attachment is characterized by a negative view of the self; therefore, people with higher levels of anxious attachment are more preoccupied with eliciting reassurance and comfort from a partner when seeking to soothe their distress. Thus, if they perceive that they are emotionally dysregulated, it makes sense that they would default to \maladaptive ways of managing their distress when pursuing emotional support from their partner. It is also possible that a person with elevated levels of anxious attachment would perceive their ways of emotionally regulating

to be even more limited during conflict with a partner, since reassurance and a sense of connection would be less likely (Mikulincer & Shaver, 2005, 2008).

Although there was a direct actor effect between levels of anxious attachment and emotion dysregulation for both males and females, the direct actor effect between levels of avoidant attachment and emotion dysregulation was only present for females. Previous research indicates that males are more likely than females to suppress emotional experience (Gross & John, 2003). Further, as emotion regulation strategies, people with higher levels of anxious attachment are more likely to ruminate on emotions, while people with higher levels of avoidant attachment are more likely to suppress emotions (Shaver & Mikulincer, 2002). Therefore, it makes sense that level of anxious attachment has a larger effect on self-reported emotion dysregulation than level of avoidant attachment; perhaps people with higher levels of avoidant attachment are less aware of their own distress and therefore less able to accurately self-report emotion dysregulation. Additionally, the gender difference for emotion suppression may explain why the direct actor effect between levels of avoidant attachment and emotion dysregulation was significant for only the females in our sample.

Implications

The findings of the current study improve our understanding of the relationships among levels of anxious and avoidant attachment, emotion dysregulation, and psychological aggression in couples, and can be used to inform theory and clinical practice with couples. As the framework for the current study, the findings support adult attachment theory by highlighting important partner effects between actor levels of anxious attachment and partner psychological aggression. The behaviors associated with higher levels of anxious attachment, such as clinging to or angrily pursuing a partner, may increase the likelihood of psychologically aggressive

behavior in partners; the hyperactivation of the attachment system may contribute in this way to unhealthy interactions between partners, instead of the intended effect to foster connection and security. Additionally, the results indicating an association between levels of insecure attachment and emotion dysregulation support a framework of attachment dimensions themselves as indices of emotion regulation (Babcock et al., 2000). In this sense, the hyperactivation and deactivation of the attachment system—characterized by attachment anxiety and avoidance, respectively—are used to regulate emotion in the context of partner relationships (Dozier & Kobak, 1992).

In addition to application to theory, the findings of the current study also have practical value for clinicians working with couples—especially since the current study used a clinical sample. The distributions for mild, moderate, and severe relationship distress levels were fairly even for males and females; therefore, the findings can likely be generalized to couples in therapy at different levels of distress. Emotionally Focused Couple Therapy [EFT] is a therapy framework based in adult attachment theory that has been proven effective for distressed couples (Johnson, 2004); its interventions based in attachment theory integrate well with the current study's findings.

The current study's findings converged with previous research indicating that psychological aggression is highly prevalent and bidirectional between partners; interventions that aim to decrease psychological aggression between partners should account for this reciprocity. Using an experiential EFT approach, therapists can block psychological aggression between partners in session and redirect them before they become escalated; in turn, this can help partners increase awareness of their attack/defend communication patterns and learn how to interrupt negative conflict cycles. If partners can take responsibility for their own roles in the

bidirectional relationship of psychological aggression, they can also interrupt the positive feedback loop that amplifies their reactivity to each other.

Additionally, the partner effects for anxious attachment suggest that decreasing the behaviors associated with hyperactivation of the attachment system in one partner may help to decrease psychological aggression in the other partner. Therapists can provide psychoeducation about the behaviors associated with attachment anxiety and avoidance, as well as help their clients gain insight into their own tendencies to aggressively pursue or emotionally withdraw from their partners. Therapists can facilitate conversations between partners in which they learn how to communicate about attachment injuries; softening their negative affect and identifying vulnerable, primary emotions underneath psychologically aggressive behavior provides a different way for partners to interact besides blaming/defending. For example, a therapist can help partner B respond in an empathic way—as opposed to a reactive, hostile way—when partner A is being psychologically aggressive: “based on how you’re reacting, I can tell that something is wrong and I want to check in with you.”

Though emotion dysregulation was not the mediating variable between anxious attachment and psychological aggression, it was still highly associated with anxious attachment in males and females, as well as avoidant attachment in females; this suggests that increasing people’s abilities to regulate their own emotions could potentially offset their tendencies to relate to their partners in unhealthy ways when distressed. EFT also involves intrapsychic work with both partners to help them develop awareness of their own emotional experiences, as well as increase their ability to self-regulate. The findings highlight that working with both members of a couple to decrease psychological aggression may involve helping partners to develop an

awareness of the partner-directed behaviors they engage in when distressed and modifying approaches that may trigger each other to respond in psychologically aggressive ways.

Limitations and Future Directions

As we discuss the relationships among the main variables, it is important to note that the data used in the study were cross-sectional; therefore, we are unable to make definitive statements about the causal directions of the significant relationships. We are also cautious about the generalizability of the findings due to the use of a convenience clinical sample. Additionally, there were fairly moderate levels of anxious and avoidant attachment for the couples in the study. Distributions of levels of anxious attachment and avoidant attachment were relatively normal indicating that most participants scored towards the means for these measures. Given that the ECR scale measures anxious attachment and avoidant attachment along spectrums, the inverse for both subscales is a measure of secure attachment. The majority of participants in the study did not score at the extreme levels for anxious or avoidant attachment; therefore it is important to interpret the results in light of the moderate levels of anxious or avoidant attachment—and therefore moderate levels of secure attachment—reported by participants. The distributions of emotion dysregulation scores were slightly skewed, indicating that most participants fell toward the lower end of possible scores for this variable as well; therefore it is important to interpret the results in light of the lower levels of emotion dysregulation in the sample. Psychological aggression scores were also fairly normally distributed for both males and males (see Appendix B for histograms of anxious attachment, avoidant attachment, emotion dysregulation, and psychological aggression for males and females). The tested relationships may have produced different results if the participants had

reported higher levels of anxious or avoidant attachment, emotion dysregulation, or psychological aggression.

The small sample size limited the power of statistical analyses to detect significant effects and prevented us from examining both anxious attachment and avoidant attachment within the same model. Although outside of the scope of the current study, the small sample size prevented us from further examining any differences detected between participants based on ethnicity or religious beliefs; future studies could examine the differences that arise in levels of insecure attachment, emotion dysregulation, and psychological aggression based on demographic variables. Further, we were not able to use structural equation modeling to control for measurement error due to the small sample size.

Using self-report measures for the predictor variables and mediator variables may have elevated the effect sizes of the relationships among levels of anxious or avoidant attachment and emotion dysregulation, due to common method variance. Additionally, self-report measures may have introduced social desirability bias in the responses. Indeed, a different method of scoring for the CTS-2 psychological aggression measure than the combined self- and partner-report method used in the current study, such as using the higher score of the self- and partner-reports on an item, would better control for the effect of social desirability when responding (Falconier, 2010; Fals-Stewart, Birchler & Kelley, 2003). Future research should aim to examine the relationships among the main variables using a larger sample size, as well as additional ways of measuring the constructs of anxious and avoidant attachment, emotion dysregulation, and psychological aggression.

For example, it could be helpful to supplement self-report measures with partner-report, observational, and physiological measurement methods; this would allow for the self-report

measures to capture the internal experience of anxious or avoidant attachment, emotion dysregulation, and psychological aggression and the partner-report and observational methods to focus on manifest behaviors. The Emotion Regulation Checklist [ERC] is an informant-report measure of children's emotion regulation and emotion-related behavior (Shields & Cicchetti, 1997)—it could be useful for future research to modify this measure for use with adult partners, especially for its utility in providing a way for informants to report on observed behaviors related to emotion dysregulation. Physiological measurements could also capture dysregulation that occurs below participants' awareness and be used to measure codysregulation between partners in study designs that examine partner interactions involving psychological aggression over time. Physiological measures such as heart rate, respiratory rate, skin conductance, and electrical brain activity using electroencephalograms have been used to measure emotion dysregulation in the literature (Weiss, Thomson & Chan, 2014). Given that psychological aggression itself can be conceptualized as a maladaptive emotion regulation strategy, as opposed to solely an outcome, supplementing self-report measures with partner-report, observational, and physiological data could also help distinguish if participants self-report about using psychological aggression as a way to self-regulate or if the behavior is part of a reactive, unconscious process.

There are specific limitations related to the measure of emotion dysregulation in this study. Whereas the measures for insecure attachment levels (ECR) and psychological aggression (CTS-2) asked participants to choose responses in the context of partner relationships, the measure for emotion dysregulation (DERS) did not prompt participants to consider their difficulties with emotion regulation in the context of romantic relationships; instead, the DERS emphasized the individual experience of emotion dysregulation. Consequently, participants may or may not have been taking their partner relationships into account when responding about their

difficulties with emotion regulation. There are various approaches to assessing emotion regulation as a dyadic process that could be used for future studies to supplement the DERS as a self-report measure, including combining self-report and partner-report scores about specific dyadic regulation behaviors (Horn & Maercker, 2016), using observation and behavior coding of audiovisual recordings with facial expressions and body language as indicators of distress (Jahromi, Meek & Ober-Reynolds, 2012), or even using speech acoustic features to behaviorally code interactions between partners (Black et al., 2013).

Some limitations are also involved with the use of the CTS-2 scale for psychological aggression. The CTS-2 includes specific behavior items that emphasize denigration, as well as dominance and intimidation of a partner, as indicators of psychological aggression; however, other aspects of psychological aggression that have been identified by researchers, including restrictive engulfment (isolation and restriction) and hostile withdrawal (emotional punishment), are not included (Murphy & Hoover, 1999). Additionally, the CTS-2 indicates the frequency of psychologically aggressive acts but not the intensity, duration, or patterns related to the reported behaviors. Future research using comprehensive, multidimensional measures of psychological aggression, such as the Multidimensional Measure of Emotional Abuse (Murphy & Hoover, 1999) or the Follingstad Psychological Aggression Scale (Follingstad, Coyne & Gambone, 2005), could be useful to gain a more nuanced understanding of the psychological aggression being measured.

In addition to limitations related to measurement issues, the current study did not control for demographic variables such as marital status, number of children, or duration of relationship given the unavailability of these variables in the secondary dataset. Previous research with couples has controlled for these demographic variables due to their potential associations with

couple outcome variables (Hardie & Lucas, 2010; Crane & Testa, 2014; Kim et al., 2014); the models in the current study did not account for the variance if these demographic variables have any significant associations with two or more of the main variables.

Conclusion

This study is one of the first to examine the mediating role of emotion dysregulation for the relationships between levels of insecure attachment—both anxious and avoidant—and psychological aggression, as well as the first to examine these relationships in couples using dyadic data. Although emotion dysregulation was not a mediator, it still had a significant role in the tested models; increased levels of emotion dysregulation were highly associated with increased levels of anxious attachment in both male and female partners. In females, increased levels of emotion dysregulation were associated with increased levels of avoidant attachment as well. The results also indicated direct partner effects between people's own levels of anxious attachment and their partners' psychological aggression. These findings suggest that increasing partners' abilities to regulate their own emotions and manage distress in healthier ways than hyperactivating the attachment system may decrease levels of psychological aggression between partners.

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Appendix A: Instruments

Experiences in Close Relationships Scale

Directions: The following statements concern how you feel in romantic relationships. We are interested in how you generally experience relationships, not only what is happening in a current relationship. Respond to each statement by indicating how much you agree or disagree with it.

Strongly Disagree 1	Disagree 2	Slightly Disagree 3	Neutral/Mixed 4	Slightly Agree 5	Agree 6	Strongly Agree 7
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1. I prefer not to show others how I feel deep down.
2. I worry about being rejected or abandoned.
3. I am very comfortable being close to other people.
4. I worry a lot about my relationships.
5. Just when someone starts to get close to me, I find myself pulling away.
6. I worry that others won't care about me as much as I care about them.
7. I get uncomfortable when someone wants to be very close.
8. I worry a fair amount about losing my close relationship partners.
9. I don't feel comfortable opening up to others.
10. I often wish that my close relationship partner's feelings for me were as strong as my feelings for them.
11. I want to get close to others, but I keep pulling back.
12. I often want to get very close to others, and this sometimes scares them away.
13. I am nervous when another person gets too close to me.
14. I worry about being alone.
15. I feel comfortable sharing my private thoughts and feelings with others.
16. My desire to be very close sometimes scares people away.
17. I try to avoid getting too close to others.
18. I need a lot of reassurance that close relationships partners really care about me.
19. I find it relatively easy to get close to others.
20. Sometimes I feel that I force others to show more feeling, more commitment to our relationship that they otherwise would.
21. I find it difficult to allow myself to depend on close relationship partners.
22. I do not often worry about being abandoned.
23. I prefer not to be too close to others.
24. If I can't get a relationship partner to show interest in me, I get upset or angry.
25. I tell my close relationship partners just about everything.
26. I find that my partner(s) don't want to get as close as I would like.
27. I usually discuss my problem and concerns with close others.
28. When I don't have close others around, I feel somewhat anxious and insecure.
29. I feel comfortable depending on others.
30. I get frustrated when my close relationship partners are not around as much as I would like.
31. I don't mind asking others for comfort, advice, or help.
32. I get frustrated if relationship partners are not available when I need them.
33. It helps to turn to close others in times of need.
34. When other people disapprove of me, I feel really bad about myself.
35. I turn to my close relationship partners for many things, including comfort and reassurance.
36. I resent it when my close relationship partners spend time away from me.

Brennan, K. A., Clark, C., & Shaver, P. R. (1998). Self-report measurement of adult attachment: An integrative overview. In J. A. Simpson and W. S. Rholes (Eds.), *Attachment Theory and Close Relationships* (pp. 46-76). New York, NY: Guilford Press.
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Difficulties in Emotion Regulation Scale

Directions: Indicate how often each item applies to you. Possible responses range from 1 (almost never) reflecting 0-10% of the time to 5 (almost always) reflecting 91-100% of the time.

Almost never (0-10%) 1	Sometimes (11-35%) 2	About half the time (35-65%) 3	Most of the time (66-90%) 4	Almost always (91-100%) 5
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1. I am clear about my feelings.
2. I pay attention to how I feel.
3. I experience my emotions as overwhelming and out of control.
4. I have no idea how I am feeling.
5. I have difficulty making sense out of my feelings.
6. I am attentive to my feelings.
7. I know exactly how I am feeling.
8. I care about what I am feeling.
9. I am confused about how I feel.
10. When I'm upset, I acknowledge my emotions.
11. When I'm upset, I become angry with myself for feeling that way.
12. When I'm upset, I become embarrassed for feeling that way.
13. When I'm upset, I have difficulty getting work done.
14. When I'm upset, I become out of control.
15. When I'm upset, I believe that I will remain that way for a long time.
16. When I'm upset, I believe that I'll end up feeling very depressed.
17. When I'm upset, I believe that my feelings are valid and important.
18. When I'm upset, I have difficulty focusing on other things.
19. When I'm upset, I feel out of control.
20. When I'm upset, I can still get things done.
21. When I'm upset, I feel ashamed with myself for feeling that way.
22. When I'm upset, I know that I can find a way to eventually feel better.
23. When I'm upset, I feel like I am weak.
24. When I'm upset, I feel like I can remain in control of my behaviors.
25. When I'm upset, I feel guilty for feeling that way.
26. When I'm upset, I have difficulty concentrating.
27. When I'm upset, I have difficulty controlling my behaviors.
28. When I'm upset, I believe that there is nothing I can do to make myself feel better.
29. When I'm upset, I become irritated with myself for feeling that way.
30. When I'm upset, I start to feel very bad about myself.
31. When I'm upset, I believe that wallowing in it is all I can do.
32. When I'm upset, I lose control over my behaviors.
33. When I'm upset, I have difficulty thinking about anything else.
34. When I'm upset, I take time to figure out what I'm really feeling.
35. When I'm upset, it takes me a long time to feel better.
36. When I'm upset, my emotions feel overwhelming.

Gratz, K. L., & Roemer, L. (2004). Multidimensional assessment of emotion regulation and dysregulation: Development, factor structure, and initial validation of the difficulties in emotion regulation scale. *Journal of Psychopathology and Behavioral Assessment*, 26(1), 41-53.
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Revised Couple Conflict Tactics Scale – Psychological Aggression Scale

The following are 5 representative items from the 8 item Psychological Aggression scale of the CTS-2. Participants were asked to provide a self-report about the frequency of their own use of the behaviors, as well as a partner-report about the frequency of their partners' use of the behaviors.

How often did this happen?

1 = Once in the past 4 months

2 = Twice in the past 4 months

3 = 3-5 times in the past 4 months

4 = 6-10 times in the past 4 months

5 = 11-20 times in the past 4 months

6 = more than 20 times in the past 4 months

7 = Not in the past 4 months, but it did happen before

0 = This has never happened

5. I insulted or swore at my partner.

35. I shouted or yelled at my partner.

49. I stomped out of the room or house or yard during a disagreement.

67. I did something to spite my partner.

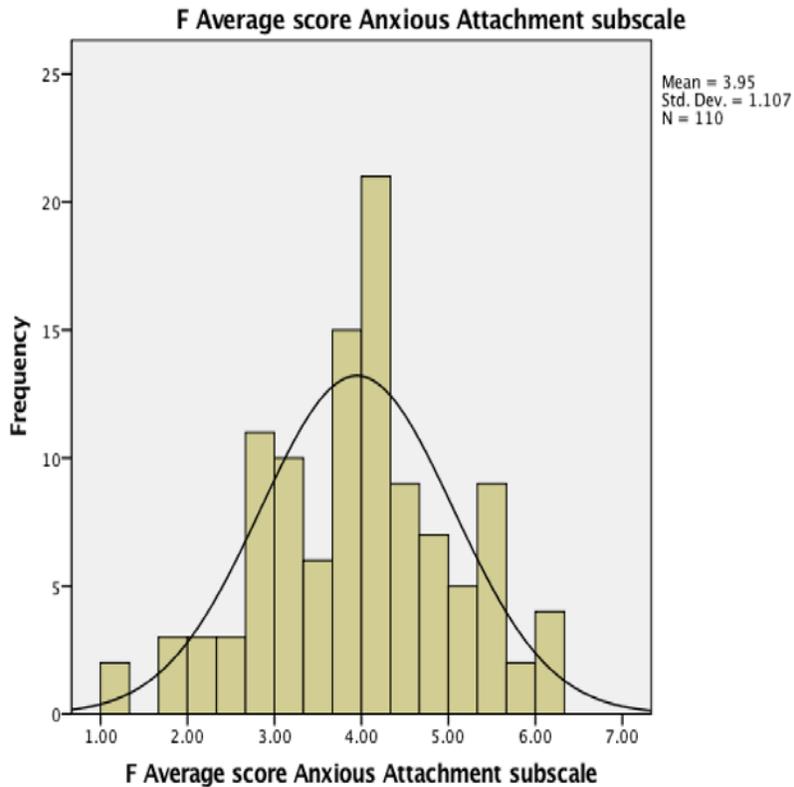
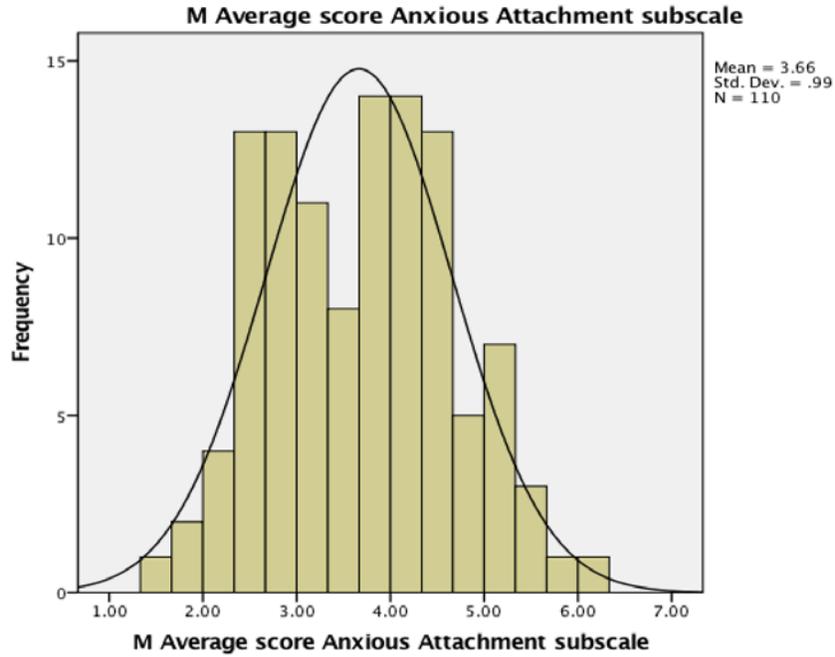
69. I threatened to hit or throw something at my partner.

Straus, M. A., Hamby, S. L., Boney-McCoy, S., & Sugarman, D. B. (1996). The revised conflict tactics scales (CTS2): Development and preliminary psychometric data. *Journal of Family Stress, 17*(3), 283-316.

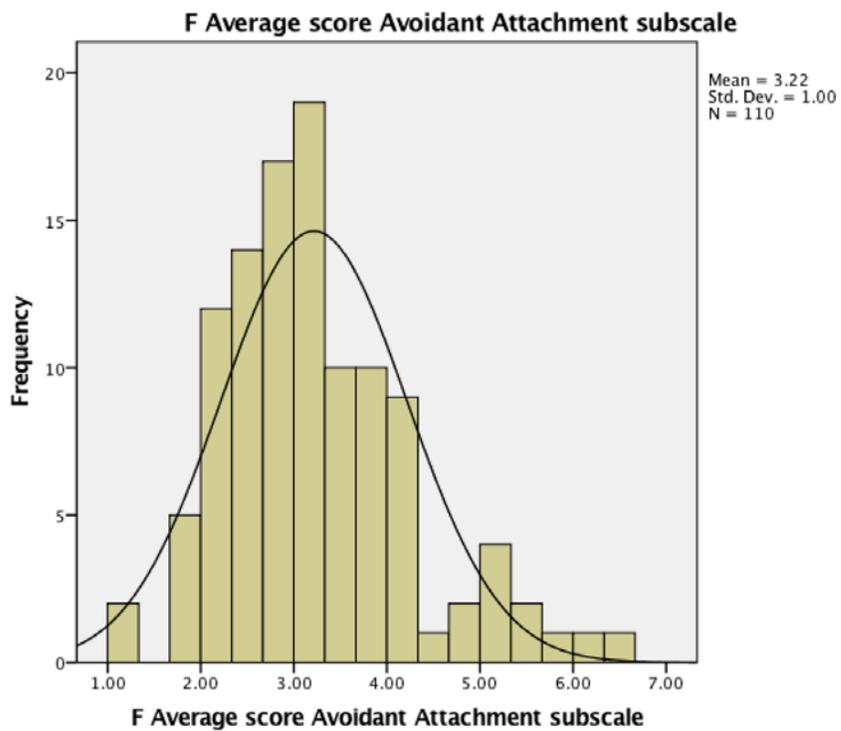
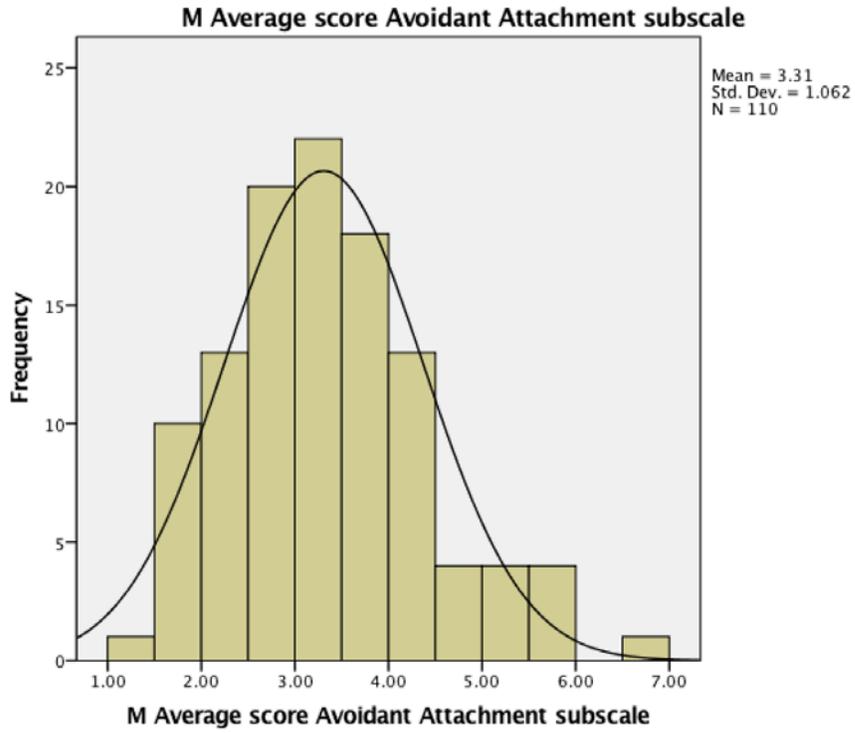
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Appendix B: Histograms

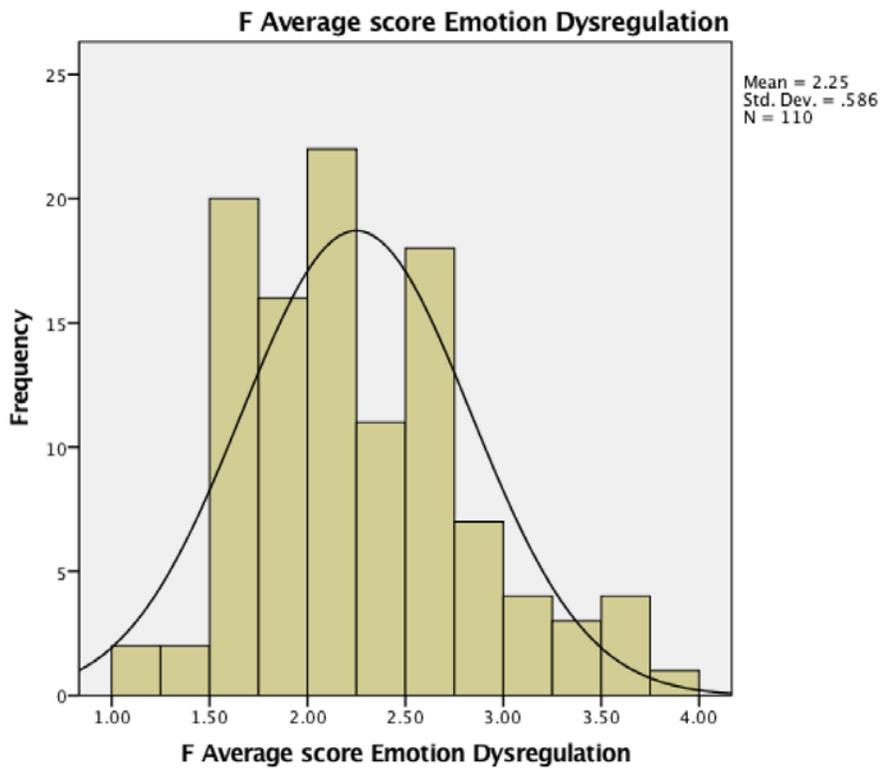
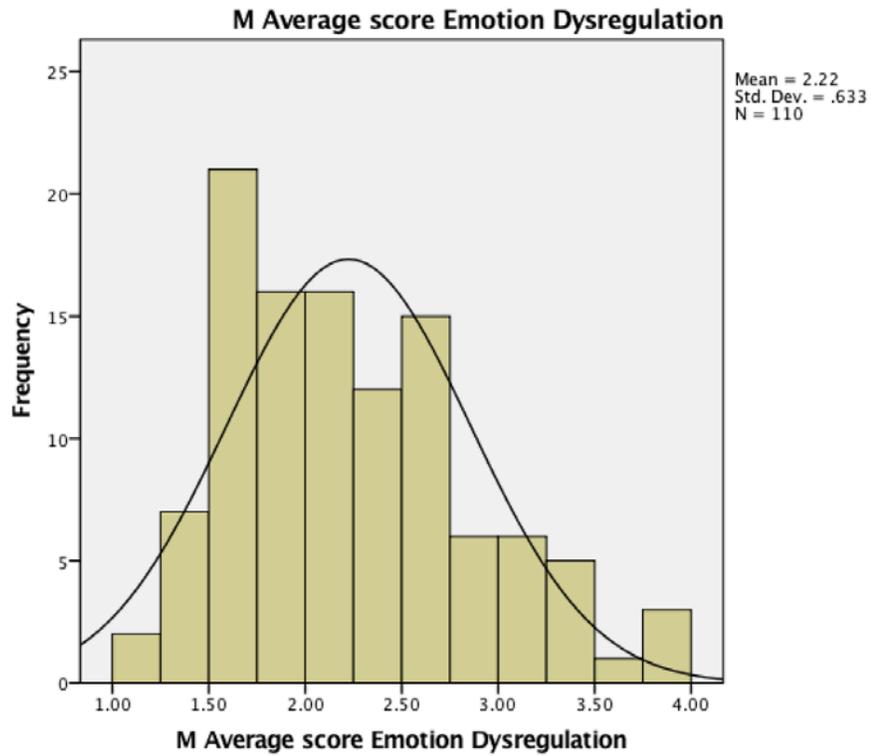
Distributions of Anxious Attachment for Males and Females



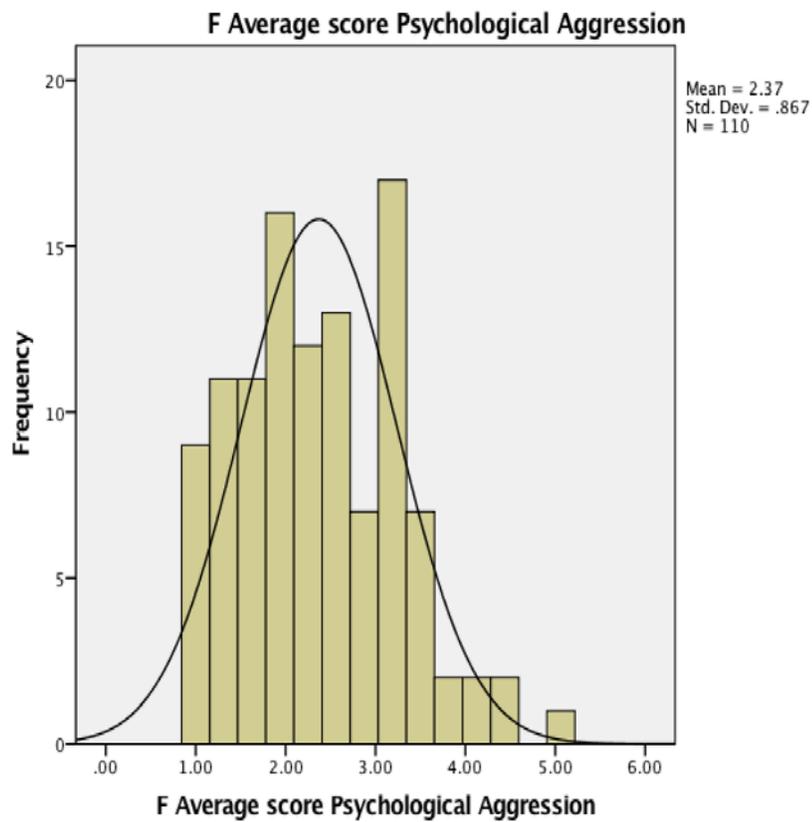
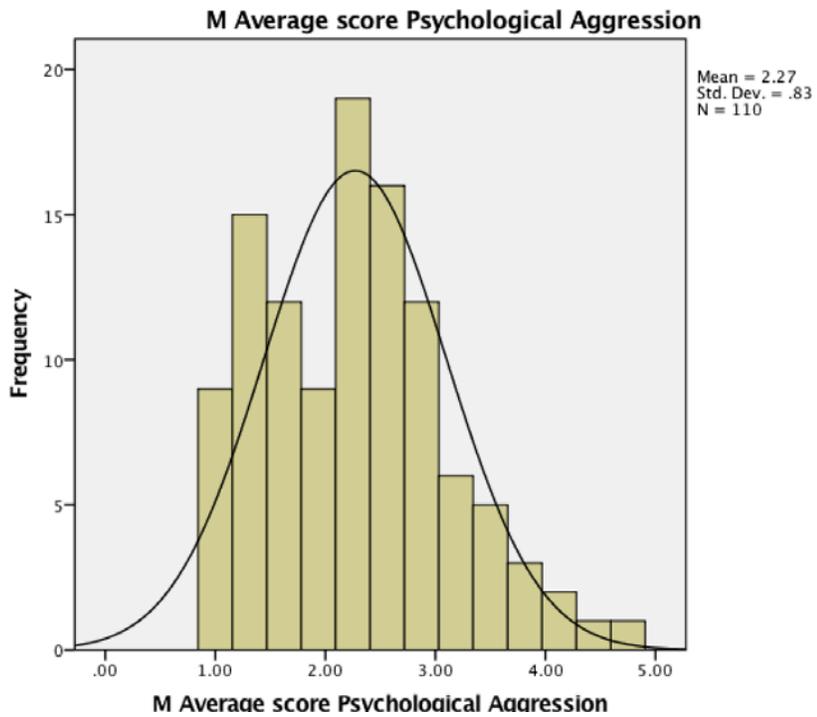
Distributions of Avoidant Attachment for Males and Females



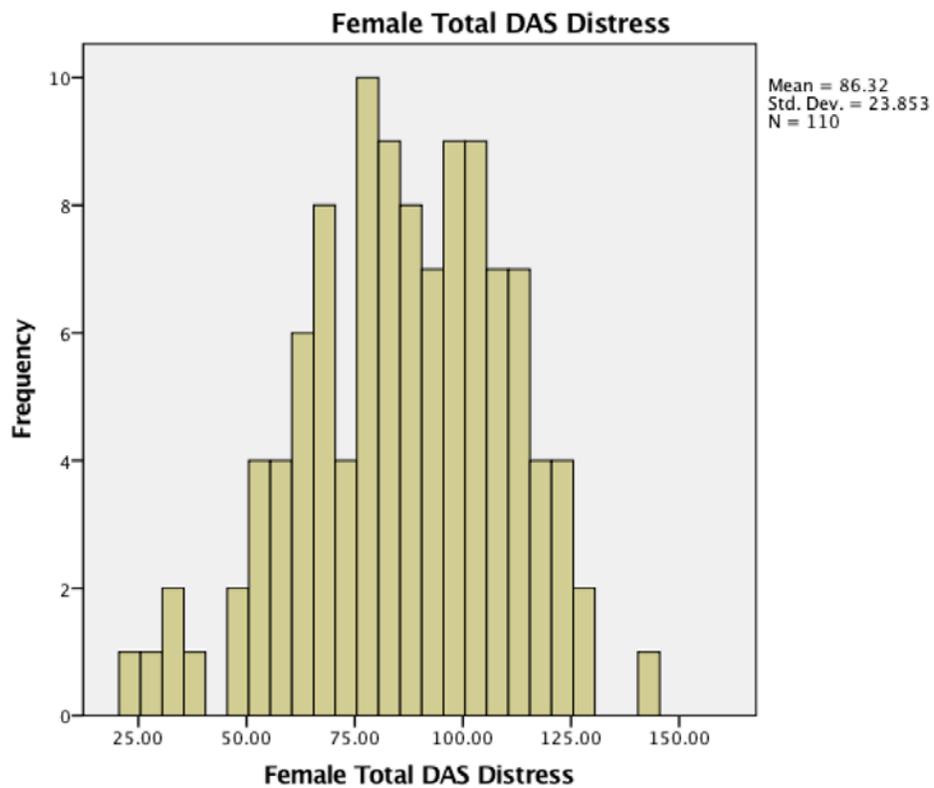
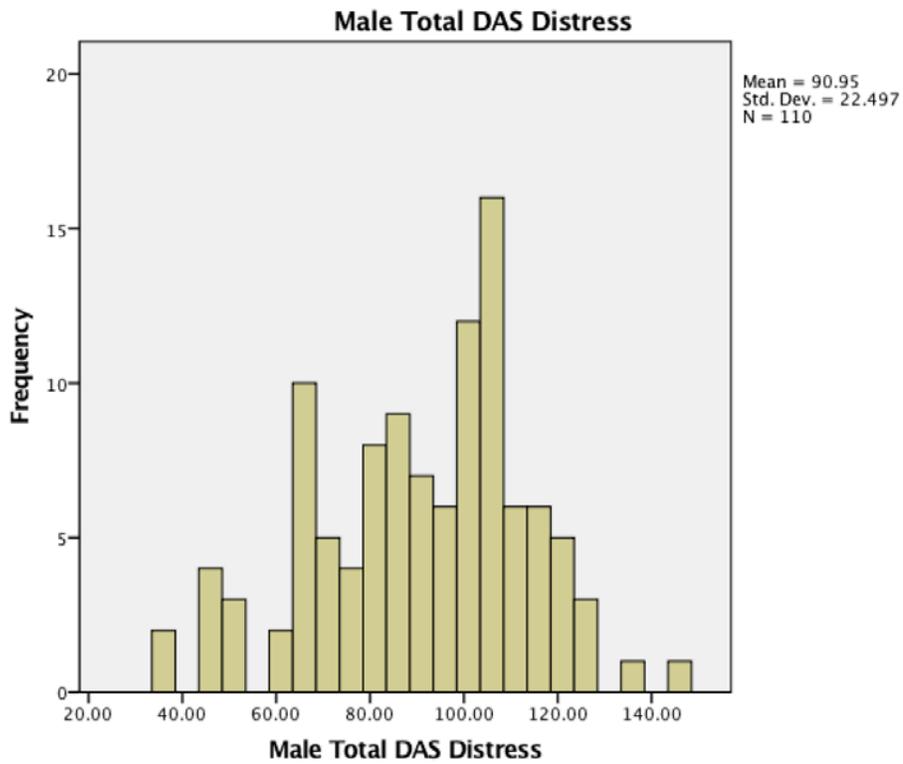
Distributions of Emotion Dysregulation for Males and Females



Distributions of Psychological Aggression for Males and Females



Distributions of Relationship Distress for Males and Females



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Experiences in Close Relationships (ECR) scale

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Revised Conflict Tactics Scale (CTS-2) – Psychological Aggression Scale



May 9, 2017

Rachel Cheche
Therapist Intern
Center for Family Services
M.S. Candidate, Marriage and Family Therapy, 2017
Virginia Polytechnic Institute and State University

Re: Revised Conflict Tactics Scale (CTS2)

Hello—

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