2017

Considering the Role of Relationship-Contingent Self-Esteem: Attachment Style, Conflict Behaviors, and Relationship Satisfaction

Amanda Katherine Buduris

Iowa State University

Follow this and additional works at: https://lib.dr.iastate.edu/etd

Part of the Counseling Psychology Commons, and the Social Psychology Commons

Recommended Citation
https://lib.dr.iastate.edu/etd/15268

This Thesis is brought to you for free and open access by the Iowa State University Capstones, Theses and Dissertations at Iowa State University Digital Repository. It has been accepted for inclusion in Graduate Theses and Dissertations by an authorized administrator of Iowa State University Digital Repository. For more information, please contact digirep@iastate.edu.
Considering the role of relationship-contingent self-esteem: Attachment style, conflict behaviors, and relationship satisfaction

by

Amanda K. Buduris

A thesis submitted to the graduate faculty
in partial fulfillment of the requirement for the degree of

MASTER OF SCIENCE

Major: Psychology

Program of Study Committee:
Loreto Prieto, Major Professor
Meifen Wei
Carolyn Cutrona-Russell

The student author and the program study committee are solely responsible for the content of this thesis. The Graduate College will ensure this thesis is globally accessible and will not permit alterations after a degree is conferred.

Iowa State University
Ames, Iowa
2017
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIST OF TABLES</td>
<td>iv</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>v</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>vi</td>
</tr>
<tr>
<td>CHAPTER 1: INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>CHAPTER 2: LITERATURE REVIEW</td>
<td>9</td>
</tr>
<tr>
<td>Attachment</td>
<td>10</td>
</tr>
<tr>
<td>Relationship-Contingent Self-Esteem</td>
<td>25</td>
</tr>
<tr>
<td>Conflict Behaviors</td>
<td>33</td>
</tr>
<tr>
<td>Relationship Satisfaction</td>
<td>39</td>
</tr>
<tr>
<td>Attachment, Relationship-Contingent Self-Esteem, Conflict Behaviors, &amp; Relationship Satisfaction</td>
<td>41</td>
</tr>
<tr>
<td>The Present Study</td>
<td>51</td>
</tr>
<tr>
<td>Research Hypotheses</td>
<td>54</td>
</tr>
<tr>
<td>CHAPTER 3: METHOD</td>
<td>56</td>
</tr>
<tr>
<td>Participants</td>
<td>56</td>
</tr>
<tr>
<td>Procedure</td>
<td>58</td>
</tr>
<tr>
<td>Measures and Materials</td>
<td>59</td>
</tr>
<tr>
<td>CHAPTER 4: RESULTS</td>
<td>64</td>
</tr>
<tr>
<td>CHAPTER 5: DISCUSSION</td>
<td>74</td>
</tr>
<tr>
<td>Attachment</td>
<td>74</td>
</tr>
<tr>
<td>Relationship-Contingent Self-Esteem</td>
<td>77</td>
</tr>
<tr>
<td>Conflict Behaviors</td>
<td>78</td>
</tr>
<tr>
<td>Relationship Satisfaction</td>
<td>79</td>
</tr>
<tr>
<td>Limitations</td>
<td>82</td>
</tr>
<tr>
<td>Future Research</td>
<td>85</td>
</tr>
<tr>
<td>Implications for Practice</td>
<td>87</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>88</td>
</tr>
<tr>
<td>APPENDIX A. BARTHOLOMEW &amp; HOROWITZ’S (1991) MODEL OF SELF AND OTHERS</td>
<td>101</td>
</tr>
<tr>
<td>APPENDIX B. IRB APPROVAL</td>
<td>102</td>
</tr>
</tbody>
</table>
APPENDIX C. INFORMED CONSENT.................................................................103
APPENDIX D. DEMOGRAPHICS & RELATIONSHIP HISTORY QUESTIONNAIRE ......105
APPENDIX E. CHOOSE YOUR OWN ADVENTURE TASK – EXAMPLES OF QUESTIONS USED........................................................................................................................................106
APPENDIX F. EXPERIENCES IN CLOSE RELATIONSHIP – SHORT FORM............107
APPENDIX G. RELATIONSHIP-CONTINGENT SELF-ESTEEM.................................108
APPENDIX H. RELATIONSHIP SATISFACTION....................................................109
LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 1</td>
<td>Participant Demographics</td>
<td>57</td>
</tr>
<tr>
<td>Table 2</td>
<td>Sample Means, Standard Deviations, and Ranges for Study Measures</td>
<td>66</td>
</tr>
<tr>
<td>Table 3</td>
<td>Correlations Among Measures</td>
<td>67</td>
</tr>
<tr>
<td>Table 4</td>
<td>Partial Correlations Among Measures and Insecure Attachment</td>
<td>68</td>
</tr>
<tr>
<td>Table 5</td>
<td>RCSE as a Moderator of Pure Anxious Attachment and Detrimental Decision Endorsement</td>
<td>69</td>
</tr>
<tr>
<td>Table 6</td>
<td>RCSE as a Moderator of Pure Anxious Attachment and Relationship Satisfaction</td>
<td>70</td>
</tr>
<tr>
<td>Table 7</td>
<td>RCSE as a Mediator of Pure Anxious Attachment and Detrimental Decision Endorsement</td>
<td>71</td>
</tr>
<tr>
<td>Table 8</td>
<td>RCSE as a Mediator of Pure Anxious Attachment and Relationship Satisfaction</td>
<td>71</td>
</tr>
<tr>
<td>Table 9</td>
<td>ANCOVA – Sex Differences in Pure Anxious Attachment Scores</td>
<td>72</td>
</tr>
<tr>
<td>Table 10</td>
<td>ANOVA – Sex Differences in RCSE Scores</td>
<td>72</td>
</tr>
<tr>
<td>Table 11</td>
<td>ANOVA – Sex Differences in RS Scores</td>
<td>73</td>
</tr>
<tr>
<td>Table 12</td>
<td>ANOVA – Sex Differences in CYOA Scores</td>
<td>73</td>
</tr>
</tbody>
</table>
ACKNOWLEDGMENTS

I would like to express my thanks to Dr. Loreto Prieto, my graduate advisor and committee chair, for his unending support and patience throughout this research project. His continual encouragement and belief in my ability to complete my thesis were so appreciated.

I would also like to thank Dr. Meifen Wei and Dr. Carolyn Cutrona, my committee members, for agreeing to be on my committee and for their excellent advice and willingness to answer questions and generate solutions.

Lastly, I would like to express my gratitude to my family. To my mother, for always believing that I could do whatever I set my mind to. To my partner, whose support, love, and reminders for self-care were endless and helped me make it through this process.
ABSTRACT

Research has empirically demonstrated that adult attachment style directly affects communication between partners in romantic relationships, in particular, how partners address and handle conflicts in the relationship. The construct of relationship-contingent self-esteem (RCSE) suggests that individuals behave differently in romantic relationships based on the degree to which their personal self-esteem is connected to successes or failures in that relationship. However, few studies have examined how these two independent constructs are related to one another in terms of relationship communication behaviors during conflict. The purpose of my study was to examine the moderating and mediating effect of RCSE on the relation between attachment styles in romantic relationships and conflict behaviors in romantic relationships, as well as its moderating and mediating effect on the relation between attachment styles and relationship satisfaction. Results indicated that anxious attachment scores were significantly positively correlated with RCSE, anxious and avoidant attachment characteristics were significantly negatively correlated with relationship satisfaction, and that RCSE neither had a moderating or mediating effect on the relations between pure anxious attachment and number of detrimental decisions endorsed during conflict scenarios, or level of relationship satisfaction. Implications for continued examination of role that RCSE plays in the context of conflict in romantic relationships, as well as implications for clinical work are discussed.

Keywords: adult attachment; relationship-contingent self-esteem; conflict behaviors in romantic relationships; relationship satisfaction
CHAPTER 1. INTRODUCTION

The way in which we think of ourselves depends on our social relationships with others. Our sense of identity is constructed within the context of our social roles, particularly our key interactive relationships (Deaux, Reid, Mizrahi, & Ethier, 1995). Of particular interest to clinicians and researchers are romantic relationships, as individuals think, feel, and act in significantly different ways in romantic relationships than they do in other social relationships (Knee, Canevello, Bush, & Cook, 2008). For example, some individuals in romantic relationships cling to significant others who are abusive to them (Bartholomew, Henderson, & Dutton, 2001; Lesser, 1990; Steinmetz, 1977), while they would not do so if treated this way in other social relationships. Though not all individuals put themselves in these kinds of positions, such observations demonstrate that our need to connect with others at times leads us to act in ways that may not be adaptive, and that these needs for connection may in fact be more important to some individuals than their emotional safety or well being. One well established way in which behavior in romantic relationships has been conceptualized is through the theoretical lens of attachment theory; this theory has been cited as a key way in which individual differences in behavior within familial, platonic, and romantic relationships can be understood (Bowlby, 1969; 1973; 1979; 1983; 1988; Hazan & Shaver, 1987; 1990; 1994).

In its initial development, attachment theory described relational styles present for infants in relation to their caregivers (typically mothers). Ainsworth, Blehar, Waters, and Wall (1978) termed these styles as secure, anxious/ambivalent, and avoidant. A secure attachment is characterized by minimal distress when separated from the caregiver, as well as low levels of anxiety when exploring the environment independently. Infants with anxious/ambivalent or avoidant attachments to caregivers (what are generally known as insecure attachments) are
highly distressed or withdrawn when separated from a caregiver, and are hesitant to or fail to explore environments on their own. Some individuals (especially those with anxious/ambivalent attachment styles), due to evolving maladaptive beliefs about joining with others and fear of environments (Barber & Buehler, 1996), seek *enmeshment* with their attachment figures. Enmeshment refers to a lack of individuation between those in a relationship. For those whose relationships are characterized by high levels of enmeshment, removal (real or imagined) from that relationship serves as a large threat to their sense of self and sense of safety.

Those with more *avoidant* styles of attachment seek a self-protective distance with attachment figures and relationships, as a way of coping with the threat of losing the presence of their caregiver, despite experiencing a strong need for their attachment figure. *Avoidance* refers to an underlying resistance to close bonding in a relationship, due to perceptions that regard caregivers are unreliable in their presence and attention. For those acting from an avoidant position, behaviorally they appear self-protective and evince a nonplussed presentation under threat of separation and also appear to overtly devalue their relationship with the attachment figure (Evraire, Ludmer, & Dozois, 2014). These different attachment styles are the result of cognitive schemas that individuals have learned throughout their infant and childhood relationships with their caregivers that continue to shape their beliefs into adulthood regarding their desire for closeness, self-protection, and coping style to retain partners in relationships.

A second key conceptualization that aids clinicians and researchers in better understanding the behavior of individuals within romantic relationships concerns *relationship-contingent self-esteem* (RCSE; Knee et al., 2008). The literature surrounding *general* contingent-self-esteem (Crocker & Wolfe, 2001) has demonstrated that individuals highly invest their sense of self-esteem and sense of worth into particular domains of their lives (e.g., academics, work,
religion, family, romantic relationships) so that these individuals become significantly more sensitive to successes and failures within these specific domains. Scholars have outlined how RCSE and the dynamic of self-esteem investment occurs within romantic relationships; that is, those who have high levels of RCSE are more vulnerable to negative or threatening events within their romantic relationships, and are more positively impacted by affirming or positive events (Knee et al., 2008). High levels of RCSE bring individuals to maintain their romantic relationships because their core self-esteem is contingent upon its success (Crocker & Park, 2004); failure in this core relationship would create a severe blow to the low-self esteem of such an individual. RCSE likely acts as a contributor to differences in how individuals think, feel, and act in their romantic relationships, and likely has some interaction with the underlying attachment style regarding how they behave toward their romantic partners.

Previous studies have provided insight into the ways in which those with insecure attachments and high levels of RCSE behave maladaptively within their romantic relationships. For instance, those with insecure attachments typically “shut down” in the face of conflict, and try to avoid conflict all together (Creasey & Hesson-McInnis, 2001; Shi, 2003; Dominigue & Mollen, 2009) because of the negative implications conflict might pose to the stability of their relationship. As well, those with high levels of RCSE are typically more distressed by relationship conflict; for example, they may be more likely to engage in unwanted pursuit behaviors after a relationship has ended (DiBello, Rodriguez, Hadden, & Neighbors, 2015; Park, Sanchez, & Brynildsen, 2011; Rodriguez, Knee, & Neighbors, 2014). These findings illustrate how individuals with insecure attachment styles and high RCSE do not manage conflict well, and serves as a point of interest, as these response tendencies give insight into how clinicians can work with individuals who present with relationship concerns. Examining and working with
conflict behaviors, and promoting more adaptive conflict behaviors, serves as a meaningful therapeutic goal.

Finally, how individuals view the stability of their relationships and how they deal with conflict may significantly impact the degree to which they are happy or satisfied in those relationships (Heavey, Christensen, & Malamuth, 1995). Relationship satisfaction serves as another critical variable to examine within the interaction of attachment style, communication during conflict in romantic relationships, and RCSE. How satisfied individuals are with their romantic relationship influences their mental and physical health. For example, those who are happy with, and satisfied in, their relationships are typically more mentally and physically healthy and are less severely impacted by stress (Gove, Hughes, & Style, 1983; Holt-Lunstad, Birmingham, & Jones, 2008; Kolves, Ide, & De Leo, 2012), whereas individuals with lower satisfaction in their relationships, including those who are separated and divorced, are more likely to endorse suicidal ideation, hopelessness, and depression, and attempt suicide (Stack, 1990; Wyder, Ward, & De Leo, 2009; Batterham, Fairweather-Schmidt, Butterworth, Clear, Mackinnon, & Christensen, 2014; Till, Tran, & Niederkrontenthaler, 2016). In fact, the relationship status of divorce has been found to be a strong predictor of suicide rates (Stack, 1992). Examining individuals’ level of relationship satisfaction in their current relationships is critical, as it lends insight into what individuals might be doing in the relationship to promote increased relationship satisfaction, and highlights the differentiation between relationship satisfaction as a primary goal, versus simply being in a relationship as a primary goal.

In my study, I will examine this cluster of constructs (attachment, RCSE, conflict behaviors, and relationship satisfaction), and how these variables interact with one another to influence behaviors within romantic relationships. Previous literature has already demonstrated
how attachment style and RCSE are related to maladaptive behaviors within relationships (De Smet, Uzieblo, Loeys, Buysse, & Onraedt, 2015; Knee et al., 2008; Park et al., 2011). Yet, few studies have empirically examined how RCSE is related to relationship behaviors above and beyond the influence of attachment style. My contribution to the literature will be to specifically examine the moderating role of RCSE on the relation between attachment style and conflict behaviors as well as the effect these variables have on relationship satisfaction.

**Extant Research in the Area**

The literature to date regarding attachment styles, relationship-contingent self-esteem, conflict behaviors, and relationship satisfaction has, to a degree, examined the interplay of these variables within the dynamics of an adult romantic relationships. For example, these variables can affect conflict styles employed by those with secure vs. insecure attachment styles (Shi, 2003; Domingue & Mollen, 2009; Creasey & Hesson-McInnis, 2001); the coping behaviors used by those with high relationship-contingent self-esteem (DiBello et al., 2015); and, adaptive or maladaptive post-break up behaviors (De Smet et al., 2015), thoughts (Brenner & Vogel, 2015), and growth (Marshall, Bejanyan, & Ferenczi, 2013), dependent upon attachment tendencies and level of RCSE.

To date, most studies examining conflict dynamics in romantic relationships have operated under the assumption that participants can self-report on imagined behaviors (e.g, Collins, 1996) in response to relationship conflict, but this method may not be the most effective means by which to accurately capture decisions made during real life conflict, because conflict, by nature, is not a static entity. In addition, there is likely a qualitative difference between how research participants *imagine* they will respond to conflict in a given static conflict situation versus how they (re)act to an iterative set of changing and response-contingent communication
stimuli in an ongoing conflict situation (Axelrod, 1984; Rusbult, Verette, Whitney, Slovik, & Lipkus, 1991). By utilizing a forward moving and stimulus specific methodology in which participants find their (re)actions have direct consequences on their partners’ return responses in a conflict, a more accurate picture of real life conflict dynamics may reveal itself (Vicary & Fraley, 2007).

In summary, attachment style has frequently been referenced as a primary explanation for differences in conflict dynamics in relationships (Shi, 2003; Domingue & Mollen, 2009; Creasey & Hesson-McInnis, 2001; Ben-Naim, Hirschberger, Ein-Dor, & Mikulincer, 2013), but RCSE, an equally important relationship variable, has not been well studied as to its impact with these variables. Studying these two constructs in tandem, as well as their influence on the nature of conflict responses and relationship satisfaction, aids in a more thorough understanding of individual differences in communication patterns within romantic relationships.

The Present Study

Theoretically and empirically, the existing evidence within the attachment and RCSE literature suggests that those who are more insecure in their attachments in romantic relationships will behave in maladaptive ways within their romantic relationships, especially during the course of conflict. Those who are more secure in their relationships are likely better able to manage the conflict present within relationships, and generally have more confidence in themselves and their partners to adaptively resolve conflict. However, the relations among attachment, responding within relationship conflict, and relationship satisfaction are not yet known.

The findings within the literature on relationship-contingent self-esteem (RCSE) suggest that the extent to which individuals’ core self-esteem depends on the successes and failures of
their romantic relationships can influence the manner in which they handle conflict and how they evaluate their relationships overall. Although research findings show an association between attachment styles and levels of contingent self-esteem (Knee et al., 2008; Park et al., 2011), the assumption that individuals with an anxious or avoidant attachment style will endorse high levels RCSE (and that those with a secure attachment style will endorse low levels of RCSE) has not yet been demonstrated. RCSE could conceivably play a stronger role in negative emotions felt during relationships, as the potential loss of a relationship partner immediately represents (and RCSE is conceptually related to) a steep decrease in self-esteem and self-worth if a relationship is in jeopardy (such as in conflict situations). Given this, I will investigate the potential mediating and moderating role of relationship-contingent self-esteem on the relation between attachment style and response decisions made during conflict, and the relations among attachment style, RCSE, and relationship satisfaction.

The findings in the literature concerning the effects of an avoidant attachment on behaviors in romantic relationship is inconsistent (Ainsworth & Bell, 1970; Ainsworth et al., 1978; Main, 1979; Hazan & Shaver, 1987; Bartholomew & Horowitz, 1991; Creasey & Hesson-McInnis, 2001); however, research findings concerning anxious attachments in this area are more definitive and consistent. For example, anxiously attached individuals would be expected to endorse higher levels of RCSE and experience a greater degree of distress during relationship conflict (Creasey & Hesson-McInnis, 2001; Knee et al., 2008; Domingue & Mollen, 2009; Ben-Naim et al., 2013). However, those endorsing high levels of an avoidant attachment style, may or may not possess similar internal reactive states, given that their coping behaviors would seem to indicate less perceived risk to esteem (e.g., Creasey & Hesson-McInnis, 2001). Given this, I will
employ avoidant attachment tendencies in participants as a covariate of anxious attachment endorsements, generating an overall insecure attachment style score.

**Importance of Present Study**

The extent to which attachment styles and relationship-contingent self-esteem together can influence how individuals behave in their relationships, as well as how satisfied they are with their relationships, has not been well examined to date. Further, no studies to date have examined RCSE in the context of continuous iterative conflict communications. My study adds a broader understanding of the interplay of these variables to the attachment literature, and provide further information that can be used by clinicians and researchers to understanding the process of conflict in romantic relationships. Assessing the mediating or moderating role played by RCSE on the relation between attachment style and conflict communication tendencies and relationship satisfaction, sheds light on why some individuals handle challenges and threats to their relationships in more productive ways than others, and generates implications for psychotherapy with clientele dealing with conflict oriented difficulties surrounding romantic relationship issues.
CHAPTER 2. LITERATURE REVIEW

One central focus of research in the area of romantic relationships has examined why and how conflict affects individuals differently (Domingue & Mollen, 2009; Creasey & Hesson-McInnis, 2001; Shi, 2003). For example, some individuals in romantic relationships embrace conflict and view it as relationship-enhancing, while others may see the slightest disagreement as a sign that the relationship will fail (Domingue & Mollen, 2009). In addition, the degree to which romantic partnership affects individuals’ self-esteem and self-worth is another key factor affecting behavior in romantic relationships (Knee et al., 2008; Mikulincer & Shaver, 2003; Mikulincer & Shaver, 2007), such as how they handle conflict (DiBello et al., 2015) or the termination of a relationship (Park et al., 2011). Finally, how a couple manages conflict (i.e., constructively or destructively) can influence how satisfied one or both partners are in the relationship (Heavey et al., 1995; McGinn, McFarland, & Christensen, 2009). Relationship satisfaction has been shown to have substantial impact on both physical and mental health (Gove et al., 1983; Kolves et al., 2012), demonstrating its importance in the conflict and romantic relationship literature.

These three constructs – how people attach themselves to their romantic partners, the degree to which people make their self-esteem contingent upon their romantic relationships, and how these elements of their relationship affect their satisfaction with their romantic relationships – are important for applied psychologists to understand, especially with respect to how their clients experience conflict in their romantic relationships. Specifically, examining the relations of these constructs can help to clarify for psychologists the implications that differential attachment styles, levels of relationship contingent self-esteem, and pattern of communication in relationship conflicts have for clients’ adjustment, growth, and future behavior in their romantic
relationships. Examining the relations of these three variables is the focus of my study. In the next sections, I will detail these variables, what past research indicates as far as their effects within romantic relationships, and what I will be doing specifically to explore the inter-relations among these variables. Next, I will review the theory of attachment style and models of self and others, and how those relate to our behaviors in relationships.

**Attachment**

Attachment as an action within relationships has been defined as a “lasting psychological connectedness between human beings” (Bowlby, 1969, p.194). The creator of attachment theory, John Bowlby (1982), referred to attachment behavior as “any form of behavior that results in a person attaining or maintaining proximity to some other clearly identified individual who is conceived as better able to cope with the world” (p. 668). Attachment was originally studied within the context of infants’ connectedness with their caregivers, typically their mothers (Bowlby, 1969).

**Infant attachment.** Bowlby (1969) first investigated the attachment construct within infant-mother relationships. The classic Ainsworth et al. (1978) “strange situation” experiment helped to clearly differentiate the behaviors of infants with different attachment styles. When separated from their mothers, infants reacted based on how they currently attached to that attachment figure, where behaviors ranged from comfortable exploring to constant crying. Bowlby (1988) later described four characteristics of attachment. *Proximity maintenance* refers to the desire to be near the people to whom we are attached. We see our attachment figures as *safe havens*, and therefore return to them for comfort and safety in the face of a fear or threat. The attachment figure also acts as a *base of security* from which the child can explore the
surrounding environment. And finally, *separation distress* refers to anxiety that occurs in the absence of the attachment figure.

Based on these characteristics, styles of infant and childhood attachment have been coded into four different categories: secure, anxious-resistant, anxious-avoidant, and disorganized/disoriented (Ainsworth & Bell, 1970; Ainsworth et al., 1978). Essentially, a *securely attached* infant is able to confidently explore its environment freely and engage with strangers in a non-fearful way when the attachment figure (caregiver) is present. Although securely attached infants become visibly upset when their attachment figure leaves, these infants are soothed easily and become happy again when their attachment figure returns. In general, those infants with a secure attachment are presumed, given behavioral and emotional evidence, to experience the attachment figure as a ‘secure base’: a caregiver that is consistently available to them and will be there as an anchor for them from which they explore the world. Research shows that caring, consistently responding, and attentive caregivers best promote the development of secure attachments within infants (Dunst & Kassow, 2008; Aronoff, 2012). Overall, the development of a secure attachment in children is seen as the most adaptive and mentally healthy attachment style for them to acquire (Ainsworth et al., 1978). The remaining three styles are classified under the umbrella of *insecure attachments* and represent less than optimal resolutions of infants’ experiences with, and trust of, caregivers as a stable base of safety and support from which they can explore the world.

*Anxious-resistant* attachment (also referred to as ambivalent or dismissing attachment; Ainsworth et al., 1978) is an insecure attachment style. In the presence of the attachment figure, an anxious-resistant infant is significantly hesitant to leave the caregiver and explore the environment and is uneasy, suspicious and fearful around strangers. When the attachment figure
leaves, the anxious-resistant infant becomes highly distressed. Some of the infant’s distress remains upon the return of the attachment figure, resolving only to a worried, unsure sense of safety and support (versus the confident and consistent sense of support that the securely attached child demonstrates). An anxious-resistant attachment is believed to develop in response to a caretaker that is inconsistent in responding in a safe and supportive way toward the infant. As such, the infant develops a sense of ambivalence toward the caregiver, who sometimes is a source of nurturance, yet, simultaneously, is not a stable source of safety, support, and comfort upon which the child can rely (Crittenden, 1999).

A second insecure attachment style has been labeled as an anxious-avoidant type. This style of attachment is characterized by a child who, when the caregiver is present, generally avoids or ignores the attachment figure, showing little emotion at all when the attachment figure leaves or returns (Ainsworth et al., 1978). Ainsworth and Bell (1970) suggested that those infants with an anxious-avoidant attachments act in the observed indifferent and unemotional manner in order to cope with and mask their internal distress surrounding the instability of their bond with their caregiver. Those who embody an anxious-avoidant attachment likely due to a history of rejection from caretakers in response to expressing attachment needs (Main, 1979). Avoidant behavior allows these individuals to maintain proximity to their attachment figures while avoiding the potential for rejection.

Finally, the fourth category, one which has been less well empirically supported and accepted, is the disorganized/disoriented attachment style. This attachment is characterized by a general lack of consistency in infants’ reactions to the attachment figure and their departure and return (Ainsworth et al., 1978). These infants are described as displaying overtly contradictory behaviors and emotions, random movements, and even periods of disengagement from
environmental stimuli. Scholars have criticized this category, because its descriptors are too encompassing, it does not possess sufficient unique and discriminating characteristics, and it overlaps substantially with characteristics associated with the anxious attachment style (Crittenden, 1999). The disorganized/disoriented style is not considered as valid as the other attachment styles, and in much of the current literature, including attachment measures, this style is not taken into account.

Baumeister and Leary (1995) and Park (2006) have referred to our need for interpersonal attachments as a fundamental human motivation; as we seek to relate to others because of our social needs, we form psychological and emotional attachments to them, in both real and symbolic ways. The attachment formed between an infant and a caregiver, and how that relationship develops and functions, has implications for infants’ future relationships, as these initial, highly impactful relational patterns form our expectations and reactive behaviors in later relationships (Sund & Wichstrøm, 2002). Bowlby’s attachment theory (1969) proposed that working models obtained in childhood would continue across development and relationships. As children grow and distance from caregivers naturally evolves, future relationships (particularly romantic ones) begin to serve as our primary source for love and psychological support.

Romantic relationships are particularly important to investigate as individuals (for the most part) chose those with whom they form romantic relationships. Investigators have shown that attachment plays a major part in our relationships as we mature, particularly within romantic relationships (Hazan & Shaver, 1987; 1990; 1994). Much like a caregiver provides love and security for an infant, a romantic partner provides love and security from which individuals receive psychological support and emotional comfort. Choice of partners may reveal much about how an individual attaches psychologically to others (Frazier, Byer, Fischer, Wright, & DeBord,
As such, examining the attachment styles of adult individuals with respect to their romantic relationships can be very informative and has clinical implications for treatment of potentially maladaptive behaviors within their relationships. Next, I will detail how the early attachment style of children evolves into those held later in life as an adult.

**Adult attachment.** Hazan and Shaver (1987; 1990) were among the first researchers to suggest the attachment framework could be extended from the infant-mother relationship to romantic relationships. They noted similarities between infant/caregiver relationships and adult romantic partners. Within both kinds of relationships, partners feel safe when the other is close and responsive; partners engage in close, intimate, bodily contact; partners have emotional reactions when separating from and rejoining one another; and, partners even engage in “baby talk”, mimicking earlier patterns of communication heard from childhood caregivers. Like Bowlby described the central characteristics of infant-mother attachment (1988), Fraley and Shaver (2000) described the central tenets of adult attachment as they relate to childhood attachment. First, the emotional and behavioral dynamics of the two relationships are governed by the same *biological system*. Next, the kinds of *individual differences* expressed via attachment behavior are similar across the two types of relationships. Further, the individual differences in adult attachment behavior are *reflections of people’s experiences* in close relationships (e.g., relationship with parents). Finally, a romantic relationship involves an interplay of *attachment, caregiving, and intimacy*.

When applied to adult romantic relationships, attachment categories are labeled as *secure, anxious-preoccupied, dismissive-avoidant, and fearful-avoidant* (Bartholomew & Horowitz, 1991; Pietromonaco & Barrett, 1997). In comparison to childhood attachment, this
categorization finds childhood anxiety-related styles melded into a single dimension, and avoidant styles instead broken down into two dimensions. Relatedly, much of the adult attachment literature, and many common adult attachment scales employed in research, combine the dismissive-avoidant and fearful-avoidant into a single “avoidant” category given their underlying commonality surrounding individuals’ psychological needs resulting in two different behavioral expressions for avoidant behavior. In fact, the main body of adult attachment research posits two main dimensions on which individual differences can be assessed: attachment anxiety and attachment avoidance (Brennan, Clark, & Shaver, 1998; Cassidy & Kobak, 1988; Mikulincer & Shaver, 2003; 2007). For this reason, many of the scales measuring attachment focus on measuring anxiety and avoidance, where low scores on both scales constitute secure attachment. The anxiety dimension is characterized by a desire for closeness and protection, intense worries about partner availability and the value one has to the partner, and use of hyperactivating strategies (e.g. hyper-vigilance of potential threats to relationship, exaggerated appraisal of threats, rumination over past threatening experiences, excessive reassurance seeking) in attempts to avoid or cope with insecurity and distress. The avoidance dimension, on the other hand, is characterized by a discomfort with closeness, lack of trust in using romantic partners as a secure base, a desire to be emotionally distant and self-reliant, and use of deactivating strategies (e.g. lack of monitoring of potential threats, inhibition/suppression of threat-related thoughts) to cope with insecurity and distress (Mikulincer & Shaver, 2007). Regardless, for clarity of the development of adult attachment research, I will briefly review the four categories below.

A secure adult attachment is viewed as an extension of a secure childhood attachment. As with infant attachment, secure attachment is promoted by having a caregiver who is emotionally available, responsive to need behaviors, and capable of regulating his/her own
positive and negative emotions (Sable, 2008). In adulthood, individuals with secure attachments have largely consistently warm and responsive interactions with their romantic partners. Those with secure adult attachments typically have a positive view of themselves, their partners, and their relationships (Bartholomew & Horowitz, 1991). They far less frequently feel or behave in ways similar to those with insecure attachment styles (Collins & Read, 1990; Feeney & Noller, 1990).

Anxious-preoccupied attachments are characterized by individuals having consistently a high need to receive intimacy, approval, and responsiveness from their romantic partners (Bartholomew & Horowitz, 1991), beyond what those who are securely attached would demonstrate. Because of the strength of these desires, someone with an anxious-preoccupied attachment may become overly dependent on a partner, primarily driven by the negative self-views possessed by those who have this style of attachment. Those with preoccupied attachments strive for acceptance by valued others (Bartholomew & Horowitz, 1991; Hazan & Shaver, 1987; Main, Kaplan, & Cassidy, 1985). Characteristics of the preoccupied group include high levels of: depth (vs. superficial) of descriptions of self and other, self-disclosure, emotional expressiveness, frequency of crying, reliance on others, crying in front of others, high levels of relationship involvement, and low levels of coherence and balance of control in friendships (Bartholomew & Horowitz, 1991). Individuals who are attached in an anxious-preoccupied manner tend to see themselves as less than worthy partners, and blame themselves when their relationships do not function well (Mikulincer & Shaver, 2007). On the whole, people in this attachment group are highly emotionally expressive, and spend a lot of time worrying and acting impulsively in their relationships in order to gain the soothing they require to feel stable and secure in themselves and their relationships (Bartholomew & Horowitz, 1991; Mikulincer & Shaver, 2007).
Adults with avoidant attachments have a fundamentally different perspective and set of psychological and relational needs. Those with *dismissive-avoidant* attachments highly value their personal independence in romantic relationships and do not have an easy time trusting or forming deep attachments with others (Bartholomew & Horowitz, 1991). Characteristics of the dismissive group include high self-confidence and low emotional expressiveness; low frequency of crying and warmth (compared to other styles); low self-disclosure, intimacy, level of involvement in relationships, and capacity to rely on others; and, being more in control than counterparts in both friendships and romantic relationships (Bartholomew & Horowitz, 1991). In their relationships, they tend to exhibit less emotional intimacy, as they view their partners less positively than they view themselves. Those with a dismissive-avoidant attachment typically suppress or hide their feelings of normal emotional need and bonding out of a lack of trust and valuing of their partners (Creasey & Hesson-McInnis, 2001). This lack of trust and valuing results from their long standing (and previously learned) deep-seeded sense of unworthiness: when they are faced with rejection from a caregiver, often due to their overwhelming demands and needs, they tended to distance themselves to cope with the loss (Ainsworth et al., 1978; Main, 1979).

Individuals with *fearful-avoidant attachments*, on the other hand, tend to be distant in, or abstain from, relationships for different reasons than dismissive-avoidant individuals. These individuals have mixed feelings about close relationships. They want to be emotionally close with someone, but they are also uncomfortable with feeling emotionally close due to their negative views of themselves and others (Hazan & Shaver, 1987; Bartholomew & Horowitz, 1991). Characteristics of the fearful group include low self-confidence and balance of control in friend and romantic relationships, and low self-disclosure, intimacy, level of relationship
involvement, and reliance on others (Bartholomew & Horowitz, 1991). Similar to those with a dismissive-avoidant attachment, individuals with fearful-avoidant attachments do not seek high levels of intimacy in relationships and do not express affection often. As well, individuals with fearful-avoidant attachments have core psychological concerns surrounding their own unworthiness, driven by their anticipation that their partners will ultimately disappoint them, be inconsistent in their care, and will fail to care for them because of the core belief of being unworthy of such love. For both dismissive and fearful avoidant attachments, the avoidant attachment behavior helps protect them against potential disappointment (Bartholomew & Horowitz, 1991), but brings difficulty with being able to connect with friends or romantic partners.

Though infant and adult attachment styles may appear similar in many ways across the four respective categories, there are mixed thoughts about whether individuals’ attachment style as an infant determines their adult attachment. The basis of attachment theory is that the attachment system is organized by early experiences with caregivers, which then shape and sustain working models of self and others (Bowlby, 1973). This is consistent with Piaget’s (1953) theory of cognitive development, where he argued that people assimilate new information to existing knowledge structure. If we develop an insecure attachment in infancy, throughout our lives, we may seek to confirm our negative models of self and others. Bowlby (1973) also argued that we attract relationship partners who fit our working models as a means to remain congruent with our attachment experiences and models. However, Bowlby (1969; 1982) also noted that attachment working models reflect actual experiences in relationships, and so are subject to revision. People with a secure attachment who find their partners have engaged in infidelity may develop a measure of insecurity as a new part of their working model, and people with insecure
attachments who experience a consistently positive experience with a partner may increase a sense of security in their working model of relationships.

There is mixed evidence about the stability of an infant attachment style continuing into adulthood. Fraley’s (2002) meta-analysis found a mean correlation of .32 (\(N = 896\)) for attachment patterns across the second year of life (1-12 months); .35 (\(N = 161\)) for attachment patterns at one and four years old; and .67 (\(N = 131\)) for attachment patterns over six years. This suggests that as children age, their primary attachment styles become more stable. However, Fraley (2002) reports a low correlation (.27; \(N = 218\)) between 'Strange Situation' scores (in infancy) and Adult Attachment Interview scores (19-20 years old). This is consistent with the above findings that as time goes on attachment styles are more stable, and that as time goes on, attachment styles from contiguous periods of development are more highly correlated than those compared across longer developmental times. Last, supporting Bowlby’s argument, that attachment styles are also subject to change based on more recent relationship experiences.

In sum, the literature on attachment in adults has been boiled down to a model of views of self (levels of dependence) and others (levels of avoidance) (Bartholomew & Horowitz, 1991; Domingue & Mollen, 2009). A secure attachment is characterized by a positive view of self and others: a sense of self as lovable and of others as accepting. A dismissing attachment is characterized by a positive view of self and a negative view of others, leading to distancing in close relationships. A preoccupied attachment is characterized by a negative view of self and a positive view of others: a sense of self as unworthy, leading to striving for acceptance by valued others. Finally, a fearful attachment is characterized by a negative view of self and others: sense of unworthiness combined with expectations that others will be untrustworthy and rejecting (see Appendix A for visual representation).
**Adult attachment in romantic relationships.** Given these established working models of self and others that influence individuals' perceptions of partners and relationships, empirical evidence has demonstrated marked differences in the ways that individuals behave in their adult romantic relationships. In my study, I will focus on the way individuals respond to a perceived threat.

Romantic relationships require people to make a deep emotional investment in their partners. How people experience and regulate their emotions directly relates to their general navigation of relationships and how they handle events with their partners (Marroquín & Nolen-Hoeksema, 2015; Burk & Seiffge-Krenke, 2015). Attachment styles have been shown to have a substantial impact on how people experience and regulate their emotions (e.g. Ben-Naim et al., 2013). How a partner views and acts on emotions during conflict in a relationship is important to understand in relation to other relationship variables, such as relationship satisfaction. How conflict is handled in a relationship (behaviors empirically related to attachment style) can play a substantial part in determining the extent to which one or both partners are satisfied in the relationship, and whether they choose to continue being together. I will briefly review typical behavioral characteristics associated with each attachment style in response to relationship conflict.

**Secure.** In relationships where both partners have a secure attachment, their communication patterns during conflict show higher levels of direct verbal engagement, self-disclosure, and mutual discussion and understanding. These individuals use integrating and compromising strategies, meaning they listen to the needs of both partners and work towards how both can get their needs mostly met. As such, both individuals are less likely to engage in withdrawal and verbal aggression (Shi, 2003). Securely attached individuals see conflict in
relationships as an opportunity to eventually increase intimacy and adjust to each other’s needs. People with secure attachments are confident enough to be assertive and trust their partner will respond supportively (Domingue & Mollen, 2009). This type of communication, especially during conflict, between secure individuals would most often be viewed as a healthy way in which to advocate for one’s needs getting met.

Insecure. Research suggests that those with insecure attachments have more difficulties managing conflict (Creasey & Hesson-McInnis, 2001). These individuals tend to become clinging, to make demands, stonewall communication with their partners (i.e., give their partner the ‘silent treatment’), or withdraw from their partners because they believe their partner will reject them (Domingue & Mollen, 2009).

Avoidant. Those with avoidant attachments are less likely to report emotional distress during altercations. Rather, they are more likely to say and do hurtful things during conflict, and to engage in this behavior in a cool or detached manner (Creasey & Hesson-McInnis, 2001). Those with an avoidant attachment typically withdraw from conflict, and are less likely to engage in behaviors that promote each individual to speak about and compromise their needs because engaging these behaviors can mean creating an expectation of reward for showing acts of love and care. In turn, this expectation could lead to eventual disappointment if their partner does not provide such reward. Instead, they turn away from partners when they are distressed as a self-protective coping mechanism in case they lose their connection with their partner. Those with an avoidant style can also be dominant in conflict as a means to protect themselves from a loss of connection with their partner. They pursue temporary relief from these fears by directing the outcome or resolution of the conflict, rather than negotiating an agreement with their partners surrounding behaviors to be changed to avoid future conflict (Shi, 2003).
Anxious. Anxiously attached individuals, who possess a negative model of self as unworthy, are more invested in their relationships and view relationship success as a validation of self. During conflict, they have little confidence in their ability to control their negative emotions, and tend to ground their conflict management behavior in hostility. As a result, when they are active in the conflict, they are more hurtful towards their partner (Creasey & Hesson-McInnis, 2001). As their relationship success is a measure of their self-validation, they fight for the continuance of their relationships. Unfortunately, this struggle means exercising pressure on their partners, dominating conflict resolution processes, and displaying greater hostility. On the whole, there is a lack of mutual discussion and understanding when anxiously attached individuals are involved in conflict. As a result of their hostility, these individuals tend to feel more guilt, worry, and hurt once conflict has ended. At the same time, they are more resistant to pressure from their partner to improve the relationship or communicate more effectively. This set of behaviors and conflict resolution process portray a general withdraw pattern (Shi, 2003). In sum, those who are insecurely attached fluctuate between demanding and withdrawing, depending on their upset or fear of abandonment.

Building off of the research summarized earlier in this paper, research also indicates that part of the variation in why people do not respond to similar situations in similar ways is because of one’s working models (Collins, 1996). Because those with secure attachments are faithful in their partner’s ability to be dependable and responsive to their needs, they are less likely to get highly distressed in conflict situations. Those with insecure attachments, on the other hand, do not have this faith in their partners, and therefore do become more distressed. This then suggests that individuals interpret and understand events in ways that reinforce their expectations — leading them to behave in ways that confirm rather than disconfirm their assumptions about
relationships. The self-esteem literature, for example, supports this relation: those who have a high self-esteem seek to self-enhance themselves (increase positive perception of self), whereas those with lower self-esteem seek to self-verify (Swann, 1990; 1992), even if those views of self are negative. As such, working models of others is a major determinant of how individuals engage in conflict with their romantic others.

**Attachment dynamics.** Attachment captures a working model of self and others, and is associated with either hyperactivation or deactivation of the attachment system. Different attachment views and concerns affect how people generally are in relationships, and also how they act and react moment to moment. Ben-Naim et al. (2013) found evidence for moment-by-moment cognitive, emotional, and physiological reactions during conflict. These considerations, driven by working models, influence what individuals say and do next. Within this area of research, how those with secure versus insecure attachments make decisions during conflict is an important focus that gives insight into what individuals perceive as threats to their relationships. For those with insecure attachments, the more threat they perceive, the more likely they are to make destructive choices during conflict.

Vicary and Fraley (2007) utilized a methodology in which they focused on the iterative nature of decision-making in relationships, in which a behavioral choice in one part of the story required the participant to skip ahead in the conflict sequence to see how their decision affected the process of the conflict. Participants read an interactive story in which, at 20 time points, they would be presented with two types of choices (one coded as “relationship-enhancing”, and the other “detrimental to the relationship”). At each choice point, participants would select the choice they would most likely make in an actual relationship. The authors created several conditions in which: a) the story evolved regardless of participants’ choices; b) the partner in the
story was consistently supportive regardless of participants’ choices; c) the partner in the story was consistently unsupportive regardless of participants' choices; and, d) the simulated partner’s level of supportiveness was based on the participants’ choices (relationship-enhancing reciprocated with supportive; detrimental to the relationship reciprocated with unsupportive). Across all conditions, securely attached individuals started off making relationship-enhancing decisions, and continued to do so across all choice points, whereas insecure individuals continually made detrimental relationship choices or made relationship-enhancing decisions at a slower rate than securely attached individuals.

Turan and Vicary (2010) extended on Vicary and Fraley’s (2007) study, to examine whether those who make choices detrimental to the relationship are aware of the negative effects their choices can carry. Their results indicated that anxiously attached individuals were as aware as securely attached individuals were in terms of knowing which choice would be relationship-enhancing, but still chose not to employ it. In other words, anxious attachment is associated with a knowledge of adaptive decision-making, but also difficulty in applying that knowledge to situations in which perceived abandonment risks are high.

These latter studies provide evidence that attachment style influences individuals’ conflict behaviors in romantic relationships. When presented with conflict, those with insecure attachments are more likely to become distressed and either seek reassurance or withdraw from the conflict situation. How those with insecure attachments appraise and perceive conflict is key to their consequent behavior in choosing how to deal with conflict. Given this, attachment style is a key factor in the conflict-based, behavioral choices individuals make during relationship conflict.
**Relationship Contingent Self-Esteem**

**History and definition.** The study of self-esteem can be traced back to William James, who identified the idea of 'self-concept', which included multiple dimensions of the self: the “I-self” and the “Me-self,” where the “I-self” concerns processes of knowing, and the “Me-self” concerns resulting knowledge about the self (1892). The “Me-self” is said to be composed of three parts: the material self (representations of the body and possessions), the social self (all characteristics recognized by others), and the spiritual self (representations and evaluative dispositions regarding the self). Next, I will lay out how the social self is most related to what is today commonly referred to as self-esteem.

The notion that self-esteem is a product of our social interactions has been prominent in the literature. For example, Cooley’s (1902) looking-glass self argues that others act as a mirror through which people come to see and understand themselves. According to Cooley, our self-concept is comprised of a) how we think we appear to others, b) our interpretation of others’ judgments of our appearance, and c) our evaluation of that interpretation (e.g. shame, pride). Others’ impressions (whether true or imagined) largely form one’s self-esteem, and therefore getting positive feedback increases our self-esteem, and getting negative feedback decreases our self-esteem. Relatedly, reflected appraisals theory (e.g. Mead, 1934) asserts that our self-knowledge comes from how we have interacted with others. In addition, Leon Festinger’s social comparison theory (1954) argues that we evaluate ourselves via comparisons against others. The early works on the self-concept demonstrate how outside others play a crucial role in our development of a sense of self.

As self-concept and self-image has become more widely studied, it became necessary to clearly define what these two terms were: what do they measures and what are their components.
Morris Rosenberg (1965) conceptualized self-image as “an attitude toward an object…. In other words,…people have attitudes about objects, and that the self is one of the objects toward which one has attitudes” (p. 5). Rosenberg aimed to capture how individuals saw and felt about themselves, and the dimensions on which they evaluated themselves: content, direction, intensity, importance, salience, consistency, stability, and clarity. Given the literature on the development of the self-image (Cooley, 1902; Mead, 1934; Festinger, 1954), individuals’ social interactions inevitably influence how we see and feel about ourselves, and affect the domains on which we evaluate ourselves. Rosenberg therefore conceptualized self-esteem as a feeling of self-worth. In the construction of the Rosenberg self-esteem scale, he included items assessing the degree to which individuals felt satisfied with themselves, and worthy/of import to others. Even though a self-esteem scale by nature is intended to assess how individuals feel about themselves, it is impossible to tease out social influences and social comparisons since these are so central to our conceptions of self.

Acknowledging the importance of social groups in the development and maintenance of self-esteem, Rosenberg (1979) further argued that self-esteem is enhanced when individuals are members of social groups they value and that are perceived as better than other groups, suggesting group memberships also influence our self-esteem. Social identity theory (e.g., Tajfel, 1982; Tajfel & Turner, 1979; Turner, 1982) argues that our construction of our self-concept is a combination of personal and social attributes: how do we see ourselves and how do others see us. How we see ourselves in relation to our social groups has a strong influence on our behaviors. Low self-esteem is characterized by “behavioral plasticity” (Brockner, 1984). That is, people with low self-esteem are easily and heavily influenced by others, and thereby change their behaviors to be more accepted by others. On the other hand, inflated, unrealistic, or fluctuating
forms of self-esteem are vulnerable to ego threats (Kernis, Granneman, & Barclay, 1989), and therefore provoke these individuals to act aggressively towards those who criticize them. This process allows these individuals to protect their self-esteem (Tangney, Wagner, Fletcher, & Gramzow, 1992). These studies illustrate how individuals behave in order to enhance or preserve their self-esteem in the context of social settings. Overall, there is evidence that collective self-esteem (perception of one’s social group as positive) is correlated with personal self-esteem (Luhtanen & Crocker, 1992), especially for members of racial or ethnic minorities (Crocker, Luhtanen, Blaine & Broadnax, 1994).

Expanding on Rosenberg's idea of self-esteem, Judge, Locke, and Durham (1997) studied core self-evaluations, which they defined as individuals' fundamental evaluations about themselves, their abilities, and their control. These self-evaluations have been proven to be predictive of general life satisfaction (Judge, Locke, Durham, & Kluger, 1998). Judge et al. argued that self-esteem is the primary self-evaluation dimension because it encompasses how people feel about themselves overall. Smith and Mackie (2007) posit that a self-concept is what we think about the self, while self-esteem refers to how we feel about the self – our positive and negative evaluations of ourselves.

All of the literature thus far has summarized global self-esteem. Recent literature has examined domain-specific self-esteem, which examines our self-esteem in relation to distinct aspects of life including physical appearance, scholastic competence, and athletic competence (von Soest, Wichstrøm, & Kvalem, 2015). This field of research suggests self-esteem can simultaneously be present in some areas and entirely lacking in others: someone might be highly confident in their physical appearance but completely insecure in their romantic relationships, and these domain-specific self-esteem can change over time (von Soest et al., 2015). In this
sense, self-esteem is a more complex variable than the global self-esteem people generally consider when evaluating themselves.

Historically, the self-esteem literature has focused on how we come to develop a sense of self through our relationships with others, and specifically the positive or negative feedback received from others. The literature has recently shifted towards examining how self-esteem affects performance in different domains (academics, relationships). More recently, research on self-esteem is examining the complexity of self-esteem (trait, state, domain-specific), and how these different types help or hinder our functioning, and relate to our thoughts and behaviors about ourselves and others.

**Socio-relational functions of self-esteem.**

**Sociometer theory.** Leary, Tambor, Terdal, and Downs (1995) developed sociometer theory, which posits that self-esteem is a measure of the health of one’s social relationships; that is, people acquire and maintain high self-esteem when they have a sense that they are liked by others, and develop low self-esteem when they experience rejection. Because of our fundamental need to connect with and be liked or loved by others, experiences with social exclusion or rejection are related to hostile actions (e.g. insults, rejecting and/or degrading others) (e.g. Twenge, Baumeister, Tice, & Stucke, 2001). An experience with rejection is related to a subsequent view of the world as hostile and aggressive (DeWall, Twenge, Gitter, & Baumeister, 2009), and so we then reciprocate those aggressive behaviors. Even further, rejection is associated with emotional and physical numbness as a means to increase pain threshold and tolerance (DeWall & Baumeister, 2006). A meta-analysis (Leary & Kowalski, 1995) found the average correlation between social anxiety (fear of social rejection) and self-esteem to be -.50, suggesting a highly interpersonal basis to self-esteem. These studies illustrate how negative
social feedback creates negative cognitive and emotional experiences for victims of rejection, and also provokes them to expect and subsequently give back negative feedback to others.

**Mating sociometer.** Certain researchers argue a separate type of sociometer exists specific to romantic relationships. As opposed to the general sociometer, which reflects successes or failures in social situations, these investigators suggest that individuals monitor their desirability as romantic or sexual partner via a mating sociometer (Bale & Archer, 2013).

Kavanagh, Robins, and Ellis (2010) found that manipulating rejection or acceptance by attractive opposite-sex confederates altered heterosexual participants' ideas of who there were compatible with as a potential romantic partner. Participants who were rejected reported feeling more romantically compatible with those in low-attractiveness profiles, while those who were accepted expressed feeling more romantically compatible with those in high-attractiveness profiles. Further, Kavanagh, Fletcher, and Ellis (2014) found that romantic acceptance by an opposite-sex confederate increased self-esteem and lowered satisfaction with and commitment to current romantic partners, and also increased the appeal individuals felt about dating people outside of their current relationships. Results from these studies suggest sociometric self-esteem has significant consequences for experiences in romantic relationships, and that self-esteem based upon relational sociometry is domain-specific, and different from other specific types or a general sense of self-esteem.

**Contingent self-esteem.** The broader self-esteem literature has examined how self-esteem may influence different variables, such as academic achievement, happiness, and satisfaction in romantic relationships. Sociometer theory, including the mating sociometer, starts to cover how our self-esteem changes as a result of successes or failures we encounter in social situations. General self-esteem can be gained or lost from a number of different contributing
sources, such as successes or failures at work, in school, in relationships. As opposed to being domain-specific, general self-esteem captures how individuals feel across pertinent domains, and, for the most part, across extended periods of time (Stake, Huff, & Zand, 1995; Robins & Trzesniewski, 2005; Hank, 2015). Higher levels of self-esteem are argued to be reached when needs for autonomy, competence, and relatedness are well met (Deci & Ryan, 2000). However, and more specifically, contingent self-esteem is said to arise when contributing sources of self-esteem are challenged (Knee et al., 2008). When individuals endorse a contingent self-esteem (e.g., to academic competence, appearance, the approval of others, the love of one's family; Crocker & Wolfe, 2001), by definition, individuals compromise their ability to determine their sense of self-esteem on their own.

Contingent self-esteem theory argues that, when we invest ourselves in a particular domain (work, school, religion, family, romantic relationships), our self-esteem becomes dependent upon events in that domain (Crocker & Wolfe, 2001; Crocker, Luhtanen, Cooper, & Bouvrette, 2003; Crocker & Park, 2004). Research on contingent self-esteem (CSE) has examined the different venues that contribute to individuals' overall sense of self-esteem, and sought to identify domains people rely most on to determine their value. Further, investigators have focused on how, when, and why particular events, within particular domains, affect the degree to which we hold ourselves in esteem (Crocker & Wolfe, 2001). CSE theory argues that when we invest our personal sense of esteem in outcomes within a particular domain (e.g., the success of our romantic relationships), events occurring within that domain will specifically affect our sense of esteem within that same domain, moreso than events that lie outside of that domain. Related, successes and failures in domains relevant to our personal sense of esteem are associated with an increased intensity of affect and potential fluctuations in our general self-
esteem (Crocker, Karpinski, Quinn, & Chase, 2003). In other words, the outcomes and meaning of events within these critical self-contingent domains will tend to be generalized by individuals to the global way in which they (do or do not) value themselves. As such, contingent self-esteem can strongly impact an individual’s thoughts, feelings, and behaviors (Crocker & Park, 2004) as they engage in efforts to seek or recover esteem within a domain in which it has been lost. Given the research on the function of self-esteem as indicators of our social well-being, it makes sense to study contingencies of self-esteem in relational contexts.

**Relationship-contingent self-esteem.** Relationship-contingent self-esteem (RCSE) is a specific domain researchers argue is a contributor to general self-esteem. RCSE examines the extent to which individuals’ sense of self-esteem depends on the security of their romantic relationship (Knee et al., 2008). RCSE is thought to arise when fundamental sources of self-esteem (e.g., relatedness) are challenged (Knee et al., 2008). Such challenges can bring an intense focus on the specific domains (such as romantic relationships) in order to regain a sense of esteem in the domain of relatedness. The literature on self-regard and relationships has demonstrated that individuals’ view of themselves is greatly affected by their relationships (Cross & Morris, 2003), with key elements of this self-regard concerning feeling invested in and committed to a relationship (Rusbult, 1983), and a heightening of the extent to which people include their relationship as a primary contributor to their general self-concept (Aron & Aron, 1996).

The construct of RCSE specifically refers to how self-regard is linked to the nature, process, and outcome of a relationship (Knee et al., 2008). People higher in RCSE tend to view minor relationship events (e.g. partner spends time with friends instead of significant other) as threatening because of the imagined implications such an event could have for the security of the
relationship as well as the potentially negative effect such an event could have on their self-esteem. In terms of RCSE, successes or failures in the relationship domain influence how individuals perceive themselves in other non-relationship domains. Therefore, individuals strive to succeed in those areas within which they have predicated their self-esteem (Crocker & Park, 2004). Those higher in RCSE will be more vulnerable to self-esteem loss when confronted with real or perceived threats in their relationships than those lower in RCSE.

**RCSE in romantic relationships.** Those who have a high degree of RCSE will think, feel, and behave differently about themselves and their relationships than those with lower RCSE, and will incorporate different coping strategies to deal with typical but difficult relationship events, like conflict or dissolution (e.g. DiBello et al., 2015; Park et al., 2011). The influence of RCSE has been reflected in a set of studies by Spielmann, MacDonald, Maxwell, Joel, Peragine, Muise, & Impett, (2013), which demonstrated that people who are currently without a romantic partner and fear being single show a greater likelihood of entering a less than optimal or desirable romantic relationship. Further, those with higher levels of RCSE report being more committed to, but not happier with, their relationships (Knee et al., 2008), depicting a difficult situation for these individuals – they are unsatisfied but in a relationship they are afraid of leaving. For those relationships that do end, those high in RCSE are shown to engage in unwanted pursuit behaviors (stalking, repeatedly reaching out) (Park et al., 2011), have more alcohol-related problems (Rodriguez et al., 2014; DiBello et al., 2015), and experience a greater amount of distress (Park et al., 2011). These negative coping behaviors and consequences are a result of an extreme blow to one’s RCSE: losing the relationship that determined self-esteem means no basis on which to garner self-esteem. In an effort to regain their self-esteem,
individuals try to reestablish the relationship. If they cannot do that, they drink to cope with their loss of a significant other and their self-esteem.

These few studies on relationship-contingent self-esteem demonstrate the extreme way in which those with high RCSE cling to their relationships. For those with high levels of RCSE, having a satisfactory relationship is not as important as simply having a relationship as a means to boost their self-esteem. When these relationships do not go well, they experience more distress, and work harder to repair the relationship. Because of their intense emotional reactions to distress and strong attempts to restore relationships, RCSE is an important construct to relate to conflict behaviors and relationship satisfaction. My study will help to close that gap in the current research. In the next section, I will focus on describing basic issues with conflict in romantic relationships and its connection with the other variables of interest in my study.

**Conflict Behaviors**

Conflict in relationships is typical, and constructive if resolved well. However, too much conflict, and, more importantly, a maladaptive manner of handling conflict, has the potential to be detrimental to a relationship bond. John Gottman (2015) described the “Four Horsemen of the Apocalypse” (i.e., signs people know a relationship will fail) as criticism, contempt, defensiveness, and stonewalling. Criticism refers to attacking the personal attributes of a partner (e.g., personality, character) with the intent of being “right” and a partner “wrong.” Contempt occurs when a partner’s sense of self is assailed as a means to insult or psychologically abuse. Defensiveness manifests in the form of seeing the self as the victim. Finally, stonewalling refers to withdrawing from the relationship to avoid conflict. Although a significant amount of past research has sought to clearly define and illustrate the different conflict styles (e.g., concern for self vs other, including integrating, obliging, dominating, avoiding, and compromising, Blake &
Mouton, 1964; Rahim, 1983), more recently this area of research has focused on the construct of
“demand and withdraw.”

**Demand/Withdraw.** Demand/withdraw is a pattern in which a relationship partner
(typically the woman, in heterosexual relationships) is likely to advocate for the relationship via
expressing negative affect and complaining during discussion (Christensen, 1987, 1988). The
other relationship partner (typically the man, in heterosexual relationships), on the other hand, is
more likely to withdraw from the discussion, or avoid it altogether. Theorists suggest that, due to
gender role socialization, there are gender-based patterns of communication within couples
(Christensen & Heavey, 1990; Heavey, Layne, & Christensen, 1993; Henley & Kramarae,
1991). Jacobson (1989) argued that women are more likely to be the agents of change in a
relationship, as they are neither experiencing need fulfillment nor have an interest in maintaining
the status quo in which women have less power in their relationships than men. Men, on the
other hand, are invested in preserving the status quo, as they are experiencing need fulfillment
and are satisfied with the status of their relationship where they have more power in their
relationships than women. As a result, men are more likely to withdraw from conflict to preserve
the status quo and avoid confrontation outcomes that might force them to change.

Newer conceptualizations of demand/withdraw suggest that “demand” is more complex
than simple expression of negative affect and complaints, and that “withdraw” is more
dimensional than purely avoiding discussion. That is, demand includes the various characteristics
of blaming, accusing, criticizing, nagging, and pressuring, and withdraw is divided into different
two different categories; withdrawing (e.g., avoiding, failing to respond, being silent/defensive,
passive inaction) and submitting (e.g., deferring, giving in, yielding, surrendering, complying)
(Knobloch-Fedders, Critchfield, Boisson, Woods, Bitman, & Durbin, 2014). These newer
conceptualizations show the multitude of ways in which communication can occur during conflict between romantic partners.

There is evidence that an overall pattern of demand/withdrawal communication is detrimental to long-term relationship satisfaction (Heavey et al., 1995) and tends to lead to greater miscommunication between partners (Henley & Kramarae, 1991; Maltz & Borker, 1982; Tannen, 1990). However, ironically, there is also some research that indicates women benefit from a male-demand/female-withdraw pattern, as a one-year follow-up with couples employing this gender-based strategy showed an increase in relationship satisfaction (Heavey et al., 1993; Noller, Feeney, Bonnell, & Callan, 1994). Acitelli (1992) suggested this finding might be explained by women's appreciation of men's willingness to actively discuss relationship issues. The potential negative effects of the male-demand/female-withdraw pattern for women is an under-examined area of research. Therefore, the line between appreciating male partners' willingness to talk about the relationship while women withdraw from these conversations, and where this overall known pattern of problematic interaction may begin to become detrimental to relationships, is not yet known.

Research has shown that the demand/withdraw pattern happens significantly more often during relationship conflict discussions (e.g., financial stressors) than personal problem discussions (e.g., one person wants to get in shape), and that, overall, the demand/withdraw pattern is greater for distressed than non-distressed couples. As well, the typical gender disparity of female-demand/male-withdraw happens across both relationship and personal problem discussions when the issue was about a change in the husband (Eldridge, Sevier, Jones, Atkins, & Christensen, 2007). This finding suggests gender/sex plays a large role in the development and fulfillment of conflict styles, and how subsequent conflict plays out.
In studying the consequences of the demand/withdraw pattern, McGinn et al. (2009) found that higher levels of the demand/withdraw pattern in couples’ communications predicted lower satisfaction with the outcome of a conflict. In their study, 60% of conflicts that occurred, using this pattern, were considered unresolved by at least one of the partners. Even for conflicts that were considered resolved, one or both individuals were not satisfied with the outcome, and at least one individual may have left the interaction feeling misunderstood. The concept of self-verification stresses the extent to which an individual felt understood by his/her partner, and is an important concept to consider in the presence of conflict. Self-verification was found to mediate the relationship between the demand/withdraw pattern and satisfaction for husbands, but it only partially mediated the relationship for wives. These results give evidence for how the process of conflict matters as much, if not more than, the outcome. These findings also give further evidence that withdrawing from a conflict in progress is detrimental to both the process and the outcome of the conflict. In addition, how an individual interprets the conflict strategy employed by a partner, or even how the couple interacts post-conflict, have a larger influence on respective partners’ evaluations of relationship satisfaction.

**Conflict Structure Theory.** Conflict-structure theory (Christensen & Heavey, 1990; Heavey et al., 1993) suggests that the role each individual takes on in a conflict depends on the nature of the conflict. Whichever individual brings up a topic for discussion is referred to as the person who desires a change. The person who is on the receiving end is the one who experiences a “burden of change” (Eldridge et al., 2007). Once the requestor has asked for a desired change, they must rely on their partner to hear and work towards change. The requestor might then engage in more behaviors to elicit the desired change in the partner. These behaviors are commonly expressed through complaints, demands, and pressure to change. The partner with the
burden of making a change may find these behaviors to be uncomfortable and aversive, and, as a way to cope with their discomfort, withdraw from the situation and avoid the topic to reduce conflict and avoid having to make the desired change. An exception to this pattern of conflict is when the person who desires a change also carries the burden of it (e.g. “I want to exercise more”). This is referred to as a personal problem discussion, rather than a relationship problem discussion (e.g. “I want you to exercise more”) (Eldridge et al., 2007). In either case, the cognitive processes that are elicited during conflict are important to highlight, as they provide a key insight into conflict dynamics.

Attributions and Efficacy. Doherty (1981a; 1981b) suggested that conflict in close relationships initiates two cognitive processes, as explained by two different theories. Attribution theory aims to determine why the conflict arose. When a problem is pointed out in the relationship, individuals look for causal loci: self, other, relationship, external environment, theological causes, or luck/chance/fate. Having a sense of why the problem arose, and where the problem arose from, gives information about how to “fix” the problem. While there are some partner-specific concerns that may arise in relationships (e.g., my partner does not put enough time in our relationship, my partner does not communicate well with me), there are also many factors outside of the relationship itself that may cause a conflict (e.g., finances, living situation, family/friends). When the causal locus is outside of the relationship, the power to “fix” their relationship concerns is, to some extent, outside of their control. How couples then choose to attribute that loss of control within the relationship, then, may cause additional conflict (e.g., “you spend too much money”; “you have too much stuff and we don't have room for it all”).

Second, efficacy theory highlights individuals’ thought processes as they try to determine whether the conflict can be resolved. Efficacy expectations refer to individuals' expectations to
engage in, and effectively solve, problems. An individual with high self-efficacy is more likely to be persistent in attempts to resolve conflicts. Someone with low self-efficacy, on the other hand, is more likely to engage in helpless responses – giving up, doing nothing to try to resolve the conflict. These findings are consistent across investigations (e.g. Fincham & Bradbury, 1987). However, when the cause of conflict is stable (e.g., finances, family), efficacy expectations are likely to be low (e.g., “your family constantly meddles in our relationship; no matter what we have tried it does not stop your family from meddling”). When a source of conflict is stable, individuals might interpret this conflict permanence as a sign of defeat – that nothing they do will make the problem go away. Over time, these messages reduce an individual’s self-efficacy beliefs about their ability to engage in effective problem-solving activity, in their current and future relationships (e.g., “in future relationships where my partner's family meddles, that kind of situation will not change”).

Fincham and Bradbury (1987) expanded on Doherty’s work and asserted the presence of a responsibility attribution. If and when a causal locus is identified, the question then becomes who is accountable for working towards, and being responsible for, changing the conflict or situation to suit one or both partners. These authors argue that responsibility attribution is more closely related to current concerns about the partner and the relationship. When the locus of the problem is within a partner in the relationship (e.g., you spend too much time with your family and not enough time with me), partners can assume that this identified partner also carries the responsibility to change the situation to achieve a desired outcome. As such, when the partner accepts and agrees to take responsibility for resolving the conflict, the partner demanding the desired change will be more satisfied with their relationship. If the partner with whom the locus has been identified does not accept and agree to the burden of change, both individuals might
experience a decrease in their satisfaction with their relationship. The partner with the burden of change feels attacked for her/his behavior, which they do not perceive to be a problem for the relationship. The partner demanding change sees this as evidence that her/his partner is unwilling to change and is insensitive to their needs.

However, when the causal locus is seen as being outside of the relationship, it is difficult for partners to assign responsibility for change, and further, to expect change to occur. With this sense of hopelessness, the demanding partner might incorrectly attribute her/his negative affect onto their feelings about the relationship generally, and become less satisfied in the relationship.

Partners’ comfort with, and ability to, handle their emotions during conflict is fundamentally tied to their attachment and level of RCSE (Ben-Naim et al., 2013; Park et al., 2011). If individuals are less secure in themselves and in their relationships, in a conflict situation they become more distressed and may withdraw, simply submit to partner demands without further communication or attempt to compromise, or avoid all responsibility for resolution of the problem – all potentially maladaptive ways to cope with a conflict situation.

Accounting for the role RCSE plays in conflicts arising within romantic relationships, along with the role of attachment style, will lend a more thorough understanding into what influences and motivates partners' behaviors during conflict situations.

In the next section, I will discuss the construct of relationship satisfaction and its associated role with other variables of interest in my study.

**Relationship Satisfaction**

As social beings, the extent to which individuals are happy with and satisfied in their romantic relationships is an important construct to investigate. Relationship satisfaction has been associated with increases in individuals’ general happiness and life satisfaction (Glenn &
Weaver, 1981; Markey, Markey, & Gray, 2007). Relationship satisfaction is also a strong predictor of general mental health (Gove et al., 1983; Logan, Hall, & Karch, 2011). For these reasons, those in happy and stable relationships report better mental and physical health (Gove et al., 1983; Holt-Lundstad et al., 2008; Kolves et al., 2012), have a greater buffer against the harmful effects of stress (Coyne & DeLongis, 1986; Markey et al., 2007), have lower morbidity and mortality rates (Kietcolt-Glaser & Newton, 2001), and are less inclined to commit suicide (Gove et al., 1983; Kolves et al., 2012; Batterham et al., 2014). These findings indicate that the benefits of maintaining a supportive and satisfying romantic relationship can bolster general mental health. Conversely, dissatisfaction with a romantic relationship can leave individuals vulnerable to many negative mental health consequences.

For example, Markey et al. (2007) asked couples to report on the extent to which their significant others impact their health. Both sexes perceived that their partners were a positive influence on their health (i.e., quality of nutrition, amount of physical exercise). Notably, women rated their relationship partners as more being more influential on their health than men rated their partners. For both sexes, a higher level of perception that partner's were a positive influence on health, was associated with a greater the amount of relationship satisfaction and the perception of being more healthy.

The lack of a satisfying relationship, then, has the potential to mitigate the presence of these positive benefits and can leave individuals vulnerable to greater amount of distress. Those in unsatisfactory relationships, who are separated, or who are divorced endorse greater feelings of depression, as well as suicidal ideation (Stack, 1990; Wyder et al., 2009; Batterham et al., 2014; Till et al., 2016). Till et al. (2016) demonstrated that those with low satisfaction in their relationships reported higher levels of suicidal ideation, hopelessness, and depression. The extent
to which low satisfaction within a relationship is detrimental was further amplified by these authors who also reported finding that risk factors for suicide were higher among those who reported low satisfaction in their romantic relationships, as compared with those in higher levels of satisfaction relationships. Similar to this finding, a longitudinal study by Bruce and Kim (1992) found that divorced men were 45 times more likely to meet criteria for major depression as compared to happily married men, and were 14 times more likely to meet criteria for major depression as compared to unhappily married men. Relationship satisfaction is particularly important to consider in conjunction with the anxious thoughts and maladaptive concerns of those possessing insecure attachment and high levels of RCSE. Anxious attachment and high levels of RCSE are both characterized by a high level of interpersonal distress and low level of emotion regulation (e.g., Ben-Naim et al., 2013; Park et al., 2011). Given this, it is likely those with anxious attachments and/or high levels of RCSE are more likely to endorse feelings of depression or suicidal ideation in the presence of an unsatisfactory relationship, and especially when a relationship is threatened or possibly headed toward termination.

**Attachment, RCSE, Conflict Behaviors, and Relationship Satisfaction**

**Attachment & Relationship-Contingent Self-Esteem.** Attachment and relationship-contingent self-esteem both concern individual differences with respect to the central importance by which significant others are regarded, as well as individuals' appraisals and reactions to threats in romantic relationships. Given these similarities, there is some conceptual overlap between the two constructs. However, attachment is related to working models of self and others, and thoughts about secure others’ availability, whereas RCSE is concerned with the degree to which successes and failures in romantic relationships determines one’s self-esteem (Knee et al., 2008). Few studies have explicitly examined the relation between attachment styles and RCSE.
The meta-analytic article on RCSE (Knee et al., 2008) found positive associations between RCSE and attachment anxiety \( (r = .52, p < .001) \) and a manic \( (r = .48, p < .001) \) and selfless \( (r = .27, p < .001) \) attitude towards love, as well as low magnitude negative association between RCSE and avoidant attachment \( (r = -.10, p < .01) \). In follow up studies, Knee et al. found a correlation of \( .26 (p < .001) \) between RCSE and anxious attachment. They also sex differences in this effect, where women with anxious attachments demonstrated a stronger relation with RCSE \( (r = .29, p < .001) \) than men with anxious attachments \( (r = .12, p < .01) \).

Park et al. (2011) found, in comparison to attachment, RCSE better predicted emotional distress and obsessive (unwanted) pursuit behaviors after relationship dissolution. This relation also remained significant after controlling for attachment style. These findings give evidence that although RCSE and attachment have similarities, RCSE captures unique variance concerning experiences in romantic relationships. Other researchers have also found RCSE to be significant in predicting relationship satisfaction while controlling for anxious attachment and trait self-esteem, supporting RCSE alone as responsible for observed statistical effects (Rodriguez et al., 2014). Finally, Knee et al. (2008), found that significant correlations between RCSE and their other study constructs, generally remained significant after controlling for attachment anxiety. Overall, these studies suggest that although anxious attachment and RCSE have some conceptual and empirical relation, they are measuring distinct emotions and attitudes that individuals experience in relationships.

**Attachment and Conflict Behaviors.** In addition to demand/withdraw research, other research has demonstrated a marked difference in the perceptions of, and actions taken, during conflict given attachment style. For example, Campbell, Simpson, Boldry, and Kashy (2005) conducted a two-part study in which individuals completed diaries for two weeks (Part 1) and
were then observed discussing a major problem with their partner (Part 2). In Part 1, higher levels of anxious attachment were associated with more perceived conflict between partners, and participants reported that these conflicts typically escalated in severity. In Part 2, higher levels of anxious attachment were associated with higher levels of distress experienced during the conflict conversation, and were reported by observers as appearing more distressed and as the source of escalating the severity of conflict. In comparison to those low in anxious attachment, highly anxiously attached individuals reported a decrease in relationship satisfaction, a lower sense of the stability in the relationship, and a lower sense of their partner’s perception of the stability of the relationship when they experienced conflict.

Attachment captures a working model of self and others, and is associated with either hyper-activation or deactivation of the attachment system. Different attachment-based concerns affect how people generally behave in relationships, and how they act and react moment to moment, especially in conflict situations. Ben-Naim et al. (2013) sought to take a holistic approach to measuring distress during conflict. In addition to traditional scale measurement (i.e. attachment, affect post conflict), they measured physiological markers as well, such as skin conductance response, skin temperature, and heart rate, and also trained observers to code for emotional behavior. These authors asked couples to either suppress their negative emotions/expressions or maintain a positive mindset (i.e., think about positive aspects of their partner) throughout the course of a 15-minute conflict-based conversation with their partner.

Higher levels of avoidant attachment with suppression of emotion/expression were associated with less cardiovascular arousal and experience of sadness, and more expressions of disgust. However, higher levels of anxious attachment, with suppression of emotion/expression, were associated with higher experiences and expression sadness. This indicates that suppression
may not meet the immediate needs, during conflict situations, of those who are anxiously attached, and that experiencing and expressing their emotions may be core part of coping with conflict for them. Conversely, participants maintaining a positive mindset demonstrated less cardiovascular arousal and showed fewer expressions of contempt. Overall, the findings by Ben-Naim et al. (2013) indicate the ways in which people regulate their emotions has a moment-by-moment effect on how they proceed with conflict, especially given their perceptions of how their partner is feeling during the conflict. Interestingly, either suppression of emotion/expression or keeping a positive mindset could be beneficial or detrimental depending, in part, on partners' underlying attachment style. These researchers describe their results as a “second hand smoke effect” of emotion regulation; that is, affective suppression affects both the individual and the partner. Suppressing emotions is not only very difficult for people to do, but it may also ironically increase the experience and expression of negative emotions. Suppression appears to be a toxic communication strategy, except for those with avoidant attachments. Capturing and revealing these moment-by-moment relationship dynamics during conflict is a strong contribution to the field, as measurement of these communication dynamics is not typically handled in this way.

By and large, measurement of conflict behaviors observed in the lab has suffered from too great of a reliance of the external validity of its findings; the idea that how people behave in conflict situations in the lab is an accurate representation of their real-life behavior in conflict situations. Vicary and Fraley (2007) disagreed with this assumption of external validity, noting that individuals’ choices in lab-based conflict methods (such as those employing vignette scenarios), should be assessed in terms of how participant responses impact both their partners in the conflict, and the progression of the conflict itself. In other words, these authors argued that
investigators need to reveal how the potentially negative response base of those with insecure attachments is present in a detrimental way across communication patterns within a conflict situation. To address this desired methodological advance, these authors devised a vignette scenario (“Choose Your Own Adventure”) in which they focused on the iterative nature of decision-making in relationships during conflict, where a communication choice at one part of a vignette conflict sequence affected the on-going process of the conflict. In the Vicary and Fraley (2007) study, participants read an interactive story in which, at 20 choice points, they were presented with two types of choices (one coded as “relationship-enhancing” and the other “detrimental to the relationship”). At each choice point, participants would select the choice they would most likely make in an actual relationship.

The authors (Vicary & Fraley, 2007) created several conditions in which: a) the story evolved regardless of participants’ choices; b) the partner in the story was consistently supportive regardless of participants' choices; c) the partner in the story was consistently unsupportive regardless of participants' choices; and, d) the simulated partner’s level of supportiveness was based on the participants’ choices - relationship-enhancing responses were reciprocated with supportive reactions and responses detrimental to the relationship were reciprocated with unsupportive partner responses. Across all conditions, securely attached individuals started off making relationship-enhancing decisions, and continued to do so across all choice points, whereas insecure individuals continually made detrimental relationship choices or made relationship-enhancing decisions at a slower rate than securely attached individuals. This multi-part study illustrated how, regardless of being presented with positive or negative consequences for relationship detrimental communication choices, those with insecure attachments still continue to make detrimental communication choices during conflict.
Turan and Vicary (2010) extended Vicary and Fraley’s (2007) study, to examine whether those who make choices detrimental to the relationship are aware of the negative effects their choices can carry. They employed the same methodology as Vicary and Fraley (2007), but gave participants a new task: they used two separate samples in which one sample was asked “which choice would you choose” (like the 2007 study) and the other sample was asked “which choice should you choose.” This latter condition aimed to capture points of decision-making where participants knew what they “should” do in response to the conflict process (i.e., what is the most constructive response choice), even if they still did not follow through on using a relationship enhancing response. Their results indicated that anxiously attached individuals were as aware as securely attached individuals in knowing which choice would be relationship-enhancing, but still chose the detrimental decisions. In other words, anxious attachment is associated with an internal knowledge of adaptive decision-making, but also difficulty in applying that knowledge to situations in which perceived abandonment risks are high.

These latter studies serve as evidence that attachment style influences moment-by-moment conflict dynamics in romantic relationships. When presented with a point of conflict, those with insecure attachments are more likely to become distressed and either seek reassurance or withdraw from the conflict situation. How those with insecure attachments appraise and perceive threat is key in the consequent behavior they choose in dealing with conflict.

**Attachment and Relationship Satisfaction.** Research has consistently found negative effects from attachment-based anxiety and avoidance on relationship satisfaction (Hadden et al., 2014; Mikulincer, Florian, Cowan, & Cowan, 2002). The general trends in findings indicate that, in heterosexual relationships, women’s attachment anxiety negatively impacts men’s relationship satisfaction, and conversely, that men’s attachment avoidance negatively impacts women’s
relationship satisfaction (Collins & Read, 1990; Simpson, 1990; Kirkpatrick & Davis, 1994; Givertz, Woszidlo, Segrin, & Knutson, 2013). In addition, those higher in attachment avoidance and anxiety experience a decline in relationship satisfaction over time (e.g., Sadikaj, Moskowitz, & Zuroff, 2015). Studying attachment and relationship satisfaction in the context of other variables (like RCSE and conflict communication behaviors) is critical in parsing out the individual differences and additional contextual factors that contribute to relationship satisfaction.

**Relationship-contingent self-esteem and conflict behaviors.** To date, research has not explored RCSE in the context of conflict behaviors. Some of the research on RCSE makes evident that those high in RCSE are more distressed and tend to engage in more maladaptive coping strategies in response to relationship distress (Park et al., 2011; Rodriguez et al., 2014; DiBello et al., 2015). However, no research has examined RCSE and conflict behaviors directly.

**Relationship-contingent self-esteem and Relationship Satisfaction.** Investigating how RCSE impacts relationship satisfaction is a fruitful area of study. Theoretically, individuals higher in RCSE should be more affected by their own, and perceptions of their partners', level of relationship satisfaction, as low relationship satisfaction and the potential of losing a relationship partner both serve as a sense of failure and concern over abandonment (Knee et al., 2008). For those who highly base their self-esteem on the successes and failures of their romantic relationships, satisfaction in the relationship is of import, but may function in a differential manner. That is, relationship satisfaction may not so much be about being authentically happy with, and committed to, a partner. Rather, conceptually, as reflected by RCSE, relationship satisfaction may more likely be about preserving an individual's self-regard and esteem. For those who highly endorse RCSE, a failure of the relationship is regarded as a personal failure.
Research has also indicated, for example, that those with high RCSE and low relationship satisfaction are more likely to engage in negative coping strategies, such as increased drinking (Rodriguez et al., 2014). Therefore, the negative effects of low relationship satisfaction on mental health summarized above (e.g., depression, hopelessness, suicidal ideation) could be exacerbated for those with higher levels of RCSE.

Because RCSE is a relatively recent construct, this variable has not been explored to the extent that other relationship-relevant variables (such as attachment) have been in relation to outcome variables like communication patterns in conflict or relationship satisfaction. In a meta-analysis of studies concerning RCSE’s correlations with other relationship-based variables, Knee et al. (2008) found a low correlation of .08 between RCSE and relationship satisfaction. As this correlation was significant across five samples, was of low magnitude, and its statistical significance likely reflected the power present in the sample size (total N = 1,661), this finding reflects that RCSE fundamentally assesses a different construct than anxious attachment, which typically holds a moderate to strong correlation with relationship satisfaction. For example, Hadden et al. (2014) demonstrated in a meta-analysis of 57 studies effect sizes ranging from -.09 to -.71 for females, and .08 to -.66 for males, between anxious attachment and relationship satisfaction. As Knee et al. (2008) stressed, RCSE is more related to viewing the presence of a romantic relationship as primary import, as opposed to reflecting the extent to which an individuals’ emotional needs are met in the relationship. A recent study by Rodriguez, Wickham, Øverup, and Amspoker (2016) illustrated how even former relationships can influence the relationship satisfaction of those high in RCSE. These investigators asked participants who regularly communicated with former partners, even though they were in current relationships, to complete nightly measures, over the span of three weeks, of communication and satisfaction with
current and former relationships. They found that those endorsing higher levels of RCSE experienced lower current relationship satisfaction and higher former relationship satisfaction if they frequently communicated with their former partner. The same patterns were not evident amongst those lower in RCSE. This finding suggests those with high RCSE find greater personal satisfaction in experiencing evidence that a former relationship is not a “failed” one.

Related, Spielmann et al. (2013) found people who are currently without a romantic partner and fear being single show a greater likelihood of entering a less than optimal or satisfying romantic relationship. Conceptually, RCSE, in part, can be associated with a fear of being single, as not having a relationship to base self-esteem upon can be problematic for those high in RCSE. If evidence suggests that those who fear being single would rather be in an unsatisfactory relationship than no relationship at all, this is concerning inasmuch as research on low relationship satisfaction suggests the potential for negative consequences for the mental health for such individuals. As Knee et al. (2008) suggested, having a high level of RCSE puts individuals in a difficult position in which they are unsatisfied with their relationships, but afraid to leave them. This situation has a high likelihood of influencing conflict behaviors in romantic relationships, and will a significant point of interest for investigators to examine in the future.

**Conflict Behaviors and Relationship Satisfaction.** As aforementioned, a demand/withdraw pattern of communicating during conflict is related to decreased satisfaction in relationships (Heavey et al., 1995; McGinn et al., 2009). The extent to which people view conflict as beneficial to a long-lasting relationship, or a sign the relationship may end, is dependent upon a number of variables, including attachment style and RCSE. For those who do not view conflict positively by either seeing their partner as too demanding or feeling as though conflict highlights their own weaknesses, conflict may lead to a decrease in relationship
satisfaction, as attachment needs for love and a secure base are not being met. How people communicate, especially during conflict, has an influence on the extent to which individuals are satisfied in their relationships.

A study by Gilbert, Murphy, and Ávalos (2011) examined individuals’ levels of satisfaction with their real-life romantic relationships, as well as their level of satisfaction with a virtual partner. They found that participants rated the level of communication to be significantly better within their virtual relationship, and as a result reported a higher level of relationship satisfaction with their virtual partner than with their real-life relationship. This finding demonstrated that individuals find more satisfaction within a relationship that has good communication with a partner, even when the relationship is not “real.” Further, recent research has found individuals in relationships with unresolved conflicts (often a by-product of poor communication) reported higher levels of suicidal ideation, hopelessness, and depression than those in relationships where conflicts were resolved (Till et al., 2016).

Last, Liu, Cui, & Han (2014) found that (in heterosexual relationships) males’ scores of constructive conflict resolution were positively related to partners’ scores of relationship satisfaction. Specifically, females’ relationship satisfaction is, in part, dependent on how well their male partners handle conflicts in their relationships. This finding is in line with the demand/withdraw research which indicates females may benefit from seeing the males successfully engage in conflict, as it may serve as an indicator that the males are committed to making their relationships work (cf., Acitelli, 1992). These above research findings highlight how critical communication and conflict resolution are to the level of satisfaction experienced within a relationship.
Summary. The research I have outlined above describes how attachment, relationship-contingent self-esteem, conflict communication behaviors, and relationship satisfaction are interrelated. No studies to date have examined how all four of these variables are related. Utilizing the lens of mating sociometer, those with insecure attachments and high relationship-contingent self-esteem see a continuing relationship as an indicator that they are worthwhile, and therefore they experience an increase in self-esteem. However, due to the importance of their relationships, they may likely strongly fear any sign of potential partner abandonment or loss of a relationship (such as conflict), and engage in hyper-activating strategies to ensure the stability of their relationships and their ability to cope with threats to their relationships. In my study, I will look at how all four of these constructs interact, and also explore the ability of RCSE to moderate or mediate the relation between attachment style and conflict communication behaviors, as well as relationship satisfaction. This research represents a significant and important addition to the extant literature in this area.

The Present Study

The vast literature on attachment theory has provided many explanations as to why individuals behave and react differently to conflict in romantic relationships. The recent literature on relationship-contingent self-esteem has helped to refine explanations surrounding these behavioral differences. However, few studies that have worked toward investigating how these two constructs relate to one another within the realm of conflict inside of romantic relationships. Although anxious attachment and RCSE reflect personal insecurity and insecurity surrounding the stability of romantic relationships, these constructs represent different conceptual ideas and need to be examined as to their inter-play surrounding conflict in romantic relationships. Finally, as RCSE is a relatively new addition to the literature surrounding behavior
in romantic relationships, its role within conflict in romantic relationships has not been well examined.

Those with high levels of RCSE are highly attuned to signs that the relationship is proceeding successfully or in danger of failing. Interpretation of what conflict in a romantic relationship means and how it should be handled by partners, can serve as a sign for insecure individuals that their relationship is at risk. The RCSE literature has indicated that those high in RCSE are more distressed during difficult junctures of relationships (such as conflict), but has not made clear how these individuals handle their distress, especially during the evolving process of conflict. Theoretically, one reason that those who possess anxious attachment and/or endorse high levels of RCSE become either highly anxious and seek to ensure the continuance of a relationship, or withdraw during relationship conflict to protect themselves from rejection, is because of intensity of the distress they experience in conflict situations, which can lead to maladaptive conflict communication behaviors, even when individuals know these will be detrimental to their relationship. However, no study has yet examined these theoretical links. Specifically, little is known as to how RCSE relates to conflict dynamics or relationship satisfaction. This is an important connection to examine as the literature indicates several potential negative effects for those in unsatisfactory relationships.

In my study, I have extended Vicary and Fraley’s (2007) study of how individuals make communication decisions during conflict. In addition to assessing attachment styles, I assessed for level of RCSE so as to clarify its relation to communication behaviors during conflict, and how it might moderate or mediate the relation between attachment style and responses that are detrimental to the relationship. Finally, I assessed how RCSE might moderate or mediate the relation between attachment style and the level of relationship satisfaction participants report.
I suspected that more anxiously attached individuals endorsed higher levels of RCSE than those endorsing higher levels of avoidant attachment, given the tendency for individuals with avoidant attachment to respond in a nonplussed manner or withdraw during conflict. Further, as insecure attachments have been consistently empirically linked to more maladaptive conflict communication behaviors (i.e., over-expression of emotion, expressions of disgust for partners, withdrawal from conflict), I suspected those with higher levels of insecure attachments to endorse more relationship-detrimental choices. However, given that past research has shown those with a primarily avoidant attachment style tend to generate conflict responses that do not show parity with those issued by individuals who are anxiously attached, I partialled out (via covariance) participants’ avoidant attachment scores out of their anxious attachment scores to best account for the influence of anxious attachment scores in participant responses to the CYOA scenarios. Throughout the remainder of this paper, “anxious attachment” refers to anxious attachment including the variance of avoidant attachment, while “pure anxious attachment” refers to anxious attachment with avoidant attachment partialled out.

As well, past research has noted that men may have different core concerns than women that pertain to their satisfaction in romantic relationships and their approach to conflict inside of these relationships, contingent upon their attachment style (e.g., Del Giudice, 2011). Therefore, I examined sex-based differences on the key variables of anxious attachment, avoidant attachment, RCSE, relationship detrimental responses within conflict situations, and relationship satisfaction to ascertain whether or not the sexes in the sample demonstrate differential patterns of endorsement on these variables.

Given this conceptual and empirical evidence, the following hypotheses appeared warranted:
Research Hypotheses:

*Hypothesis 1a.* Pure anxious attachment scores will statistically significantly correlate, in a positive manner, with the number of detrimental decisions endorsed during the CYOA conflict scenarios.

*Hypothesis 1b.* Pure anxious attachment scores statistically significantly correlate, in a positive manner, with RCSE scores.

*Hypothesis 1c.* Pure anxious attachment scores will statistically significantly correlate, in an indirect manner, with participants’ endorsement of satisfaction with their current romantic relationships.

*Hypothesis 2.* RCSE will have an enhancing moderating effect on the relation between pure anxious attachment style and number of detrimental decisions endorsed during relationship conflict, with high levels of anxious attachment and high levels of RCSE increasing the number of negative responses to the CYOA scenario.

*Hypothesis 3.* RCSE will have a moderating effect on the relation between pure anxious attachment style and participants’ endorsement of satisfaction with their current romantic relationships, with low levels of anxious attachment and low levels of RCSE, increasing the endorsed level of current satisfaction with romantic relationships.

*Hypothesis 4.* RCSE will have a mediating effect on the relation between pure anxious attachment style and number of detrimental decisions endorsed during relationship conflict, with RCSE bringing the relation between attachment style and detrimental decision scores during the CYOA conflict scenarios to statistical non-significance.

*Hypothesis 5.* RCSE will have a mediating effect on the relation between pure anxious attachment style and participants’ endorsement of satisfaction with their current romantic relationships.
relationships, with RCSE bringing the relation between insecure attachment style and level of endorsed of satisfaction with current romantic relationships to statistical non-significance.

**Hypothesis 6.** Mean pure anxious attachment scores across the sexes will be statistically significantly different, with men demonstrating lower levels of pure anxious attachment than women.

**Hypothesis 7.** Mean RCSE scores across the sexes will be statistically significantly different, with men demonstrating lower levels of RCSE than women.

**Hypothesis 8.** Mean relationship satisfaction scores across the sexes will not be statistically significantly different.

**Hypothesis 9.** Mean detrimental decision scores across the sexes, made during the CYOA scenarios, will not be statistically significantly different.
CHAPTER 3. METHOD

Participants

My study was approved by the Iowa State University Institutional Research Board (see Appendix B). I obtained informed consent from participants at the beginning of the study (see Appendix C). Undergraduate college students at Iowa State University voluntarily participated in this study via the SONA system in the Department of Psychology. Participants confirmed that they were currently in a romantic relationship and that they were over 18 years of age. Students were awarded one research credit for their participation in this study. Courses that require research credits within the department include: Introduction to Psychology, Developmental Psychology, Social Psychology, and Introduction to Communication Studies. Each participant was enrolled in at least one of these courses; however, participants could participate in the study only once.

A total of three hundred fifteen undergraduate students participated in the study. Nine cases were discarded because these participants responded only to one item and then discontinued the survey, and one case was discarded because this participant discontinued the survey halfway through the CYOA task. In addition, 58 cases were discarded because they reported being “single” at the time of participation. Two cases did not respond to the ‘current relationship status’ item, and were discarded.

A total of 245 cases were included for data analysis. The sample had a mean age of 19.4 years old and consisted of 135 female-identified participants (55% of the sample). Most of the sample (78%) identified as European American and primarily identified as heterosexual (95%) in their sexual orientation. The average length of relationship at the time of the study was 14.5 months and 86 participants (35%) identified their relationship as long-distance. On average,
participants were 15.9 years old at the age of their first relationship, and reported to date having been in 3.1 romantic relationships since their first relationship (including their current relationship). Participants indicated seeing their partner, on average, at intervals between once a day and once a week. On average, participants indicated being between “Quite close” and “Extremely close” to their partners, and believed their partners felt “Quite close” and “Extremely close” to them. See Table 1 for a full breakdown of participants’ demographic statuses.

Table 1

<table>
<thead>
<tr>
<th>Participant Demographics</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>110</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>135</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>19.4</td>
<td>1.5</td>
<td>18-28</td>
<td></td>
</tr>
<tr>
<td>Sexual Orientation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heterosexual</td>
<td>233</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bisexual</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gay/Lesbian</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Questioning</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Race/Cultural Affiliation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Indian or Alaskan Native</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic or Latino American</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middle Eastern</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian American</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hawaiian or Other Pacific Islander</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>European American (White)</td>
<td>191</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bi/Multi racial/Other</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>International Student</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Length of current relationship (mos)</td>
<td>14.5</td>
<td>14.0</td>
<td>0-72</td>
<td></td>
</tr>
<tr>
<td>Age at first relationship (in years)</td>
<td>15.9</td>
<td>1.9</td>
<td>11-22</td>
<td></td>
</tr>
</tbody>
</table>
Table 1 (continued).

<table>
<thead>
<tr>
<th>Items</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of relationships to date (including current)</td>
<td>3.1</td>
<td>2.3</td>
<td></td>
<td>1-24</td>
</tr>
<tr>
<td>Long-distance relationship</td>
<td>86</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proximal relationship</td>
<td>159</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency of seeing partner</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rarely (couple times a year)</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Once per month</td>
<td>51</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Once per week</td>
<td>58</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daily</td>
<td>127</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotionally close to partner</td>
<td>4.29</td>
<td>.77</td>
<td></td>
<td>1-5</td>
</tr>
<tr>
<td>Perception of partner’s emotional closeness</td>
<td>4.36</td>
<td>.80</td>
<td></td>
<td>1-5</td>
</tr>
</tbody>
</table>

**Procedure**

Students voluntarily signed up for participation in the study through the SONA system. Upon sign-up for the study, participants were directed to the Qualtrics® survey site, where they affirmatively endorsed an informed consent document and were extended an invitation to complete research materials. After obtaining informed consent, participants provided information on a demographic and relationship history questionnaire, and completed the CYOA, ECR-SF, RCSE, and Relationship Satisfaction measures. At the end of the survey, participants were instructed to follow a link where they verified their participation in order to receive research credit. All data records were anonymous.
Measures and Materials

Demographic & Relationship History Questionnaire

Participants completed a demographic questionnaire, soliciting information on sex, age, sexual orientation, race/ethnicity, current relationship status, sex of current romantic partner, length of current relationship, age of first romantic relationship, number of romantic relationships to date, nature of current relationship (i.e. long distance or not), frequency of face to face interaction with partner, how emotionally close participants feel towards their partners, and how close they believe their partners feel toward them (see Appendix D).

Choose Your Own Adventure Task (CYOA)

Vicary and Fraley (2007) developed a measure to assess both relationship enhancing and relationship detrimental patterns of communication across a series of potentially conflictual interactions in a romantic relationship, based upon the Choose Your Own Adventure task (Montfort, 2003; see Appendix E). The CYOA task presented a narrative story of ongoing interactions or situations, with 20 predetermined points at which participants needed to make a forced-choice response decision. Participants could either choose a relationship-enhancing response (e.g., understanding, accepting, supportive) to their partner’s communication, or a detrimental response (e.g., critical, unsupportive, conflict continuing). Participants were instructed to make responses during the narrative according to how they would respond in real life with their current romantic partner. The CYOA measure yields a total of 20 enhancing and detrimental decision choices made. In their original study, Vicary and Fraley utilized a regression scoring method, to assess the rate by which individuals made relationship-enhancing decisions over the course of the 20 scenarios. For the purposes of my study, the number of relationship detrimental (negative) responses were summed and utilized as the outcome score for
the measure. There is no established validity for this scoring approach, as it has never been used with the CYOA task. However, I believed that negative responses would best reflect the influence of pure anxious attachment style on key variables of interest, and would be most comparable to data reported on in the literature concerning relationship detrimental behaviors engaged in by those reporting primarily or largely anxious attachment styles. For the current sample, participants endorsed an average 4.8 detrimental decisions across the 20 response choice points.

**Experiences in Close Relationship Scale-Short Form (ECR-SF)**

The *Experiences in Close Relationship-Short Form* (ECR-SF; Wei, Russell, Mallinckrodt, & Vogel, 2007), based on the *Experiences in Close Relationship* (ECR) scale (Brennan et al., 1998), is designed to measure how individuals emotionally experience their relationships, and categorizes these internal perceptions into anxious and avoidant attachment style tendencies. The ECR-SF is a 12-item questionnaire, employing a seven-point Likert scale (1 = “Strongly Disagree” to 7 = “Strongly Agree”, with a midpoint anchor of “Neutral”). I converted the anchors on the extant Likert scale items of the ECR-SF to a five-point Likert scale consisting of the individually worded anchors of “Completely Disagree”; “Slightly Agree”; “Somewhat Agree”; “Mostly Agree”; and “Strongly Agree.” This was done based on an interest in measuring only the degree to which participants felt that each item personality attribute within ECR-SF actually applied to them versus the extent to which each attribute item did or did not apply to them. This approach avoids conceptual and empirical confusion with obtained data with respect to correctly interpreting and analyzing participant scores endorsed at or around the original ECR-SF midpoint anchor of “Neutral” (cf. Rossiter, 2011). As well, scholars have indicated that unipolar scales have a stronger ability to provide a more nuanced assessment of an
attribute, given that finer distinctions can be made among the increasing intensity of anchors within a unipolar versus bipolar Likert scale (cf. Wolf, Joye, Smith, & Fu, 2016). I also labeled each Likert anchor in my converted scale (as opposed to those on the ECR-SF), as scholars have indicated that such point-by-point labeling increases the possibility of more accurate self-ratings by respondents (cf. Sangster, Willits, Saltiel, Lorenze, & Rockwood, 2001). Last, research concerning personality attribute measurement has found similar (if not superior) reliability and validity indices using unipolar Likert scale anchors on items originally designed to operate on a bipolar Likert anchor basis (Tzeng, Ware, & Bharadwaj, 1991; Tzeng, Ware, & Chen, 1989).

The two ECR-SF subscales assess attachment-related anxiety (six items) and attachment-related avoidance (six items) within intrapersonal experiences in relationships. Example items include: “I worry a lot about my relationships” (anxiety), and “I am nervous when partners get too close to me” (avoidance) (see Appendix F). Four of the twelve items were reverse scored, and items on each subscale (anxious and avoidant) were summed and divided by the number of items in their respective subscales, so that mean scores aligned with the five-point Likert scale qualitative anchors. As to interpretation, higher average scores on each scale indicate tendencies toward greater anxious or avoidant (insecure) attachments in relationships.

Previous research suggests that the relation of avoidant attachment to various variables of interest (e.g., RCSE, relationship satisfaction, and communication patterns in romantic relationships) may not be consistent due to the ways in which avoidant individuals internalize their emotional experiences, and react in ways that are often in contrast to how they feel (e.g., Hadden et al., 2014; Ainsworth & Bell, 1970; Main, 1979; Creasey & Hesson-McInnis, 2001). Therefore, in my study, scores relating to avoidant attachment on the ECR-SF were partialled out
of anxious attachment scores to control for their effect on anxious attachment style, and to create a “pure” anxious attachment score.

Validity was established for the ECR-SF across a series of studies conducted by Wei et al. (2007), utilizing exploratory and confirmatory factor analyses to reduce their original 36-item form. The CFA model yielded good fit indices (CFI = .95, RMSEA = .09, SMRs = .10). An internal reliability coefficient of .78 and .84 was found for the anxiety and avoidance subscales, respectively. Test-retest reliability over a 1-month interval was $r = .80$ and .83 for the anxiety and avoidance subscales, respectively. For the current sample, the average score on the anxious attachment subscale was 2.62 (2 = “Slightly Agree” to 3 = “Somewhat Agree”). Internal reliability for the anxiety subscale was .72. The average score on the avoidance attachment subscale was 1.8 (1 = “Completely Disagree” to 2 = “Slightly Agree”). Internal reliability for the avoidance subscale was .78.

**Relationship-Contingent Self-Esteem (RCSE)**

The *Relationship-Contingent Self-Esteem* scale (RCSE; Knee, Patrick, & Neighbors, 2001) measures the extent to which individuals base their self-esteem on their romantic relationships. The RCSE is based upon the more general *Contingent Self-Esteem Scale* (Kernis & Goldman, 2006) and the *Contingencies of Self-Worth Scale* (Crocker & Wolfe, 2001).

The RCSE is an 11-item measure, employing a five-point Likert scale (1 = “Not at all like me” to 5 = “Very much like me”). Participants rated the extent to which they agree to items such as “My feelings of self-worth are based on how well things are going in my relationship” and “When my partner and I fight, I feel bad about myself in general” (see Appendix G). Three of the 11 items were reverse scored, and the scale items were summed and divided by total number of items, so mean scores aligned with the five-point Likert qualitative anchors. *Higher*
scores indicate that individuals base of their self-esteem to a greater extent on the presence and status of their romantic relationships.

Knee et al. (2008) conducted an exploratory factor analysis (EFA) of the RCSE on data from a sample of 675 college students. They extracted a single factor, with eleven items, with factor loading weight coefficients ranging from .53 to .70. With respect to concurrent validity, the RCSE correlated positively with two subscales from the Contingences of Self Worth Scale (CSWS), demonstrating \( r \) values of .61 with general contingent self-esteem, and .44 on items reflecting a need for others’ approval (both correlations were significant at \( p < .001 \)). An internal reliability coefficient of .90 was obtained for the RCSE, and a two-week test-retest reliability of .78 (Knee et al., 2008). For the current sample, average score on the RCSE scale was 3.5 (3 = “Somewhat like me”). Internal reliability for the sample on the RCSE scale was .85.

**Relationship Satisfaction**

The *Relationship Satisfaction* measure (RS; Conger et al., 1990) is a two-item measure, employing a five-point Likert scale (1 = “Extremely unhappy/Not at all satisfied” to 5 = “Extremely happy/Completely satisfied”). Participants rated the extent to which they agreed with the items “How happy are you, all things considered, with your current relationship?” and “All in all, how satisfied are you with your current relationship” (see Appendix H). The two items were summed and divided by two, so that mean scores aligned with the five-point Likert qualitative anchors. As to interpretation, higher scores indicate greater happiness and satisfaction with a current romantic relationship.

The RS measure has demonstrated good reliability; for example, Lei et al. (2016) reported a Cronbach’s alpha of .88 and test-retest across a one-year period of .91 with a sample of people who reported being in satisfying romantic relationships. Bryant, Conger, and Meehan
(2001) demonstrated the validity of the RS measure by comparing partner satisfaction on the Marital Success Scale with the RS items, finding correlations that ranged from .64 to .88. For the current sample, average score on the relationship satisfaction was 4.06 (“Moderately happy/satisfied”). Internal reliability for this sample on the Relationship Satisfaction scale was .74.
CHAPTER 4. RESULTS

Missing Data

Within the 245 useable cases, a total of 13 participants each failed to endorse a single item, across study measures. Four participants failed to endorse a single item on a CYOA choice point; these missing data points were simply allowed to be treated as missing cases in analyses, so as to not affect detrimental decision endorsement totals. Six participants failed to respond to one item, on either the anxiety or avoidance subscales of the ECR-SF, or on the RCSE scale. For these six cases, the extant average of each individual’s respective subscale score on the ECR-SF, or full scale RCSE was calculated and used as that participant’s missing data point. Finally, three participants did not provide data on the ‘number of relationships to date’ item. The sample average for 'number of relationships to date' was entered for these three missing data points.

Statistical Analysis Procedures

For all descriptive analyses and analyses of variance, I used the Statistical Package for the Social Sciences (SPSS; 2016, version 24.0). For all moderation and mediation analyses, I used the Hayes PROCESS module (2015, version 2.15) for SPSS (2016, version 24.0) for analysis. More specifically, in terms of moderation and mediation analyses, the PROCESS module employs bootstrapping techniques, which are a method of repeated re-sampling of data in order to determine existing confidence intervals and dispersion parameters within the data. This technique is a powerful method for testing the effects and relations of an intervening variable on the relation of independent and dependent variables (MacKinnon et al., 2004; Williams & MacKinnon, 2008). The confidence intervals determined by repeated re-sampling tests are used to indicate whether the indirect effects of intervening variables are statistically significantly related to the distributional relations of independent and dependent variables (e.g., Shrout & Bolger, 2002).
Descriptive Statistics

In this section, I present the means, standard deviations, and sample ranges for the study measures (CYOA, ECR-SF, RCSE, and Relationship Satisfaction; see Table 2).

Table 2

<table>
<thead>
<tr>
<th>Instruments</th>
<th>Anxious</th>
<th>Avoidant</th>
<th>RCSE</th>
<th>CYOA</th>
<th>RS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Sample</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>2.62</td>
<td>1.79</td>
<td>3.54</td>
<td>4.81</td>
<td>4.06</td>
</tr>
<tr>
<td>SD</td>
<td>.75</td>
<td>.66</td>
<td>.67</td>
<td>2.44</td>
<td>.95</td>
</tr>
<tr>
<td>Males</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>2.51</td>
<td>1.87</td>
<td>3.58</td>
<td>4.52</td>
<td>4.08</td>
</tr>
<tr>
<td>SD</td>
<td>.65</td>
<td>.62</td>
<td>.63</td>
<td>2.37</td>
<td>.96</td>
</tr>
<tr>
<td>Females</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>2.71</td>
<td>1.72</td>
<td>3.51</td>
<td>5.05</td>
<td>4.04</td>
</tr>
<tr>
<td>SD</td>
<td>.81</td>
<td>.68</td>
<td>.71</td>
<td>2.48</td>
<td>.95</td>
</tr>
<tr>
<td>Possible range</td>
<td>1-5</td>
<td>1-5</td>
<td>1-5</td>
<td>0-20</td>
<td>1-5</td>
</tr>
<tr>
<td>Sample range</td>
<td>1.17-5</td>
<td>1-3.67</td>
<td>1.64-4.91</td>
<td>0-12</td>
<td>1-5</td>
</tr>
</tbody>
</table>

Note. RCSE = relationship-contingent self-esteem; CYOA = total number of detrimental choices endorsed; RS = relationship satisfaction.

Inter-correlations of Study Measures

In this section, I present the inter-correlations and alpha coefficients for the ECR-SF, RCSE, CYOA, and Relationship Satisfaction items (see Table 3). Anxious attachment and avoidant attachment were significantly positively related to each other ($r = .24$), indicating that while the two insecure attachment patterns are similar, they are also fundamentally different. Anxious and avoidant attachments were significantly positively related to number of detrimental decisions endorsed, and anxious attachment had a stronger relation to this variable in comparison to avoidant attachment ($r = .25$ and $.15$, respectively). Both anxious and avoidant attachments were significantly negatively related to degree of satisfaction with current relationship, where avoidant attachment had a stronger relation to this variable in comparison to anxious attachment ($r = -.42$ and -.27, respectively). Anxious attachment was significantly positively related to RCSE ($r = .32$), whereas avoidant attachment was significantly negatively related to RCSE ($r = -$.
suggesting that the characteristics present for those who endorse high levels of RCSE are also present for those who endorse high levels of anxious attachment, but not avoidant attachment. Finally, relationship satisfaction was significantly negatively related to number of detrimental decisions endorsed \((r = -.17)\), suggesting that those who are more satisfied in their relationships endorse fewer detrimental decisions.

Table 3

<table>
<thead>
<tr>
<th>Instruments</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Anxious</td>
<td>.72</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Avoidant</td>
<td>.24***</td>
<td>.78</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. RCSE</td>
<td>.32***</td>
<td>-.21**</td>
<td>.85</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. CYOA</td>
<td>.25***</td>
<td>.15*</td>
<td>.10</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>5. RS</td>
<td>-.27**</td>
<td>-.42***</td>
<td>.04</td>
<td>-17**</td>
<td>.74</td>
</tr>
</tbody>
</table>

*Note. *Coefficients significant at \(p < .05\). **Coefficients significant at \(p < .01\). ***Coefficients significant at \(p < .001\). Alpha coefficients are on the diagonal. RCSE = relationship-contingent self-esteem; CYOA = total number of detrimental decisions endorsed; RS = relationship satisfaction.

**ECR-SF**

The average sample score on the anxious attachment subscale was 2.62 (2 = “Slightly Agree” to 3 = “Somewhat Agree”; SD = .75; Range = 1.2 – 5). The average sample score on the avoidant attachment subscale was 1.8 (1 = “Completely Disagree” to 2 = “Slightly Agree”; SD = .66; Range = 1 – 3.7). Together, these low means indicate the individuals in this sample fall at the more "secure" end of the spectrum than insecure (anxious or avoidant).

**RCSE**

The average score on the RCSE was 3.54 (SD = .67; Range = 1.64 - 4.91), indicating that the sample, on average, endorsed having their self-esteem based “somewhat” on the successes and failures of their romantic relationships.
**CYOA**

Across the 20 choice points, participants, on average, endorsed 4.8 detrimental decisions (SD = 2.4; Range = 0 - 12). With regard to the extreme totals, 6 participants did not endorse any detrimental decisions, and 8 participants endorsed at least 10 detrimental decisions.

**Relationship Satisfaction**

The average score on the relationship satisfaction items was 4.06 (SD = .95; Range = 1 - 5), indicating that participants, on average, were “moderately” satisfied in, and happy with, their romantic relationships.

**Research Hypotheses**

**Hypothesis 1**

The partial correlations among the ECR-SF, RCSE, CYOA, and Relationship Satisfaction scales (see Table 4), address my first hypothesis in which I predicted that pure anxious attachment would be significantly positively correlated with the number of detrimental decisions endorsed during the CYOA scenario, RCSE scores, and significantly indirectly correlated with relationship satisfaction, respectively. To guard against inflating the Type I error rate, I used a Bonferroni corrected alpha of \( p < .008 \) to determine statistical significance. My first hypothesis was supported: pure anxious attachment positively correlated with RCSE scores \( (r = .39) \), CYOA scores \( (r = .22) \), and relationship satisfaction scores \( (r = -.19) \).

Table 4

| Partial Correlations Among Measures and Pure Anxious Attachment |
|----------------------|-------------------|
| Measures             | Anxious           |
| RCSE                 | .39***            |
| CYOA                 | .22***            |
| RS                   | -.19***           |

*Note. CYOA = total number of detrimental decisions endorsed; Anxious = Residual anxious attachment scores with avoidant score variance partialled out; RCSE = relationship-contingent self-esteem; RS = relationship satisfaction. *Coefficients significant at \( p < .05 \). **Coefficients significant at \( p < .01 \). ***Coefficients significant at \( p < .001 \).
Hypothesis 2

I predicted that RCSE would significantly moderate the relation between pure anxious attachment and number of detrimental decisions endorsed during the CYOA scenarios. Anxious attachment scores were entered as the independent variable, number of detrimental decisions endorsed was entered as the outcome variable, and RCSE scores were entered as the moderator. Avoidant attachment scores were entered as a covariate to control for its effects on anxious attachment scores. The results of the moderation analysis are presented in Table 5. The interaction effect of RCSE scores with anxious attachment on detrimental decisions endorsed during the CYOA scenario was not significant. My second hypothesis was not supported.

Table 5

<table>
<thead>
<tr>
<th>Model</th>
<th>b</th>
<th>se</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxious Attachment</td>
<td>.63</td>
<td>.29</td>
<td>2.17*</td>
</tr>
<tr>
<td>Avoidant Attachment</td>
<td>.42</td>
<td>.26</td>
<td>1.62</td>
</tr>
<tr>
<td>RCSE</td>
<td>.25</td>
<td>.29</td>
<td>.88</td>
</tr>
<tr>
<td>Interaction (Anxious x RCSE)</td>
<td>.27</td>
<td>.33</td>
<td>.80</td>
</tr>
</tbody>
</table>

R-square increase due to interaction:

<table>
<thead>
<tr>
<th></th>
<th>ΔR²</th>
<th>F</th>
<th>df1</th>
<th>df2</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interaction</td>
<td>.00</td>
<td>.64</td>
<td>1</td>
<td>236</td>
<td>.43</td>
</tr>
</tbody>
</table>

Note. RCSE = relationship-contingent self-esteem. Avoidant attachment scores were controlled for in anxious attachment scores. *Coefficients significant at p < .05.

Hypothesis 3

I predicted that RCSE would significantly moderate the relation between pure anxious attachment and relationship satisfaction. Anxious attachment scores were entered as the independent variable, relationship satisfaction was entered as the outcome variable, and RCSE scores were entered as the moderator. Avoidant attachment scores were entered as a covariate to control for its effects on anxious attachment scores. The results of the moderation analysis are
presented in Table 6. The interaction effect of RCSE scores with anxious attachment on relationship satisfaction was not significant. My third hypothesis was not supported.

Table 6

<table>
<thead>
<tr>
<th>Model</th>
<th>b</th>
<th>se</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxious Attachment</td>
<td>-.24</td>
<td>.10</td>
<td>-2.48**</td>
</tr>
<tr>
<td>Avoidant Attachment</td>
<td>-.54</td>
<td>.10</td>
<td>-5.60***</td>
</tr>
<tr>
<td>RCSE</td>
<td>.03</td>
<td>.09</td>
<td>.29</td>
</tr>
<tr>
<td>Interaction (Anxious x RCSE)</td>
<td>.03</td>
<td>.11</td>
<td>.30</td>
</tr>
</tbody>
</table>

R-square increase due to interaction:

$$\Delta R^2$$ | F  | df1 | df2 | p  |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Interaction</td>
<td>.00</td>
<td>.09</td>
<td>1</td>
<td>240</td>
</tr>
</tbody>
</table>

Note. RCSE = relationship-contingent self-esteem. Avoidant attachment scores were controlled for in anxious attachment scores. **Coefficients significant at p < .01. ***Coefficients significant at p < .001.

**Hypothesis 4**

I predicted that RCSE would mediate the relation between pure anxious attachment and number of detrimental decisions endorsed. Anxious attachment scores were entered as the independent variable, number of detrimental decisions endorsed during the CYOA scenario was entered as the outcome variable, and RCSE scores were entered as the mediator. Avoidant attachment scores were entered as a covariate to control for its effects on anxious attachment scores. The results of the mediation analysis are presented in Table 7. The relation between anxious attachment and detrimental decisions endorsed during conflict was not mediated by RCSE. My fourth hypothesis was not supported.
Table 7

**RCSE as a Mediator of Pure Anxious Attachment and Detrimental Decision Endorsement**

<table>
<thead>
<tr>
<th>Model</th>
<th>$b$</th>
<th>$se$</th>
<th>$t$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model 1 (RCSE as DV)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anxious Attachment</td>
<td>.35</td>
<td>.05</td>
<td>6.46***</td>
</tr>
<tr>
<td>Avoidant Attachment</td>
<td>-.32</td>
<td>.06</td>
<td>-5.24***</td>
</tr>
<tr>
<td><strong>Model 2 (CYOA as DV)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anxious Attachment</td>
<td>.66</td>
<td>.23</td>
<td>2.93***</td>
</tr>
<tr>
<td>Avoidant Attachment</td>
<td>.43</td>
<td>.25</td>
<td>1.72</td>
</tr>
<tr>
<td>RCSE</td>
<td>.23</td>
<td>.25</td>
<td>.90</td>
</tr>
</tbody>
</table>

*Note.* CYOA = total number of detrimental decisions endorsed; RCSE = relationship-contingent self-esteem. Avoidant attachment scores were controlled for in anxious attachment scores. **Coefficients significant at $p < .001$.**

**Hypothesis 5**

I predicted that RCSE would mediate the relation between pure anxious attachment and relationship satisfaction. Anxious attachment scores were entered as the independent variable, relationship satisfaction was entered as the outcome variables, and RCSE scores were entered as the mediator. Avoidant attachment scores were entered as covariates to control for its effects on anxious attachment scores. The results of the mediation analysis are presented in Table 8. The relation between anxious attachment and relationship satisfaction was not mediated by RCSE. My fifth hypothesis was not supported.

Table 8

**RCSE as a Mediator of Pure Anxious Attachment and Relationship Satisfaction**

<table>
<thead>
<tr>
<th>Model</th>
<th>$b$</th>
<th>$se$</th>
<th>$t$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model 1 (RCSE as DV)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anxious Attachment</td>
<td>.35</td>
<td>.05</td>
<td>6.58***</td>
</tr>
<tr>
<td>Avoidant Attachment</td>
<td>-.31</td>
<td>.06</td>
<td>-5.15***</td>
</tr>
<tr>
<td><strong>Model 2 (RS as DV)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anxious Attachment</td>
<td>-.24</td>
<td>.08</td>
<td>-2.90***</td>
</tr>
<tr>
<td>Avoidant Attachment</td>
<td>-.54</td>
<td>.09</td>
<td>-6.03</td>
</tr>
<tr>
<td>RCSE</td>
<td>.02</td>
<td>.09</td>
<td>.25</td>
</tr>
</tbody>
</table>

*Note.* RCSE = relationship-contingent self-esteem. Avoidant attachment scores were controlled for in anxious attachment scores. **Coefficients significant at $p < .001$.**
Hypothesis 6

I predicted that mean endorsement of pure anxious attachment scores would significantly vary between men and women, with men demonstrating lower endorsement of pure anxious attachment. I conducted an ANCOVA between men and women on anxious attachment scores, controlling via covariance, for avoidant attachment scores. ANCOVA analyses indicated a significant difference in average pure anxious scores across the sexes, where females had higher pure anxious scores than males (see Table 9). My sixth hypothesis was supported.

Table 9

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>F (df)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>2.49</td>
<td>.07</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>2.73</td>
<td>.06</td>
<td></td>
</tr>
</tbody>
</table>

**ANCOVA**

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Avoidant Attachment</td>
<td>17.17***</td>
<td></td>
<td>(1, 242)</td>
</tr>
<tr>
<td></td>
<td>6.97**</td>
<td></td>
<td>(1, 242)</td>
</tr>
</tbody>
</table>

*Note.* **Coefficients significant at p < .01. ***Coefficients significant at p < .001.

Hypothesis 7

I predicted that mean endorsement of RCSE scores would significantly vary between men and women, with men demonstrating lower endorsement of RCSE. ANOVA analyses indicated no significant difference between RCSE scores by sex (see Table 10). My seventh hypothesis was not supported.

Table 10

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>F (df)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>3.58</td>
<td>.63</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>3.51</td>
<td>.71</td>
<td></td>
</tr>
</tbody>
</table>

**ANOVA**

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.60 (ns)</td>
<td></td>
<td>(1, 243)</td>
</tr>
</tbody>
</table>

*Note.* RCSE = relationship-contingent self-esteem; (ns) = non-significant.
Hypothesis 8

I predicted that mean endorsement of relationship satisfaction would not significantly vary between men and women. ANOVA analyses indicated no significant difference between relationship satisfaction scores by sex (see Table 11). My eighth hypothesis was supported.

Table 11

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>F (df)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>4.10</td>
<td>.96</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>4.00</td>
<td>.95</td>
<td></td>
</tr>
</tbody>
</table>

ANOVA .09 (ns) (1, 243)

Note. RS = relationship satisfaction; (ns) = non-significant.

Hypothesis 9

I predicted that mean endorsement of detrimental decisions made during the CYOA scenario would not vary between men and women. ANOVA analyses indicated no significant difference in average number of detrimental decisions endorsed by sex. My ninth hypothesis was supported.

Table 12

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>F (df)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>4.52</td>
<td>2.37</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>5.05</td>
<td>2.48</td>
<td></td>
</tr>
</tbody>
</table>

ANOVA 2.84 (ns) (1, 239)

Note. CYOA = total number of detrimental decisions endorsed; (ns) = non-significant.
CHAPTER 5. DISCUSSION

The purpose of my study was to examine and understand the influence of attachment and relationship-contingent self-esteem on decisions made during conflict in relationship communication and relationship satisfaction. The main goal of my research was to advance an understanding the RCSE construct and how it interacts with attachment and influences individual differences in behaviors in relationships.

As a new construct, RCSE has been examined with respect to its relation to attachment, and, to a smaller extent, relationship satisfaction. However, research has not yet investigated the role of RCSE during relationship conflict, specifically with regard to how individuals high in RCSE behave and make decisions during conflict. I attempted to address this gap in the research literature by including and examining all of these variables simultaneously. By gaining further information on the influence of RCSE on conflict behavior, investigators can continue to examine the individual differences associated with this construct in relationship behavior, as well as ways in which to increase the presence of adaptive conflict behaviors.

Attachment

Attachment style is understood to be a psychological connectedness between people (Bowlby, 1969), and attachment theory provides working models of how individuals view themselves and those around them (Bartholomew & Horowitz, 1991). Attachment style influences the degree of emotional security individuals feel in their familial, platonic, and romantic relationships, which in turn influences their thoughts, behaviors, and ability to cope with distress within these relationships (Bowlby, 1988). Individuals with secure attachments are more likely to engage in adaptive relationship behaviors, such as acting independently of others and being motivated towards open communication (e.g., Shi, 2003). Those with insecure
attachments (anxious or avoidant) are more likely to engage in maladaptive relationship behaviors, such as excessive reassurance seeking and shutting down in the face of conflict (Shaver, Schachner, & Mikulincer, 2005; Domingue & Mollen, 2009). Anxious attachment has been found to relate to maladaptive relationship behaviors, particularly with regard to conflict communication (cf., Vicary & Fraley, 2007). This detrimental manner of handling of conflict, as well as the general worry-filled thoughts characteristic of those with anxious attachment, has been associated with less satisfaction experienced in romantic relationships (e.g., Hadden et al., 2014). In my study, I predicted that anxious attachment would be related to a higher number of detrimental behaviors endorsed during relationship conflict, as well as lower self-reported satisfaction with current romantic partner. I, in fact, found anxious attachment to be significantly related to the number of detrimental decisions endorsed during conflict, as well as level of satisfaction felt within current relationship. These relations retained significance even after accounting for the variance contributed to anxious scores via avoidant attachment patterns. Further, I found avoidant attachment to be a significant variable influencing number of detrimental decisions endorsed during conflict, as well as level of satisfaction felt within current relationship.

These findings corroborate the findings of a meta-analysis that previously found avoidant attachment patterns to relate more strongly to lower relationship satisfaction in comparison to anxious attachment (Hadden et al., 2014). With regard to detrimental decisions endorsed during conflict, Vicary and Fraley (2007) found that whether individuals more highly endorsed anxious or avoidant attachment, they endorsed relationship-enhancing decisions at a slower rate than those with secure attachments, indicating that both insecure attachment styles are related to detrimental decision-making during conflict (or at least increased resistance to make
relationship-enhancing decisions during conflict). In my findings, the relation between anxious attachment patterns and number of detrimental decisions endorsed was stronger than that of avoidant attachment patterns and detrimental decisions. These results corroborate findings by Turan and Vicary (2010) that suggest anxious attachment is related to a knowing of which decisions would be relationship-enhancing, but finding difficulty in applying that knowledge to their actions.

On the whole, the individuals in this sample were relatively secure in their attachments, endorsing low levels of anxious and avoidant attachments. This may be due in part to the average length of relationships (14.5 months) participants were in at the time of study, as well as the number of relationships they have experienced thus far ($M = 3.1$). Bowlby’s notions (1969; 1982) that individuals’ attachment varies based on experiences in relationships might explain why individuals in my sample were relatively secure; the longer the length of the relationship, the more secure a person feels in that relationship. While one year is a relatively short period of time to be in a relationship – in that the couple may not have had enough time for serious disagreements to be raised and resolved – some research indicates one year in a relationship is enough to influence degree of security. For example, researchers have suggested attachment characteristics are stronger for romantic partners early on in the relationship (i.e., first year or two) in comparison to preferences for friends, but after some time in the relationship, attachment characteristics are weaker for partners and stronger for friends (e.g., Fraley & Davis, 1997; Hazan & Zeifman, 1994; Umemura, Lacinová, Macek, & Kunnen, 2017). These previous findings suggest romantic partners spend a significant amount of time and energy solidifying the stability of their relationships, and once they have achieved this stability (i.e., they feel they are in a long-term relationship), they put less energy into ensuring a secure relationship. As the
average length of relationships in my study was over a year, it is possible that the low insecure attachment scores are reflecting the attachment needs of individuals being met.

I also found a significant difference in pure anxious attachment between the sexes, with females in my sample endorsing higher levels of pure anxious attachment than males. This is consistent with research that indicates differences in the sexes between types of insecure attachment (e.g., Del Giudice, 2011), and may also be suggestive of the nature of traditional gender role socialization, where women tend to bear a greater burden of stabilizing heterosexual relationships than their male partners, and may feel more anxiety over accomplishing this goal. However, the difference in mean pure anxious attachment scores between the sexes was approximately one-quarter of one point in the Likert anchors I employed. Although this difference was significant, this difference was likely due to power inherent in the sample size; a difference of .24 of a point between sexes likely demonstrates a very little “real world” difference in women’s level of pure anxious attachment.

**Relationship-Contingent Self-Esteem**

My sample expressed a medium to high level of relationship-contingent self-esteem, with no significant differences noted between the sexes. This level of RCSE could be due to the age of the participants, and the life stages they are navigating. Developmental psychologist Erik Erikson’s theory of psychosocial development (1950) suggests traditional college-aged students (18-22) fall across two different critical life stages: Fidelity (identity vs. role confusion) and Love (intimacy vs. isolation). In these two stages, individuals work to answer questions of “Who am I and what can I be?” and “Can I love?” Within that theoretical framework, college-aged students struggle to balance who they are (which inherently informs partner selection, which may then also inform self-identity), and how much to blend their identities with their friends and
significant others. As RCSE is related to individuals basing their self-esteem on their relationships, it makes conceptual sense that RCSE levels are somewhat higher in this sample.

Previous studies found RCSE to be a strong predictor of emotional distress and unwanted pursuit behaviors after relationship dissolution (Park et al., 2011), relationship satisfaction (Rodriguez et al., 2014), and other relationship-based variables, such as negative emotion and inclusion of other in self (Knee et al., 2008), even after controlling for attachment style. However, in my study, I found no significant relations between RCSE and number of detrimental decisions endorsed or level of relationship satisfaction. Given the previous studies, it is possible that RCSE is more related to differences in intensity of emotions felt or the current status of the relationship (more strained vs. more secure), but not necessarily differences in actual behaviors. RCSE may relate to behavioral choices in a way different than attachment style does, where emotion tends to override individuals’ knowledge that certain behaviors are maladaptive (Turan & Vicary, 2010). The case may also be that the level of import placed on keeping the relationship, as tapped by RCSE, leads one to make more relationship-enhancing decisions, even when they are extremely distressed. Regardless, my study did not find a negative relation between RCSE and number of detrimental decisions endorsed.

Conflict Behaviors

Previous literature has demonstrated the tendency for those with insecure attachments to behave in relationship detrimental ways during the course of conflict (Creasey & Hesson-McInnis, 2001; Shi, 2003; Domingue & Mollen, 2009; Vicary & Fraley, 2007; Turan & Vicary, 2010). The results of my study corroborated these previous findings, and found significant low to moderate correlations between anxious and avoidant attachment characteristics and number of detrimental decisions endorsed during the CYOA task. These findings, while in line with my
hypotheses, are rather surprising, as the correlational magnitudes are on the low side, and previous literature might have predicted stronger relations between these variables. As attachment systems are (de)activated by an attachment threat, it is possible that participants were not perceiving high amounts of threat during the CYOA task, and thus they did not experience a substantial increase in distress. Therefore, participants may have felt more confident in their ability to manage the fictitious CYOA conflict and make relationship-enhancing choices, or not felt enough of a ‘real life’ connection with the conflict in the CYOA scenarios given their current satisfaction with, and experiences in, their ‘real life’ romantic relationships. The case may be that lab-based attachment style research may not sufficiently activate ‘real world’ triggers for individuals who have more insecure attachment styles. As participants were instructed to base their decisions on what they would most likely do in their current relationships, the fact remains that the actual CYOA conflict scenarios were not happening in vivo, and may not have been readily imaginable by participants as occurring within their current relationships. Therefore, more heightened emotion/attachment concerns may not have been as strongly present in the CYOA task.

**Relationship Satisfaction**

The benefits of relationship satisfaction and detriments of low relationship satisfaction have been well established (e.g., Markey et al., 2007; Batterham et al., 2014). My study found that both anxious and avoidant attachment had low to moderate negative relations with relationship satisfaction. These results corroborate previous research indicating that both types of insecure attachment are negatively related with relationship satisfaction, and that avoidant attachment is more strongly correlated with relationship satisfaction (e.g., Hadden et al., 2014). The relation between insecure attachment and relationship satisfaction poses potentially negative
consequences for individuals with insecure attachments, as the literature suggests an increased risk for depression and hopelessness for such individuals (Stack, 1990; Wyder et al., 2009; Batterham et al., 2014; Till et al., 2016). Given these negative correlations, it is surprising again that the relation between insecure attachments and number of detrimental decisions were low to moderate; one would assume someone less satisfied in a relationship would make more detrimental decisions given their current level of dissatisfaction. However, making more enhancing decisions during conflict may be reflective of individuals’ desires to maintain the relationship, even if it is unsatisfactory, or perhaps especially because it is unsatisfactory, due to an effort to increase their satisfaction.

With regard to RCSE as a predictor of relationship satisfaction, my study found a very low correlation between the two variables. This is consistent with Knee et al.’s (2008) meta-analysis, which found a similar low magnitude correlation ($r = .08$) between these variables. High RCSE is a function based on individuals’ greater personal concern with having a relationship on which to base their self-esteem, and as such the construct is not directly related to the extent to which an individual’s needs are met in a romantic relationship. Further, this relation may be connected in an unknown way to the Eriksonian developmental stage task – that is, college-aged participants may have their relationship-contingent self-esteem connected to simply being in a romantic relationship, not as a way to preserve their personal self-esteem, but rather as a way to discover for the first time in their lives if they can ‘love’ and operate well in a romantic relationship. This may also explain the low magnitude correlation between RCSE and relationship satisfaction.
Summary of Findings

Overall, the participants in my sample were heterosexual, European American, nineteen-year old men and women. On average, they reported having their first romantic relationships at age 15 (approximately four years before sampling), and indicated they had an average of three different relationships during those four years (including their current relationship). They reported being in their current relationship for a little over a year. The majority reported being in a relationship with someone who lived nearby them, and a majority reported that they saw their partners on a daily basis. On average, they reported feeling quite emotionally close to their partners, and reported feeling that their partners felt similarly toward them.

Participants endorsed a low number of detrimental decisions in the CYOA conflict scenario; reported low levels of anxious and avoidant attachment characteristics (generally reporting more secure attachments); reported a moderate sense of relationship-contingent self-esteem (whether from developmental phase or specific insecurity is not clear); and, reported a high level of satisfaction with their current relationships.

Those who reported higher levels of anxious or avoidant characteristics in their attachment style also reported lower levels of relationship satisfaction; women endorsed higher levels of insecure characteristics in their attachment style than did men, but did not report feeling less satisfied in their relationships as compared to men. Levels of relationship-contingent self-esteem were not related to relationship satisfaction, and there was no difference by sex in the amount of relationship-contingent self-esteem expressed. Neither was there a sex difference in detrimental decisions endorsed during the CYOA conflict task.

Finally, RCSE was neither a moderator nor mediator of the relation between pure anxious attachment characteristics and detrimental decisions made during the CYOA conflict task. In
addition, RCSE was neither a moderator nor mediator of the relation between pure anxious attachment characteristics and relationship satisfaction.

**Limitations**

**Sample**

A sample of college students was used; therefore, my findings may not be generalizable to community samples. However, as many college students are in romantic relationships, it is helpful to understand the relationship concerns and dynamics of these individuals. Nevertheless, there are several sample-based limitations in my study.

*Age.* This is a college-aged sample. Extrapolating findings to older individuals should be done with caution. Again, Erikson’s theory of psychosocial development (1950) would suggest traditional college-aged students (18-22) fall across the Fidelity (identity vs. role confusion) and Love (intimacy vs. isolation) stages. Given the majority of this sample would conceptually be in the early part of the Eriksonian Love stage, it is likely they are still facing crises and confusion in their resolution of self-identity and capacity for forming and sustaining romantic relationships. As such, the findings from my study might look different for those who are developmentally further along in these Eriksonian stages or who have more successfully resolved the Fidelity and Love stages.

*Nature of relationship.* A sizeable proportion (35%) of the sample identified as being a part of a long-distance relationship. The literature suggests that while those in long-distance or proximal relationships do not differ in relationship satisfaction, those in long-distance relationships (LDRs) report lower general anxiety, depression, and fatigue, and better diet and exercise behaviors (e.g., Du Bois, Sher, Grotkowski, Aizenman, Slesinger, & Cohen, 2016). At the same time, those in proximal relationships (PRs) report better maintenance of the
relationship, including a higher frequency of meeting sexual needs and lower levels of relationship stress. Preliminary tests of key variables in my study across the condition of LDR vs. PR revealed only the average amount of avoidant characteristics endorsed was significantly different between the groups (LDRs $M = 1.7$ vs. PRs $M = 1.8$; $p < .05$), so I pooled the data for analyses given the small amount of difference existing between them, and the use of ‘pure anxiety’ as an index of insecure attachment. Regardless, it may not be prudent to assume these two groups possess similar attachment style (de)activation levels, relationship-contingent self-esteem, conflict communication behaviors, or relationship satisfaction. The element of LDR status was not one considered pre-data collection; this element of relationship status deserves further attention.

Sexual orientation. The majority of my sample identified as heterosexual (95%). Therefore, I was unable to determine if my main variables of interest (attachment, RCSE, CYOA, relationship satisfaction) operate differently for those identifying as non-heterosexual. Although preliminary analyses indicated no differences between the two groups on these key variables of interest, I did not collect sufficient numbers of participants identifying as LGBTQ to either assert generalizability of my findings to these groups or to robustly test any extant differences between these groups on key variables of interest.

Race/ethnicity. Only 54 participants identified as people of color in my sample, and were scattered across several different racial/ethnic groups. This low number of participants of color is not sufficient or representative enough to assert generalizability of my findings to all groups of color; my findings are best generalized to European Americans.
Measures and Instruments

CYOA. Although the CYOA task has been utilized in other studies (Turan & Vicary, 2010), reliability and validity of the CYOA task is hard to ascertain. As I did not include a check on the emotional arousal of participants as they took part in completing the CYOA task, I cannot ensure either a sufficiently high or consistent enough emotional arousal was elicited by the conflict task, which in turn, could have affected relations of the CYOA to attachment, RCSE, or relationship satisfaction measures. Without fear of a true threat to the relationship or a sufficient arousal of emotional response generated by the conflict task, the number of detrimental decisions made in the CYOA task may not be reflective of how people feel during conflict in ‘real world’ romantic relationships. In addition, although the CYOA task aims to better capture the iterative dynamics of conflict within relationships, the tool is still made for employment in a lab-based study, and therefore, the external validity of the tool remains in question.

In addition, the forced-choice, “either-or” decision-making method used by the CYOA measure prevented more subtle use of adaptive and maladaptive conflict communication responses; participants might have verbalized their real life concerns differently than the verbal choices available in the CYOA task. As well, I did not assess for social desirability, which also could explain why some individuals endorsed more relationship-enhancing than detrimental decisions. Turan and Vicary (2010) demonstrated that those endorsing anxious attachments do have an accurate knowledge of which choice would be enhancing to the relationship; if neither choice accurately reflected what an individual might do, this may have led participants to simply endorse the choice that is more adaptive for fear of being seen as insecure or because the text of the enhancing choice was closer to what they might actually say to their ‘real world’ partner than the text that was present in the detrimental choice.
Finally, though previous investigators utilizing the CYOA (Vicary & Fraley, 2007; Turan & Vicary, 2010) used a regression scoring method to assess CYOA responses, I used a summing method in which I examined the number of relationship detrimental decisions endorsed by each participant. This method of analyzing the CYOA responses has not been previously done, and therefore there is no validity information associated with this method. As such, I do not know if my findings related to CYOA responses would have shown different results using a different scoring method. Further research is needed on ways in which various scoring methods affect results obtained with the CYOA, and the relations these results have with other variables of interest.

ECR-SF. This instrument has well-established reliability and validity; however, I changed the anchors of the scale to measure degrees of agreement with attachment anxiety and avoidance to avoid a bi-polar Likert array. In my study, the ECR-SF subscales demonstrated sufficient reliability indices; however, the original ECR-SF had slightly higher reliability coefficients for the anxiety and avoidant subscales.

**Future Research**

Investigators should seek to recruit individuals of a more diverse age range and capture more individuals from non-heterosexual orientations, as well as follow up on potential differences between long distance and proximal relationships. A comparison of findings from such samples will help to highlight commonalities and indicate which variables (i.e., attachment and RCSE) have a greater influence on conflict behaviors and satisfaction felt in relationships across individuals from various demographic groups. Future studies should also seek to replicate my findings with more racially diverse samples.
To address the limitations in my study related to the relatively low reporting of insecure attachments, future studies should actively seek out individuals from both shorter and longer term relationships to examine the potential differences in attachment patterns. My sample reported being in relationships that were only an average of approximately 14 months long. In addition, researchers should continue to examine the interaction of RCSE and attachment style with populations that have a greater range in their current levels of relationship satisfaction to determine how RCSE affects both emotional and behavioral differences. Continuing to understand how RCSE operates within romantic relationships, given differently held attachment styles, will help to inform clinical treatment planning and interventions.

With regard to the utilization of the CYOA task, future studies might incorporate a measure of state emotion or affect during the conflict scenario to examine differences between attachment style and levels of RCSE by level of perceived stress or threat experienced. As well, future investigations could incorporate a measure of participants’ current willingness to stay in, or leave, their current relationship, as well as participants’ perceived purpose in making more relationship-enhancing decisions, to examine the potential effect these variables have on relations among attachment, RCSE, conflict behaviors, and relationship satisfaction.

An additional and relevant area for future research is how to use and apply the results found in my study. One main purpose behind conducting my study was to better understand what influences individuals’ choices to make decisions that are detrimental to their relationships, in hopes that intervention methods could be developed to help individuals maintain their relationships by making more relationship-enhancing decisions during conflict. Investigators should continue to examine the intersection of attachment style and RCSE, to determine under what circumstances one might be more influential than the other in conflict response.
Implications for Practice

The respective attachment and RCSE literatures lay out the ways in which those who feel less secure, or base their self-esteem in their relationship, fear the loss of a romantic relationship. Important to consider is how these variables influence one another in order to predict other relationship variables, such as conflict communication and relationship satisfaction. Although previous studies have found that the distress experienced by those reporting high levels of RCSE explains maladaptive conflict behaviors above and beyond anxious attachment (i.e., Park et al., 2011; Rodriguez et al., 2014; Knee et al., 2008), my study did not find such a relation using the CYOA task. Regardless, insecure attachments and high levels of RCSE both represent a fundamentally worried state of being regarding the stability of romantic relationships. Clinicians should focus on both attachment patterns as well as level of RCSE, as both have a significant influence on individual differences in relationships. My study found that the two are positively correlated with one another, yet have different relations with other relationship-based variables. Clinicians incorporating a focus on both of these variables stand to gain a more thorough knowledge of the complexity with which individuals think about, and deal with, conflict within their relationships.
REFERENCES


APPENDIX A. BARTHOLOMEW & HOROWITZ’S (1991)

MODEL OF SELF AND OTHERS

<table>
<thead>
<tr>
<th>Model of Other (Avoidance)</th>
<th>Model of Self (Dependence)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive (Low)</td>
<td>Secure</td>
</tr>
<tr>
<td></td>
<td>Comfortable with intimacy and autonomy</td>
</tr>
<tr>
<td>Negative (High)</td>
<td>Preoccupied</td>
</tr>
<tr>
<td></td>
<td>Preoccupied with relationships</td>
</tr>
<tr>
<td></td>
<td>Dismissing</td>
</tr>
<tr>
<td></td>
<td>Dismissing of intimacy</td>
</tr>
<tr>
<td></td>
<td>Counter-dependent</td>
</tr>
<tr>
<td></td>
<td>Fearful</td>
</tr>
<tr>
<td></td>
<td>Fearful of intimacy</td>
</tr>
<tr>
<td></td>
<td>Socially avoidant</td>
</tr>
</tbody>
</table>

Date: 10/12/2016
To: Amanda Budurs
W112 Lagomarino Hall
CC: Dr. Loreto Prieto
W218 Lagomarino Hall
From: Office for Responsible Research
Title: Psychological Dynamics of Romantic Relationships
IRB ID: 16-406

Approval Date: 10/12/2016
Date for Continuing Review: 10/11/2018
Submission Type: New
Review Type: Expedited

The project referenced above has received approval from the Institutional Review Board (IRB) at Iowa State University according to the dates shown above. Please refer to the IRB ID number shown above in all correspondence regarding this study.

To ensure compliance with federal regulations (45 CFR 46 & 21 CFR 56), please be sure to:

- Use only the approved study materials in your research, including the recruitment materials and informed consent documents that have the IRB approval stamp.
- Retain signed informed consent documents for 3 years after the close of the study, when documented consent is required.
- Obtain IRB approval prior to implementing any changes to the study by submitting a Modification Form for Non-Exempt Research or Amendment for Personnel Changes form, as necessary.
- Immediately inform the IRB of (1) all serious and/or unexpected adverse experiences involving risks to subjects or others, and (2) any other unanticipated problems involving risks to subjects or others.
- Stop all research activity if IRB approval lapses, unless continuation is necessary to prevent harm to research participants. Research activity can resume once IRB approval is reestablished.
- Complete a new continuing review form at least three to four weeks prior to the date for continuing review as noted above to provide sufficient time for the IRB to review and approve continuation of the study. We will send a courtesy reminder as this date approaches.

Please be aware that IRB approval means that you have met the requirements of federal regulations and ISU policies governing human subjects research. Approval from other entities may also be needed. For example, access to data from private records (e.g., student, medical, or employment records, etc.) that are protected by FERPA, HIPAA, or other confidentiality policies requires permission from the holders of those records. Similarly, for research conducted in institutions other than ISU (e.g., schools, other colleges or universities, medical facilities, companies, etc.), investigators must obtain permission from the institution(s) as required by their policies. IRB approval in no way implies or guarantees that permission from these other entities will be granted.

Upon completion of the project, please submit a Project Closure Form to the Office for Responsible Research, 202 Kingland, to officially close the project.

Please don’t hesitate to contact us if you have questions or concerns at 515-294-4566 or irb@iastate.edu.
Title of Study: Psychological Dynamics of Romantic Relationships  
Investigators: Amanda Buduris, BA; Loreto Prieto, PhD

This is a research study. Please take your time in deciding if you would like to participate.

Introduction
The purpose of this study is to understand factors that influence peoples’ behaviors in romantic relationships.

Description of Procedures
Participants will voluntarily sign up to take part in this study via the SONA website. If you are eligible and decide to participate in this study you will be granted access to a link to an online survey via the SONA website. Your responses to the survey will be confidential, no identifying computer (IP addresses) or personal information will be collected, and all data will be reported in aggregate form.

You will be asked to respond to scenarios about how you would likely respond to a relationship communication exchange. After responding to these scenarios, you will be asked to complete a series of items related to the scenarios as well as items assessing your general thoughts, feelings, and behaviors about romantic relationships. Once you reach the end of the survey, if you have made a good faith effort to complete the research materials, you will be redirected to a new URL, where you can obtain your SONA credit.

Risks
We do not anticipate this study will cause participants any discomfort whatsoever, but there is a minimal risk associated with a research topic surrounding communicating in romantic relationships. Individuals who are currently experiencing relationship or psychological distress, who have a history of psychological or mental health difficulties, or who have recently gone through a significant life difficulty may feel some discomfort when considering their relationship situation or completing the research materials. If you feel any discomfort answering any specific items in the study, you may skip them. As well, at any point, you may end your participation in the study. Last, listed below are several resources that you can utilize if you are feeling discomfort while or after participating in this study.

• Thielen Student Health Center (ISU: 515-294-5801)
• Student Counseling Services (ISU: 515-294-5056)

Benefits
There will be no direct benefits to you by participating in the study. However, we hope to learn information that could help researchers better understand the situations of those experiencing relationship difficulties. You have other methods of obtaining the required course research credit. Consult your course syllabi for this information.
Costs and Compensation
You will be awarded one SONA research credit for your good faith participation in this study. The estimated amount of time required to complete this study is 15-30 minutes. Please be aware that you will not be able to save your responses and return to the survey at another time - *therefore complete all research materials in one sitting*.

Participant Rights
Your participation in this study is completely voluntary. You may refuse to participate or end your participation at any time, without any penalty or negative consequences. In order to receive your SONA research credit, you must make a good faith effort to complete the items and reach the end of the survey. However, you have the right to not answer any questions on the survey that you do not wish to answer (simply skip the questions by using the forward arrow buttons at the bottom of each page on the Qualtrics survey).

Confidentiality
Research records and data will be kept confidential to the extent permitted by applicable laws and regulations and will not be made publicly available. However, federal government regulatory agencies, auditing departments of Iowa State University, and the Institutional Review Board (a committee that reviews and approves human subject research studies) may inspect and/or copy research records for quality assurance and data analysis. These records may contain private information.

To ensure confidentiality to the extent permitted by law, the following measures will be taken: 1) no information that could directly identify you will be solicited; 2) no physical copies of consent forms will be obtained to protect participants' identities; 3) all research materials will be stored in a locked file cabinet in a locked lab; and, 4) all raw data will be kept on password protected computers. If the results are published, your identity will remain confidential, no individual will be identified in any research report as all data will be described in aggregate form.

Questions or Problems
You are encouraged to ask questions at any time about this study.

- For further information about the study contact Amanda Buduris at abuduris@iastate.edu (515.294.1742) or Dr. Loreto Prieto at lprieto@iastate.edu (515.294.2455).
- If you have any questions about the rights of research subjects or research-related injury, please contact the IRB Administrator, (515) 294-4566, IRB@iastate.edu, or Director, (515) 294-3115, Office for Responsible Research, Iowa State University, Ames, Iowa 50011.

******************************************************************************

I. PARTICIPANT SIGNATURE

By checking the “Yes, I agree to participate” box, I am confirming that I have read and fully understood the informed consent form, that I am currently in a romantic relationship, and that I am at least 18 years of age. I voluntarily agree to participate in this study, if I have questions, the study has been fully explained to me, and I have been given the time to read the informed consent document and understand it. By checking the “No, I do not agree to participate” box, you will immediately end your participation in this study. We strongly recommend that you print this form for your records.

Yes, I agree to participate. No, I do not agree to participate.
APPENDIX D. DEMOGRAPHICS & RELATIONSHIP HISTORY QUESTIONNAIRE

Instructions: Please answer the following demographic and history questions.

1) Sex M_____ F_____ Other (please identify) _____

2) Age _____

3) Sexual orientation Heterosexual Bisexual Gay/Lesbian Transsexual Questioning Other (please identify)

4) Racial/Cultural Affiliation
   ____ American Indian or Alaskan Native ____ Asian American
   ____ African American ____ Hawaiian or Other Pacific Islander
   ____ Hispanic or Latino American ____ European American (White)
   ____ Middle Eastern American ____ Bi/Multiracial/Other
   ____ International Student

5) Current relationship status Single_____ In a romantic relationship_____

6) What is the sex of your current romantic relationship partner? _Male _Female _Other

7) How long have you been with your current partner? _____

8) At what age did you have your first romantic relationship? _____

9) Number of romantic relationships you have been in to date (including current one) _____

10) Is your current romantic relationship 'long-distance' (your partner spends most of her/his time geographically far from you)?

11) How frequently do you see your romantic partner?

   ______Rarely (couple times a year) ______Once a month
   ______Once a week ______Daily

12) How 'emotionally close' do you feel toward your current romantic partner?

   1 Not close 2 A little 3 Somewhat 4 Quite 5 Extremely
   at all close close close close

13) How 'emotionally close' do you think your current romantic partner feels toward you?

   1 Not close 2 A little 3 Somewhat 4 Quite 5 Extremely
   at all close close close close
APPENDIX E. CHOOSE YOUR OWN ADVENTURE TASK – EXAMPLES OF QUESTIONS USED

Dinner is ready so everyone sits down to eat. Halfway through dinner, the doorbell rings. In walks a boy your age. Quickly walking over to your partner, he gives her a hug. Your partner introduces him as her parents’ next door neighbor whom she grew up with.

When the boy leaves, he gives your partner a new phone number and tells her to call sometime.

Once you're back in the car, do you:
(a) Not say anything, assuming they are just old friends.
(b) Tell your partner you would prefer she not call.

On the way home, you ask your partner if she wants to go to dinner tomorrow night. "I already have plans to go out with my friends," she tells you. You've gone out many times in the past with your partner and her friends, so you're surprised when she lets the subject drop without inviting you.

Do you say:
(a) "Is it a girls’ night out?"
(b) "Is something wrong?"

Your partner tells you that the girls are just getting together to hang out and it's no big deal. You drop your partner off and nothing more is said about the weekend.

The next night, a friend calls you up and you make plans to go out. You meet up with a bunch of people at a local bar and are sitting off to the side talking when you see your partner come in with her group of friends.

Do you:
(a) Immediately go up to her to say hello.
(b) Stay off to the side, thinking you'll be able to see how she acts when you're not around.

Note. Participants own partners’ sex was inserted into the stories. Versions were made for both heterosexual and LGBT coupled partners. For each entry in this table, “a” indicates the relationship-enhancing choice, and “b” represents the choice that is detrimental to the relationship.
APPENDIX F. EXPERIENCES IN CLOSE RELATIONSHIP – SHORT FORM

**Instructions:** Please use the scale below for the following items. Please respond to them as you have usually found yourself thinking, feeling, and behaving in past/current romantic relationships. Be as honest and straightforward as you can in answering these questions.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Completely Disagree</td>
<td>Slightly Agree</td>
<td>Somewhat Agree</td>
<td>Mostly Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

It helps to turn to my romantic partner in times of need.
I need a lot of reassurance that I am loved by my partner.
I want to get close to my partner, but I keep pulling back.
I find that my partner doesn't want to get as close as I would like.
I turn to my partner for many things, including comfort and reassurance.
My desire to be very close sometimes scares partners away.
I try to avoid getting too close to my partner.
I do not often worry about being abandoned.
I usually discuss my problems and concerns with my partner.
I get frustrated if romantic partners are not available when I need them.
I am nervous when partners get too close to me.
I worry that romantic partners won’t care about me as much as I care about them.
APPENDIX G. RELATIONSHIP-CONTINGENT SELF-ESTEEM

Instructions: Please use the scale below to answer the following items. Please respond to the items as you usually find yourself thinking, feeling, and behaving in your current romantic relationship. Be as honest and straightforward as you can in answering these questions.

1
Not at all like me
2
Somewhat like me
3
Very much like me

I feel better about myself when it seems like my partner and I are getting along.
I feel better about myself when it seems like my partner and I are emotionally connected.
An important measure of my self-worth is how successful my relationship is.
My feelings of self-worth are based on how well things are going in my relationship.
When my relationship is going well, I feel better about myself overall.
If my relationship were to end tomorrow, I would not let it affect how I feel about myself.
My self-worth is unaffected when things go wrong in my relationship.
When my partner and I fight, I feel bad about myself in general.
When my relationship is going bad, my feelings of self-worth remain unaffected.
I feel better about myself when others tell me that my partner and I have a good relationship.
When my partner criticizes me or seems disappointed in me, it makes me feel really bad.
APPENDIX H. RELATIONSHIP SATISFACTION

Instructions: Please answer the following questions based on your current relationship.

How happy are you, all things considered, with your current relationship?

1 2 3 4 5
Extremely unhappy Somewhat happy Extremely happy

All in all, how satisfied are you with your current relationship?

1 2 3 4 5
Not at all satisfied Somewhat satisfied Completely satisfied