A STUDY ON ATTACHMENT, EMOTIONAL INTELLIGENCE, AND BODY IMAGE

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THESIS

Submitted in partial satisfaction of
the requirements for the degree of

MASTER OF ARTS

in

PSYCHOLOGY
(Counseling Psychology)

at

CALIFORNIA STATE UNIVERSITY, SACRAMENTO

SPRING
2010
A STUDY ON ATTACHMENT, EMOTIONAL INTELLIGENCE, AND BODY IMAGE

A Thesis

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Abstract

of

A STUDY ON ATTACHMENT, EMOTIONAL INTELLIGENCE, AND BODY IMAGE

by

Amadee J. Fuentes

This study examined the interaction between attachment, emotional intelligence, and body image among college students. Participants completed a questionnaire packet and a demographic form. There were 310 participants. Results revealed that a positive view of self had a greater effect on the ability to repair emotions among females, and a positive view of others had a greater effect on self evaluation among males. Results of a follow-up analysis using the four attachment prototypes (i.e., secure, preoccupied, dismissive, and fearful) showed that secure (positive self/others) and dismissive (positive self/negative others) females and preoccupied (negative self/positive other) males reported greater perceived ability to repair emotions. The study suggests that view of self may have a greater influence among females and view of others may have a greater influence among males.

_______________________, Committee Chair
Lawrence S. Meyers, Ph.D.

_______________________
Date
ACKNOWLEDGMENTS

I would like to dedicate this to my father who passed away in 1997 and was unable to bear witness to his hope for me. I would like to thank all of my family members, who not only hung in there with me throughout the years, but also provided me with the support necessary to meet my goal. Thank you Mom, without your support I may not have finished. I would also like to thank the many friends, who provided me with guidance, support, and emotional encouragement during times I thought and stated, “Do I really want to do this?” Thank you to Michelle, who encouraged me to shoot for average; Donna, for listening to me in times of shear panic and emotionally supporting me; and, all the strong women in my life who told me, “hang in there.” A special thanks to you, Dale, for providing me with the emotional support to see me through from beginning to end and, being witness to my personal growth throughout this process. Finally, thank you to my committee members, Dr. Cameron and Dr. Endriga who were always supportive and encouraging throughout this thing called graduate school. Thank you, Dr. Meyers for your time and commitment during the final phase of this whole process.
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Chapter 1

INTRODUCTION

Attachment

Early experiences can have a profound effect on the developmental progress and personality characteristics of individuals. The ability of a parent and child to form a secure attachment has been one theory used to shed light on the developmental outcomes of individuals. Initially introduced by Bowlby (1973, 1982, 1988), attachment theory posited that all species including human beings had an innate biological need to feel a sense of security and that this security was attained using goal directed behaviors that aimed to seek and maintain physical closeness with an attachment figure (i.e., parent or primary caregiver). Furthermore, the reinforcement of such behaviors rested on the attachment figure’s availability to respond; For instance, when distressed infants use crying to gain the attention and reassurance they need from a caregiver. Ideally, if the attachment figure was perceived by the infant to respond in a positive and consistent manner to its cries (e.g., nurturing, caring, attentive, soothing) and effectually minimize the infant’s distress, such repeated interactions promoted the infant’s sense of safety and resulted in the formation of a secure attachment. In turn, secure attachments serves to facilitate a child’s confidence and self regulating processes promoting the infant to engage in exploration and integrate a sense of security within its internal subjective experiences (Bowlby, 1973, 1982, 1988). Finally, Bowlby (1973, 1982, 1988) suggested that the goal of maintaining security continued throughout the lifespan of an individual in order to minimize distress associated with loss and separation and that the influence
of an attachment would likely be reflected in adulthood when individuals feel especially vulnerable or distressed (e.g., feelings of fatigue, pain, and fear).

Research in the area of attachment theory has confirmed many of Bowlby’s original thoughts. Seminal work by Ainsworth and Bell (1969) and Ainsworth, Blehar, Wells and Waters (1978) involved observing the interaction between parent and child in a “strange situation” and found that infants did exhibit stereotypic behaviors that were a function of the mother-infant attachment. Ainsworth et al., (1978) classified these behaviors into three main patterns suggesting a three category model of attachment. That is, children could be described as exhibiting one of three attachments styles: secure, anxious-avoidant or anxious-resistant. Each pattern defined infants’ behavioral responses to strangers in the presence, absence and return of the mother. Infants described as having formed secure attachments to their mothers tended to cry during the mother’s absence but were easily consoled when reunited with their mothers. In contrast, infants classified as anxious-avoidant displayed few signs of distress in the mother’s absence and avoided her when reunited. Finally, Ainsworth et al. (1978) found that compared to infants classified as secure, infants classified as anxious-resistant appeared to show greater signs of distress in the mother’s absence and were more difficult to console.

Expanding on the Ainsworth et al. (1978) work, Main and Solomon (1986) isolated an additional pattern characterized by odd, disoriented, and disorganized behaviors by accounting for the behaviors of infants whose behaviors could not be classified within Ainsworth’s three categories (i.e., secure, anxious-resistant, anxious-
avoidant). The researchers found that infants could be classified as disorganized/disoriented if the exhibited behaviors in the strange situation were (a) out of “temporal sequence” compared to the organized behaviors often exhibited by infants classified as secure, anxious-resistant, or anxious-avoidant; (b) a combination of the organized attachment behaviors such as approaching the parent with averted eye contact; (c) included “incomplete or undirected movements and expressions” toward the caregiver; (d) indicative of “confusion and apprehension” such as smiling while crying, and/or; (e) indicative of “behavioral stilling” (e.g., staring off with no directed focus) and “depressed affect” (e.g., lying still while staring off into the distance).

The work of Bowlby (1973, 1982) and Ainsworth et al. (1978) had primarily focused on the attachment styles of infants and children. Eventually the focus turned to research on adult attachments based on Bowlby’s (1973, 1982) view that that the need for attachment would continue throughout the life span of the individual and would reflect the attachment systems formed during early interactions between parent and child. For example, Hesse and Main (2000) suggested that the early childhood attachments experienced by the infants’ caregivers either facilitated or, in the case of disorganized patterns, interrupted the secure attachment process formation between parent and child. By analyzing historical narratives of children’s caregivers, the researchers found that children classified as disorganized often had caregivers who had experienced unresolved traumatic events (e.g., loss of a parent, abuse, death of a family member, family illness) during their own childhoods. In comparison, parents whose infants had been classified as secure often presented narratives that were consistent with
a secure or resolved upbringing (Hesse & Main, 2000). Likewise, Hazan and Shaver (1987), for example, posited that the bonds between romantic couples would be similar to parent-child bonds formed during childhood.

Hazan and Shaver’s (1987) concept that adult attachment patterns corresponded with attachment behaviors exhibited by children lead the way to a three category model of adult attachment. Adult behaviors could be described as either secure, anxious-ambivalent, or avoidant. Adults defined as secure appeared to be comfortable in relationships that were characteristically close. In contrast, adults defined as anxious-ambivalent appeared to seek out closeness but feared rejection; and, avoidant adults who appeared to have difficulty depending on others also seemed uncomfortable developing close relationships (Hazan & Shaver, 1987).

Expanding the three-category model, Bartholomew and Horowitz (1991) proposed a two-dimensional, four-category adult attachment model (Figure 1). They proposed that individuals’ view of self and others provided the underlying foundation from which attachment patterns developed. That is, the view of self fell along one dimension in which individuals either viewed self positively or negatively and, the view of others fell along a second dimension in which individuals could view others either positively or negatively. Thus, depending on the combined valences for each dimension, individuals fell within a quadrant that could be defined as either: Secure, Preoccupied, Avoidant-Dismissive or Avoidant-Fearful.
The idea that attachment styles are founded on individuals’ views of self and others was originally conceptualized by Bowlby (1973, 1982) who posited that individuals possessed working models based on their experiences with early attachment figures. Thus, the view of others is based on “whether or not the attachment figure is judged to be the sort of person who in general responds to calls for support and protection…” while the view of self is based on “whether or not the self is judged to be the sort of person towards whom anyone, and the attachment figure in particular, is likely to respond in a helpful way” (p. 204). Supporting Bartholomew and Horowitz’s
(1991) four category model, Griffin and Bartholomew (1994a, Study 1; 1994b) found that individual’s attachment styles reflected the interaction between a positive or negative view of self and others. For example, the authors found that secure individuals appeared to have a positive view of self and others. In contrast, insecure attachment types tended to report either positive or negative views of self and others. Those described as preoccupied tended to have a negative view of self and a positive view of others; avoidant-fearful types tended to have a negative view of self and others; and, avoidant-dismissive types tended to have a positive view of self and a negative view of others.

Furthermore, research work carried out by Main, Kaplan, and Cassidy (1985) provided support for Bowlby’s theory that “working models” of self and others functioned as a navigational system in how individuals processed the world around them. Main et al. (1985) suggested that attachment patterns are best described in relation to individuals’ working models “that direct not only feelings and behaviors but also attention, memory and cognition” (p. 67). In their study, Main and colleagues observed infants’ reunion behaviors with their mother and father at 12 or 18 months of age, respectively, and compared these behaviors to representational speech and the reunion behaviors observed six years later. The study supported the view that internal working models remained relatively stable over time and that the child’s overall functioning and speech pattern were consistently related to the attachment security (or insecurity) felt during infancy.
A considerable amount of empirical work has shown that attachment facilitates adaptation and adjustment. Among infants, for example, Ainsworth et al. (1978) and Ainsworth and Bell (1969) observed differences in behavior patterns among those described as having secure, anxious-ambivalent, and anxious-avoidant attachments. Using their mother (caregiver) as a “secure base,” secure infants typically adapted and adjusted better to threatening situations and engaged in exploration of their environment. In contrast, infants with anxious and avoidant attachments appeared to have more difficulty exploring or explored without regard to the situation in the case of the avoidant infant.

Research on the effect of attachment on adjustment and adaptation has also included on adolescents and adults. Cooper, Shaver, and Collins (1998) found that those with anxious attachments showed the greatest difficulty overall in the ability to adjust. For example, anxious and avoidant individuals had greater psychological symptoms associated with depression. Avoidant adolescents also had difficulties with social competence and romantic relationships, however, these individuals did better in school, showed less hostility, and engaged in less risk-taking behaviors than anxious types.

Insecure attachments also appeared to be related to greater concerns about weight and lower self-esteem among pre-adolescent and adolescent girls (Sharpe et al., 1998) as well as substance use among adolescents (Kostelecky, 2005). Among adults, insecure attachment has been associated with eating disorders (Armstrong & Roth, 1989; Mallinckrodt, McCreary, & Robertson, 1995; Triosi, Massaroni & Cuzzolaro, 2005; see also O’Kearney, 1996; Ward, Ramsay, & Treasure, 2000 for review); alcoholism,
schizotypal traits, alexithymia, and depression (De Rick & Vanheule, 2007); negative affect, symptom reporting, and alexithymia (Wearden, Lamberton, Crook, & Walsh, 2005); sex offenses (Ward, Hudson, & Marshall, 2001), difficulty recovery from traumatic experiences (Browne & Winkelman, 2007); psychopathology (Muller & Lemieux, 2000); and, the inability to regulate emotions and mood (Campa, Hazan, & Wolfe, 2008; Caspers, Cadoret, Langbehn, Yucuis, & Troutman, 2005; Crawford, Shaver, & Goldsmith, 2007; Deniz, Hamarta, & Ari, 2005; Feeney & Ryan, 1994; Kerns, Abraham, Schlegelmilch, & Morgan, 2007; Mallinckrodt & Wei, 2005; Mikulincer, 1998; Safford, Alloy, Crossfield, Morocco, & Wang, 2004; Sroufe, 2005; Wei, Vogel, Ku, & Zakalik, 2005).

In order to understand how attachment at infancy affected individuals later in life, Bowlby (1973, 1982), and Ainsworth (1979, 1989) posited that infants were capable of developing internal cognitive structures or models of their experienced interactions with a caregiver that continued to influence the development of the child, perhaps leading to adaptive or maladaptive developmental outcomes. Early research investigating the longitudinal influence of infant attachment patterns on development revealed consistent patterns of behaviors in two, three, and six year old children (see Ainsworth et al., 1978, Ainsworth, 1979). Research showed that securely attached infants appeared to be more cooperative, positive, competent, interactive, curious, and utilized problem solving methods as children. In comparison, avoidant infants continued to be aggressive, noncompliant, and avoidant; and, anxious infants displayed more frustration intolerance, less adeptness and perseverance as children. Likewise, several
researchers (see Hesse & Main, 2000; Main & Solomon, 1986) found that infants who displayed patterns of behavior consistent with disorganized attachment often continued to show these behaviors during childhood, adolescence, and adulthood.

Recently, Sroufe, Egeland, Carlson, and Collins (2005; as cited in Sroufe, 2005) followed individuals over a 30-year period to documented the role of infant attachment on development. They found that attachment at infancy predicted self-reliance, social competence, the ability to adjust to a broad range of situations, behavioral patterns, and psychopathology. For instance, securely attached infants showed greater adaptation and adjustment, overall, as adolescents and adults. Anxious-resistant infants had developmental difficulties associated with adapting to change, emotional regulation, anxiety, depression, and self-reliance showing greater dependency later in life. Anxious-avoidant infants developed difficulties such as an over- and under-dependency on others as children and adults, respectively. Additionally, these individuals had difficulty with interpersonal relationships, conduct problems, and depression. Finally, disorders associated with personality, conduct, and dissociation were more strongly predicted by disorganized attachments, overall (Sroufe, 2005).

Despite verifying the stability of attachment types across several ages, longitudinal studies did not specifically focus on internal structures or working models. In order to capture the influence of working models, several researchers (Browne & Winkelman, 2009; Griffin & Bartholomew, 1994b; Muller & Lemieux, 1999; Wearden et al., 2005) investigated how individuals’ views of self and others (model of self and other) affected adjustment and adaptation. Research has shown that how one views self
and others was related to self reliance and interpersonal interactions such as expressivity, passivity, and the degree to which they were vulnerable to mistreatment (Griffin & Bartholomew, 1994b), and whether or not one had the ability to identify and express emotions (alexithymia; Wearden et al., 2009). Research also found that positive view of self alone was associated with positive affect, decreased symptom reporting, and greater self-esteem (Wearden et al., 2009). In contrast, among traumatized individuals a negative model of self was related to cognitive distortions (Browne & Winkelman, 2009) and strongly predicted psychopathology, especially among those individuals who had little social support (Muller & Lemieux, 1999).

**Attachment and Affect (Emotional) Regulation.** One of the primary theoretical assumptions has been that attachment acts as an affect regulating system (Ainsworth et al., 1978; Bowlby, 1973, 1988; Bradley, 2000; Fongay, Gergely, Jurist, & Target, 2002; Lopez & Brennan, 2000; Main & Solomon, 1986; Mikulincer & Florian, 2004; Mikulincer, Hazan, & Pereg, 2003; Wallin, 2007). Various models have been developed to explain the development of affect regulation; however, many have agreed that the interaction between primary caregiver and infant (child) has played a significant role in its development (Bowlby, 1973, 1988; Bradley, 2000; Fongay, et al., 2002; Wallin, 2007). This view has suggested that the parent (caregiver) – infant (child) relationship acts as a foundation that either facilitates the regulation or dysregulation of emotions and that intra- and interpersonal adaptation and well-being depend on these experienced interactions.
This line of thinking can be traced to Bowlby’s (1973) theory that infants possess an innate affect regulating system whose primary function was to promote the acquisition and maintenance of safety through “proximity- and contacting-seeking behaviors” (e.g., crying, following, clinging, smiling); and, depending on the caregiver’s response and availability to respond, resulted in behaviors associated with attachment or withdrawal. For instance, the goal of primary attachment strategies are to regulate affect using the innate affect regulating system to decrease or minimize distress (Mikulincer et al., 2003); thus, this system is utilized when caregiving has been consistently caring, warm, and nurturing. In contrast, the goals of secondary attachment strategies are to minimize distress through the use of deactivating or hyperactivating strategies (Mikulincer et al., 2003). Deactivating strategies minimize distress and negative affect through methods aimed to maximize “cognitive, emotional and physical distance from others” (p.85; Mikulincer et al., 2003). In comparison, hyperactivating strategies minimize distress by “prod[uc]ing a self-amplifying cycle of distress” where over expression of affect is utilized in an attempt to gain attention and impede abandonment or rejection (p.85; Mikulincer et al., 2003). The latter strategies are believed to be utilized when caregivers were perceived as intrusive or abusive; thus, leading to characteristics associated with avoidant or dismissive attachment. Hyperactivating strategies are believed to be utilized when caregivers are perceived as inconsistent; thus, leading to characteristics associated with anxious or preoccupied attachment (Mikulincer et al., 2003; Mikulincer & Florian, 2004).
Research investigating the influence of attachment has shown individual differences in how individuals experienced emotions, affect and mood. Using measures to assess emotions, Feeney and Ryan (1994) found that secure attachment was associated with lower negative emotion and emotional ambivalence, and greater positive emotion compared to anxious/ambivalent individuals who had increased negative emotionality. Likewise, Cooper and colleagues (1998) found differences in depression and anxiety among young adults. They found that those who were securely attached reported less depression and anxiety than those who were classified as anxious and avoidant, with the former reporting higher values overall. Among school aged children, Sroufe (2005) found greater positive affect among children who previously reported a history of secure attachments compared to those who had previously reported a history of anxious attachment. In contrast, negative affect was negatively associated with secure attachment but positively associated with preoccupied and fearful attachments among adults (Wearden et al., 2005).

Review of the research literature also revealed differences between attachment prototype and how individuals expressed and identified feelings. Deniz et al. (2005) found that secure individuals had a greater ability to be emotionally expressive compared to those who were dismissive and fearful. However, further analysis revealed that secure attachment was a better predictor of emotional expressivity. Similarly, using a measure to assess for alexithymia (ability to express and identify emotions), Wearden et al. (2005) found that secure attachment was negatively related to difficulty identifying and expressing emotions while fearful attachment was positively related to difficulties
with emotional expression and identification. In order to assess emotional regulation, Fossati et al. (2009) investigated the effects of the ability to identify feelings on impulsive aggression among preoccupied and avoidant individuals. The investigation revealed that preoccupied and avoidant individuals had difficulty expressing emotions and that this difficulty mediated their ability to control aggression. In a similar vein, Cooper et al. (1998) found that hostility appeared to be highest among anxious individuals followed by avoidant and secure individuals in descending order.

The strategies used to minimize distress also appeared to differ between the different types of attachment. For instance, secure children utilized more constructive coping strategies than anxiously attached children (Kerns et al., 2007; Sroufe, 2005). The research also appeared to support attachment theory’s proposal that deactivating and hyperactivating strategies are primarily used by avoidant and anxious/preoccupied attachment types, respectively. Crawford and her colleagues (2007) measured the amount of attachment anxiety experienced by individuals by assessing the combined effects of emotional regulatory processes and neuroticism. They discovered that high avoiders were better able to mitigate the effects of anxiety when neuroticism remained below a specific threshold; however, once above that threshold the effect of avoidance diminished. Additionally, anxiety only appeared to remain at its lowest when individuals were low avoiders and low on neuroticism; however, once low avoidance reached the “cross-over point” on neuroticism, anxiety increased at a greater rate than high avoidance. Also, it was found that a greater amount of attachment anxiety was experienced when a low ability to control negative emotions was combined with high
neuroticism. The results of this study suggested that the regulatory strategies used vary between individual attachments and function to regulate anxiety (Crawford et al., 2007).

Other researchers (Ringer & Crittenden, 2007; Wei et al., 2005) who assessed the emotional regulating strategies used by anxious and avoidant individuals found similar results. Both emotional cutoff and emotional reactivity mediated negative affect among avoidant and anxious individuals, respectively (Wei et al., 2005). Additionally, this study provided support to the premise that avoidant individuals primarily utilized emotional cutoff and anxious individual used emotional reactivity as a way to regulate emotions. Finally, eating disordered women classified with anxious and avoidant attachment frequently engaged in behaviors such as delusional idealization and feigned helplessness and aggression (Ringer & Crittenden, 2007). The researchers further suggested that these behaviors are consistent with hyperactivating and deactivating strategies theoretically linked to these types of attachment.

Despite these results, the research on attachment styles and the strategies they utilize has been more complex than originally believed (see also Pietromonaco & Feldman-Barrett, 2000). Ringer and Crittenden’s (2007) study, for example, showed that behaviors consistent with anxious and avoidant attachments were utilized by eating disordered women. However, it was more difficult to clearly identify these women as either anxious or avoidant because many of the women used both types of strategies. Likewise, in a study conducted by Mallinckrodt and Wei (2005), the researchers found that avoidant attachment negatively related to social efficacy, which appeared to support the theoretical view that avoidant individuals utilize deactivating strategies to minimize
interpersonal relationships. However, the correlation between avoidance and social efficacy also theoretically conflicted with the view that avoidant and/or dismissive attachments do not need others (Mallinckrodt & Wei, 2005). Wearden et al. (2005) found a similar discrepancy between dismissive attachment and negative affect, alexithymia, and self esteem. The researchers suggested that from a theoretical standpoint, dismissive attachment should not be related to these variables because dismissive individuals are less likely to acknowledge or discuss feelings and often have high self esteem due to their positive view of self. Similar contradictions have been observed among those who are preoccupied and anxiously attached. Unexpectedly, researchers found that preoccupied and anxiously attached individuals were less capable of identifying (Wearden et al., 2005) and expressing their feelings (De Rick & VanHuele, 2007). De Rick and Van Huele (2007) argued that the results were theoretically inconsistent with the view that hyperactivating strategies, often used to escalate affective states, should facilitate an increased ability to identify and express feelings.

Consistent with the research on attachment types, differences in affect regulating strategies have been theoretically and empirically linked to internalized working models. Mikulincer (1998) attempted to measure the relationship between working models and trust. To capture the relationship he measured the reaction times of individuals’ ability to access “trust-related memories, experiences, goals, and coping strategies” (p. 1219) when couples were presented with breaks in trust. He posited that the working models adopted by secure, avoidant, and anxious attachments would be reflected in the ability to
cognitively access trust related information and utilize coping strategies to increase positive affect. Mikulincer (1998) found that among secure individuals, trust was associated with faster times and greater efficiency to access positive memories and elicit positive affect compared to avoidant and anxious individuals. He further suggested that the decreased ability among the avoidant and anxious individuals was attributed to the deactivating and hyperactivating strategies utilized to regulate emotions.

In another study, Mikulincer, Shaver, Sapir-Lavid, and Avihou-Kanza (2009) also sought to confirm the idea that securely and insecurely attached individuals processed and responded to information differently using a cognitive concept similar to working models called a “secure-base script.” In two of the three studies conducted, results indicated that more secure individuals had greater access, automaticity, and retrieval of “secure-base scripts” compared to anxious and avoidant individuals. Furthermore, study 2 of Mikulincer et al. (2009) found that compared to secure individuals, the narratives of anxious and avoidant individuals contained fewer elements of availability of support; thus, those classified as anxious wrote stories that had fewer incidents of distress relief despite having sought support; and, those classified as avoidant wrote stories that had fewer incidents of seeking support but were more likely than anxious individuals to describe distress relief. Kerns et al. (2007) likewise found that a secure script was related to affect regulatory processes that were positive and minimized distress. Children with secure scripts showed a higher tolerance for frustration and utilized more constructive coping strategies to minimize distress.
Finally, studies have shown that individuals with positive views of self utilize affective strategies aimed to reduce distress and increase confidence. Wearden et al. (2005) found that how one views self had greater influence on negative affect and self esteem. Similarly, Van Buren and Cooley (2002) found that view of self and not view of others was consistently related to depressive symptoms among college students.

*Emotional Intelligence and Affect (Emotional) Regulation*

Emotional intelligence (EI) has been conceptualized in two ways: (a) as a set of skills and abilities that permit one to adapt socially and intra-personally (Mayer, Caruso, & Salovey, 2000a) or (b) as traits and dispositions that facilitate the use of a set of competencies to effectively cope with and adapt to daily events (Matthews, Zeinder, & Roberts, 2005). The former has been regarded as an ability model of EI. Salovey and Mayer (1989) suggested that individual differences to adapt socially and intra-personally were a function of one’s ability to use emotions and cognitive processes interactively. That is, the efficacy and accuracy with which emotional information was processed depended on the capabilities of an individual to perceive, integrate into thought, reason about, and manage emotions (Mayer et al., 2000; Mayer, Salovey, & Caruso, 2000a, 2000b; Salovey & Mayer, 1989).

Recently research has focused on measuring these capacities through the use of objective measures similar to measures used to assess IQ (Mikolajczak, Nelis, Hansenne, & Quoidbach, 2008). However, ability EI has also been measured through the use of self reports. One example is the Trait Meta-Mood Scale (TMMS; Salovey, Mayer, Goldman, Turvey, & Palfai, 1995). The TMMS was originally derived from the State
Meta-Mood Scale (SMMS; as cited in Salovey et al., 1995) which was used to capture the changing quality of reflective processes during ongoing mood states by assessing peoples’ “beliefs about the controllability of the mood, its clarity, acceptability, typicality, and changeability.” The TMMS was developed to capture “more stable” beliefs about mood and the strategies used to cope with moods by assessing the perceived ability to attend to (attention), discriminate between (clarity), and regulate moods and emotions (repair; Salovey et al., 1995). Thus, individuals who had a greater capacity in each of these areas likely exhibited characteristics that reflected greater EI.

Studies investigating perceived EI have revealed a relationship with personality traits, psychological well-being, and psychological adjustment. During its development, Salovey et al. (1995) found a relationship between perceived EI and neuroticism, depression, and distress. For example, the ability to discriminate between emotions (clarity) appeared to act as a buffer against negative mood states and rumination after stress. Likewise, repair influenced the intensity of negative affect one experienced after being exposed to a distressing film.

One characteristic of EI that has consistently been included as a factor within many EI theoretical frameworks is emotional regulation (see Mayer, Salovey et al., 2000a; Salovey, Woolery, & Mayer, 2000). The ability to repair moods and emotions is one aspect of EI measured by the TMMS and regarded by Mayer, Salovey et al. (2000a, 2000b) to reside within the emotional regulation branch of the whole EI system. Salovey et al. (1995, 2001) viewed emotional regulation as a process whereby individuals attempt, through either proactive strategies (e.g., engaging in pleasant activities that are
distracting, social interactions, emotional disclosure) or passive strategies (e.g., watching television, sleeping, the use of alcohol, drugs, and sex), to decrease or change negative feelings, emotions, affects or mood states and increase or maintain positive states. In addition to increasing positive affect or decreasing negative affect, emotional regulation also informs individuals how to respond and behave socially and influences psychological adjustment (Salovey & Mayer, 1989; Salovey et al., 2000; Salovey et al., 2001). Thus, overall well-being can be affected by the effectiveness and capacity to repair moods or emotions through the use of emotional regulating strategies.

Research studies investigating EI have shown mixed results for the effects of mood repair on psychological and physiological well-being. When investigating the relationship between mood repair and stress, Salovey, Stroud, Woolery, and Epel, (2002) in the first of a series of three studies, found that mood repair was moderately associated with lower symptom reporting, social anxiety, depressive symptoms, and higher self esteem and satisfaction with interpersonal functioning. In a second study, these researchers also found that when exposed to stress individuals more skilled at mood repair were less likely to rely on passive types of coping strategies and more likely to perceive the stressor as less threatening. In the third study, a higher ability to repair mood was associated with active coping and lower levels of rumination. Likewise, Ramos, Fernandez-Berrocal, and Extremera (2007) found that mood repair appeared to act as a “palliative” response when individuals were exposed to a stressful condition that induced a negative mood. After exposing the same individuals to a second session of the
stress condition, those with a higher ability to repair moods experienced less anger, depression, and intrusive thoughts than individuals with a lower ability to repair mood.

From a physical health standpoint, Goldman, Kraemer, and Salovey (1996) found that as distress increased there were fewer reports of illness when individuals engaged in more mood repair behaviors. In contrast, mood repair did not appear to predict somatic symptom reporting (Thompson, Waltz, Croyle, & Pepper, 2007), but did appear to be related to increased cortisol levels after the third day of being exposed to the same stress condition (Salovey et al., 2002).

Mood repair has similarly been associated with life satisfaction. Thompson et al., (2007) found that the ability to repair mood, regardless if the mood was positive or negative, predicted life satisfaction. However, studies have also found that mood repair did not predict life satisfaction and that one’s ability to distinguish between emotions was a better predictor (Extremera & Fernandez-Berrocal, 2005; Palmer, Donaldson, & Stough, 2002).

Finally, research has shown an association between mood repair and psychological adjustment. Among adolescents, greater perceived ability to regulate emotions was associated with higher self-esteem; and, when paired with the ability to distinguish between emotions, those who were more capable of regulating their emotions experienced lower levels of anxiety and depression (Fernandez-Berrocal, Alcaide, Extremera, & Pizarro, 2006). Similarly, nursing students who had a greater capacity to regulate their emotions perceived greater social support and their ability to
regulate their emotions predicted better mental health outcomes (Montes-Berges & Augusto, 2007).

In contrast, the ability to repair moods has been associated with poor adjustment. Malterer, Glass, and Newman (2008) found that prison inmates with low anxiety, high impulsivity, and anti-social behaviors appeared to be less capable of regulating and repairing their emotions. Likewise, a deficiency in the ability to regulate emotions was a key characteristic in women with both bulimia and anorexia; the more distressed the women were the greater difficulty they had regulating emotions (Gilboa-Schechtman, Avnon, Zubery, & Jeczmien, 2006). Finally, individuals with borderline personality disorder (BPD) had greater difficulty repairing there emotions (Leible & Snell, 2004). However, using the short version of the Emotional Quotient Inventory, Webb and McMurrnan (2007) found that difficulty expressing and identifying feelings were the only factors that predicted BPD.

Body Image

Pruzinsky and Cash (2002) described body image as a “multidimensional phenomenon” that is complicated by the many ways it has been defined. As such there currently exists 16 separate ways body image has been defined (e.g., weight satisfaction, size perception, appearance evaluation, body esteem, body schema, body image distortion; Pruzinsky & Cash, 2002). Similarly, as many varied perspectives of body image exist, including social cultural (Perez-Lopez & Petretic, 2004; Pruzinsky & Cash, 2002), feministic, cognitive-behavioral, and psychodynamic (Pruzinsky & Cash, 2002). Furthermore, body image issues are broad ranging and associated with various
conditions including: phantom limb syndrome or hemispheric brain damage where limbs are either recognized or not (Meissner, 1997a, 1997b); body image dysfunctions and disorders where body perception is altered as in the cases of body dysmorphic disorder, somatic delusions, eating disorders; and, physical attributes such as a birthmark or congenital defect (Pruzinsky & Cash, 2002). Whatever the conditions or circumstances, how one views one’s body is reflected in the perceptions and/or attitudes and beliefs about the body (Pruzinsky & Cash, 2002) or body image. Body image thus plays a considerable role in the development and maintenance of one’s sense of self or self-concept (Cash, 2002; Krueger, 2002b; Meissner, 1997a, 1997b, 1998), affecting “emotions, thoughts, and behaviors in everyday life” from childhood on (Pruzinsky & Cash, 2002, p. 7).

The development of body image from a cognitive-behavior perspective involves the interplay of early experiences and immediate events and processes (Cash, 2002; Kearney-Cooke and Striegel-Moore, 1997). Cash (2002) suggested that body image involves a complex “causal feedback loop” where “historical” and “proximal influences” contribute to body image development, but neither is the sole cause of it. Early or historical influences include personality attributes (parent-child attachment; Cash, 2002; Cash & Flemming, 2002), sociocultural experiences (e.g., media influences, societal norms), interpersonal experiences (e.g., peer teasing), and physical attributes (e.g., facial features, weight; Cash, 2002; Kearney-Cooke and Striegel-Moore, 1997). Immediate or proximal events and processes include how one feels about one’s body, the internal dialogues associated with the body, and adjustment and self regulatory
behaviors and strategies utilized to mitigate or maintain distress associated with the existing body image (Cash, 2002). Cash (2002) posited that body image development can be viewed as a compilation of historical influences that through social learning processes facilitate the installation of “fundamental body image schemas and attitudes” (p. 38). In turn, these schemas and attitudes contribute to characteristic beliefs about how one evaluates their body image or is satisfied or dissatisfied with their body image (body image evaluation), and how much one is willing to cognitively and behaviorally invest in their appearance (body image investment; Cash, 2002). Furthermore, these schemas contribute to the larger domain of self-schemas that are central to how one organizes and steers information related to self; thus, body image schemas relate to one’s self-concept in that they provide self-related information organized around appearance (Cash, Melnyk, & Hrabosky, 2004). Cash (2002) further posited that proximal events contribute to overall “body image history” (p. 39) when present body related experiences become past experiences (Cash, 2002).

Perception and attitudes about the body have been the primary methods used to assess body image (see Pruzinsky & Cash, 2002 for review; Perez-Lopez & Petretic, 2004). Perceptual measures assess the accuracy of one’s body size estimation (Cash, Wood, Phelps, & Boyd, 1991; Perez-Lopez & Petretic, 2004; Pruzinsky & Cash, 2002). In contrast, attitudinal measures are primarily self report and assess the affects related to, beliefs about, assumptions of, or opinions about one’s physical appearance (Cash, Wood et al., 1991; Perez-Lopez & Petretic, 2004) and have been the most common method used to assess body image (Cash, 2003). Attitudinal measures have primarily focused
on measuring the attitudes and beliefs that involve body image evaluation (Cash, Melnyk et al., 2004), that is, the satisfaction/dissatisfaction with body. An example of this are the appearance evaluation and body area satisfaction scale of the Multidimensional Body Self Relation Questionnaire (MBSRQ; Brown, Cash, & Mikulka, 1990). These subscales primarily assess the evaluative beliefs and attitudes one has about one’s physical appearance (Cash, 2000).

One area that has received less attention in research is body image investment (Cash, 1994, 2002; Cash, Melnyk et al., 2004). In order to capture body image investment, Cash and Labarge (1996) developed the Appearance Schema Inventory (ASI) to measure the “beliefs or assumptions about one's physical appearance [has to one’s] central sense of self and one's social acceptability” (Cash, Thériault, & Annis, 2004, p.99). The ASI was later revised (ASI-R) to assess for the motivational investment associated with the importance one placed on engaging in appearance maintenance or management behaviors (i.e., Motivational Salience; Cash et al., 2003). Additionally, the ASI-R has been used to assess the evaluative/affective investment one places on physical appearance (i.e., Self Evaluative Salience; Cash, Melnyk et al., 2004; Cash, 2003). Research using the ASI-R has supported the idea that body image involves more than an evaluative process and includes affective and cognitive-behavioral aspects as well. Cash and Melnyk et al. found that the more one's self schema is invested in the evaluative and affective components of appearance (self evaluative salience), the more likely they had issues related to the internalization of media driven body image ideals, body image evaluation, body image dysphoria, and poorer overall body image quality of
Motivational salience such as behaviors associated with appearance maintenance and management (e.g., dress, grooming, checking self in mirror) appeared to play a smaller role in overall body image quality of life, but was moderately associated with the internalization of media driven body image ideals and body image dysphoria (Cash, 2003; Cash, Melnyk et al., 2004).

*Body Image/Body Dissatisfaction and Attachment.* Research investigating the relationship between attachment and body dissatisfaction has primarily involved studies with eating disordered individuals or individuals that exhibit eating disordered symptomology (Cash, Thériault et al., 2004). This has generally been the case because the link between body dissatisfaction and eating disorders has been empirically supported (Cash, 2002; Kearney-Cooke & Striegel-Moore, 1997; Perez-Lopez & Petretic, 2004; Stice, Nemeroff, & Shaw, 1996; Stice, Shaw, & Nemerof, 1998). Similar research results have been observed between body image/dissatisfaction and attachment (Broberg, Hjalmers, & Nevonen 2001; Salzman, 1997; Tasca, Taylor, Bissada, Rithchie, & Balfour, 2004; Triosi et al., 2006; Triosi, Massaroni, & Cuzzolaro, 2005; Ward, Ramsay, & Treasure, 2000; Ward, Ramsay, Turnbull, Steel, Steele, & Treasure, 2001). However, results have been mixed with specific eating disorders and symptoms showing relationships to different attachment prototypes or categories. For example, anorexia nervosa and bulimia nervosa has been associated with preoccupied, anxious-resistant, and ambivalent attachment styles (Salzman, 1997; Triosi et al., 2006; Triosi et al., 2005). In contrast, some research has found that a majority of anorexic individuals were classified as dismissive (Ward et al., 2001). In some cases, the research has also revealed
that the relationship was dependent on the eating disorder subtype (Broberg et al., 2001; Tasca et al., 2004; Ward et al., 2000). Ward and colleagues found that restrictive anorexia was associated dismissive attachment, and binge-purge anorexia and bulimia were classified as preoccupied; however, Tasca et al., (2004) found that among individuals with binge-purge anorexia the treatment dropout rate was associated with whether or not the individual was classified as preoccupied or avoidant. Finally, Broberg et al. (2001), found that those diagnosed with anorexia, bulimia, and eating disorder not otherwise specified clustered across all types of attachment styles including secure/ambivalent, secure/avoidant, fearful/ambivalent, and fearful/avoidant. Additionally, more severe cases of bulimia clustered within the fearful/ambivalent and fearful/avoidant attachments categories.

Eating disorders have similarly been related to internal working models; however, a review of the literature revealed a dearth of research in the area. Friedberg and Lyddon (1996), for instance, found that those that had a negative view of self and positive view of others, or a positive view of self and negative view of others were more likely to fall within an eating disorder category compared to those who viewed self and others positively. Likewise, Triosi et al. (2006) suggested that the relationship between bulimia and body dissatisfaction, were attributed to the combined effect of a negative view of self and positive view of others where the low self-esteem and the fear of rejection or the need for approval by others predisposes these individuals to develop body dissatisfaction. Eating disorder symptoms were also associated with parental working models. Cole-Detke and Kobak (1996) found that those with eating disorder
symptoms viewed their parents as incompetent; however, this relationship was not
significant once depressive symptoms were accounted.

Notwithstanding the research above, the relationship between body image/body
dissatisfaction and attachment revealed a more complex relationship. Some studies
revealed a direct relationship between attachment and body image/body dissatisfaction;
however, these studies also found a relationship between attachment and eating
disorders. Among college women, Suldo and Sandberg (2000) found that preoccupied
attachment related to eating disorder symptoms, whereas dismissive attachment was
only related to body dissatisfaction. Likewise, Elgin and Pritchard (2006) found that
among females, fearful attachment predicted bulimic symptoms, whereas secure
attachment negatively predicted body dissatisfaction. Other research has shown
consistent ties between body dissatisfaction and attachment styles characterized as
preoccupied and fearful. Evans and Wertheim (1998) found that those with lower scores
on comfort with closeness and dependency on others and higher scores on fears of
abandonment (anxious-avoidant attachment) were more likely to report body
dissatisfaction. Park, Crocker, and Mickelson (2004) found that preoccupied and fearful
individuals’ self worth was based on appearance and on the approval of others. Cheng
and Mallinckrodt (2009) found a more complicated relationship between body
dissatisfaction and attachment where factors such as internalization of ideal bodies in the
media and parental bonding also contributed to the development of body dissatisfaction.
Cheng and Mallinckrodt (2009) suggested, that unlike secure attachments where
"positive parental bonding, facilitate[s] a positive sense of body image” (p. 372), poor
parental attunement may lead to development of a working model of self as "incomplete or damaged" prompting individuals to focus on the body or on external validation in an effort to feel a "sense of worth and desirability" (p. 372).

**Body Image/Body Dissatisfaction and Affect (Emotional) Regulation.** Once again, because eating disorders and eating disorder symptomatology have been so closely linked to body image dysfunction and body dissatisfaction, there has been a drive to theoretically conceptualize the relationship between body image/body dissatisfaction and affect/emotional regulation using data compiled from individuals with eating disorders or eating disorder symptomatology (Cash, Thériault et al., 2004). Theoretically, some researchers have proposed that eating disorders and eating disorder symptomatology are manifestations of an inability to effectively regulate emotions and affect (Downey & Chang, 2007; Krueger, 1989, 2002a, 2002b; Wiser & Telch, 1999). Wiser and Telch (1999) have conceptualized binge-eating as primarily an affect regulation deficit. The authors have suggested that binge-eating behavior acts to regulate emotional and affective distress associated with proximal events or processes triggered by body image concerns. Likewise, Downey and Chang (2007) suggested that the affect created by the expectations of society to be perfect may contribute to the intensification of negative emotions that result in the use of binging and purging to cope with the negative affect. Krueger (2002a) also argued that body image dysfunction and eating disorders are maintained as a result of poor self regulatory processes that primarily function to monitor behaviors and feelings and engage in affect, tension, and impulse regulation. An arrest of these self regulatory processes results in the body and external objects to
become the reference point from which individuals seek to regulate feelings and emotions (Krueger, 1989, 2002b).

The positive relationship between affect/emotional regulation and body image/body dissatisfaction among eating disordered samples have resulted in consistent findings. Carano et al. (2006) found that compared to binge-eating disordered women without alexithymia, those with alexithymia reported greater body dissatisfaction. Additionally, the inability to identify and express emotions predicted more severe binge-eating disorder symptoms, depressive symptoms, lower self-esteem, and greater body dissatisfaction. Emotional regulation has also been linked to anorexia and bulimia. Hinrichsen, Wright, Waller, and Meyer (2003) found that marked differences in emotional regulation were associated with eating disorder subtypes; restrictive anorexics significantly dissociated more than binge-purge anorexics and bulimics to cope with social anxiety. Differences among these subtypes may be associated with a perceived inability to repair or regulate moods and emotions. Using the TMMS, Gilboa-Schechtman, Avnon, Zubery, and Jecsmien (2006) found that those with anorexia and bulimia reported a greater perceived inability to repair moods and emotions when reported levels of depression or anxiety were high. Similarly, negative affect and emotions have been associated with difficulty identifying emotions and an inability to repair moods and emotions among high frequency dieters (Ackard, Croll, & Kearney-Cooke, 2002), obese individuals (Larsen, Van Strien, Eisinga & Engels 2006); and, early adolescent girls (Sim & Zeman, 2006).
Research results such as these may have suggested that body image/body dissatisfaction and emotional regulation are related. However, research has also revealed results that have not been so clear cut. In a study used to investigate the effects that emotional regulation skills training would have on bulimic women, Telch, Agras, and Linehan (2001), found that adaptive emotional regulation skills training had significant pre- and post- effects on binge eating and eating pathology; however, the training showed no significant effects on mood and affect between pre- and post treatment. The researchers suggested that elements of the therapeutic process explained the reduction in eating disorder behavior but not negative affect (Telch et al., 2001). Another possible explanation may be associated with various pathways leading to eating disorders. In cross-sectional (Stice et al., 1996) and longitudinal (Stice et al., 1998) studies, researchers investigated a “dual pathway model” of bulimia nervosa in which dietary restraint and negative affect acted as the last predictors in a path analysis model. The path analysis revealed a directional relationship between the sociocultural ideal to be thin, internalized views of ideal body shape, dietary restraint, and body dissatisfaction (Stice et al., 1998). Results revealed that negative affect and dietary restraint did act as the final predictors of bulimia mediating the relationship between body dissatisfaction and bulimic symptoms. Additionally, dietary restraint predicted negative affect. Similarly, Downey and Chang (2007) found that negative affect mediated the relationship between perfectionism and bulimic symptoms among those with moderate body dissatisfaction; however, among those high in body dissatisfaction the only predictor for bulimic symptoms was perfectionism.
Although the former studies conducted used female participants, the observed differences among body image/body dissatisfaction and emotional regulation may alternatively be associated to gender. Research on body image/body dissatisfaction has shown differences in the ways women and men appraise and affectively experience their physical appearance. Specifically, women have reported greater body dissatisfaction (Cash, 2002; Carano et al., 2006; Elgin & Pritchard, 2006), body dysphoria (Cash, Melnyk et al., 2004), dietary restriction (Kearney-Cook & Striegel-Moore, 1996; Striegel-Moore & Franko, 2002), and discrepancies between their current weight and their ideal weight (Muth & Cash, 1997). Likewise, women tended to be more invested in their appearance, placing greater focus on the affective component of body image (Cash, 2003). Cash, Melnyk et al. (2004) found that, compared to men, the more invested women were in their appearance evaluation (self evaluative salience), the lower their perceived body image quality of life.

In contrast, men have tended to report greater body satisfaction and show a smaller discrepancy between current body weight and ideal body weight compared to women (Muth & Cash, 1997). More recently, men have begun to feel similar societal pressures as women as indicated by body dissatisfaction scores that have become equivalent to those reported by women (Cash, Therault et al., 2004; Corson & Andersen, 2002). However, compared to women, who place a considerable amount of focus on weight, men have typically shown a greater concern with body shape and muscularity (Corson & Andersen, 2002; Perez-Lopez & Petretic, 2004) and have resorted to excessive exercise, binge-eating (Corson & Andersen, 2002; Muth & Cash, 1997), and
anabolic steroid use (Olivardia, 2002; Perez-Lopez & Petretic, 2004) as methods to change their body shape and increase weight.

Research has also found gender differences in the ways individuals regulate affect and mood. For example, women are better at perceiving and attending to emotions compared to men (Mayer, Caruso et al., 2000; Thayer, Rossy, Ruiz-Padial, & Johnsen, 2003; Thompson et al., 2007). However, no gender differences were observed in the ability to distinguish between emotions or repair moods (Thompson et al., 2007). The role of affect and emotions becomes more complex when other factors are considered such as depression (Thayer et al., 2003), obesity (Larsen et al., 2006), and binge-eating disorder (Carano et al., 2006). Thayer et al., for example, found that women with greater severity of depressive symptoms appeared to pay greater attention to their emotions and ruminate more and also reported greater difficulty in repairing their emotions compared to men. Among individuals who were obese, Larsen et al. found a stronger association between emotional eating and the difficulty in identifying and expressing emotions occurred among men compared to women. In a recent study, Nguyen-Rodriquez, Unger, and Spruijt-Metz (2009) found that emotional eating was predicted by confused mood among boys, and perceived stress, worries, and tension/anxiety among girls. In contrast, Carano et al. found no significant gender differences for alexithymia among those with binge-eating disorder.

Attachment, Body Image, and Affect (Emotional) Regulation. Despite the research indicating direct relationships between some of the variables (e.g., attachment and body image, attachment and emotional regulation, emotional regulation and body
image), few studies were found that investigated the relationship between all three variables. Tasca et al. (2006, 2009) used structural equation modeling to investigate the relationships between insecure attachment styles (i.e. anxious and avoidant), affect regulation, and eating disorders. In Tasca et al. (2006) results of the study suggested that attachment insecurity was a contributing factor in eating disorder symptoms via body dissatisfaction and negative affect. In a separate study, Tasca et al. (2009) found that affect regulation mediated the relationship between attachment and eating disorder symptoms; however, this was only significant between anxious attachment and not avoidant attachment.

Both of these studies have provided support to the idea that attachment, affect, and eating disorders, and to some extent body dissatisfaction, are all associated with one another. These studies have also made assumptions and estimated the directionality of these relationships. However, in both of the studies, affect/emotional regulation was indirectly measured through negative affect (Tasca et al., 2006) and the degree to which individuals emotionally reacted and disengaged (Tasca et al., 2009). Neither study addressed individuals’ perceived ability to repair mood/emotions directly. Furthermore, the data were based on the responses of women seeking treatment for eating disorders. Therefore, the purpose of this study was to investigate the relationship between attachment, emotional repair, and body image/body dissatisfaction among male and female college students. Additionally, the relationship between the variables will be investigated in terms of the internalized working models of self and other that are
believed to be the underlying dimensions of attachment (Bartholomew & Horowitz, 1991; Bowlby, 1973, 1982; Main et al., 1985).
Chapter 2

METHOD

Participants

Participants were 310 undergraduate psychology students who volunteered in the study in exchange for ½ hour extra credit to be applied towards an introductory psychology course. Of these participants 247 were female and 63 were male whose ages ranged from 18 – 66 years ($M=21.35$). Ethnic demographics were obtained by selecting a specific group and/or writing in a response. Due to the numerous codes originally used to capture the ethnicity responses (37; See Appendix B for original grouping) the data were collapsed into the following groups: 50.6% Caucasian/European American ($n = 157$), 25.2% Asian/Asian American ($n = 78$), 13.5% Hispanic/Latino(a) ($n = 42$), 4.5% African American/Black ($n = 14$), 3.2% Mixed Race ($n = 10$), 1% American Indian/Native American ($n = 3$), and 1.9% Other ($n = 6$).

Measures

Attachment. The RSQ (Griffin & Bartholomew, 1994) is a 30-item self report questionnaire, derived from Hazan and Shaver’s (1987) three category model of attachment, Bartholomew and Horowitz’s (1991) four attachment paragraphs and Collin and Reed’s (1990) Adult Attachment Scale. Measures used to assess attachment patterns included Griffin and Bartholomew’s (1994a) Relationship Scales Questionnaire (RSQ). Individuals are asked to rate themselves on a scale from 1 (very unlike me) to 5 (very much like me) on items reflecting one of the four attachment styles (Secure, Preoccupied, Dismissing, Fearful). For this study, individuals were asked to rate
themselves from 1 (very unlike me) to 7 (very much like me). Internal reliability for the measure ranges between .32 and .79 (Bäckström & Holmes, 2001). Test-retest reliability values over an eight month period were moderate to high ranging from $r = .81$ to .84 for view of self, and from $r = .72$ to .85 for view of other (Schafer & Bartholomew, 1994). Reliability for the model of self and others was .68 and .50, respectively (Bäckström & Holmes, 2001).

The Relationship Questionnaire (RQ; Bartholomew & Horowitz, 1991) provides a short description of four prototypical styles of attachment (Secure, Preoccupied, Dismissing, Fearful). Based on recommendations made by the authors, participants were administered a two part version of this measure. The first part of the measure forces participants to select the paragraph that best corresponds with their personal peer relationships. The second part of the measure provides a ‘profile’ of a participant’s attachment behavior and feelings. Participants rate the second part of the measure using ratings ranging from 1 (not at all like me) to 7 (very much like me). At the time of development reliability values for the RQ ranged from .87 to .97 (Bartholomew & Horowitz, 1991). Others have reported lower reliability values ranging from .41 to .71 (Stein, Jacobs, Ferguson, Allen, & Fonagy, 1998; see also Schrafe & Bartholomew, 1994).

**Emotional Intelligence.** The Trait Meta-Mood Scale (TMMS; Salovey, Mayer, Goldman, Turvey, & Palfai, 1995) is a 30-item self-report scale used to assess participant’s beliefs about their ability to attend to their moods, clarity to distinguish between their experiences of moods, and their efforts to repair their moods. Participants
were asked to rate items on a 1 to 5 scale the degree they agreed or disagreed with statements (e.g., “One should never be guided by emotions,” “I am rarely confused about how I feel,” and “When I become upset I remind myself of all the pleasures in life”). Internal reliability coefficients for the TMMS were .86, .88, and .82 for Attention, Clarity and Repair, respectively (Salovey et al., 1995).

**Body Image.** Two measures were used to assess body image. The Appearance Schema Inventory – Revised (ASI-R; Cash, Melnyk, & Hrabosky, 2004) assessed participants’ psychological investment in their appearance. The measure contains 20 items and participants rated items on a 1 (strongly disagree) to 5 (strongly agree) Likert-type scale. Items reflected one of two subscales self-evaluative salience (e.g., “When I see good-looking people, I wonder about how my own looks measure up,” “I have never paid much attention to what I look like”) and motivational salience (e.g., “I spend little time on my physical appearance,” “I try to be as physically attractive as I can be”). Higher scores reflect greater schematic investment in appearance and have corresponded with poorer body-image evaluation. Reliability for the ASI-R was .88 for women and .90 for men. Reliability for each subscale ranged between .82 and .91 for both genders (Cash et al., 2004).

The Multidimensional Body-Self Relations Questionnaire- Appearance Scale (MBSRQ-AS; Cash, 2000) includes the following subscales: Appearance Evaluation, Appearance Orientation, Overweight Preoccupation, Self-Classified Weight, and the BASS. This study was primarily concerned with participants’ body-image evaluation; thus, analysis was confined to the Body Areas Satisfaction Scale (BASS) of the
MBSRQ-AS. The scale asked participants to rate their degree of dissatisfaction-satisfaction with body areas using a 1 to 5 rating scale with higher scores reflecting greater satisfaction. Cash (2000) reported internal reliability coefficients for the BASS subscale to be .77 for males and .73 for females. Also reported were test-retest reliabilities for males (.86) and females (.74).

Procedure

Prior to participating in the research study students were asked to read and sign an informed consent that contained a brief overview of the study and the requirements and limitations of their participation in the study. All the participants then received a packet containing five questionnaires that were ordered in the following sequence: ASI-R, RSQ, TMMS, RQ, and the MBSRQ-AS. The measures were randomly assigned to this order prior to being administered. Participants were also asked to complete a demographics form that was sequentially placed last in the packet. Upon completion participants received a brief description of the study’s purpose, and theoretical and research background.
Chapter 3

RESULTS

Preliminary Analysis

Initial reliabilities on the RSQ were computed for each of the four prototypes (secure, preoccupied, dismissive, fearful) using 18 of the 30 items as proposed by Griffin and Bartholomew (1994). Results revealed low reliabilities for three of the four subscales. Cronbach alphas were .41 for Secure, .47 for Dismissing, and .39 for Preoccupied. To improve reliability values, correlations were conducted using items within each subscale and items were either added or removed based on the subscale reliability analyses. Reliabilities improved slightly; however, only a small number of items were retained for each subscale: Secure (2; $\alpha = .61$), Preoccupied (2; $\alpha = .51$) and Dismissive (3; $\alpha = .64$). In order to improve the number of items in each of the subscales and increase reliabilities, correlations were once again conducted using the remaining 12 items from the RSQ (Ognibene & Collins, 1998). If correlations achieved $r = .30$ or greater items were retained for the subscales if 1) their inclusion into the scale increased the reliability of the subscale and, 2) they were theoretically consistent with the items in the subscale. Thus, of the original 18 items, 12 items were retained and 4 additional items were added. Resulting Cronbach’s alpha were .72 for Secure (4 items), .70 for Preoccupied (5 items), .64 for Dismissing (3 items), and .77 for Fearful (4 items). Resulting reliabilities were consistent with those obtained by Ognibene et al. (1998). Despite the overall improvement in the number of items
retained for each subscale, the number of items remained lower than those retained by Ognibene et al. (1998).

According to previous research, the RSQ can be used alone or in combination with the RQ to obtain attachment styles. As suggested by Griffin and Bartholomew (1994) this study elected to utilize both measures in combination to improve the sensitivity and reliability of assessing attachment. Through procedures outlined by Ognibene and Collins (1998) continuous indexes were obtained for the four attachment prototypes and their underlying dimensions of view of self and other. Continuous indexes of the four attachment styles were obtained by averaging the scores on each of the RSQ subscales and combining them with the obtained ratings for each of the corresponding paragraph on the RQ; thus, each individual obtained a score for each of the four attachment prototypes. Finally, continuous indexes representing view of self- and other dimensions were calculated using the equation suggested by Griffin and Bartholomew (1994) that combined the four attachment prototypes yielding an indirect measure of the two dimensions. The model of Self and Other indexes were computed using the following equations: (Secure + Dismissing) – (Fearful + Preoccupied); and, (Secure + Preoccupied) – (Dismissing- Fearful), respectively.

Finally, in order to investigate the effects of attachment on emotional regulation and body image, view of self and view of other were dichotomized by taking the respective median splits 1.99 and -.458, to obtain positive and negative groups. In this sample (n = 310), scores fall within the range of 1.99 – 10.71 had a positive view of self, those who scores fell within -5.93 – 1.98 had a negative view of self (n = 151) with
scores ranging between and, respectively. Likewise, the median split of -.458 for view of other was used to obtain positive view of other \((n = 154)\) and negative view of other \((n = 156)\) with scores ranging between -.458 – 6.83 and -7.70 – -.457, respectively (see Table 1).

Table 1

Summary of \(N\), Ranges and Median Splits for View of Self and View of Other

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Median</th>
<th>Range</th>
<th>(n)</th>
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<tr>
<td>View of Self</td>
<td>1.79</td>
<td>1.99</td>
<td>-5.93 – 10.71</td>
<td>310</td>
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<td></td>
<td></td>
<td>1.99 – 10.71</td>
<td>159</td>
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<tr>
<td>Negative</td>
<td></td>
<td></td>
<td>-5.93 – 1.98</td>
<td>151</td>
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<tr>
<td>View of Other</td>
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<td>-.458</td>
<td>-7.70 – 6.83</td>
<td>310</td>
</tr>
<tr>
<td>Positive</td>
<td></td>
<td></td>
<td>-.458 – 6.83</td>
<td>154</td>
</tr>
<tr>
<td>Negative</td>
<td></td>
<td></td>
<td>-7.70 – -.457</td>
<td>156</td>
</tr>
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</table>

Reliability and Subscale Correlations

Reliability analyses were conducted for each of the measured dependent variable subscales: repairing emotions, self evaluation, appearance evaluation, and body area satisfaction. Reliabilities for each subscale were .77, .84, .81, and .81, respectively. Pearson’s correlations were conducted between subscales and revealed significant minimal to strong correlations between subscales. Subscale correlations ranged between -.267 and .803 (see Table 2). Based on the results it appeared that individuals who reported having greater ability to repair their emotions were less likely to evaluate themselves negatively \((r = -.267;\) lower scores on self evaluation indicate more positive beliefs about their physical appearance and how it affects them daily) but were more
likely to evaluate their appearance positively ($r = .313$) and possess greater satisfaction with various body parts ($r = .264$). It also appeared that all the subscales used to measure body image were strongly correlated, but seemed to be measuring different aspects of body image. Individuals who had more positive beliefs about their appearance and how it affected them daily were more likely to have a negative opinion about their physical appearance alone ($r = -.438$) and less likely to be satisfied with various body parts ($r = -.509$). A strong correlation resulted between appearance evaluation and body area satisfaction ($r = .803$). This correlation is not surprising given that each of the subscales were obtained from the MBSRQ-AS. Regardless, results suggested that individuals who had positive opinions about their physical appearance were more likely to have greater satisfaction with various body parts.

Table 2


<table>
<thead>
<tr>
<th>Subscale</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
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<tr>
<td>Emotional Repair</td>
<td>--</td>
<td>-.267**</td>
<td>.313**</td>
<td>.264**</td>
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<td>--</td>
<td>--</td>
<td>-.438**</td>
<td>-.509**</td>
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<tr>
<td>Appearance Evaluation</td>
<td>--</td>
<td>--</td>
<td>.803**</td>
<td>--</td>
</tr>
<tr>
<td>Body Area Satisfaction</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td></td>
</tr>
</tbody>
</table>

**$p < .01$**

*Primary Analyses*

A 2 (gender) x 2 (view of self) x 2 (view of other) between-subjects multivariate analysis of variance (MANOVA) was conducted on four dependent variables: emotional repair, self evaluation, appearance evaluation and body area satisfaction.
A statistically significant Box’s M test \( (p = .052) \) indicated inequality of variance-covariance matrices of the dependent variables across levels of the independent variables. A significant Bartlett’s test of sphericity \( (p < .000) \) indicated sufficient correlation between dependent variables to justify the multivariate analysis.

*Interaction effects*

*Gender and View of Self.* Using Pillai’s trace to evaluate multivariate significance, results revealed a trend toward an interaction between gender and view of self, Pillai’s trace = .028, \( F(4, 299) = 2.15, p < .074, \) partial \( \eta^2 = .028 \). A univariate analyses was conducted using a Bonferroni corrected alpha of .0125 (.05/4 dependent variables) and results revealed a significant two-way between-subject interaction between gender and view of self on emotional repair, \( F(1, 309) = 6.49, p < .011, \) partial \( \eta^2 = .021 \) (see Figure 2). A simple effects analysis showed that females with a positive view of self scored higher on emotional repair than those in any of the other groups.

*Gender and View of Other.* The MANOVA also revealed a trend toward a two-way between subject interaction between gender and view of other, Pillai’s trace = .031, \( F(4, 299) = 2.37, p < .053, \) partial \( \eta^2 = .031 \). A univariate analysis was conducted to isolate the effect of the interaction and revealed a significant effect for self evaluation, \( F(1, 309) = 7.13, p < .008, \) partial \( \eta^2 = .023 \) (see Figure 3). A simple effects analysis showed that males who viewed others more positively scored lower on self evaluation than those in any of the other groups.
**Main Effects**

*Gender.* A multivariate analysis of variance revealed a significant main effect of participants’ gender on the dependent variate, Pillai’s trace $= .044$, $F(4, 299) = 3.44, p < .009$, partial $\eta^2 = .044$. A univariate analysis resulted in a significant group difference between gender on body area satisfaction, $F(1, 309) = 7.79, p < .006$, partial $\eta^2 = .025$. Estimated marginal means on body area satisfaction showed that males scored higher ($M = 3.61, SE = .08$) than females ($M = 3.34, SE = .04$), suggesting that in this sample males were more satisfied with their body parts compared to females.

*View of Self.* The MANOVA revealed a significant main effect of participants’ view of self on the dependent variate, Pillai’s trace $= .108$, $F(4, 299) = 9.02, p < .000$, partial $\eta^2 = .108$. Univariate analysis revealed significant group differences on view of self on self evaluation, appearance evaluation, and body area satisfaction accounting for 7.4%, 5.2%, and 5.1% of the variances, respectively (see Table 3). Those with a positive view of self had a lower estimated marginal mean on self evaluation ($M = 2.82, SE = .06$) than those with a negative view of self ($M = 3.28, SE = .07$). Additionally, those who viewed self positively had higher estimated marginal means on appearance evaluation ($M = 3.73, SE = .08$) and body area satisfaction ($M = 3.67, SE = .06$) than those who viewed self negatively ($M = 3.26, SE = .09$ and $M = 3.28, SE = .07$, respectively).
Figure 2. Perceived emotional repair score as a function of gender and view of self

Figure 3. Self Evaluation score as a function of gender and view of other.
Table 3

Univariate Analysis of Variance for View of Self and Body Image Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>df</th>
<th>F</th>
<th>η²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self Evaluation</td>
<td>1, 309</td>
<td>24.19*</td>
<td>.074</td>
</tr>
<tr>
<td>Appearance Evaluation</td>
<td>1, 309</td>
<td>16.71*</td>
<td>.052</td>
</tr>
<tr>
<td>Body Area Satisfaction</td>
<td>1, 309</td>
<td>16.19*</td>
<td>.051</td>
</tr>
</tbody>
</table>

* p < .001

Follow-up Analyses

Following the recommendations by Griffin & Barthholomew (1994) an additional analysis using the four attachment prototypes (Secure, Preoccupied, Dismissive, Fearful) was conducted with the possibility of providing “interpretational clarity”; thus, a 2 (gender) x 4 (attachment prototype) between-subjects MANOVA was conducted on four dependent variables: emotional repair, self evaluation, appearance evaluation and body area satisfaction.

A Box’s M test (p = .672) revealed equality of variance-covariance matrices of the dependent variables across levels of the independent variables. A significant Bartlett’s test of sphericity (p < .000) indicated sufficient correlation between dependent variables to justify the multivariate analysis.

Interaction effects of Gender and Attachment

Repairing Emotions. Using Wilk’s lambda to evaluate multivariate significance, results revealed a significant interaction effect between gender and attachment prototype, Wilk’s lambda = .90, F(12, 791) = 2.75, p < .001, partial η² = .035. A univariate analyses was conducted using a Bonferroni corrected alpha of .0125 (.05/4 dependent variables) and revealed a significant two-way between-subject interaction
between gender and attachment for emotional repair, \(F(3, 309) = 4.09, p < .007\), partial \(\eta^2 = .039\) (see Figure 4). A simple effects analysis showed that secure and dismissive females had a greater ability to repair their emotions than fearful and preoccupied females; secure females had a greater ability to repair their emotions than secure and fearful males; and, preoccupied females had a lower ability to repair emotions than preoccupied males.

*Self Evaluation.* Although the interaction between gender and attachment did not show a significant univariate effect for self evaluation, \(F(3, 309) = 2.70, p < .046\), partial \(\eta^2 = .026\) (see Figure 5). Simple effects analysis provided additional information that had not been captured in the previous interactive effect between gender and view of others on self evaluation. This analysis revealed that secure and dismissive females scored lower on self evaluation than fearful and preoccupied females; secure males’ scored lower than fearful males and secure, preoccupied, and fearful females; and, preoccupied males scored lower than preoccupied females.

*Main effects*

*Gender.* A multivariate analysis of variance revealed a significant main effect of participants’ gender on the dependent variate, Wilk’s Lambda = .0969, \(F(4, 299) = 3.44, p < .051\), partial \(\eta^2 = .031\). A univariate analysis revealed no significant effects of gender for each of the dependent variables.

*Attachment.* The MANOVA revealed a significant main effect of attachment prototype on the dependent variate, Wilk’s Lambda = .857, \(F(12, 791) = 3.96, p < .000\),
Figure 4. Perceived emotional repair score as a function of gender and attachment.

Figure 5. Self Evaluation score as a function of gender and attachment.
partial $\eta^2 = .050$. Univariate analysis revealed significant group differences of attachment for self evaluation, appearance evaluation, and body area satisfaction accounting for 7.0%, 8.9%, and 10.8% of the variances, respectively (see Table 4).

Table 5 shows estimated marginal means for each of the dependent variables by attachment category. A Tukey post hoc test on attachment for self evaluation revealed that individuals with secure and dismissive attachment prototypes had lower estimated marginal means on self evaluation than those categorized as preoccupied and fearful. Furthermore, the test revealed that individuals categorized as secure and dismissive reported higher scores on appearance evaluation and body area satisfaction than those categorized as preoccupied and fearful.

Table 4

Univariate Analysis of Variance for Attachment and Body Image Variables

<table>
<thead>
<tr>
<th>Variables</th>
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<th>$F$</th>
<th>$\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
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<td>.070</td>
</tr>
<tr>
<td>Appearance Evaluation</td>
<td>(3, 309)</td>
<td>6.00*</td>
<td>.089</td>
</tr>
<tr>
<td>Body Area Satisfaction</td>
<td>(3, 309)</td>
<td>4.87*</td>
<td>.108</td>
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</table>

*p < .001

Table 5

Estimated Marginal Means on Body Image Variables for Attachment Prototypes

<table>
<thead>
<tr>
<th>Variables</th>
<th>Secure</th>
<th>Preoccupied</th>
<th>Fearful</th>
<th>Dismissive</th>
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<tbody>
<tr>
<td></td>
<td>$M$</td>
<td>$SE$</td>
<td>$M$</td>
<td>$SE$</td>
</tr>
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<td>Self Evaluation</td>
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<td>.07</td>
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<td>.13</td>
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<tr>
<td>Appearance Evaluation</td>
<td>3.73</td>
<td>.08</td>
<td>3.15</td>
<td>.16</td>
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<tr>
<td>Body Area Satisfaction</td>
<td>3.71</td>
<td>.07</td>
<td>3.09</td>
<td>.13</td>
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</tbody>
</table>
Chapter 4

DISCUSSION

The results of this study did not confirm an interaction effect between gender, attachment, and emotional repair on measures of body image evaluation or investment. However, a significant interaction effect resulted between gender and attachment on emotional repair. More specifically, differences in individuals’ perceived ability to repair emotions were based on the individuals’ gender and how individuals viewed self. It appears that when females have a positive view of self they are more likely to feel they have a greater ability to repair their emotions. The results were consistent with previous research showing gender differences where females generally have a greater ability to perceive and attend to their emotions, and when not saddled with depression or anxiety they also have a greater ability to regulate emotions compared to men (Thayer et al., 2003). The results are also consistent with the view that those with a positive view of self (secure and dismissive) are more effective in regulating emotions (Bartholomew & Horowitz, 1991; Hazan & Shaver, 1987; Pietromonaco & Feldman-Barret, 2000) even when the strategies used are not as positive. For instance, dismissively attached individuals characteristically avoid emotional expression (Bartholomew & Horowitz, 1991; Deniz et al., 2005; Fossati et al., 2009; Wearden et al., 2005) and rely less on social support (Bartholomew & Horowitz, 1991, Study 1; Griffin & Bartholomew, 1994b; Hazan & Shaver, 1987; Mallinckrodt & Wei; 2005).

It is difficult to ascertain whether one’s view of self contributes to emotional regulation, or whether emotional regulation improves one’s view of self. Salovey et al.
(1995) have argued that emotional regulation is the last step in a sequential process of attending to, distinguishing between, and then regulating emotions. It may be that women who view themselves negatively may not be capable of repairing their emotions because they may be caught in more rumination that prevents them from attending to and having clarity about their emotions (Salovey et al., 2002; Thayer et al., 2003); thus, contributing to their overall sense of self as ineffective (Tasca et al., 2006).

An additional analysis was conducted on the relationship between gender, attachment, and repairing emotions using the four prototypes of attachment (i.e., secure, dismissive, preoccupied, and fearful) to provide greater interpretative information as suggested by Griffin and Bartholomew (1994). Bartholomew and Horowitz (1991) posited that view of self was one of the underlying dimensions that encompassed the four prototypes. So, those who had a positive view of self likely fell within a quadrant characterized by secure or dismissive attachment behaviors, and those who viewed self negatively likely fell within a quadrant characterized by preoccupied and fearful attachment behaviors. The results of the follow-up study were consistent with the first analysis that used view of self; women who were secure and dismissive (positive view of self) perceived themselves as better at regulating emotions compared to those who were preoccupied and fearful (negative view of self). These results are consistent with previous findings that have found that those who are securely or dismissively attached regulate emotions more effectively than those who are preoccupied (Bartholomew & Horowitz, 1991; Hazan & Shaver, 1987; Pietromonaco & Feldman-Barret, 2000). A causal relationship cannot be determined from this study and an alternative explanation
for the results may be that emotional regulation is better at explaining one’s attachment prototype. For example, the results may suggest that women feel more secure because they are able to regulate their emotions, and dismissive women may have a more positive view of self because of their ability to detach from their emotions serves as an effective self regulating process (Mikulincer et al., 2003).

The follow-up analysis also showed that secure females were better able to repair emotions compared to secure males; however, the opposite occurred among preoccupied males and females. The discrepancy among the secure group is consistent with the research that has found women to be more capable of attending to and regulating emotions than men (Mayer et al., 2000; Thayer et al., 2003; Thompson et al., 2007). Likewise, research has found that women are more likely to ruminate on emotions reducing their ability to regulate emotions (Thayer et al., 2003). This may explain why preoccupied men were better at repairing their emotions compared to preoccupied women.

The current study found no effect of gender and attachment on body image evaluation or more specifically, body area satisfaction and appearance evaluation. This was inconsistent with early research (Cash, Thériault et al., 2004). However, this study found an interactive effect between gender and view of other on body image investment (i.e., self evaluation) supporting previous findings that women compared to men tend to be more invested in their appearance (Cash, Melnyk et al., 2004, Cash, Thériault et al., 2004; Muth & Cash, 1997). Cash, Thériault et al. also found that preoccupied men and women were more likely to have greater body dysphoria, body dissatisfaction, and
dysfunctional investment in their appearance, and that the internal working models (negative view of self and positive view of others) among this group were therefore more likely to be dysfunctionally invested in their appearance. In contrast, the current study’s analysis indicated that only males with a positive view of others scored lower on self evaluations than any other group. The difference between the two studies may be explained by the different variables used in the analysis. This study chose to directly utilize the underlying dimensions of model of self/other as part of the analysis. The result of this was that view of other, and not view of self, was the only underlying dimension of the two that appeared in the interaction.

In light of the results, we decided to conduct a follow-up MANOVA using the four attachment prototypes. The univariate analysis revealed no significant interaction effects but a simple effects test was conducted to see if the attachment prototypes could provide additional information to help explain the results, and it did. Cash, Thériault et al. (2004) found that dismissive and fearful attachments did not appear to be associated with body image investment. This was not the case in the current study, which found that fearful and dismissive attachments did appear to have a greater role than that suggested by the early study. Moreover, fearful attachment appeared to play a bigger role among the men than had been suggested. There are possible explanations as why this occurred. First, Cash, Thériault et al. (2004) used an older version of the ASI-R, the ASI, that had not been sensitive to gender differences (Cash, Melnyk et al., 2004). Therefore, use of the ASI-R may have captured gender differences that had not been captured in the earlier study. Second, in this study we chose to combine the two
attachment measures RSQ and RQ to obtain a more sensitive assessment of attachment as suggested by Ognibene and Collins (1998). Finally, Cash, Thériault et al. (2004) utilized different measures of attachment within romantic and general relationships. Cash and his colleagues found that romantic attachment predicted body image dysfunction among females, and found that both anxious romantic attachment and general preoccupied attachment predicted body image dysfunction among males.

Attachment in general relationships was the only attachment relationship measured for this study; thus, it may be that fearful and dismissive attachments played a bigger role because there was no other form of attachment relationship available to account for the variance in body image.

Once again a causal relationship cannot be determined from this study. Given the results and the method of analysis it would be difficult to conclude that one’s attachment prototype or internalized working model explains how much importance males and females place on appearance. It may be that how much importance one places on their appearance is what affects how they behave in interpersonal relationships with others.

Limitations. There are several considerations that must be taken into account when interpreting the results. Several methodological errors occurred prior to and during the time of data collection. First, the originally scaling range of the RQ from 1 to 5 was erroneously scaled from 1 to 7. Second, during data collection, the researcher did not randomize the order of the measures during each data collection session. All questionnaires were distributed to participants using the same order and may have resulted in producing response biases in subsequent measures.
The data were collected on a university campus where the sample was predominately young, Caucasian, female, college-aged students; thus, results cannot be generalized to a larger population. Additionally, the disparity between the number of female and male participants was large and the observed differences obtained may not accurately reflect differences that would occur if the samples sizes were equal.

Several issues occurred in relation to the measures used. Upon further review of the literature it was found that schemas or working models tend to be domain specific (Markus, 1977). Two measures (RSQ and ASI-R) were used that assessed schemas or working models within specific domains; thus, it is not clear whether working with different schematic domains would affect the results. Additionally, the measures used in this study have either been revised or have alternatives that have been shown to be more reliable measures of the constructs. The measures used to assess emotional intelligence and attachment in this study, have improved or been replaced with more reliable and valid measures (see Mayer, Salovey, & Caruso, 2002 and Fraley, Waller, & Brennan, 2000, respectively).

Finally, in this study we did not assess for affect such as anxiety or depression making it difficult to determine individuals’ efficacy in repairing emotions or mood. As with all the measures used in this study, the information gathered from the questionnaires are self-reported and are susceptible to social desirability.

*Future Research.* The relationship between gender, attachment, and emotional regulation on body dissatisfaction would benefit from studies investigating the role of body dissatisfaction between clinical and non-clinical samples. Research has suggested
that body dissatisfaction is associated with the development of bulimia and influences negative affect and dietary restraint (Stice et al., 1996, 1998). Body dissatisfaction has also been associated with poorer parental bonding that increases susceptibility to internalizing media images of thinness among non-clinical samples (Cheng & Mallinckrodt, 2009). Understanding of the differences between samples may provide a clearer understanding in the role body satisfaction plays within clinical and non-clinical samples.

Future research may similarly provide clarity in the relationship between attachment, emotional regulation, and body image by investigating the gender differences among eating disordered individuals. Research has suggested that individuals with eating disorders vary in their attachment (Broberg et al., 2002; Salzman, 1997; Tasca et al., 2004; Triosi et al., 2006, 2005; Ward et al., 2000, 2001) and how they emotionally regulate (Cash, Thériault et al., 2004; Carano et al., 2006; Downey & Chang, 2007; Gilboa-Schechtman et al., 2006; Hinrichsen et al., 2003; Krueger, 1989, 2002a, 2002b; Stice et al., 1996, 1998; Telch et al., 2001; Wiser & Telch, 1999). However, most comparisons have been conducted using women. Investigation of males with eating disorder would provide a foundation for future comparisons between genders and non-clinical male samples.

**Conclusion.** The aim of this study was to investigate the relationship between gender, attachment, emotional regulation, and body image. The results partially supported previous research findings that individuals’ view self and attachment prototype was related to their ability to emotionally regulate. Furthermore, this
relationship was related to gender. Women’s ability to repair emotions appeared to be influenced by how they viewed self; whereas men’s ability to repair emotions was reflected in how they viewed self and others.

The relationship between gender, attachment, and body image coincided with earlier findings (see Cash, 2003 and Cash, Thériault et al., 2004) that women were more invested in their appearance and reported greater body image dissatisfaction than men (Carano et al., 2006; Cash, 2002; Elgin & Pritchard, 2006). Furthermore, in contrast to Cash, Thériault, et al.’s findings, fearful and dismissive attachment appeared to play a greater role than had been suggested. To investigate this contrast, a follow-up analysis was conducted. Results of a simple effects test indicated that fearful and dismissive attachment did influence how much importance one placed on their appearance. This was especially the case among females; those who were secure and dismissive placed less importance on appearance compared to preoccupied and fearful. Results also contradicted theoretical suggestion that preoccupied individuals are generally more preoccupied with appearance in order to seek approval from other and avoid rejection. This was not the case among men, who viewed others positively or were preoccupied. These individual tended to place less importance on their appearance than men who viewed others negatively or who were fearful, and women who were preoccupied.

The results of this study may have several therapeutic implications. Attachment and gender do appear to influence body image and emotional regulation. A greater awareness of the differences between men’s and women’s attachment orientation is likely to play a pivotal role in how well the therapeutic process will proceed if the goal
of therapy is to improve emotional regulation and body image. It appears that men place a smaller role in how they view self than women. Therapists working with men, who are fearful or view self and others negatively, may facilitate improved emotional repairing and body image by working to improve interpersonal relationships and increasing their view of self (Cheng & Mallincrodt, 2009; Suldo & Sandberg, 2000; Tasca et al., 2009). In contrast, preoccupied and fearful women may benefit from efforts to increase their view of self to improve emotional regulation and improve body image. Researchers have suggested that this can be accomplished by helping individuals develop affect regulating skills that help stabilize emotions and impulsivity (Tasca et al., 2009; Telch, Agras, & Linehan, 2001), and by developing trusting relationship that foster a positive working model of self (Cheng & Mallincrodt, 2009; Suldo & Sandberg, 2000).
APPENDIX A

Table 1A. Preliminary ethnic and racial groupings.

<table>
<thead>
<tr>
<th>Ethnicity</th>
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<th>P</th>
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</thead>
<tbody>
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</tr>
<tr>
<td>European American/Caucasian</td>
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</tr>
<tr>
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<td>10.6</td>
</tr>
<tr>
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<td>1.0</td>
</tr>
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<td>.6</td>
</tr>
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<td>.3</td>
</tr>
<tr>
<td>Arabic/German</td>
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<td>.3</td>
</tr>
<tr>
<td>Asian/Caucasian</td>
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</tr>
<tr>
<td>Black/African American/ Hispanic/ Latino(a)</td>
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<td>.6</td>
</tr>
<tr>
<td>Caucasian/Pacific Islander</td>
<td>1</td>
<td>.3</td>
</tr>
<tr>
<td>Chinese/Filipino/Spanish</td>
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<td>.3</td>
</tr>
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<td>Cuban/White</td>
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<td>.3</td>
</tr>
<tr>
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<td>.3</td>
</tr>
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</tr>
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<td>.3</td>
</tr>
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</tr>
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<td>.3</td>
</tr>
<tr>
<td>Filipino/Guamanian</td>
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<td>.3</td>
</tr>
<tr>
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<td>.3</td>
</tr>
<tr>
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<td>.3</td>
</tr>
<tr>
<td>White/Black/Native American</td>
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<td>.3</td>
</tr>
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<td>.3</td>
</tr>
<tr>
<td>East Indian</td>
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<td>.3</td>
</tr>
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<td>.3</td>
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<tr>
<td>German/Irish</td>
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<td>.3</td>
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<td>Pacific Islander</td>
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