

A Test of Associations among Generalized Attachment, Interpersonal Competence,
Relational Self-Construal and Happiness among Undergraduates

by

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ABSTRACT

The present study examined the associations between generalized attachment (orientations toward interactions with others) and personal happiness. In addition, it assessed whether these associations were mediated by interpersonal competence domains (initiation, self-disclosure, support provision, negative assertion, conflict management), and relational self-construal. A sample of 1209 undergraduates at a southwestern university participated in the study. Respondents completed an anonymous online questionnaire packet which contained a measure of generalized attachment style, Interpersonal Competence Questionnaire, Relational-Interdependent Self-Construal Scale and Subjective Happiness Scale. A factor analysis of the attachment measure revealed only two attachment dimensions (avoidance, anxious-ambivalence). For each dimension, regression analysis indicated that the attachment-happiness associations were partially mediated by competence and construal. Two elements of competence (initiation, conflict) emerged as unique predictors of happiness, even in the context of each insecure attachment dimension. Discussion of the findings and directions for future research are offered.

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CHAPTER ONE

INTRODUCTION

There has been a great deal of research on relationship-specific attachment, but less attention has been paid to generalized or global attachment among undergraduates. Relationship-specific attachment refers to one's orientations within a particular relational dyad, such as a parent, friend or romantic partner (Collins & Read, 1994; Ravitz, Maunder, Hunter, Sthankiya & Lancee, 2010). In contrast, generalized attachment refers to individuals' orientations toward multiple others (Collins & Read, 1994; Ravitz et al., 2010). Generalized attachment can play a role in various relationship types (e.g., siblings, peers, friends) or interactions with strangers across the lifespan (Fraley, Hudson, Heffernan & Segal, 2015). Prior research has found that one's attachment style in specific relationships can differ from one's generalized attachment style (Baldwin, Keelan, Fehr, Enns & Koh-Rangarajoo, 1996; Klohnen, Weller, Luo & Cho, 2005; Wang, Yang, Wang & Miller, 2015). Thus, the purpose of this study is to explore the associations between (a) three generalized attachment styles [secure, avoidance, anxious-ambivalence] and (b) interpersonal competence, relational self-construal, and happiness. This study's focus is in line with the call for research that more clearly delineates the level of attachment under consideration (Fraley et al., 2015; Klohnen et al., 2005; Shaver, Collins & Clark, 1996).

Attachment

Bowlby (1969/1982, 1973, 1980) as well as Ainsworth, Blehar, Waters, and Wall (1978) were the first researchers to identify common attachment styles in childhood. Attachment relationships begin in infancy, as a child forms a bond to their primary

caregiver, typically the mother. The nature of this bond varies by the quality of caregiving provided. Ideally, mothers' responsiveness meets a child's needs for protection and nurturance. However, need fulfillment is not always achieved or sustained. As a result of repeated parent-child interactions, a child forms mental models, which are reflected in one of three organized attachment styles (secure, avoidant, anxious-ambivalent). Subsequent researchers identified an additional fourth classification, which was labeled disorganized/disoriented. This style is reflected in a child's use of a wide variety of interpersonal behaviors rather than a single, coherent attachment strategy with a parent (Main & Solomon, 1986). These attachment styles not only influence subsequent parent-child interactions, but can also become generalized to children's interactions with peers and other adults, and eventually carry forward into adulthood (Ainsworth & Bowlby, 1991).

The process of generalization occurs through internal working models (IWMs). According to Bowlby (1973), the models contain perceptions of self and others that shape interpersonal interactions. Over time, subsequent interactions refine and confirm these models, accounting for the influence of attachment throughout the lifespan. IWMs are mental representations of early parent-child interactions that influence thought, emotion, and behavior in adult relationships (Simpson & Rholes, 2010). These models contain beliefs about attachment experiences that guide interpretations of others' behaviors, which serve to influence social responses or interactions (Collins & Feeney, 2004). Bowlby (1973) further notes that IWMs allow for the planning and preparation of

particular relationship outcomes by helping individuals to predict the actions of other people.

According to Terzi (2013), secure attachment reflects a positive image of self and others. More specifically, security is indicative of beliefs that individuals are (a) worthy of kindness/care from others and (b) likely to receive assistance when needed. Thus, security reflects an open, trusting view of people. This attachment style is also indicated by semi-permeable boundaries, which create an optimal balance of intimacy and autonomy (Riggs et al., 2007). Further, security involves easy success in achieving closeness, comfort with depending on others and lack of concern about relational enmeshment (Hazan & Shaver, 1987).

Avoidant attachment reflects a distrust of others. This results in a discomfort with being close to people, due to beliefs that others will not be available when needed (Mikulincer & Shaver, 2007). This style is often indicated by self-reliance and emotional distance. Indeed, avoidance is displayed by not seeking help, even in situations where it is expected that seeking would be a common response to a problem (Collins & Feeney, 2000). Further, avoidance includes discomfort with closeness, difficulty trusting others and nervousness when others are too engaging (Hazan & Shaver, 1987).

Anxious-ambivalent attachment is characterized by a fear of abandonment. This fear facilitates a preoccupation with relationships and an intense need for approval from others. Thus, anxious-ambivalence often results in seeking constant closeness and reassurance (from other people) that is never quite satisfied. This attachment style is often marked by being (a) overly attentive/intrusive toward others, and (b) too conciliatory.

Further, ambivalence involves concerns about not being liked by others, worries about being abandoned and desires for extreme closeness to others (Hazan & Shaver, 1987).

Attachment and Happiness

It is possible that happiness is associated with generalized attachment in meaningful ways. Happiness has been defined as positively-valenced affective evaluations of one's own life (Diener, 1994). It is reflected in contentment that life is consequential and has joyful moments/experiences (e.g., Lyubomirsky, 2001). Thus, happiness is a subjective condition in response to how life events are collectively perceived, interpreted, and/or experienced (e.g., Diener, 1994; Lyubomirsky, 2001). Prior research has shown that happiness is positively related to interpersonal competence, friendship quality (Demir, Jaafar, Bilyk & Mohd Ariff, 2012), social connectedness (Satici, Uysal & Deniz, 2016), autonomy, and relatedness (Howell, Chenot, Hill & Howell, 2011). In addition, a personal sense of uniqueness mediates the relationship between friendship quality and happiness (Demir, Simsek & Procsal, 2013).

Happiness is an accumulation of emotional experiences that are often associated with interpersonal events (Lyubomirsky, 2001; Satici et al., 2016). This suggests that happiness may be influenced by multiple, varied interactions that contribute to a generalized emotional state (Lyubomirsky, Tkach & DiMatteo, 2006; Segrin & Taylor, 2007). Similar to happiness, one's generalized attachment style is also impacted by multiple interactions with others. Thus, the generalized styles could be associated with subjective happiness.

Secure attachment involves feeling open, trusting, and worthy of being treated well (Terzi, 2013). This reflects a positive outlook of interactions with others and expectations of good experiences. Thus, it seems reasonable to expect security to be positively related to happiness. In contrast, avoidant attachment includes feeling safe at a distance from others, but this flows from the belief that others cannot be trusted (Mikulincer & Shaver, 2007). This sense of distrust and suspicion of others is an unpleasant experience. Therefore, it makes sense that avoidance would be negatively related to happiness. Anxious-ambivalent attachment involves a need for closeness and reassurance, but also a persistent fear of losing others (Riggs et al., 2007). This constant fear of abandonment is an unpleasant experience. Thus, it seems plausible that anxious-ambivalence would be negatively related to happiness.

Interpersonal Competence as a Possible Mediator

If attachment and happiness are associated in meaningful ways, then interpersonal competence might mediate this association. Interpersonal competence reflects knowledge and/or ability to interact successfully with others. Buhrmester, Furman, Wittenburg and Reis (1988) identified five domains of interpersonal competence that serve to facilitate prosocial interactions with others: initiation; self-disclosure; support provision; negative assertion; and conflict management. Initiation is the ability to instigate interactions with new people and/or current relationship partners. For instance, initiation includes introducing oneself to someone new or suggesting a time to get together with a friend. Self-disclosure is the capacity to share personal information with others, such as moving beyond superficial talk to communicate intimate thoughts and feelings with another.

Support provision is the ability to comfort people when they are experiencing difficulties or distress, such as listening and giving advice to another as they share about an important life decision. Negative assertion is the capacity to effectively express personal rights or displeasure to people, such as voicing feelings of neglect in a relationship. Finally, conflict management is the ability to successfully resolve disagreements with others, such as not losing one's temper during an argument and being able to accept another's viewpoint even when angry (Buhrmester et al., 1988).

Prior research has revealed that all five domains of interpersonal competence are positively related to friendship quality (Festa, Barry, Sherman & Grover, 2012), and support from others (Jackson, Fritch, Nagasaka & Gunderson, 2002). In addition, all domains are negatively associated with shyness (Jackson, et al., 2002). Variations among domains have been detected as well. More specifically, negative assertion, self-disclosure, and conflict management are inversely correlated with depression (Cooley, Van Buren & Cole, 2010), whereas initiation, disclosure, and conflict are negatively associated with hostility (Sahl, Cohen & Dasch, 2009).

Prior research has been helpful in identifying the link of attachment to interpersonal competence within the context of specific relationships (e.g. romantic, friendship). Yet, this link may be a function of very particular relationship dynamics. Less is known about attachment and competence outside the context of specific relationships. Some colleagues have suggested that both attachment styles and competence may represent qualities that can be generalized across different types of relationships or interactions (Buhrmester et al., 1988; Simpson, 1990).

It is feasible, therefore, that the attachment styles could be differently associated with interpersonal competence than relationship-specific attachment orientations.

Secure attachment involves being trusting and open to more engagement with others (Mikulincer & Shaver, 2007). Interpersonal competence involves facilitating interactions with others. Given the interactional comfort reflected in this attachment style, it seems probable that security would be positively related to all five domains of interpersonal competence. Indeed, prior research has shown that security is positively related to self-disclosure (Mikulincer & Nachson, 1991) and prosocial conflict management strategies (Corcoran & Mallinckrodt, 2000; Pistole, 1989).

Avoidant attachment involves a general distrust of others and desire for less engagement with others (Riggs et al., 2007). In contrast, interpersonal competence includes increasing interactions with others. As avoidance consists of moving away from others, it is reasonable to expect that attachment style would be negatively related to all five competence domains. Indeed, prior research shows that avoidance is negatively related to prosocial conflict management strategies (Corcoran & Mallinckrodt, 2000).

Anxious-ambivalent attachment involves a desire for extreme closeness, so it makes sense that this style would be positively associated with task domains that prompt closeness, such as initiation, self-disclosure and support provision. Prior research supports this premise, as anxious-ambivalence is positively associated with self-disclosure (Mikulincer & Nachson, 1991). This attachment style also involves a tendency to be worried and easily threatened by the fragility of relationships (Mikulincer & Shaver, 2007). Therefore, it seems reasonable that anxious-ambivalence would be negatively

associated with task domains that may be interpersonally stressful, such as negative assertion and conflict management. Indeed, prior research has found that anxious-ambivalence is negatively associated with mutual conflict resolution strategies (Pistole, 1989).

Interpersonal competence serves to facilitate prosocial interactions with others (Buhrmester et al., 1988). Prior research has found that interpersonal competence is associated with positive relationship outcomes, such as friendship quality (Demir et al., 2012). Lyubomirsky (2001) notes that such prosocial experiences are often an important component of subjective happiness. Indeed, prior research has found that social connectedness is positively associated with happiness (Satici et al., 2016). Further, researchers have found that global competence is associated with greater happiness (Demir et al., 2012). Thus, it seems reasonable to expect positive associations between individual competence domains and happiness.

Relational Self-Construal as a Possible Mediator

Relational self-construal may also serve as a mediator of the proposed attachment-happiness link. Construal highlights connectedness to people. More specifically, it indicates the degree of overlap between individuals and other people in the construction of identity. Relational self-construal involves (a) maintaining close connections with others and (b) drawing upon these connections in identity formation/maintenance. As a result, higher construal can contribute to individuals' thoughts/behaviors toward social interactions and/or relationships (Cross, Bacon & Morris, 2000). For instance, those high in relational-self construal may feel that their

close relationships reflect an important part of who they are (Cross et al., 2000). Not surprisingly, construal is positively related to perceived social support from others (Cross et al., 2000), self-disclosure, responsiveness to others, and relationship quality (Gore, Cross & Morris, 2006) and social support (Heintzelman & Bacon, 2015).

Individual differences in attachment style uniquely contribute to self-other perceptions (Mikulincer, 1998). In addition, relational construal contributes to how one perceives and interacts with others (Cross et al., 2000; Cross & Morris, 2003). Yet, relatively little research has explored associations between personal characteristics and relational construal (Gore et al., 2006; Heintzelman & Bacon, 2015). It is possible that individual differences in attachment styles are related to construal in significant ways. Given that secure attachment involves a positive view of self and others (Terzi, 2013), it seems likely that security would be positively associated with construal. In contrast, avoidant attachment involves viewing the self as separate from others (Mikulincer & Shaver, 2007). Therefore, it is plausible that avoidance would be negatively related to construal. Finally, anxious-ambivalent attachment involves being more dependent on connectedness to others for validation (Riggs et al., 2007), so it seems reasonable that anxious-ambivalence would be positively related to construal.

Relational self-construal influences how one views and relates to others (Cross et al., 2000; Cross & Morris, 2003). More specifically, construal involves an increased awareness and recall of positive interactions with others (Cross et al., 2000). By focusing attention on positive experiences, construal might contribute to increased happiness. Construal is associated with greater life satisfaction (Gore & Cross, 2010; Heintzelman &

Bacon, 2015), and viewing the self as connected to others contributes to increased happiness (Satici et al., 2016). Thus, it is reasonable to expect positive associations between construal and happiness in this study.

Mediation

It is possible that generalized attachment style contributes to perceptions of interactional competencies with others, and these perceptions contribute to happiness. It is also possible that attachment contributes to the degree one thinks of oneself as connected with others, and that it is this self-other construal that contributes to happiness. Thus, interpersonal competence and relational self-construal may mediate the attachment-happiness link. More specifically, this study will examine the following hypotheses.

Hypotheses

1. There will be significant associations between attachment, interpersonal competence, relational self-construal, and happiness.
 - a. Secure attachment will be positively related to all five domains of competence, construal, and happiness.
 - b. Avoidant attachment will be negatively related to all competence domains, construal, and happiness.
 - c. Anxious-ambivalent attachment will be positively related to three competence domains (initiation, self-disclosure, support provision) and construal, but negatively related to two domains (negative assertion, conflict management) and happiness.

2. For each of the three attachment styles, the attachment-happiness relationship will be mediated by interpersonal competence and relational self-construal.

CHAPTER TWO

METHOD

Participants

The sample consisted of 1209 undergraduate students enrolled in psychology courses at Northern Arizona University. Twenty-six percent of respondents were male and 74% were female. The age range was 18-22 years ($M=18.56$ years, $SD=0.89$). In reference to educational status, 75% were freshmen, 18% were sophomores, 5% were juniors and 2% were seniors (see Table 1).

Measures

Adult Attachment Style. Three attachment styles (secure, avoidant, anxious-ambivalent) were assessed initially via a modified version of Hazan and Shaver's (1987) scale. Two modifications to the scale were made for this study. Originally, the scale was a categorical measure, in which each participant selected a single paragraph which best described him/them/her. Other researchers (e.g., Mikulincer, Florian & Tolmacz, 1990; Simpson, 1990) chose to deconstruct the paragraphs into single-item sentences. Participants responded to each sentence, and their responses were summed to create variable scores. This approach allowed for more continuous measurement of the attachment styles. Comparisons of the categorical and continuous measurement approaches demonstrated a high degree of similarity in attachment classifications (Mikulincer et al., 1990, Mikulincer & Nachshon, 1991). In prior research, the three attachment style subscales had good internal consistency, with Cronbach alphas ranging

Table 1.

Demographics and Distribution of Scores

	<u><i>n</i></u>	<u><i>%</i></u>	<u><i>M</i></u>	<u><i>SD</i></u>	<u><i>Range</i></u>
Sex					
Male	313	26			
Female	896	74			
Educational Level					
Freshman	912	75			
Sophomore	215	18			
Junior	54	5			
Senior	28	2			
Age			18.56	.89	18-22
Avoidance			24.05	5.58	9-45
Anxious-Ambivalence			10.91	3.15	4-20
Initiation			28.15	6.69	8-40
Self-Disclosure			25.97	6.21	8-40
Support Provision			32.80	5.44	8-40
Negative Assertion			27.09	6.45	8-40
Conflict Management			29.15	5.22	9-40
Relational Self-Construal			39.90	6.70	14-55
Happiness			16.17	4.00	4-20

.74-.79 (Mikulincer & Nachshon, 1991). Thus, the 15-item single sentence measurement approach was used for this study.

In addition, the sentences were slightly reworded. The original scale focused on romantic partners and relationships, but adult attachment is not limited to one relationship type. Other researchers reworded the sentences, removing romantic language in order to focus the items on more general attachment style (Simpson, Rholes & Nelligan, 1992; Simpson, Rholes & Phillips, 1996). In line with these researchers, the general attachment measurement approach was used for this study. The secure subscale consisted of the following items: (a) *“I find it relatively easy to get close to others”*; (b) *“I am comfortable depending on others”*; (c) *“I am comfortable having others depend on me”*; (d) *“I don’t often worry about being abandoned by others (friends, romantic partners) in my life”*; and (e) *“I don’t worry about someone getting too close to me”*. The avoidant subscale consisted of five items: (f) *“I am somewhat uncomfortable being close to others”*; (g) *“I find it difficult to trust others completely”*; (h) *“I find it difficult to allow others to depend on me”*; (i) *“I am nervous when anyone gets too close to me”*; and (j) *“Often, others (friends, romantic partners) want to be closer than I want to be”*. The anxious-ambivalent subscale was also comprised of five items: (k) *“I find that others are reluctant to get as close as I would like”*; (l) *“I often worry that other people don’t really like me”*; (m) *“I often worry that others (friends, romantic partners) won’t want to stay in my life”*; (n) *“I want to merge completely with another person (friend, romantic partner)”*; and (o) *“My connection with others (friends, romantic partners) is sometimes so intense that it scares them”*. Participants responded to each item on a five-point Likert scale (1=strongly

disagree, 5=strongly agree). [Note: The same Likert scale was used for all additional measures and all measure scores were summed.]

An initial analysis revealed that the secure subscale had low internal consistency (Cronbach's $\alpha=.52$). In line with previous research (Simpson et al., 1992; Tucker & Anders, 1999), a principal-axis factor analysis with varimax rotation was performed on the 15 attachment items. Principal-axis analysis was used to allow for common item variance to be analyzed while removing error variance (Tabachnick & Fidell, 2007). Varimax rotation was used to maximize the distinctiveness of individual items and allow for clearer factor loading patterns (Osborne, 2015). The first unrestricted factor analysis generated five factors. However, there was no coherent pattern to the data, as some items loaded similarly on multiple factors. Thus, restrictions were imposed and a two-factor solution emerged as the best fit to the data (see Table 2).

One secure item (item d) did not load on either factor and was removed before the scales were computed. All of the avoidant items and most security items loaded onto the first factor. The secure items were reverse-scored, so that all of the items reflected a bipolar factor ranging from security to avoidance. The resulting scale was comprised of nine items from Hazan and Shaver's (1987) original descriptions of secure and avoidant styles (a, b, c, e, f, g, h, i, and j); higher scores indicated greater avoidance. In reference to the second factor, the majority of items were from the original anxious-ambivalent subscale. One item (n) did not load on either factor, so it was removed from scale construction. One item originally from the security subscale (d) loaded on this factor and was reverse-scored. However, reliability analysis revealed that this item was not a good

Table 2.

Factor Loadings for Attachment Scale Items

<u>Item</u>	<u>Avoidance</u>	<u>Anxious- Ambivalence</u>
(i) <i>I am nervous when anyone gets too close to me</i>	.68	.28
(f) <i>I am somewhat uncomfortable being close to others</i>	.57	.22
(e) <i>I don't worry about someone getting too close to me#</i>	-.53	
(a) <i>I find it relatively easy to get close to others#</i>	-.49	-.13
(c) <i>I am comfortable having others depend on me#</i>	-.47	
(h) <i>I find it difficult to allow others to depend on me</i>	.40	.15
(j) <i>Often, others (friends, romantic partners) want to be closer than I want to be</i>	.40	
(g) <i>I find it difficult to trust others completely</i>	.36	.27
(b) <i>I am comfortable depending on others#</i>	-.32	
(n) <i>I want to merge completely with another person (friend, romantic partner)</i>	-.25	.25
(m) <i>I often worry that others (friends, romantic partners) won't want to stay in my life</i>	.16	.74
(l) <i>I often worry that other people don't really like me</i>	.15	.65
(k) <i>I find that others are reluctant to get as close as I would like</i>		.38
(o) <i>My connection with others (friends, romantic partners) is sometimes so intense that it scares them</i>	.16	.32
(d) <i>I don't often worry about being abandoned by others (friends, romantic partners) in my life#</i>		-.30

Note: # indicates this item was originally categorized as part of the secure subscale; Blank spaces represent a value of less than .11.

fit. Thus, the final subscale consisted of four items (k, l, m, and o); higher scores indicated greater anxious-ambivalence. The subscales created from these factors demonstrated good internal consistency (avoidance $\alpha = .73$; anxious-ambivalence $\alpha = .61$).

Interpersonal Competence. Domains of competence were assessed via the Interpersonal Competence Questionnaire (ICQ; Buhrmester et al., 1988). The ICQ consists of five subscales which represent (a) initiation, (b) self-disclosure, (c) support provision, (d) negative assertion, and (e) conflict management. Each subscale was comprised of eight items, which reflect the degree to which each respondent thought he/they/she was good at the competence tasks. Sample items for each subscale include “*Asking or suggesting to someone new that you get together and do something*” (initiation); “*Revealing something intimate about yourself while talking with someone you’re just getting to know*” (self-disclosure); “*Helping a close companion work through his or her thoughts and feelings about a major life decision, e.g., a career choice*” (support provision); “*Telling a companion you don’t like a certain way he or she has been treating you*” (negative assertion); and “*Being able to admit that you might be wrong when a disagreement with a close companion begins to build into a serious fight*” (conflict management). Each subscale demonstrated good internal consistency (initiation $\alpha = .89$; disclosure $\alpha = .83$; support $\alpha = .90$; assertion $\alpha = .86$; conflict $\alpha = .80$). Higher scores indicated greater competence (see Table 1).

Relational Self-construal. This variable was assessed via the 11-item Relational-Interdependent Self-Construal Scale, which measures the extent to which an individual

includes others in his/their/her self-concept (Cross et al., 2000). Sample items include “*My close relationships are an important reflection of who I am*” and “*When I feel very close to someone, it often feels to me like that person is an important part of who I am*”. The scale demonstrated good internal consistency ($\alpha = .85$). Higher scores indicated more construal.

Happiness. This variable is being assessed via the Subjective Happiness Scale (SHS; Lyubomirsky & Lepper, 1999). This scale is comprised of four items (e.g., “*In general, I consider myself to be a very happy person*”). The scale demonstrated good internal consistency ($\alpha = .84$). Higher scores indicated more happiness.

Procedure

Undergraduate students enrolled in psychology courses at Northern Arizona University were offered the opportunity to participate (voluntarily) in the study. Students could withdraw from the study prior to completing the questionnaire, but no withdrawals were reported. Respondents completed the questionnaire packet anonymously via an online system.

CHAPTER THREE

RESULTS

Preliminary Analysis

There was less than 1% of missing data, and all missing values were confined to the happiness scale. There was no indication as to why some respondents chose to not respond to this scale. Given the small percentage of missing data, no computational adjustments (e.g., score replacements) were utilized.

Correlation analysis (see Table 3) showed that avoidance and anxious-ambivalence were positively related ($r=.31, p<.01$). The relatively small value suggested that these two factors are distinct constructs and is consistent with the factor analysis. Similarly, the five competence domains were each positively related to one another ($r=.20-.63, p<.01$). These findings are consistent with prior research and support Buhrmester and colleagues' (1988) argument that there are multiple domains of competence.

Hypothesis Testing

Given that secure attachment did not emerge as a unique variable (as indicated by the factor analysis), the hypotheses pertaining to security could not be tested. Thus, no results in reference to Hypothesis 1a are reported. Additionally, security was excluded from the analysis of mediating relationships (Hypothesis 2).

Hypothesis 1b stated that avoidant attachment will be negatively related to all competence domains, construal and happiness. This hypothesis was fully supported.

Table 3.

Bivariate Correlations

	1	2	3	4	5	6	7	8	9
1. Avoidance		.31**	-.41**	-.50**	-.34**	-.22**	-.29**	-.36**	-.40**
2. Anxious			-.16**	-.06*	-.10**	-.18**	-.14**	.01	-.34**
3. Initiation				.63**	.45**	.49**	.32**	.28**	.35**
4. Disclosure					.43**	.51**	.36**	.26**	.31**
5. Support						.31**	.54**	.36**	.23**
6. Assertion							.20**	.08**	.20**
7. Conflict								.24**	.27**
8. Construal									.18**
9. Happiness									

Note: *p < .05, **p < .01; Variable names have been shortened for table presentation. Anxious=anxious-ambivalence, Disclosure=self-disclosure, Support=Support provision, Assertion=Negative assertion, Conflict=Conflict management, Construal=Relational self-construal.

Avoidance was found to be inversely associated with initiation ($r=-.41, p<.01$), self-disclosure ($r=-.50, p<.01$), support provision ($r=-.34, p<.01$), negative assertion ($r=-.22, p<.01$), conflict management ($r=-.29, p<.01$), relational self-construal ($r=-.36, p<.01$), and happiness ($r=-.40, p<.01$).

Hypothesis 1c stated that anxious-ambivalent attachment will be positively related to three competence domains (initiation, self-disclosure, support provision) and construal, but negatively related to two domains (negative assertion, conflict management) and happiness. This hypothesis was partially supported. Anxious-ambivalence was inversely related to negative assertion ($r=-.18, p<.01$), conflict management ($r=-.14, p<.01$), and happiness ($r=-.34, p<.01$). In contrast to expectations, this attachment style was negatively related to the other three domains as well (initiation $r=-.16, p<.01$; self-disclosure $r=-.06, p<.05$; support provision $r=-.10, p<.01$). Contrary to the hypothesis, anxious-ambivalence was not correlated with relational self-construal ($r=.01$).

In order to address Hypothesis 2, a three-step regression model was utilized (Baron & Kenny, 1986). This format is used to determine whether mediating relationships exist among variables. This same format was used for each attachment style (avoidant, anxious-ambivalent). In model one, the anticipated mediators (interpersonal competence, relational self-construal) were regressed on the independent variable (attachment style). In model two, the dependent variable (happiness) was regressed on the independent variable. In model three, the dependent variable was regressed on the independent variable after controlling for the anticipated mediators. According to Baron and Kenny (1986), mediation is indicated by any decrease in the variance (accounted for

by the independent variable); this decrease is detected by a comparison of the second and third models. Full mediation is suggested under the following conditions. First, there must be statistically significant paths from the (a) independent variable to the dependent variable, (b) independent variable to the mediators, and (c) mediators to the dependent variable. Second, the (a) path will be non-significant after mediating variables are added (in the third regression model). In addition, there is the possibility of partial mediation. This would be evident if the (a) path is reduced, but still statistically significant in the third model (Baron & Kenny, 1986).

In reference to avoidant attachment (see Tables 4a and 4b), the five competence domains and construal accounted for 32% of the variance ($p < .01$) in the first model. When happiness was regressed on avoidance in the second model, this attachment style accounted for 16% of happiness variance and was significant related ($\beta = -.40, p < .01$). In model three, happiness was regressed on avoidance (after controlling for competence domains and relational self-construal). Collectively, competence and construal accounted for 16% of happiness variance. When avoidance was added to the regression, it explained an additional 5% ($R^2 \text{ total} = .21, p < .01$). Initiation ($\beta = .19, p < .01$), conflict management ($\beta = .13, p < .01$), and avoidance ($\beta = -.29, p < .01$) emerged as significant predictors of happiness. In the comparison of models two and three, the relationship between avoidance and happiness remained significant, but the beta value was reduced (from $-.40$ to $-.29$). These results suggested that the avoidant attachment-happiness association was partially mediated and provided partial support for Hypothesis 2.

Table 4a.

A Summary of Mediators Regressed on Avoidant Attachment

	<i>B</i>	<i>SE B</i>	β
Model 1			
Initiation	-.10	.03	-.12**
Disclosure	-.32	.03	-.36**
Support	-.05	.03	-.05
Assertion	.05	.03	.06
Conflict	-.06	.03	-.06
Construal	-.17	.02	-.21**
ΔR^2		.32**	

*p<.05, **p<.01

Table 4b.

A Summary of Avoidant Attachment and Mediators Regressed on Happiness

	<u>B</u>	<u>SE B</u>	<u>β</u>
Model 2			
Avoidance	-.29	.02	-.40**
ΔR^2		.16**	
Model 3			
Initiation	.12	.02	.19**
Disclosure	-.00	.02	-.01
Support	-.02	.03	-.03
Assertion	.01	.02	.02
Conflict	.10	.02	.13**
Construal	.00	.02	.00
Avoidance	-.21	.02	-.29**
ΔR^2		.21**	

*p<.05, **p<.01

In reference to anxious-ambivalence (see Tables 5a and 5b), the first model revealed that the five competence domains and construal accounted for 6% of the variance ($p < .01$). In the second model, this attachment style explained 12% of happiness variance ($p < .01$) and was a significant predictor ($\beta = -.34, p < .01$). In the third model, competence and construal accounted for 16% of the variance, whereas anxious-ambivalence accounted for an additional 8% when added to the regression ($R^2 \text{ total} = .24, p < .01$). In this final model, the unique predictors were initiation ($\beta = .18, p < .01$), disclosure ($\beta = .14, p < .01$), conflict management ($\beta = .11, p < .01$), construal ($\beta = .08, p < .01$), and anxious-ambivalence ($\beta = -.30, p < .01$). Although the relationship between anxious-ambivalence and happiness was statistically significant in the third model, the beta value was somewhat reduced (from $-.34$ to $-.30$). These results suggested partial mediation, which reflects partial support for Hypothesis 2.

In sum, this analysis indicated that generalized attachment and happiness were related in meaningful ways. Collectively, interpersonal competence and relational self-construal partially mediated the avoidance-happiness relationship. This suggested that to some extent, avoidance contributed to happiness via its association with other factors. Yet, avoidance still made a unique contribution to happiness as well. A similar pattern emerged in reference to anxious-ambivalence. This attachment style had some unique contributions to happiness, but this relationship was partially mediated as well. Additionally, initiation and conflict emerged as unique predictors of happiness, even in the context of each insecure attachment style.

Table 5a.

A Summary of Mediators Regressed on Anxious-ambivalent Attachment

	<i>B</i>	<i>SE B</i>	β
Model 1			
Initiation	-.07	.02	-.15**
Disclosure	.07	.02	.14**
Support	-.00	.02	-.00
Assertion	-.07	.02	-.15**
Conflict	-.07	.02	-.12**
Construal	.03	.01	.05
ΔR^2		.06**	

*p<.05, **p<.01

Table 5b.

A Summary of Anxious-ambivalent Attachment and Mediators Regressed on Happiness

	<u>B</u>	<u>SE B</u>	<u>β</u>
Model 2			
Anxious-ambivalence	-.43	.04	-.34**
ΔR^2		.12**	
Model 3			
Initiation	.11	.02	.18**
Disclosure	.09	.02	.14**
Support	-.01	.03	-.02
Assertion	-.02	.02	-.04
Conflict	.09	.02	.11**
Construal	.05	.02	.08*
Anxious-ambivalence	-.38	.03	-.30**
ΔR^2		.24**	

*p<.05, **p<.01

CHAPTER FOUR

DISCUSSION

The purpose of the present study was to explore associations among generalized attachment, interpersonal competence, relational self-construal and happiness. For avoidant and anxious-ambivalent attachment, the results indicated that competence and construal partially mediated the link to happiness. This study adds to the literature that suggests that generalized attachment styles can be meaningful contributors to individuals' quality of life.

Interpretation of Findings

Attachment Factors

As noted in the Method section, a two-factor (avoidance and anxious-ambivalence) solution emerged as the best fit to the data. This finding is consistent with some prior research that also identified a two-factor dichotomy (Simpson et al., 1992; Tucker & Anders, 1999). Security did not emerge as a distinct factor. This would suggest that participants were inconsistent in their responses across the five-items intended to reflect the security subscale. One possibility is that the item phrases were somewhat confusing or incoherent. For instance, two items ask participants to report an extent to which they do not worry about the consequences of interactions. It might be difficult for people to conceptualize how often they experience the absence of a particular emotion. Additionally, other items address issues of mutual dependence. Dependence might seem premature or inappropriate with some individuals. It is possible that this concept is more meaningful in specific relationships, rather than general interactions with others. Indeed,

prior research has found higher internal consistency when assessing relationship-specific attachment (Mikulincer & Nachshon, 1991).

Contributors to Happiness – Avoidance and Competence

Given that the results of the correlations and regressions were quite similar, the interpretation will only focus on the regression results (see Tables 4 and 5). In reference to the attachment-mediator associations, the analysis revealed that avoidance was negatively related to initiation. This is consistent with the hypothesis and parallels the results of a study conducted by Jenkins-Guarnieri, Wright and Hudiburgh (2012). However, these researchers failed to specify whether they were assessing generalized or specific attachment. Yet, the same avoidance principles might apply to either context. More specifically, avoidance reflects mistrust and low expectations of others (Mikulincer & Shaver, 2007). Thus, avoidant attachment is reflected in maintaining distance to minimize the risk of harm or disappointment (Mikulincer & Shaver, 2007). Given that initiation requires instigating interactions with others (Buhrmester et al., 1988), this competence domain increases interpersonal risk. Therefore, decreased initiation lowers such risks.

Consistent with the hypothesis, avoidance was inversely related to self-disclosure as well. This same association has been identified in research on dating couples (Bradford, Feeney & Campbell, 2002). Self-disclosure is a revelatory experience which involves the sharing of private thoughts and feelings (Buhrmester et al., 1988) which has the potential to decrease interpersonal distance. Given that avoidant attachment consists of discomfort with getting too close to others (Hazan & Shaver, 1987), revealing such

personal information could create uneasiness. Thus, lower self-disclosure might be a means to minimize the unease and enhance self-protection in avoidant attachment.

Avoidance was also negatively associated with relational self-construal. This aligns with the hypothesis and prior research (Joireman, Needham & Cummings, 2002). Construal involves integrating interactions with others into one's identity (Cross et al., 2000). However, avoidant attachment includes a certain degree of psychological disconnectedness (Mikulincer & Shaver, 2007). This may result in more time and energy devoted to self-interests, as well as fewer thoughts directed toward others. It is possible that this independence helps to maintain a less interdependent view of the self.

In reference to the avoidance-happiness association, the findings showed that (a) they were inversely associated and (b) this association was partially mediated. Although partial mediation was not specifically predicted in the hypothesis, this result suggests that the avoidance-happiness association is influenced by other factors. A similar inverse association was found among married couples (Li & Fung, 2014). It seems reasonable that the avoidance elements are comparable in generalized attachment. More specifically, avoidance can reflect socioemotional filters in which unpleasant experiences (e.g., disappointment, betrayal) are expected (Mikulincer & Shaver, 2007). As noted previously, happiness involves an accumulation of positive and negative experiences (Lyubomirsky, 2001). If avoidance enhances the perception or reality of unpleasant experiences, then avoidance might imbalance the accumulation in a negative direction.

In reference to competence-happiness associations, the results showed that initiation was associated with greater happiness. This result is similar to past research

which found that interpersonal competence was positively related to happiness (Demir et al., 2012). However, these researchers assessed general competence rather than individual competence domains. It has been argued that initiation is a core of competence, as it is required to establish interactions which become the basis for all future relationships (Buhrmester et al., 1988). Initiation involves invitations to spend time with people who seem interesting or pleasant (Buhrmester et al., 1988). In addition, initiation may influence the selection of enjoyable activities. Pleasurable events are often an important contributor to happiness (Lyubomirsky, 2001). As such, initiation may be associated with greater happiness by creating increased opportunities for positive experiences with others.

Conflict management was also positively related to happiness. This finding is similar to prior research that found that effective conflict resolution skills are related to happiness (Lyubomirsky, King & Diener, 2005). Conflict management involves strategies to resolve disagreements in prosocial ways, such as seeking negotiation or compromise (Buhrmester et al., 1998). These strategies may include perceptions that one has made the best possible effort toward resolution or has attempted to be respectful during a tense situation. In addition, management includes an effort to minimize negative emotions such as anger or resentment (Buhrmester et al., 1988). Thus, conflict management may be associated with greater happiness because individuals are choosing strategies which reduce the likelihood of lingering negativity and enhance positive self-perceptions about problem resolution efforts.

Contributors to Happiness - Anxious-ambivalence, Competence and Construal

In reference to the attachment-mediator associations, analysis revealed that anxious-ambivalence was negatively related to initiation. This finding is consistent with prior research (Jenkins-Guarnieri et al., 2012). However, this result is contrary to the hypothesis that anxious-ambivalence would be positively associated with initiation. Anxious-ambivalence includes a strong need for approval from others and concerns about rejection (Mikulincer & Shaver, 2007). Although increased interactions with others are necessary to gain acceptance, initiating interactions would also be risky. Hence, anxious-ambivalence may be associated with less initiation to limit the possibility of rejection.

In addition, anxious-ambivalence can be characterized by very intense forms of communication. For instance, it is often characterized by exaggerated emotions (Dozier, Stovall & Albus, 1999), expression of too much information (Riggs, 2010), and being overly attentive or intrusive toward others (Mikulincer & Shaver, 2007). Thus, ambivalence might be negatively associated with initiation because intense communications could go beyond the expected social norms (McClure & Lydon, 2014). Given that the ICQ assesses self-perceptions of success, this negative association may also reflect awareness that their initiating communications might be hindering their social interactions.

Consistent with the hypothesis, anxious-ambivalence was positively associated with disclosure. This result is consistent with past research (Mikulincer & Nachson, 1991). Given that anxious-ambivalence involves a desire for extreme closeness (Hazan & Shaver, 1987), increased disclosure could be an attempt to foster fulfillment of this

desire. Additionally, sharing personal concerns, such as fears or inadequacies (Buhrmester et al., 1988), may prompt encouraging responses from others. Thus, anxious-ambivalence may be associated with greater disclosure because this might facilitate the types of interactions that are being sought.

Consistent with the hypothesis, ambivalence was associated with less negative assertion. This finding is similar to research by Paulk, Pittman, Kerpelman and Adler-Baeder (2011), who found that anxious-ambivalence was inversely related to assertion among high school students. The same principles of anxious-ambivalent attachment could be applicable to a college sample. Negative assertion involves the ability to express displeasure with others (Buhrmester et al., 1988). As such, assertion may also establish interpersonal boundaries that create distance. In the context of anxious-ambivalence, this competence domain may actually increase fears of rejection and uncertainty about the parameters of interactions (Riggs, 2010). Therefore, it is possible that anxious-ambivalence is associated with less assertion to minimize these threats.

Anxious-ambivalence was also negatively related to conflict management. This result is consistent with prior research that found that ambivalence was negatively associated with mutually supportive resolution strategies, such as compromise (Pistole, 1989). In the context of anxious-ambivalent attachment, it is likely that addressing problems with others provokes interactional anxiety. This may lead to the avoidance of conflict in order to reduce the possibility of abandonment (Corcoran & Mallinckrodt, 2000). In addition, anxious-ambivalence is characterized by preoccupation with the self (Riggs, 2010). As such, anxious-ambivalence may be associated with less conflict

management by interfering with the ability to take into account the concerns or viewpoints of others (Buhrmester et al., 1988).

In reference to the association between anxious-ambivalence and happiness, the findings indicated that (a) they were inversely associated and (b) this association was partially mediated. This finding is similar to recent research that found that anxious-ambivalence was negatively associated with positive affect (Schiffrin, 2014). As noted previously, this attachment style involves a number of negative emotions, including fear and worry (Riggs, 2010), which is likely to be an unpleasant experience. Additionally, anxious-ambivalence is reflected in persistent need for reassurance from others. However, the fulfillment of this need tends to be temporary and inadequate (Mikulincer & Shaver, 2007). Thus, despite having this need addressed, any emotional benefits do not last. It may be that anxious-ambivalence is associated with less happiness because need for reassurance is never fully satisfied.

In reference to competence-happiness associations, this regression revealed again that initiation and conflict management were unique predictors. However, two additional factors emerged which were not distinct predictors in the prior analysis. Self-disclosure was associated with greater happiness. This finding is similar to prior research that found that disclosure was associated with more positive mood affect (Cunningham, 1988). Self-disclosure involves the revelation of personal information that is authentic or genuine (Buhrmester et al., 1988). Being authentic is likely to be a pleasant experience (Sheldon, Ryan, Rawsthorne & Ilardi, 1997). Therefore, disclosure may be associated with greater happiness because individuals are being true to themselves.

Relational self-construal was also positively related to happiness. This finding is similar to past research that found that relational self-construal was associated with greater life satisfaction (Gore & Cross, 2010; Heintzelman & Bacon, 2015). One element of relational self-construal is a greater awareness and recollection of positive interactions (Cross et al., 2000). Additionally, construal includes seeking harmonious interactions and positive feedback from others (Cross et al., 2000). Thus, individuals might be more likely to perceive that others are a source or reinforcer of validating experiences. Thus, construal may contribute to greater happiness by increasing positive expectations.

Although the associations were statistically significant relationships, the effect sizes were in the small-moderate range. The smallest sizes were evident in reference to happiness. Prior happiness studies identified similar magnitudes of association (Demir, Haynes & Potts, 2017; Howell et al., 2011; Quoidbach, Berry, Hansenne & Mikolajczak, 2010). For example, Segrin and Taylor (2007) reported a significant beta value of 0.13 in the social skills-happiness relationship. Across studies, one possibility is that the complexity of happiness has a hindering or suppressing effect. Given that many factors contribute to happiness (Lyubomirsky, 2001), it may be less likely for a single variable to have a strong association. Another consideration is that the specific mediators in this study are not continually activated. For example, individuals do not engage in self-disclosure or conflict management in every interaction with every person (Buhrmester et al., 1988). As such, self-perceptions of social competence and construal may not always be salient to one's subjective experience of happiness.

Theoretical Implications

These results offer two theoretical implications. First, attachment theory asserts that internal working models (IWMs) exist in adulthood and create cognitive-emotional filters that can influence interpersonal interactions (Bowlby, 1973). The findings of the present study align with this assumption, as insecure attachment was associated with less interpersonal competency. If these perceptions are validated by actual interactions, then this could create a self-reinforcing cycle. More specifically, individuals (a) anticipate that they will have unpleasant social encounters [because others are untrustworthy or unwilling to provide sufficient reassurance], (b) perceive that they are not good at communication processes, such as self-disclosure, (c) have unfulfilling or negative interactions with others, and (d) receive verification that their IWMs are accurate. Such a self-perpetuating process could explain the stability of attachment styles/dimensions. The second implication is in reference to the concept of connectedness. Attachment theory is inherently dyadic, as it defines identity in the degree and nature of self-other linkages (Ainsworth & Bowlby, 1991). Such linkages are also the basis of relational self-other construal. Although it was expected that attachment would be associated with construal, the magnitude of associations were quite small. This would suggest that despite the commonality, insecure attachment and construal are distinct constructs. Yet, the parameters of self-other linkages within attachment theory are imprecise. Attachment theory would be enhanced by refining and clarifying the boundaries of this linkage (Mikulincer & Shaver, 2012).

Weaknesses

The results should be interpreted within the context of the study's weaknesses and strengths. First, sampling issues limit the generalizability of results. More specifically, the participants were a convenience sample of undergraduate students at one university. Additionally, the sample had small variations in demographic characteristics. Thus, the findings may be particular to this subset of the population. Second, the study had a cross-sectional measurement design. Thus, no definitive causal conclusions can be drawn regarding the associations between the variables. Additionally, it is unknown whether there could have been changes in the variables (e.g., degree of happiness) over time.

Third, only self-report measures were used. The study relied upon the respondent's willingness to report their self-perceptions. Given that some experiences are uniquely personal (e.g., degree of construal or happiness), this measurement approach is not entirely unreasonable. However, there is no validating data from external sources such as peers. Fourth, the attachment measure used in this study is based on one of the earliest attempts at dimensional assessment of adult attachment styles. More detailed measures including interview protocols have been developed over time (Mikulincer & Shaver, 2007).

Fifth, the approach utilized to test mediation was somewhat simplistic. The Baron and Kenny (1986) format does not indicate which mediators had the strongest impact on the attachment-happiness associations. In addition, this format fails to provide guidelines about the magnitude (of decreased variance) which should be used to determine if mediation exists (Mouzon, 2013). Rather, mediation is a dichotomous condition (it exists

or doesn't exist). Sixth, the large sample size increased the likelihood that small associations among the variables would be statistically significant. Although larger samples can enhance statistical power, they also reduce the effect size necessary to reach a level significance (Tabachnick & Fidell, 2007). Yet, some researchers have argued that methodological choices should be considered when evaluating the importance of small effects. For example, Fritz, Morris and Richler (2012) suggested that using homogenous samples and reliable measures can reduce error variability, which in turn improves the likelihood that effect sizes are accurate.

Strengths

Despite the weaknesses, some strengths of the study should be noted as well. First, the large sample size was sufficient to reduce the margin of error and increase the trustworthiness of the findings (Schutt, 2006). Second, this study focused on generalized rather than relationship-specific attachment. Multiple researchers have called for additional investigation of the emotional/social characteristics associated with generalized attachment (Cozzarelli, Hoekstra & Bylsma, 2000; Fraley et al., 2015; Klohnen et al., 2005). This study helps fill this gap in the literature. Third, this study used a measure of interpersonal competence that assessed multiple domains of competence. Prior research has indicated the utility of distinguishing among the domains (Buhrmester et al., 1988), particularly when investigating associations between competence and attachment (Cooley et al., 2010).

Fourth, this study adds to the literature by identifying associations between generalized attachment and happiness. Prior research has typically focused on the

associations in the context of relationship-specific attachment (e.g., Li & Fung, 2014; Schiffrin, 2014). Fifth, this study examined potential contributors of the attachment-happiness relationship. This examination aligns with recommendations to give more attention to investigation of possible mediating processes (Mikulincer & Shaver, 2012).

Future Directions

There are several options for improvements in future research. First, sampling could be randomized and extended to include community respondents outside of university settings. This would create a sample more representative of the overall population and enhance the generalizability of results. A community sample could include participants of various ages, which would allow for comparative examinations across the lifespan. Second, a longitudinal design could be utilized. This would allow for examination of potential causal pathways in the associations between the variables. Additionally, it would be possible to detect variations (e.g., in competence) over time. Third, a multi-method design would allow for validation of constructs assessed by the self-report measures. For instance, observational methods could be used to capture additional information about the interpersonal competence behaviors during interactions with others. Similarly, it would be possible to use questionnaire and interview measures of attachment. Such changes would fit with attachment researchers' recommendations for multiple method approaches (Mikulincer & Shaver, 2012).

Fourth, an updated attachment measure, such as the Experiences in Close Relationships Scale (ECR; Brennan, Clark & Shaver, 1998) could be used to assess attachment. This scale measures attachment on the two dimensions of avoidance and

anxiety, and the items do not contain relationship-specific language. Thus, it might be possible to use this measure for samples which are not limited to dyadic groups (e.g., married couples). Fifth, a more modern approach to testing mediation could be implemented. Preacher and Hayes (2008) suggest that bootstrapping procedures offer the most powerful method to evaluate indirect effects. Such methods can be used to delineate direct and indirect effects. Future research can continue to expand knowledge about the associations among attachment, happiness, competence and construal in meaningful ways.

Conclusion

In summary, this research provides insight into the associations among attachment dimensions, interpersonal competence, relational self-construal and happiness. Such research can make some important contributions to the literature. First, this study highlighted the value of focusing on generalized attachment. Much of the past research has examined attachment to specific relationship partners (e.g., Li & Fung, 2014; Simpson, 1990; Schiffrin, 2014). This can be somewhat limiting, as it only focuses on a subsample of individuals who are currently in romantic relationships. In contrast, an analysis of generalized attachment (and its associations) can capture the experiences of a broader range of undergraduate samples. Second, this study conceptualized and assessed competence as a multidimensional rather than singular construct (Buhrmester et al., 1988). The findings revealed that some competence domains were uniquely relevant to each attachment dimension and happiness. This suggests that competence is a complex experience whose deconstruction can be illuminating. This also aligns with Buhrmester et

al.'s (1988) argument that (a) individuals are not equally competent in all domains and (b) the domains can be situationally specific. Third, mediational processes in the attachment-happiness association were explored. The mediating variables (interpersonal competence, construal) have received little attention in the attachment literature. In addition, the results showed that each insecure attachment dimension contributes to happiness both independently and through its association with competence and construal. Despite the abundance of attachment research, it is important to continue exploring potential pathways of association (Mikulincer & Shaver, 2012). This study is one more contribution to this exploration process.

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APPENDIX A

ATTACHMENT LITERATURE

Attachment relationships begin in infancy, as children form an attachment to their primary caregivers. According to Bowlby (1969), attachment theory suggests that children develop a routine way of interacting with their caregivers (often parents). These interactional patterns influence the way children perceive and respond to parents, and shape their worldview. This worldview is an interpretive framework for how they perceive themselves and relate to others. This style of relating carries forward throughout the lifespan, influencing other relationships with peers and romantic partners (Simpson et al., 1992).

Bowlby (1969, 1973, 1980, 1982) proposed that, under ideal circumstances, the close bond between children and caregivers is a result of fulfillment of children's needs for protection and affection. Children use their caregivers as bases from which to explore their environments, and safe havens in times of stress. Children are also motivated to seek closeness to their caregivers through proximity-seeking behaviors, such as crying or physically reaching for them. When caregivers are beneficially responsive, children learn that their attachment needs can be met (Bowlby).

Ainsworth and colleagues (1978) were the first team to empirically verify Bowlby's theoretical principles. These researchers found three distinct attachment patterns, which varied by the pattern of children-mother interactions. Children whose mothers are sensitive and responsive develop a secure attachment pattern. Such children learn a fundamental trust in their mothers' availability during times of need (Riggs,

2010). These securely attached children play comfortably in their presence, use mothers as a base from which to explore their environments, and seek/receive comfort when frightened (Ainsworth et al., 1978). Other children have mothers who are insensitive and unresponsive to their needs. These children develop one of two insecure attachment patterns (Riggs, 2010). Avoidantly attached children appear generally indifferent to their mothers' presence. This indifference is reflected in children's independence and physical distance from mothers (Ainsworth et al., 1978). In contrast, anxious-ambivalent children limit their exploration space and frequently seek proximity to their mothers. The children's actions were interpreted as similar to a sense of being in perpetual danger (Ainsworth et al.).

A basic assumption of attachment theory is that early parent-child interactions hold explanatory value for adult relationships/interactions (Ainsworth, 1989; Ainsworth & Bowlby, 1991; Bretherton, 1992). The link of these childhood patterns to adult attachment styles lies in the concept of internal working models (IWMs). Bowlby (1973) suggested that children store a mental representation of interpersonal experiences related to how the primary caregivers responded during times of need/distress. IWMs form early in life as a result of daily interactions between children and their caregivers (Berlin, Cassidy & Appleyard, 2008). Due to the nature of these relationships, children form views of their caregivers and how they see themselves in relation to the caregivers (Berlin et al., 2008; Crowell, Fraley & Shaver, 2008). For instance, children of responsive caregivers develop IWMs that (a) identify the caregivers as supportive and trustworthy, plus (b) higher self-worth [given that they are recipients of such support]. Conversely,

children who receive insensitive and/or inconsistent care develop IWMs that (a) identify caregivers as untrustworthy and unavailable as well as (b) lower self-worth [given that they are unfulfilled or neglected]. According to Riggs (2010), IWMs of self include perceptions of worthiness for the love and acceptance offered by other people. IWMs of others involve expectations as to whether people can be trusted and are available when needed (Riggs).

As children grow, their range of social interactions (with peers, other family members, strangers) expands. Although the models can be changed in response to new experiences, IWMs often serve as a guide or cognitive filter as interactions begin (Bowlby, 1982). Thus, IWMs might shape individuals' attitudes and actions during interactions. In addition, IWMs also influence the selection of relationship/interaction partners and behaviors elicited from such partners (Berlin et al, 2007). As a result of these models, individuals come to predict and plan their own interactional patterns (Riggs, 2010). Collins and Sroufe (1999) suggest that each time individuals' interpersonal experiences are consistent with their attachment styles, the expectations contained in IWMs are confirmed as well. Such confirmatory experiences account for the ways in which IWMs become a stable interpretive framework that individuals carry across different context and through developmental processes into adulthood (Crowell et al., 2008).

Several researchers have explored the consistency of IWMs across general interactions and specific relationships. For instance, Baldwin and colleagues (1996) examined associations between generalized and relationship-specific attachment style.

Participants (178 undergraduates) completed a multi-part questionnaire. Generalized attachment was assessed with Hazan & Shaver's (1987) categorical measure, with participants choosing which style best described their general feelings in close relationships. To assess specific attachment, participants listed their ten most impactful relationships and indicated which attachment style best characterized each relationship. Generalized and relationship-specific attachment style did not overlap consistently. More specifically, 41% of the sample reported differences in general and mother-specific attachment, 46% reported father-general differences, and 32% reported romantic-general differences. These findings suggest that most people have experience with multiple attachment styles. Additionally, one's most frequently experienced style may reflect the accessibility of attachment knowledge when thinking about relationships.

Cozzarelli and colleagues (2000) investigated (a) associations between generalized and partner-specific attachment, as well as (b) the predictive influence of each on three relationship outcome variables (satisfaction, inclusiveness, love). Respondents (112 undergraduates currently in romantic relationships) completed two (general, romantic-specific) forms of the Relationship Questionnaire (RQ; Bartholomew & Horowitz, 1991). The researchers generated self and other attachment variables from the RQ. Respondents also completed a questionnaire packet containing the Relationship Assessment Scale (Hendrick, 1988), Inclusion of Other in the Self Scale (IOS; Aron, Aron & Smollan, 1992), plus Sternberg's (1988) Triangular Love (TL) scale. Results showed that generalized and partner-specific attachment were modestly correlated for both self- and other-attachment. Self- and other-attachment were positively associated

with all relationship outcomes in the partner-specific context. However, these associations were not evident in reference to generalized attachment. These findings suggest that generalized and relationship-specific attachment overlap, but are not redundant constructs.

Pierce and Lydon (2001) completed two studies examining potential distinctions between generalized and relationship-specific attachment. In Study 1, respondents (393 undergraduates) completed the RQ (Bartholomew & Horowitz, 1991) in reference to general attachment, plus attachments to mother, father, closest friend, and current romantic partner. Results indicated that although generalized attachment was positively associated with all four relationship-specific attachments, the effects were relatively small. In addition, only 5-6% of the variance in each relationship-specific attachment was explained by generalized attachment. These findings suggest that people develop multiple relationship-specific attachments and that one's generalized attachment style is distinct from those for any one relationship.

In Study 2, the authors evaluated the effects of generalized and relationship-specific attachment on daily interactions. Respondents (72 undergraduates) completed the RQ (Bartholomew & Horowitz, 1991) in reference to general interactions. Over the next seven days, respondents completed the Rochester Interaction Record (RIR; Reis & Wheeler, 1991) for each of their social interactions. Based on these records, the researchers were able to identify the five individuals with whom each respondent interacted most frequently. Respondents then completed the RQ in reference to each of the individuals. As in Study 1, there were small to modest positive correlations between

generalized and relationship-specific attachment. Generalized attachment accounted for only 3-7% of the variance in specific attachments. In reference to daily interactions, specific attachment was a much stronger predictor of the quality and intimacy of communications. These findings suggest that while both generalized and relationship-specific attachment make unique contributions to the nature of interactions, relationship-specific may be more relevant in the context of existing relationships.

Klonen and colleagues (2005) explored (a) associations between generalized and relationship-specific attachment, as well as (b) the predictive impact on three indicators of well-being (emotional stability, self-esteem, ego-resiliency). Participants (129 undergraduates) completed two measures (Relationship Questionnaire (RQ; Bartholomew & Horowitz, 1991); Circumplex Measure of Attachment-Based Self-Representations (CMABS; Klonen, 2005)) in reference to general interactions and four specific relationships: (1) romantic, (2) closest friendship, (3) mother and (4) father. To assess psychological well-being, the researchers used Big Five Inventory's neuroticism scale (BFI; John & Srivastava, 1999), Rosenberg's (1965) Self-Esteem scale, and Klonen's (1996; 1999) Ego-resiliency scale.

Results indicated that together, the four specific attachments explained a significant amount of variance (34%-65%) in generalized attachment. In comparison with the specifics, generalized attachment was associated more strongly with wellness. Generalized, romantic and mother attachment were unique predictors of all three indicators of well-being. These findings suggest that generalized and relationship-specific attachment are related, but distinct constructs that should be measured independently.

Other researchers have extended conceptualization of attachment style to adulthood. For instance, Hazan and Shaver (1987) suggested that the three infant attachment patterns first identified by Ainsworth and colleagues (1978) develop into three corresponding adult attachment styles. Secure adults trust that others will be available when needed. Such individuals display appropriate boundaries of intimacy and autonomy, plus they confidently seek closeness to others when stressed (Mikulincer & Shaver, 2007). Anxious-ambivalent adults are untrusting, fearful, and preoccupied with relationships. These individuals have difficulty with autonomy, frequently seeking closeness and reassurance from others. Yet, this behavior is never quite satisfying for anxious-ambivalent individuals. Avoidant adults are untrusting and dismissive of the need for relationships. Such individuals seem very independent and often withdrawn. They do not seek proximity to others when stressed, due to the expectation that others will be unavailable or unresponsive to their needs (Mikulincer & Shaver).

Based on this expansion, researchers explored the presence of the three styles in adulthood. For example, Simpson and colleagues (1992) examined the role of attachment styles in support seeking and giving behaviors. The sample (83 men and 83 women in a dating relationship) completed a 13-item, continuous attachment scale consisting of individual sentences taken from Hazan and Shaver's (1987) original categorical measure. Female partners were exposed to potentially anxiety-induced stimuli alone, and then reunited with their male partners. During reunion, researchers assessed (a) females' anxiety and support-seeking behaviors, plus (b) males' support gestures to their partners. The results indicated that for secure females, support-seeking increased as their anxiety

increased. In contrast, avoidant females' support-seeking decreased as anxiety increased. In reference to responsiveness, secure males offered more support as their partners' anxiety increased. Conversely, avoidant males offered less reassuring support in response to partners' anxiety. These findings suggest that attachment styles were differentially related to support-seeking and -giving behaviors in anxiety-provoking situations.

Tucker and Anders (1999) studied how relationship quality might contribute to the association between attachment style and relationship satisfaction. The sample consisted of 61 undergraduate dating couples. Each individual completed a questionnaire assessing (1) attachment style with the 13-item Adult Attachment Questionnaire (Simpson et al., 1992), (2) various aspects of relationship quality (e.g., satisfaction, love, commitment, faith, dependability), (3) self-disclosure, and (4) emotional expressiveness. The results showed that lower relationship satisfaction was evident for (a) anxious-ambivalent men and women, plus (b) avoidantly attached men. In addition, anxiously attached men had less accurate perceptions of their partners' satisfaction, which in turn, negatively contributed to their own satisfaction. These findings suggest that insecure attachment styles are detrimentally related to quality. In addition, anxious attachment in men contributes to distorted/inaccurate perceptions of their partners' emotional experiences.

Mikulincer (1998) investigated the association of attachment style and self-appraisal. The sample of 54 Israeli undergraduates (35 women and 19 men) completed a 15-item attachment scale derived from Hazan and Shaver's (1987) categorical descriptions of three adult attachment styles. Self-appraisal was assessed with a computer

screen task. Forty trait adjectives (20 positive; 20 negative) were displayed and randomly paired with either neutral words (e.g., kitchen, clock) or attachment-threatening words (e.g., rejection, abandonment). Participants were asked to choose whether each trait adjective described them. Results indicated that anxious-ambivalent individuals engaged in self-devaluation, by choosing less positive trait adjectives (when paired with threat words). Consistent with IWMs, these findings support the fragile nature of self-worth among anxious-ambivalent undergraduates. It also highlights the ways in which anxious-ambivalent individuals' own choices might undermine their well-being.

Rholes, Simpson and Orina (1999) examined the associations of attachment style, anger, and support seeking/giving behaviors. Each individual in the sample (83 men and 83 women in a dating relationship) completed the 13-item, continuous attachment scale derived from Hazan and Shaver's (1987) categorical measure. Female partners were told they would be exposed to a potentially anxiety-inducing situation, and asked to wait with their male partners for five minutes ("stress period"). Participants were then told that this portion of the study was cancelled, and then waited together for an additional five minutes ("recovery period"). Researchers rated the partner interactions in each period, including (1) the anxiety, anger, and support seeking in female partners, and (2) anger and support-giving in male partners. Results indicated that avoidant females displayed more anger (a) during the stress period and (b) when receiving less support or increased anger from their partners. Avoidant males demonstrated more anger (a) during the stress period and (b) when their partners expressed increased anxiety or sought additional support. Anxious-ambivalent females showed more anger during the recovery period,

especially if they were more anxious during the stress period. These findings indicate that insecure attachment styles were associated with more adverse reactions with partners during and after potentially stressful events.

Scharf (2014) studied the association of children's attachment styles, conflict/support response strategies, and social competence. The sample included 260 elementary (4th and 5th grade) Israeli students. Each child completed a 15-item attachment scale that assessed secure, avoidant, and anxious-ambivalent styles. Strategies were assessed by presenting children with hypothetical conflict/support situations and asking how likely they would be to choose certain responses (e.g., hostile, compromising, accommodating, disengaging, excluding friends). Teachers provided ratings of social competence. Results showed that secure attachment was negatively related to friend exclusion and hostile conflict strategies. Anxious-ambivalent attachment was positively related to accommodating conflict and verbal support strategies, but negatively related to social competence. Avoidant attachment was negatively related to social competence. Parallel to research on adults, these findings suggest that secure children may use more socially competent strategies when navigating conflict and offering support to others.

In sum, attachment theory suggests that children develop one of three attachment styles—secure, avoidant, or anxious-ambivalent—as a result of the accumulation of interactions with their primary caregivers. These relational styles can become generalized to children's interactions with peers and other adults, and eventually carry forward into adulthood. Prior research on early adulthood has provided some support for the

attachment styles. Across studies, it was evident that the three styles were differently related to personal characteristics, patterns of interaction, social competence and relationship satisfaction. While this research has been helpful, further examination of differences in attachment style is justified. Additional research could enhance the understanding of how generalized attachment styles are related to personal characteristics outside of specific relationships (e.g., romances, friendships).

APPENDIX B

INTERPERSONAL COMPETENCE LITERATURE

Interpersonal competence reflects the ability to successfully interact with others in the context of personal relationships (Larson, Whitton, Hauser & Allen, 2007).

Interpersonal competence can be defined as a set of interpersonal task domains, such as initiating interactions with others and providing emotional support (Buhrmester et al., 1988). According to Buhrmester and colleagues (1998), defining interpersonal competence as a set of task domains is important because interpersonal encounters (providing support, resolving conflicts) are not uniform. Thus, different interactions may require the use of different competencies (Buhrmester et al., 1998). Further, individuals might not be uniformly skilled - they can be more competent in some domains, but less competent in others (Buhrmester et al., 1998).

Buhrmester and colleagues (1998) identified five interpersonal task domains, or dimensions of interpersonal competence. Initiation is the ability to begin interchanges with others in new or current relationships. Self-disclosure is the revelation of personal thoughts and feelings to another person. Support provision is reflected in offering emotionally sensitive responses to another person when he/they/she is stressed. Negative assertion is the ability to express displeasure or violations (of relational boundaries). Conflict management is the ability to successfully resolve disagreements with others in a respectful manner, such as negotiation or compromise (Buhrmester et al., 1988).

Buhrmester and colleagues (1998) completed two studies to examine the usefulness of distinguishing between multiple domains of interpersonal competence. In

Study 1, the authors explored the relations between self- and peer-perceptions of competence, masculinity/femininity, self-esteem and loneliness. Participants (n= 69 undergraduates) and their roommates (n= 69 undergraduates) completed separate questionnaire packets. The participants completed the following measures in reference to themselves: the Interpersonal Competence Questionnaire (ICQ; Burhmester et al., 1988), the Personal Attributes Questionnaire (PAQ; Spence & Helmreich, 1978) to assess masculinity and femininity, the Texas Social Behavior Inventory (TSBI; Helmreich & Stapp, 1974) to measure social self-esteem as well as the revised UCLA Loneliness Scale (Russell, Peplau & Cutrona, 1980). Participants returned two weeks later to complete each of the questionnaires about their roommates. In parallel, roommates completed the ICQ, PAQ and TSBI in reference to the participants.

Results showed convergence of participant (self) and roommate ratings of competence domains. In addition, participant masculinity was positively related to self-rated initiation, assertion and conflict, whereas participant femininity was positively related to self-rated support, disclosure and conflict. Participant self-esteem was positively related to self-ratings on all domains of competence plus roommate-rated initiation. Roommate ratings of participant esteem were positively related to (a) roommate-ratings on all competence domains plus (b) self-rated initiation, support and disclosure. Self-reported loneliness was negatively related to roommate-rated initiation, support, disclosure and conflict. These findings demonstrate the value of distinguishing between domains of competence. More specifically, certain competencies appear to be viewed by self and others as specifically related to sex-role orientations. Additionally,

these findings suggest that that individuals viewed by self or others as having higher self-esteem are seen as more competent, whereas individuals experiencing loneliness are perceived by others as less socially competent.

In Study 2, the authors explored perceptions of competence in two types of relationships, with a new acquaintance and an established friend. Participants (151 undergraduates) were paired with a same-sex strangers and asked to interact for seven minutes. After the interactions, participants completed the ICQ (Buhrmester et al., 1988) in reference to themselves. Participants also completed the following measures in reference to their new acquaintance: a 20-item version of the ICQ; an overall rating of satisfaction; and a personality rating (5-point bipolar adjectives: e.g., outgoing-reserved). Participants were also asked to take a questionnaire packet to a close same-sex friend. In reference to themselves, close friends completed the ICQ. In reference to the participants, friends completed the 20-item ICQ, satisfaction rating and personality rating.

Results revealed that, in comparison to new acquaintances, close friends more accurately predicted participant competence. More specifically, close friend ratings of all five domains competence were positively related to participants' own ICQ scores. Acquaintance ratings of participants' initiation and disclosure were positively related to self-scores on these domains. In addition, acquaintances' interaction satisfaction was positively associated with their ratings on participants' initiation, disclosure, support, and assertion. In reference to personality traits, the same patterns of association were reported for friends and acquaintances. Initiation was positively correlated with being viewed as outgoing, extraverted, confident and warm. Disclosure was positively related to being

seen as extraverted, outgoing, warm and sensitive. Support was associated with greater sensitivity and warmth. Assertion was positively associated with being seen as extraverted, outgoing and dominant. Conflict management was positively correlated with being viewed as sensitive and warm, but negatively correlated with dominance.

These findings suggest that certain competencies may be more important at different phases of a relationship. More specifically, initiation and disclosure may be more salient to satisfying interactions with strangers. One possibility is that support, assertion and conflict may be less salient because they are often responses to stressful or difficult situations. If interactions with strangers are not unduly stressful, then these domains might not be utilized (or evident to strangers). In contrast, close friendships are likely to have diverse interactions over time, which might require a broader range of task domains. In addition, these findings suggest that certain competencies may be indicative of different clusters of personality traits. For instance, Burhmester and colleagues (1998) suggest that initiation and assertion appear to be more closely linked to instrumental traits, whereas disclosure, support and conflict management can be more closely linked to expressive traits.

Cooley and colleagues (2010) investigated the associations among interpersonal competence, depression and attachment. The sample was comprised of 93 undergraduate women. Each participant completed a questionnaire packet that included the ICQ (Burhmester et al., 1988), Beck Depression Inventory (Beck, Steer & Brown, 1996), plus Bartholomew and Horowitz's (1991) Relationship Questionnaire (RQ). The researchers generated self and other attachment variables from the RQ. The results indicated that self-

attachment was positively related to four competencies – initiation, negative assertion, self-disclosure, and conflict management. Other-attachment was associated with more assertion and disclosure. In contrast, depression was associated with less assertion, disclosure, and conflict management. Regression analysis revealed that conflict management mediated the relationship between views of self and depression. These findings suggest that interpersonal competence has direct effects with attachment and depression. Additionally, self-attachment may be more important than other-attachment in predicting interpersonal competence and depression.

Demir and colleagues (2012) examined the associations among interpersonal competence, friendship quality and happiness. The sample consisted of 154 Malaysian and 211 U.S. undergraduate students. Interpersonal competence was assessed using the ICQ (Buhrmester et al., 1988). The authors summed the five ICQ subscales to create a single general competence variable. Friendship quality was measured using the McGill Friendship Questionnaire of Friend's Functions (Mendelson & Aboud, 1999). Happiness was assessed using the Subjective Happiness Scale (Lyubomirsky & Pepper, 1999). The results showed that (a) competence was positively related to both friendship quality and happiness, and (b) quality mediated the relationship between competence and happiness. These findings suggest that interpersonal competence can contribute to relationship-specific factors (friendship quality) plus global emotional states in meaningful ways.

Festa and colleagues (2012) explored the relationship between interpersonal competence, personality traits, and friendship quality. The sample (176 college students) completed a questionnaire packet containing the ICQ (Buhrmester et al., 1988), Five

Factor Inventory from the International Personality Item Pool (Goldberg, 1992), plus Crabery and Buhrmester's (1998) Social Provisions Questionnaire (to assess friendship quality). The results indicated that all five competencies—initiation, assertion, disclosure, support provision, and conflict management—were positively associated with friendship quality. However, regression analysis revealed that disclosure was the only competency to explain significant variance in friendship quality. Given that disclosure requires the sharing of personal information with others, it might be critical to the nature and dynamics of a specific relationship (friendship).

Jackson and colleagues (2002) examined the associations among interpersonal competence, expectations of rejection, social support, shyness and loneliness. The sample (255 college students) completed a questionnaire packet containing the ICQ (Buhrmester et al., 1988), Sensitivity to Rejection Scale (Mehrabian & Ksionsky, 1974), Multidimensional Scale of Perceived Social Support (Zimet, Dahlem, Zimet & Farley, 1988), Cheek and Buss' (1981) Shyness Scale, plus the UCLA Loneliness Scale (Russell, 1996). Similar to Demir and colleagues (2012), the authors utilized the single general competence variable. Results indicated that shyness was associated with lower competence. After controlling for social support, the analysis revealed that lower interpersonal competence and greater rejection sensitivity contributed to greater loneliness. These findings suggest that loneliness could be impacted by social inhibitions as well as competence deficits.

Sahl and colleagues (2009) investigated whether competence moderated the relationship between mood and daily stress. The sample was comprised of 127

undergraduates. On Day 1 of the study, respondents completed a questionnaire packet that included the ICQ (Buhrmester et al., 1988), Beck Depression Inventory (Beck et al., 1996), Buss and Perry's (1992) Aggression Questionnaire (to assess hostility), plus the College Student Life Event Survey (Sandler & Lakey, 1982) to measure life stress. Each morning for 7 days, daily mood was assessed via the Positive and Negative Affect Schedule—Expanded Form's Sadness and Hostility subscales (Watson & Clark, 1994). For each of 7 evenings, daily stressors were assessed via a 26-item negative events checklist. Daily stressors were rated by multiple coders as either dependent (influenced by one's behavior or psychological state), or independent (unrelated to behavior or state).

The results showed that depression was inversely correlated with initiation and negative assertion. Hostility was negatively correlated with initiation, disclosure and conflict management. In addition, the association between hostility and stress was stronger for the high initiation group as compared to the low initiation group. These results suggest that certain interpersonal competencies may be inhibited by negative mood. If individuals initiate more interactions while in a hostile mood, it is possible that they experience more stress by creating multiple unpleasant interactions (in which the mood is shared with others).

In sum, prior research has enhanced our understanding of interpersonal competence. More specifically, research has shown that domains of competence were positively related to personal characteristics such as self-esteem, but negatively related to characteristics such as hostility. In addition, competence was a contributor to general happiness as well as relationship-specific quality. Although such research has been

illuminating, further exploration of interpersonal competence domains could be helpful. Additional research could increase our understanding of the ways in which domains are associated with personal characteristics outside of specific relationship contexts.

APPENDIX C

RELATIONAL SELF-CONSTRUAL LITERATURE

The self contains the essential features of an individual that distinguish one person from another. An individual's sense of self influences their thoughts, feelings, and actions. Thus, the concept of self is central to the study of human beings (Singelis, 1994; Triandis, Chan, Bhawuk, Iwao & Sinha, 1995). Marcus and Kitayama (1991) have suggested that the self can be represented conceptually in a variety of ways. The interdependent self-construal assumes that the self is defined in terms of social roles, obligations, and relationships (Markus & Kitayama, 1994). From this perspective, an individual maintains connections to others, and draws upon these connections when forming a sense of self.

Relational self-construal is conceptualized as the way in which individuals integrate relationships with close others into their own identities (Cross et al., 2000). In comparison to individuals with low construal, high construal people have larger social networks, receive more support from others, have closer important relationships, and give more consideration to others' opinions when making important decisions (Cross et al., 2000). In addition, high construal individuals engage in more prosocial behaviors, such as greater disclosure and responsiveness to others (Cross et al., 2000).

In two studies, Cross and Morris (2003) explored the relationships between relational self-construal, closeness, relational cognition, and well-being. In Study 1, respondents ($n = 156$ undergraduates) and their roommates ($n = 95$ undergraduates) completed separate questionnaire packets. The respondents completed the following

measures in reference to themselves: the Relational-Interdependent Self-construal Scale (RISC; Cross et al., 2000), Quality of Relationship Inventory (QRI; Pierce, Sarason & Sarason, 1991) to measure closeness, plus the Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen & Griffin, 1985) to measure well-being. To assess relational cognition, respondents were presented with a list of 15 value/belief statements, and were asked to rank the importance of each value to their roommates. Roommates completed the RISC and relational cognition items in reference to themselves.

Results from Study 1 revealed that, in comparison to low-construal individuals, high construal respondents were more accurate in predicting their roommates' values/beliefs. However, this effect only held true when respondents had low closeness to roommates. In addition, construal moderated the relationship between closeness and well-being. More specifically, closeness was positively associated with well-being for high construal respondents, but negatively associated for low construal individuals. These findings suggest that relational-self construal influences whether one interprets closeness as beneficial or detrimental to individual wellness.

In Study 2, the authors evaluated the same associations from study 1 with a different sample and added a longitudinal element. Respondents (244 undergraduates) and their roommates (142 undergraduates) completed separate questionnaire packets, with respondents being measured at two points in time. At Time 1, respondents completed the RISC (Cross et al., 2000), plus the closeness and well-being measures in reference to themselves. Respondents also completed the closeness measure in reference to how they anticipated roommates would respond. Roommates completed the RISC and

the closeness measure in reference to themselves. One month after initial data collection, respondents completed the well-being measure again.

Results from Study 2 indicated that higher construal respondents provided more optimistic predictions of their roommate's perception of closeness. In comparing Time 1 and Time 2 data, there was no association between closeness and changes in well-being. However, there was a negative association between closeness and well-being changes for low construal individuals. These findings suggest that differences in relational self-construal can be meaningful in geographically close relationships (roommates) and that this geography does not assure psychological closeness.

In two studies, Gore and colleagues (2006) examined the associations between relational self-construal, self-disclosure, responsiveness and relationship quality. In Study 1, participants (156 undergraduates) and their roommates (95 undergraduates) completed separate questionnaire packets. Participants completed the following measures in reference to themselves: the RISC (Cross et al., 2000), five items from a scale by Miller, Berg and Archer (1983) to assess self-disclosure, plus a relationship quality index drawn from four different scales. Participants completed the social support subscale from the Quality of Relationships Inventory (QRI; Pierce et al., 1991) to measure responsiveness in reference to their roommates. Roommates completed the self-disclosure and responsiveness measures in reference to the participants. Roommates completed the relationship quality index in reference to themselves.

Results from Study 1 showed that participants high in construal were more likely to self-disclose and were seen by their roommates as more responsive. In addition, high

construal was positively associated with roommate-reported quality. These findings suggest that construal is associated with a competence domain (self-disclosure) that is associated with relationship formation. Thus, individuals high in construal might be more willing to share sensitive information about themselves in an effort to create a comfortable environment with roommates.

In Study 2, the authors evaluated the same associations from Study 1 with a different sample. Participants (241 undergraduates) and their roommates (142 undergraduates) completed separate questionnaire packets. Individuals completed the RISC (Cross et al., 2000), and a slightly different relationship quality index in reference to themselves. Participants also completed the measure of self-disclosure twice (once in reference to their own disclosure and once in reference to their view of the roommates' disclosure). Further, participants completed eight items from a scale used in a previous study by Cross and colleagues (2000) to assess their view of their roommates' responsiveness. Roommates also completed each of these measures in reference to themselves and the participants. Results from Study 1 were largely replicated with this sample, as participants high in construal were more likely to self-disclose, and were seen as more responsive by their roommates. Disclosure and responsiveness were positively associated with relationship quality. This same pattern was found in the roommates' data. Roommates high in construal were rated as more disclosing and responsive. These findings suggest that it is possible that similar levels of self-construal might facilitate prosocial patterns of interactions (e.g., disclosing and responding). If individuals see

themselves as relationally connected to roommates, they might behave in ways that foster shared knowledge and mutuality.

Heintzelman and Bacon (2015) completed two studies examining the associations between relational self-construal, social support and life satisfaction. In Study 1, each respondent (79 college students) completed a questionnaire packet containing the RISC (Cross et al., 2000), Multidimensional Scale of Perceived Social Support (Zimet et al., 1988), and Satisfaction with Life Scale (Diener et al., 1985). Results indicated that relational self-construal was positively related to support and satisfaction. Additionally, regression analysis revealed that an association between support and satisfaction was stronger for those high in construal. These findings suggest that social support is not inherently gratifying, but only has greater value for individuals who place an emphasis on interpersonal connectedness.

In Study 2, each respondent (284 college students) completed a questionnaire packet containing all measures from Study 1. In addition, respondents completed the Perceived Stress Scale (Cohen, Kamarck & Mermelstein, 1983). As in Study 1, results showed that construal (a) was positively related to support and satisfaction, and (b) moderated the support-satisfaction relationship. In addition, the support-satisfaction linkage was stronger for individuals with high stress and high construal. These findings suggest that, similar to attachment styles, stress might play an activating role in support-seeking efforts among high construal individuals.

In sum, prior research has enhanced knowledge of relational self-construal. In general, the literature has shown that construal is associated with communication

processes as well as certain relationship outcomes. Most of this research has focused on construal in specific relational contexts, such as roommates. While this research has been helpful, much less is known about how construal may be generalized across interactions. Additional research could add to our understanding of the ways in which construal is directly or indirectly associated with personal characteristics outside of specific relational parameters.

APPENDIX D

HAPPINESS LITERATURE

Happiness is a positive emotional state reflecting gratification in one's life. Lyubomirsky (2001) has noted that "[h]appiness includes the experience of joy, contentment, or positive well-being, combined with a sense that one's life is good, meaningful and worthwhile" (p. 239). Others have noted that happiness consists of a combination of the overall satisfaction plus the ratio of positive and negative emotions typically experienced (Diener, 1994; Demir, Ozdemir & Marum, 2011). In addition, it is shaped by how life events are perceived, interpreted, remembered, and experienced (Lyubomirsky, 2001). Thus, happiness is a subjective experience which is not dictated by external forces (Diener, Suh, Lucas & Smith, 1999; Lyubomirsky et al., 2006).

Some researchers have attempted to delineate associations to happiness. For example, Satici and colleagues (2016) examined the associations among subjective happiness, social connectedness, and loneliness. A sample of 325 Turkish undergraduate students completed a questionnaire packet containing the Subjective Happiness Scale (SHS; Lyubomirsky & Lepper, 1999), Social Connectedness Scale (Lee & Robbins, 1995), plus the UCLA Loneliness Scale (Hays & DiMatteo, 1987). Results revealed that connectedness was positively associated with happiness, whereas loneliness was negatively associated with happiness. Additionally, happiness mediated the connectedness-loneliness relationship. These findings suggest that social bonds or connections might not inherently serve as a buffer against loneliness. Rather, the degree

to which such bonds contribute to overall happiness might be an important element worthy of more empirical attention.

Segrin and Taylor (2007) explored the associations among (a) six indicators of well-being (happiness, life satisfaction, environmental mastery, self-efficacy, hope, and quality of life), (b) social skills and (c) positive relations with others. A community sample of 703 adults (\bar{x} =45 years) completed a questionnaire packet containing the brief version of the Social Skills Inventory (Riggio, 1986; Riggio & Canary, 2003), plus the Positive Relations with Others Scale (Ryff, 1989; Ryff & Keyes, 1995). In addition, the researchers utilized six measures that they stated measured psychological well-being: SHS (Lyubomirsky & Pepper, 1999); Satisfaction with Life Scale (Diener et al., 1985); Environmental Mastery Scale (Ryff & Keyes, 1995); Self-Efficacy Scale (Scherer, Maddox, Mercadente, Prentic-Dunn, Jacobs & Rogers, 1982); Hope Scale (Snyder, et al., 1991); and the Quality of Life Inventory (Frisch, Cornell, Villaneuva & Retzlaff, 1992). Results showed that social skills was positively related to happiness and all other well-being variables. Positive relations with others was (a) directly associated with more happiness and (b) a mediator of the skills-happiness relationships. These findings suggest that skills contribute to relationship-specific sentiment, which in turn contribute to global emotional states. Indeed, skills could be a generative factor in creating social situations in which positively-valenced affect might emerge.

Howell and colleagues (2011) examined the associations between happiness, life satisfaction, daily well-being (satisfaction, affect) and daily psychological needs (autonomy, competence, and relatedness). The sample of 132 undergraduate students

completed a questionnaire packet containing the SHS (Lyubomirsky & Lepper, 1999) and Satisfaction with Life Scale (SWLS; Diener et al., 1985). To assess well-being and psychological need variables, participants completed a daily survey for three consecutive nights. Daily satisfaction with the day was measured with two statements adapted from the SWLS. Positive and negative affect were each assessed with two items from the Positive and Negative Affect Schedule- Expanded Form (Watson & Clark, 1994). Autonomy, competence and relatedness were each measured with two items adapted from the Basic Need Satisfaction in Life Scale (BNSLS; Kashdan et al., 2006). Results revealed that each of the psychological needs (autonomy, competence, relatedness) was associated with (a) more life satisfaction, happiness, daily satisfaction and positive affect, but (b) less negative affect. These findings suggest that as individuals reflect on their day, the fulfillment of psychological needs enhances their overall well-being (including subjective happiness).

Demir and colleagues (2013) explored the relationships between happiness, friendship quality and uniqueness. The sample of 724 undergraduates completed a questionnaire packet containing the SHS (Lyubomirsky & Lepper, 1999), McGill Friendship Questionnaire-Friend Functions (MFQ-FF; Mendelson & Aoud, 1999), and Personal Sense of Uniqueness Scale (PSU; Simsek & Yalincetin, 2010). Personal uniqueness was conceptualized as having distinct worth within connection to others. Results showed friendship quality and uniqueness were positively related to happiness. In addition, the relationship between quality and happiness was mediated by uniqueness. These findings suggest that specific relationships, such as friendship, contribute to

individuals' sense of being valued. Consistent with the happiness definitions (e.g., Lyubomirsky, 2001), it seems reasonable that being valued contributes to a worthwhile and content existence.

Quoidbach, Berry, Hansenne and Mikolajczak (2010) examined the associations of happiness, positive affect, life satisfaction, and emotional intensity management. The sample of 282 individuals from a Belgian University included students and staff members. Each participant completed the SHS (Lyubomirsky & Lepper, 1999), Positive and Negative Affect Schedule (PANAS; Watson, Clark & Tellegen, 1988), Satisfaction with Life Scale (SWLS; Diener et al., 1985), and Emotion Regulation Profile-Revised (ERP-R; Nelis, Quoidbach, Hansenne & Mikolajczak, 2011) to assess savoring and dampening intensity strategies. The authors created a savoring score by summing the total number of strategies used, and a diversity score by identifying the different types of savoring strategies. Results showed that total savoring and savoring diversity were positively related to happiness. These findings suggest that there are multiple ways to make the best of positive emotions (savoring), and that expanding the range of these strategies may facilitate happiness.

In three studies, Demir, Haynes and Potts (2017) examined the associations between happiness, friendship quality, and capitalization responses. In Study 1, 302 undergraduates completed a questionnaire packet containing the SHS (Lyubomirsky & Lepper, 1999), McGill Friendship Questionnaire of Friend's Functions (MFQ-FF; Mendelson & Aboud, 1999) to assess friendship quality, plus the Perceived Responses to Capitalization Attempts Scale (PRCA; Gable, Reis, Impett & Asher, 2004) in reference to

a same-sex best friend. Results indicated that happiness was positively associated with friendship quality and capitalization responses. Additionally, the relationship between capitalization and happiness was mediated by friendship quality. These findings suggest that for same-sex best friends, capitalization responses from others serve to increase overall happiness by enhancing the quality of a particular relationship.

In Study 2, 541 undergraduates completed the same measures (as Study 1), but were asked to complete the MFQ-FF and PRCA in reference to a cross-sex friendship. Results indicated that friendship quality was associated with more happiness for both women and men. Happiness was positively related to capitalization responses for women, but not for men. Additionally, the relationship between capitalization and happiness was mediated by quality for women. These findings suggest that in cross-sex friendships, men do not experience a happiness benefit from capitalization responses that women experience.

In Study 3, 305 undergraduates completed the same measures, but were asked to complete the MFQ-FF and PRCA in reference to their three closest friends (best, first, and second close friend). The authors ran separate regressions for the three friendship types. Results indicated that capitalization responses and friendship quality were positively associated with happiness across all three types. In addition, quality mediated the capitalization-happiness association for all friendship types. These findings extend the associations found in Studies 1 and 2 to friendships of differing levels of closeness.

In sum, prior research has enhanced our knowledge of subjective happiness. More specifically, prior research has revealed that perceptions of individual characteristics and interactions with others were associated with happiness in unique ways. These trends were evident across specific relationships such as friendships, as well as generalized interactions. Although such research has been informative, further examination of constructs related to happiness is warranted. Additional research could further our understanding of contributors to increased or decreased happiness.

APPENDIX E

TEXAS TECH UNIVERSITY HUMAN DEVELOPMENT AND FAMILY STUDIES HDFS DOCTORAL DEGREE

GUIDELINES FOR ALTERNATIVE THESIS/DISSERTATION FORMAT

The HDFS Department will implement, on a limited, experimental basis, an alternative format for students' Master's theses and doctoral dissertations. The final product for either a thesis or dissertation would consist of a journal manuscript-length report of the project, with an extended literature review chapter (from the proposal defense) added as an Appendix.

1. RATIONALE

- The new format is aimed at expediting submission of a manuscript to a journal as quickly after the final defense as possible.

2. CONTENT-BASED GUIDELINES

The main report, containing all the typical elements (Intro, Methods, Results, Discussion) should not exceed 40 pages, including tables, figures, and references. This is intended more as a target, rather than an iron-clad rule. The literature-review Appendix should not exceed 30 pages. The following areas are ones that might be addressed in the Appendix:

- A fairly comprehensive review of previous studies bearing on the student's focal empirical question. Such a review should not be a simple recitation of findings; rather the student should also DRAW CONCLUSIONS from the previous findings.
- A fuller elaboration of some theory or methodological technique than would be possible in a journal-length report.
- A background report on the epidemiology of some phenomenon (i.e., what percent of the population has experienced some psychological disorder, and how estimates were obtained).

3. INITIATION OF ALTERNATIVE FORMAT

- Advisors can inform their students that this new, alternative format is currently available, or students can raise the idea with their advisors. Once the student and advisor agree to use this format, the student and/or advisor should mention this fact to prospective committee members as early as possible, so that the latter can make an informed decision as to whether they would like to participate in this "experimental" venture.

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4. OVERVIEW OF PROPOSAL AND FINAL DEFENSE STAGES

- Proposals under the alternative approach will probably look much like they currently do, in that a thorough literature review is necessary, which may largely be placed in the Appendix of the final version. Also, as with the traditional format, at the proposal defense the student would be examined largely on the literature review, conceptualization of the problem, hypotheses, and methods for conducting the study, whereas at the final defense, the focus would shift to the student's results and the interpretations, conclusions, implications, and applications the student drew from the findings.

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