



Theses and Dissertations

---

2011-07-07

## Adult Attachment: A Framework for Predicting Dating Patterns

Franklin Owen Poulsen  
*Brigham Young University - Provo*

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



Part of the [Family, Life Course, and Society Commons](#)

---

### BYU ScholarsArchive Citation

Poulsen, Franklin Owen, "Adult Attachment: A Framework for Predicting Dating Patterns" (2011). *Theses and Dissertations*. 2786.

<https://scholarsarchive.byu.edu/etd/2786>

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

Adult Attachment: A Framework for Predicting Dating Patterns

Franklin O. Poulsen

A thesis submitted to the faculty of  
Brigham Young University  
in partial fulfillment of the requirements for the degree of  
Master of Science

Thomas B. Holman, Chair  
Dean M. Busby  
Jason S. Carroll

School of Family Life  
Brigham Young University

August 2011

Copyright © 2010 Franklin O. Poulsen

All Rights Reserved

## ABSTRACT

### Adult Attachment: A Framework for Predicting Dating Patterns

Franklin O. Poulsen  
School of Family Life, BYU  
Master of Science

Although adult attachment has been the focus of a great deal of relationship research, few studies have attempted to examine how adult attachment style may be related to relationship initiation. This study investigates how adult attachment is associated with dating processes and patterns in a sample ( $N = 587$ ) of college students at a private religious university. Results indicate that attachment anxiety and attachment avoidance are related to a pattern of being mostly dateless in a twenty-five week period. Furthermore, attachment avoidance but not anxiety is related to having fewer relationships in the period. Along with attachment avoidance and anxiety, being less attractive was also predictive of being mostly dateless in the measured period, as was being female. Physical attractiveness is the strongest predictor of having dates, as well as having relationships, but is not predictive of relationship length.

Keywords: adult attachment, relationship initiation, dating patterns

## Table of Contents

Introduction.....	5
Review of Liturature.....	6
A Brief Review of Adult Attachment Theory.....	6
Adult Attachment Style and Relationship Formation.....	8
Control Variables.....	13
Research Questions.....	13
Method.....	14
Sample.....	14
Procedures.....	15
Measures.....	16
Results.....	20
Descriptive Statistics.....	20
Attachment Dimensions and Dating Processes.....	24
Attachment Categories and Dating Processes.....	27
Attachment Dimensions and Dating Styles.....	27
Post Hoc Analyses.....	29
Discussion.....	30
Attachment.....	31
Physical Attractiveness.....	33
Understanding Dating Styles.....	35
Implications.....	36
Future Research, Limitations and Conclusions.....	37
References.....	39

## List of Tables and Figures

Table 1. <i>Correlation Table</i> .....	44
Table 2. <i>Descriptive statistics for the dating process variables.</i> .....	45
Table 3. <i>Model fit statistics used to decide number of classes in the Latent Class Analysis</i> .....	46
Table 4. <i>Unstandardized coefficients and estimated percent change in predictor taken from zero-inflated Poisson regressions indicating the relationship between dating process variables and attachment dimensions.</i> .....	47
Table 5. <i>Estimated Means of attachment styles across dating process variables</i> .....	48
Figure 1. DISTRIBUTION OF THE VARIABLE CATEGORICAL ATTACHEMENT.....	49
Figure 2. ESTIMATED MEANS DEFINING CLASS MEMBERSHIP FOR THE DATING PROCESS VARIABLES.....	50
Figure 3. MODEL REPRESENTING RELATIONSHIPS BETWEEN ADULT ATTACHMENT DIMENSIONS AND THE PROBABILITY OF MEMBERSHIP IN A SPECIFIC CLASS OF DATERS AS IDENTIFIED BY PATTERNS IN INDIVIDUALS' DATING PROCESSES.....	51

## Introduction

Since Hazan and Shaver's application of attachment theory to romantic relationships (Hazan & Shaver, 1987) there has been a considerable amount of research investigating adult attachment as a predictor of couple functioning, processes, and outcomes. Most of this research has focused on how attachment style can be used to predict quality or maintenance in later stages of a committed relationship. However, researchers have given less attention to how attachment is related to success in relationship initiation (Eastwick & Finkel, 2008), and very few studies have actually explored the link between attachment style and an individual's dating patterns (i.e. progression from not-dating, to casual dating, to exclusivity). The purpose of this study is to discover how adult attachment is associated with dating patterns in a sample of young single adult college students.

There are at least two very good reasons for investigating how attachment is related to relationship formation. For one, although marriage rates have declined in America over the past several decades (Cherlin, 2003), most Americans will marry at least once in their lives (Goldstein & Kenney, 2001) and the overwhelming majority of American's value marriage as extremely important (Thornton & Young-DeMarco, 2001). If adult attachment insecurity does—as theory suggests—lead to difficulty in initiating relationships and progressing those relationships to higher levels of commitment, then many Americans who deal with attachment insecurity may find themselves severely disadvantaged as they attempt to reach their goal of marriage. In a culture where the average age at first marriage is approaching thirty (U.S. Census Bureau, 2010), adults with attachment security issues may find themselves on the high end of the average, and although late marriage alone is not necessarily negative, it may among other things reinforce that nobody can or will be there to provide security.

The second reason is closely related to the first and deals with the issue of selection. Again, if theorists are correct and attachment insecurity is a disadvantage in relationship initiation, then insecure adults not only face the possibility of prolonged singleness, they might also feel obliged to be far less selective in whom they choose to date and eventually marry. This of course might have implications for marital quality and stability. Thus, individuals with adult attachment insecurity may marry far later than they desire and may find themselves married to an individual with whom they are not very satisfied.

## **Review of Literature**

### **A Brief Review of Adult Attachment Theory**

According to Bowlby (1973), the attachment system is a behavioral system innate in all humans that motivates individuals to seek proximity in order to assuage them of fears or distress. Attachment theory proposes that children learn behavioral strategies and develop a working model of relationships based on early interaction experiences with attachment figures (usually parents). Children who see their attachment figures as available and responsive to their needs typically develop attachment security. However, when a child sees their attachment figures as unavailable and not supportive, the child may develop attachment insecurity. When the latter occurs the child may develop representations of themselves and others, and adopt proximity seeking strategies that are ineffective at filling their needs and calming their fears (Shaver & Mikulincer, 2006). Typically these ineffective strategies fall into the two categories of anxious and avoidant. Anxious behavior is characterized by exhibiting extreme distress when the caregiver is unavailable followed by ambivalence toward the caregiver when he/she returns. Avoidant children often seem untroubled by their caregiver's absence and upon reuniting typically avoid contact. Although attachment theory was initially applied to infant and child

development, Bowlby proposed that attachment systems formed in infancy may guide behavior "from the cradle to the grave"(Bowlby, 1979, p. 129).

Beginning in the late 1980's, scholars began applying an attachment framework to the study of adult romantic relationships, suggesting that this behavioral system is active as adults seek to form and maintain romantic relationships. Since then, researchers have substantiated that adult attachment relationships in many ways mirror the infant-caregiver relationships observed by Ainsworth et al. (1978). For example, secure base behaviors exhibited by children, wherein they seek proximity to their caregivers during duress, have been identified as a behavioral strategy used commonly among romantic adult partners who utilize each other as a secure base to which they can return in times of distress (Simpson et al.1992). Furthermore, just as insecure children tend to utilize ineffective strategies in fulfilling their attachment needs, Zeifman and Hazan (2000) proposed that insecure adults are often ineffective in fulfilling their attachment needs in a romantic context. Thus, reasons for applying an attachment framework to romantic adult relationships are well established; however, the two are not always conceptualized in the same way.

Ainsworth et al. (1978), in her early strange situations experiments, measured infant-caregiver attachment as a three category measure. This measurement system was subsequently adopted by Hazan and Shaver (1987) in their early work exploring adult attachment. Since then adult attachment has typically been conceptualized as either a continuous measure that accounts for more or less anxiety or avoidance, or a categorical measure which attempts to assign individuals within a sample to three or four attachment styles (Ravitz, Maunder, Hunter, Sthankiya & Lancee (2010).



Dimensional measures focus on determining how individuals score on attachment anxiety (the extent to which an individual worries about a partners' availability in time of need) or attachment avoidance (the extent to which an individual seeks behavioral independence and emotional distance and is wary of a partners' goodwill) (Shaver & Mikulincer, 2006). In dimensional measures no benchmarks exist for labeling an individual as being any one style, rather individual scores reflect relative anxiety or avoidance as compared to others in a given sample, and thus each individual is simply more or less anxious, and more or less avoidant. When viewed as a categorical measure combining scores on the attachment anxiety dimension and the attachment avoidance dimension results in the characterization of an individual as having a secure (low on both avoidance and anxiety) anxious (high on anxiety) , or avoidant (high on avoidance) attachment style. Still others test a four category model that measures all the possible combination of high and low avoidance and anxiety. This model introduced by Bartholomew and Horowitz (1991) characterizes individuals as having a secure, preoccupied, dismissive-avoidant or fearful-avoidant attachment style. The current study will consider both continuous and categorical measures.

### **Adult Attachment Style and Relationship Formation**

In the last two decades since Hazan & Shaver (1987) laid the foundation for applying attachment theory to adult romantic relationships, a large body of literature has emerged in this area (see Miklincer & Shaver, 2007 for an encyclopedic review). Even so, in a recent summary of attachment theory and research as it applies to romantic relationship initiation, Creasey & Jarvis (2008) recognized that “most studies in this area are contrived in a hypothetical manner”, and that “although it seems prudent to theorize that secure adults are more likely to successfully initiate potential romantic relationships, this idea has not been tested well” (p.80). Furthermore

Eastwick and Finkel (2008), suggest that there is little research exploring how attachment is related to how individuals move through early relationship stages. The current study is interested in addressing these gaps in the literature. Before going there however, it will be helpful to review studies which have shown hypothetically, as Creasey & Jarvis (2008) suggested,—that attachment behavior is discernable even in the earliest stages of relationship formation, and that these behaviors have implications for the success or failure of relationship advancement.

In the late eighties, Cassidy and Kobak (1988) showed how insecure individuals used *hyperactivating* (characteristic of anxious individuals) and *deactivating* strategies (characteristic of avoidant individuals) as a defense mechanism in attachment relationships. More recently Shaver and Mikulincer (2006) summarized the literature by modeling these strategies in relation to three behavioral constructs at play in early relationship formation. They asserted that in the relationship formation process the literature suggests attachment strategies are likely most directly manifest in an individual's emotional tone, self-presentation, and self-disclosure. Specifically, secure individuals use appropriate strategies such as a positive and warm emotional tone, are balanced in their self-disclosure and are authentic in their self-presentation. Contrastingly, anxious individuals typically engage in *hyperactivating* strategies such as indiscriminate self-disclosure, negative emotional tone, and self-defeating presentation, whereas avoidant individuals use *deactivating* strategies such as detachment, self-inflating presentation, and resisting disclosure. Because clearly expressing interest and using appropriate levels of disclosure are among the most effective rapport building strategies that fuel progression in early relationships (Clark, Shaver, & Abrahams, 1999), these strategic differences across attachment

style provide a strong theoretical argument for differences in relationship initiation and dating patterns. How these strategies play out in a dating context is not so clear.

A few hypothetical attempts to explain the association between dating patterns and attachment style are helpful. For example, Pietromonaco and Carnelley (1994) asked participants to imagine being in a relationship with individuals who displayed secure, avoidant, or anxious behavior. They found that participants were less inclined to be interested in dating individuals who were characterized as avoidant. Chappell and Davis (1998) conducted a very similar study wherein they asked approximately 1000 college students to respond to specific scenarios that depicted relationships with a hypothetical partner who was either anxious, avoidant or secure. While participants were more apprehensive about dating anxious and avoidant people as compared to secure individuals, participants reported the greatest apprehension when faced with the possibility of dating an avoidant individual. Based on these findings we assume avoidant individuals would face challenges in the early stages of a relationship that would differentiate them from anxious and secure individuals.

Hazen and Shaver (1987) found that on self-report measures, anxious individuals typically express that they fall in love quickly. At the same time however, they are also apt to report that others are not as willing and able to commit as they are (Hazen & Shaver, 1987). This research seems to suggest that anxious individuals may indeed have frequent first dates, but are not any more likely to move to a committed relationship due to partners' unwillingness to reciprocate.

Using three different samples of college students Klohnen & Luo (2003) asked participants to rate hypothetical partners on various aspects of attraction. They found that secure individuals were rated as more attractive than anxious individuals, and that anxious individuals

were rated as more attractive than avoidant individuals. Because adults who see themselves as attractive are more likely to initiate dating relationships (Clark, Shaver, & Abrahams, 1999), it would make sense that secure individuals would have qualitatively different dating experiences than their avoidant or anxious counterparts.

The above research reasonably suggests that attachment style may be related to an individual's success in moving from not-dating to forming a casual and subsequent exclusive relationship. However, as Creasy and Jarvis (2008) suggest there is very little hard evidence pointing to that reality. In fact, only two studies were found that specifically looked at dating patterns and their relationships to attachment style.

The first study that made a direct connection between dating patterns and adult attachment was conducted by Sanford (1997). This study was primarily interested with validating the two dimensional adult attachment model, discussed earlier in this paper, using both a married and non-married sample. Ancillary to this central interest, Sanford also looked at the relationship between attachment style and dating frequency among the 214 non-married participants in his sample. Although how exactly dating frequency was measured is unclear, the findings showed that after controlling for dating status (whether or not they were dating steadily), individuals attachment closeness (this was a reverse coded avoidance measure) was positively correlated with dating frequency. A significant negative correlation emerged between high attachment anxiety and dating frequency. The correlation between dating frequency and attachment closeness was significantly higher than the correlation between dating frequency and attachment anxiety. In sum, Sanford (1997) found that being either attachment avoidant or anxious was related to less frequent dating compared to being secure, and that the relationship

between attachment avoidance and dating frequency was considerably stronger for avoidant ( $R^2 = .07$ ) than for anxious ( $R^2 = .01$ ).

The second study is more recent and more closely resembles the current study. Schindler, Fagundes and Murdock (2010), conducted a study with the primary goal of exploring whether or not attachment predicted progress from not-dating, to casual dating, to exclusivity. Their sample of 90 college students was followed for a period of nine months. Follow up was done using an online assessment to track their dating progress. How often they were tracked is unclear as is the length of time each participant actually participated. Their findings revealed no association between attachment anxiety and a greater likelihood to date or to commit to a romantic partner. Although avoidance had no association with a decreased likelihood to date, attachment avoidance was associated with a decreased likelihood to enter a committed relationship. Though this study provided the best evidence for how attachment styles relate to an individual's relationship formation, sample size, among other things, was a limitation affecting the strength of the findings.

In one additional study (McClure, Lydon, Baccus and Baldwin, 2010) the researchers tested the relationship between attachment style and success in a speed-dating context. McClure et al. (2010) showed that among a sample of speed daters, anxious individuals used a *hyperactivating* approach and were unpopular as dating partners. This however, had different implications for males and females. Because males were typically in the position of asking women out, they missed fewer opportunities than their secure or avoidant counterparts but also made more failed attempts to get dates. In the end they made very few matches. Females on the other hand, while still unpopular as compared to their avoidant and secure counterparts, made as

many matches as avoidant and secure individuals. However, anxious females were less selective about potential matches to begin with, thus their success may be due more to lower expectations.

### **Control Variables**

Past research has suggested that it is important to control for certain factors that may also be influencing the relationship between adult attachment and relationship processes. For example, Maner et al. (2003) showed that without any other information people are more likely to attend to, and in the case of males, remember those they consider physically attractive. Furthermore, Hazan and Diamond (2000) showed that the physical attractiveness of a potential partner often spurs relationship initiation. As the current study investigates how attachment is related to dating patterns at the very cusp of relationships where relatively little information has been acquired about the potential partner, it is necessary to control for physical attractiveness in our analyses.

Gender is also a factor that needs to be considered when testing the relationship between adult attachment and relationship processes. Based on findings by McClure et al. (2010) showing different outcomes for anxious males and females in their success in a speed dating experiment, it is likely that being female will act as a buffer in dating at least for anxiously attached females. It is unlikely that this same buffer will exist for avoidant individuals however, since the anxious females were only buffered because of their desire to respond yes indiscriminately when petitioned by males. McClure et al. (2010) found no such association for avoidant individuals. Nonetheless, gender was included as a control variable in all analysis.

### **Research Questions**

As there were only three studies found (including the speed-dating experiment) that explored the relationship between attachment style and dating patterns in a non-hypothetical

manner, and these studies had conflicting findings, it is not clear exactly how attachment style may actually influence how people date. Furthermore, although the theoretical literature suggests there are differences in how secure, anxious, and avoidant individuals will engage in relationship initiation strategies, it is still unclear how these encounters may actually play out in real life. Lastly, the literature reveals some disagreement on how adult attachment should be conceptualized in order to best capture attachment behavior, which further complicates a determination of how attachment may relate to relationship initiation. We therefore felt it prudent to explore these constructs using both categorical and continuous measures of attachment. Based on our reading of the literature the following questions are presented to explore how attachment orientation and dating patterns may be related.

**Question #1:** How are the two dimensions of attachment anxiety and attachment avoidance related to specific dating processes, under the conditions of variation in attractiveness and gender differences?

**Question #2:** Are there differences in how individuals across four attachment categories (secure, preoccupied, dismissive-avoidant and fearful-avoidant) participate in specific dating processes under the conditions of variation in attractiveness and gender differences?

**Question #3:** Do the two dimensions of attachment anxiety and attachment avoidance predict qualitatively different dating styles under the conditions of variation in attractiveness and gender differences?

## **Method**

### **Sample**

The data were gathered in 2010 and 2011 as part of the Pathways to Marriage study conducted at Brigham Young University (BYU). Seven-hundred and five participants were

recruited by ten researchers who went door to door within a pre-selected geographic area. This area had a high concentration of apartment complexes and houses generally rented by students and working young adults. The sample was limited to exclude individuals who were already in a committed relationship at the time of the first data collection. The final sample consisted of 587 individuals, 53% of whom were female. Ninety-five percent of participants were Caucasian and between 18 and 30 years of age with a mean age of 22 for males and 20 for females. All but 6 individuals were members of The Church of Jesus Christ of Latter-day Saints (LDS). This is important because research has shown that LDS young people are culturally different than the U.S. population at large in their relationship initiation and marriage behaviors. Specifically, LDS young people marry younger, and have shorter courtships before marriage compared to the LDS population (Schaalje & Holman, 2007). Furthermore, LDS young people at BYU date at a much higher rate than coeds nationally (Chadwick, Top, McClendon, Hudd & Smith, 2007).

### **Procedures**

Participants completed the READY online assessment, a 300 plus item questionnaire that measures a variety of dating and relationship contexts including attitudes about marriage, risk behaviors, family of origin functioning, attachment style, etc. The validity and reliability of the measurement scales have been established in previous studies (for details see Busby, Holman & Taniguchi, 2001). Participants also responded to a weekly text message for twenty-five weeks asking them to indicate any relationship transitions in the last week and the name of the individual with whom that transition occurred.

Lastly, a profile was set up on Facebook and participants were invited as friends of the study. This allowed access to their wall, information page and pictures. A picture of each



individual was then selected and edited so that they would uniformly show the shoulders and face of all participants.

## Measures

**Dating Processes.** Dating processes were measured using responses from the weekly text messages. As text messaging only allows 160 characters per message participants were instructed at the outset of the study to respond to the following cue. “Relationship transitions in the last week. Respond with Letter and Persons Name.” Response options were; (a) No date, (b) First Date, (c) 2<sup>nd</sup> or more date with the same person, (d) In an exclusive relationship, (e) Engaged. (f) Broke-up, (g) Other specify. Respondents were asked to include all dates they may have been on in the previous week, including multiple dates with the same partner. They were also instructed to give the name(s) of the individual(s) with which they went on a date. This allowed us to construct several variables measuring how often and how long participants dated certain individuals. Using the data collected through text messaging the following dating patterns were isolated.

The first measure, *Number of Dateless Weeks* represents the number of weeks an individual reported not having a date of any kind. As respondents were followed for twenty-five weeks, higher numbers reflect a pattern of less dating. This variable was measured by counting the total number of weeks that the participant responded with the letter “a” signifying they did not go on a date that week.

The second dating process isolated from the text data was *Number of 1<sup>st</sup> Dates*. This variable reflects how many first dates an individual participated in during the week preceding the text. This variable was measured by counting the total number of “b’s” (1<sup>st</sup> dates) respondents

indicated they had been on each week. Higher numbers reflect a dating process of consistent dating but not necessarily dating that progresses toward commitment.

The *Number of 2<sup>nd</sup> or more Dates with the Same Individual* an individual participated in was measured by counting how many “c’s” (indicating 2<sup>nd</sup> or more dates with same individual) respondents said they had during the week. Higher numbers of 2<sup>nd</sup> or more dates reflects a dating pattern of consistently dating the same person. Although these are not committed relationships they likely reflect a degree of attraction and liking by one or both of the partners.

The *Number of Relationships* an individual had over the course of the twenty-five weeks was measured by counting the first “d” the respondent reported indicating they were exclusive. Many individuals reported “d” consistently for many weeks as long as they remained in that relationship, and some of those relationships continued through the end of the twenty-five weeks. Multiple relationships were identified by looking for “f’s” that followed “d’s”, as this indicated a break up. As respondents were also asked to give the names of the individuals they dated, checks were made to ensure the exclusive relationship and the break-up were with the same person. Although twenty-five weeks allowed us to measure multiple relationships for a few people, this was not the case for most participants, having one or more relationships is nonetheless indicative of a committed dating process.

*Relationship Length* measures how long the relationship lasted from the time the individual considered the relationship exclusive till the time the individual considered the relationship over. This variable was computed by subtracting the time of first “d” indicating they were exclusive from the time of the first subsequent “f” indicating a break up. Names were checked to ensure the respondent was referring to the same person. Relationship length was

computed for all relationships reported in the twenty-five week period. Although rare, some individuals may have had more than one relationship over the time period.

*Weeks to Exclusivity* represented the number of weeks between the first date the individual reported going on with a partner until the date the individual reported being exclusive with that person. This variable was measured by computing the number of days between (b) first date and (d) when they indicated they were exclusive. This measure indicated how slowly or quickly individuals moved into a committed relationship.

The last dating process measure was *Number of Break-ups*. This variable measures how many break ups each individual reported in the twenty-five week period. It was measured by counting the number of “F’s” reported by each individual. Because many individuals continued in their relationships beyond the period of our study this variables becomes an indicator of how quickly individuals move through relationships.

**Adult Attachment Style.** As indicated in the review of literature, *Adult Attachment Style* is often measured as a four category construct (see Bartholomew & Horowitz, 1991) or as two continuous dimensions—avoidance and anxiety. The current study tests both continuous and categorical measures.

**Attachment Dimensions.** Attachment dimensions of avoidance and anxious were measured using items from READY that were derived from the Adult Attachment Questionnaire (AAQ) (Simpson, Rholes, & Phillips, 1996) Avoidance was measured on an eight item scale that gauges the degree to which respondents (1) see themselves as comfortable having others depend on them, (2) find it difficult to trust others completely, (3) find it relatively easy to get close to others, (4) are comfortable having to depend on other people, (5) like people getting close to them, (6) are uncomfortable being close to others, (7) are nervous whenever anyone gets too

close to them, and (8) see that others want them to be more intimate than they feel comfortable being. Response options were a seven point Likert-type scale ranging from *Strongly Disagree* to *Strongly Agree*.

Anxious attachment was measured using nine items that asked the extent to which respondents (1) worry about being abandoned by others, (2) view others as reluctant to get as close as they would like, (3) worry that their partner does not really love them, (4) worry about their partner leaving them, (5) want to merge completely with others, which sometimes scares people, (6) are confident that others would never hurt them by suddenly ending the relationship, (7) want more closeness and intimacy than others do, (8) rarely thinks about others leaving them, and (9) are confident that their partner loves them just as much as they love their partner. Response options were a seven point Likert-type scale ranging from *Strongly Disagree* to *Strongly Agree*.

**Categorical Attachment.** Attachment styles were constructed using the mean scale scores above. The appropriateness of constructing categories in this manner has been demonstrated by Bartholomew & Horowitz (1991). Mean-splits on the two dimensions resulted in four discreet categories of secure (low-avoidance and low-anxious), preoccupied (low-avoidance and high-anxiety), dismissive-avoidant (high-avoidance and low-anxious), and fearful-avoidant (high-avoidance and high-anxious).

**Physical Attractiveness.** Finally, *Physical Attractiveness* was measured using the pictures gleaned from participants' Facebook sites. *Physical Attractiveness* reflects the extent to which raters perceive a target as having physical features that are appealing to them. While this is subjective, research has shown that individuals are fairly consistent in their judgment of physical attractiveness (Sugiyama, 2005). In the present study, physical attractiveness was

measured by having five research assistants rate participants' pictures. The pictures were selected from Facebook based on two criteria. The first was that they appeared to be a representation of the respondents' most attractive self. Second, pictures were selected that showed the upper torso and face of respondents. The scale was 1-7 with one indicating very unattractive and seven indicating very attractive. Correlations were computed between research assistants, as a means of testing consistency across raters. Correlations across raters range from .50 to .62.

**Gender.** Gender was measured using an item from the READY assessment that simply asked respondents to indicate their biological sex. Response options were male and female.

**Age.** Age was measured using an item from the READY assessment that simply asked respondents to indicate their age in years. The response option was open ended.

**Dating Styles.** Dating *styles* as distinct from dating *processes* are measures that will emerge from the analysis conducted to answer question number three. This measure will be computed by including all of the dating process measures outlined above in a Latent Class Analysis (LCA).

## Results

### Descriptive Statistics

A number of significant correlations existed between variables in the sample (see Table 1.); however, none of them indicated multi-collinearity. The dating process variables were all count variables and thus had a non-normal distribution. Most were zero inflated. Furthermore, the variables *Number of Relationships*, *Weeks to Exclusivity*, *Relationship Length*, and *Number of Break-ups* only included responses for the individuals to which they applied. Table 2 includes basic statistical information for each of the dating process variables.

A look at these variables suggests that there is wide variation in how the participants in this sample experience dating. For example, the mean number of dateless weeks was almost 10, the mean number of first dates was 3.63 and mean number of second plus dates with the same individual was 2.26. Thus, in a 25 week period the average individual in our sample went on around 6 dates and went about 10 weeks without a date. There was however quite a bit of variation on these variables. Nearly twelve percent of the sample did not go a single week without a date in the twenty-five week period, and almost twenty-five percent of the sample had fifteen or more weeks without a date. Seventeen percent of respondents did not report any first dates in the measured period and about thirty-seven percent reported zero second or more dates with the same partner. About 5 percent of respondents had more than ten first dates in twenty-five weeks and not quite 3 percent had more than ten second or more dates with the same partner.

There was also a wide range of variation in the variables *Weeks to Exclusivity* and *Relationship Length*. Means suggest the average individual moved quickly into a relationship ( $M = 3.89$ ) and stayed in the relationship a little over 9 weeks. This is confirmed by the fact that almost forty percent of the sample became exclusive in two weeks or less, and only five percent dated for more than 9 weeks before they declared exclusivity. About thirty-percent of relationships lasted 3 weeks or less, and about 10 percent of the relationships formed lasted over 20 weeks.

The means and standard deviations of the attachment dimensions anxiety and avoidance were ( $M = 3.46$ ,  $SD = .98$ ) and ( $M = 3.21$ ,  $SD = 1.05$ ) respectively. The variable *Categorical Attachment* was created by splitting the two dimensions of anxiety and avoidance on either side of the means above. Figure 1 models the distribution of this variable. The category Secure had

$N = 174$  individuals, Preoccupied had  $N = 133$ , Dismissive-Avoidant had  $N = 134$ , and Fearful-Avoidant had  $N = 141$ .

In order to create the variable *Dating styles* latent class models were fit using the dating process variables (*Number of Dateless weeks*, *Number of 1<sup>st</sup> Dates*, *Number of 2<sup>nd</sup> or more dates with the same individual*, and *Relationship Length*). The variables *Weeks to Exclusivity*, and *Number of Break-ups* were not used in this analysis because the variables were under-dispersed due to the fact that they were not measured for all individuals. *Number of Relationships* was included in the analysis but was recoded due to under-dispersion. Because so few individuals had more than one relationship (20), the variable was recoded to act as a binary indicator of relationship (1) or not (0).

In LCA “...the goal is to classify individuals into distinct groups or categories based on individual response patterns so that individuals within a group are more similar than individuals between groups” (Jung & Wickrama, 2008). Using Mplus (Muthe´n & Muthe´n, 2006) a sequence of six (2-class through 7-class) models were estimated. Each model was computed using 2000 random starts and 200 final stage optimizations. This was done in order to avoid local maxima and ensure the resulting estimates were based on a global likelihood. The model selection is best determined by using the sample-size adjusted Bayesian information criteria (adjusted BIC), and the Lo, Mendell, and Rubin (2001) likelihood ratio test (LMR-LRT) (Jung & Wickrama, 2008). The LMR-LRT compares the current model with the model with one less class and then provides a  $p$ -value to reveal whether or not a significant difference exists. Thus, the model with the lowest adjusted BIC, and significantly better LMR-LRT than the previous model should be the model that classifies individuals into the best possible category based on the selected variables (see Nylund, et al, 2007, for a more detailed discussion on fit indices). Table 3

provides a comparison of fit information for the 2-class through 7-class models. Results of the LCA revealed that six classes fit the data best,  $BIC = 10134.687$ ,  $LMR-LRT = 152.016$ ,  $p\text{-value} = .000$ , Entropy was  $.922$ . About 13% of the sample fell into Class one, 9% of the sample fell into Class two, 9% in Class three, 24% in Class four, 6% in Class five and 38% in Class six. A representation of mean scores on each of the variables for each class can be viewed in Figure 1. Class one was characterized by an average of 8.8 dateless weeks in the 25 week period, followed by 4.8 first dates, fewer second plus dates with the same person and relationships that lasted an average of 3.2 weeks. The probability of individuals in this class of having a relationship was 1.00. Class two was characterized by 4.4 dateless weeks, few first dates ( $M = 3.4$ ), fewer second plus dates ( $M = 2.9$ ) and relationships that lasted 11.4 weeks long, the probability of individuals in this class having a relationship was 1.00. Individuals in Class three had averages less than one on all the variables. The probability of individuals in this class having a relationship was  $.02$ . Class four was defined by 8.4 dateless weeks, an average of 6.6 first dates and 4.9 second plus dates with the same person. Individuals in this class averaged zero for relationship length and thus their probability of being in a relationship was zero. Individuals in Class five averaged less than one on the variable dateless weeks, 1.1 for first dates, 1.4 second dates and relationships that lasted 19.9 weeks on average. The probability of individuals in this class having a relationship was 1.00. Lastly, Class six was characterized by an average of 15.5 dateless weeks, 2.6 first dates, less than one second plus dates with the same person and zero relationships. The probability of being in a relationship was zero. Based on the characteristics that defined each class, Class one was named (Daters who commit), Class two (Short Relationships), Class three (Infrequent responders), Class four (Frequent Daters), Class five (Long Relationships), and Class six (The Dateless).



## Attachment Dimensions and Dating Processes

To answer the first question—how are the two dimensions of attachment anxiety and attachment avoidance related to specific dating processes, under the conditions of variation in physical attractiveness, age and gender differences—regression analyses were conducted. King, (1989) proposes that due to their non-normal distribution and their potential for having inflated zero values, count variables of similar events in a given time period necessitate the calculation of a zero-inflated Poisson distribution model. All of the dating process variables except *Weeks to Exclusivity* and *Number of Break-ups*, fit these assumptions; thus, regression analyses were conducted in Mplus (Muthe'n & Muthe'n, 2006) using a zero-inflated Poisson model to determine whether attachment avoidance or anxiety predicted changes in the dating process variables (*Number of Dateless Weeks*, *Number of 1<sup>st</sup> Dates*, *Number of 2<sup>nd</sup> or more Dates with the Same Individual*, and *Relationship Length*). Although the variable *Number of Relationships* fit the zero-inflated assumption, because of the short time period of twenty-five weeks only a few individuals had more than one relationship. Thus, there was not enough dispersion in the variable to treat it as zero-inflated. Instead it was used in a Poisson regression analysis without predicting the zero portion. *Weeks to Exclusivity* and *Number of Break-ups* were also modeled in this matter.

Zero-inflated Poisson models estimate two models. The first model predicts the value of the dependent variable for individuals who are able to assume values of zero and above. The second model predicts the probability of being unable to assume any value except zero (Muthe'n & Muthe'n, 2006). Thus, for each zero-inflated Poisson regression, results for both the count and the zero-inflated portions of the model are reported. In total, eleven total regression analyses were computed, eight of which were zero-inflated Poisson models including both a count and a

zero portion, and three that followed a Poisson distribution but was not zero-inflated. See Table 4 for a detailed view of coefficients and  $p$ -values.

Of the eleven models calculated, the attachment dimensions were significant predictors in only five. In the first of these, the independent variable attachment anxiety was used to predict *Number of Dateless Weeks* while controlling for age, attractiveness, and gender. Attachment anxiety was a significant predictor of *Number of Dateless weeks*. The expected change in *Number of Dateless Weeks* for a one unit change in attachment anxiety was ( $\beta = .052$ ). According to Atkins and Gallop (2007), regression coefficients from a Poisson model can be interpreted as a percentage change in the expected counts by applying the formula  $100(\exp^{\beta \cdot \delta} - 1)$ , where  $\beta$  equals the regression coefficient,  $\delta$  equals the standard deviation in the predictor and  $\exp$  signifies exponentiation of the product. Using this formula the relationship can be translated to show that a one standard deviation increase in attachment anxiety is related to a 5% increase in dateless weeks. Attachment anxiety did not significantly predict the zero-inflated portion of the model.

Attachment anxiety was not a significant predictor of any of the remaining dating process variables. However, under the conditions of change in age, attractiveness, and gender, attachment avoidance was a significant predictor of *Number of Dateless Weeks*, *Number of Relationships* and *Number of Break-ups*. The expected change in *Number of Dateless Weeks* for a one unit change in avoidance was ( $\beta = .073$ ), which translates into an 8% increase in the *Number of Dateless weeks* for every standard deviation increase in attachment avoidance. For *Number of Relationships* the log count was ( $\beta = -.190$ ). The expected decrease in *Number of Relationships* for a one standard deviation change in attachment avoidance was 18%. Finally, a one unit increase in attachment avoidance translates into a 61% decrease in number of break-ups

( $\beta = -.90$ ). Attachment avoidance did not predict the zero portion of the models for the variables *Number of Dateless Weeks*, *Number of Relationships* and *Number of Break-ups*

Lastly, although attachment avoidance did not predict the count portion of the model with *Relationship Length* as the dependent variable, it was a significant predictor of the zero-inflated portion of the model. The log count was ( $\beta = .288$ ), indicating attachment avoidance was positively associated with zero weeks of being in a relationship.

Beyond the attachment variables, age was a significant predictor of *Weeks to Exclusivity* ( $\beta = -.108$ ), such that a one unit increase in age translates to a 19% decrease in *Weeks to Exclusivity*. Gender (0 = female) was a significant predictor of the count portion of *Number of Dateless Weeks* ( $\beta = -.290$ ), and *Weeks to Exclusivity* ( $\beta = .646$ ), as well as the zero portion of *Number of 2<sup>nd</sup> or more Dates with the Same Individual* ( $\beta = 1.175$ ). The relationships were such that females on average have 13% more dateless weeks, and take 32% longer to move to exclusivity in a 25 week period than do males. Furthermore, males are more likely to have zero *2<sup>nd</sup> or more Dates with the Same Individual*.

Physical attractiveness did not predict *Weeks to Exclusivity* in the Poisson regression analysis. However, physical attractiveness predicted the count portion of the model for all of the other dating process variables except *Relationship Length*. In the case of *Relationship Length* physical attractiveness only predicted the zero-inflated portion of the model ( $\beta = -.423$ ). Thus, physical attractiveness is negatively associated with the probability of having a relationship longer than zero weeks. Physical attractiveness predicted *Number of Dateless Weeks* ( $\beta = -.170$ ), which translates into a 16% decrease in *Number of Dateless Weeks* for every one unit increase in physical attractiveness. Physical attractiveness predicted *Number of Relationships* ( $\beta = .293$ ), such that a one unit increase in physical attractiveness translates into a 36% increase in *Number*

*of Relationships*. A one unit increase in physical attractiveness predicted an 11% increase in *Number of 1<sup>st</sup> Dates* ( $\beta = .103$ ), a 28% increase in *Number of 2<sup>nd</sup> or more dates with the same individual* ( $\beta = .239$ ), and a 62% increase in *Number of Break-ups* ( $\beta = .188$ ). Physical attractiveness also predicted the zero-inflated portion of the model for the variable *Number of 2<sup>nd</sup> or more dates with the same individual* ( $\beta = -.259$ ). See Table 4 for all the regression results.

### **Attachment Categories and Dating Processes**

The second research question addressed whether there were differences in how individuals across the four attachment categories (secure, preoccupied, dismissive-avoidant and fearful-avoidant) participated in specific dating processes. To determine if mean scores in the model were significantly different between categories, a one-way multivariate analysis of variance with covariates (MANCOVA) was performed to determine the effect of the independent variable (Categorical Attachment) on the dependent variables (*Number of Dateless weeks*, *Number of 1<sup>st</sup> Dates*, *Weeks to Exclusivity*, *Number of 2<sup>nd</sup> or more dates with the same individual*, *Number of Relationships*, *Relationship Length* and *Number of Break-ups*). Age, gender and physical attractiveness were entered as covariates. The multivariate F-Test was not significant indicating that the independent variable did not have a significant effect on the dependent variables Wilks's Lambda = .82,  $F(21, 224) = .740$ ,  $p = .789$ ,  $\eta^2 = .065$ . Due to the non-significance of the Wilks's Lambda univariate tests were not interpreted.

### **Attachment Dimensions and Dating Styles**

The third question—do the two dimensions of attachment anxiety and attachment avoidance predict qualitatively different dating styles—was answered by using the attachment dimensions of anxiety and avoidance to predict the classes that emerged from the LCA (see Figure 2.). This was done in Mplus using Structural Equation Modeling (SEM). Results of the

LCA were extracted as posterior probabilities for each individual in the sample. These probabilities represent the likelihood of membership in each of the six classes. Running an SEM using all six classes in the model will not converge because probabilities of class membership add up to 100%. Thus in order to compute the SEM, class six (The Dateless) was left out and used as a reference category. The Dateless class was then re-inserted and class four (Frequent Daters) was used as the reference class. Age, gender and attractiveness were controlled for in the model. Overall the model fit the data well. For the model with (The Dateless) left out the  $\chi^2$  value with 230 degrees of freedom was 525.078 and was significant at ( $p < .000$ ), the TLI was .906, the CFI was .927, and the RMSEA was .047. When The Dateless was included and Frequent Daters was left out, the  $\chi^2$  value with 230 degrees of freedom was 525.078 and was significant at ( $p < .000$ ), the TLI was .910, the CFI was .930, and the RMSEA was .047. The squared multiple correlations ( $R^2$ ) for Classes one through six were .02, .02, .02, .03, .02, and .14 respectively. Results were that of the attachment variables, attachment avoidance predicted membership in The Dateless ( $\beta = .06, \delta = .12, p < .01$ ). Attachment anxiety also predicted membership in The Dateless ( $\beta = .04, \delta = .11, p = .02$ ). Besides these two path coefficients, attachment had no other significant relationships with the Class outcomes. The control variables were much better predictors of the outcomes. Age was negatively associated with the probability of membership in Infrequent Responders ( $\beta = -.02, \delta = -.11, p < .05$ ) but was not significantly associated with membership in any of the other classes. Gender which was dummy coded with female as 0, was positively associated with the probability of membership in Infrequent Responders ( $\beta = .09, \delta = .15, p < .01$ ) and negatively associated with the probability of membership in The Dateless ( $\beta = -.18, \delta = -.20, p < .001$ ). Physical attractiveness was positively associated with the probability of membership in Daters Who Commit ( $\beta = .04, \delta = .13, p < .01$ ),

positively associated with the probability of membership in Short Relationships ( $\beta = .03$ ,  $\delta = .12$ ,  $p = .01$ ), positively associated with membership in Frequent Daters ( $\beta = .04$ ,  $\delta = .13$ ,  $p < .05$ ), and negatively associated with the probability of membership in The Dateless ( $\beta = -.12$ ,  $\delta = -.29$ ,  $p < .001$ ).

### **Post Hoc Analyses**

Although, it is understood that running multiple Analysis of Variance (ANOVA) tests inflates the rate of type one error, cell sizes in two categories of the categorical attachment variable were too small (15 or less) to produce sufficient power in the MANCOVA. Thus, post hoc Analysis of Variance with covariate (ANCOVA) tests were conducted to determine the effect of the independent variable (Categorical Attachment) on the dependent variables (*Number of Dateless weeks*, *Number of 1<sup>st</sup> Dates*, *Weeks to Exclusivity*, *Number of 2<sup>nd</sup> or more dates with the same individual*, *Number of Relationships*, *Relationship Length* and *Number of Break-ups*) while controlling for age, gender and physical attractiveness. Of the seven ANCOVA tests conducted two were significant. The ANCOVA used to evaluate the relationship between the dependent variable, *Number of Dateless weeks* and the independent variable Categorical Attachment was significant,  $F(3, 368) = 5.172$ ,  $p < .01$ . A look at the pairwise comparisons revealed that both Secure ( $M = 9.4$ ) and Preoccupied ( $M = 9.9$ ) individuals have significantly fewer weeks with no dates than do Fearful-Avoidant ( $M = 12.6$ ) individuals. As well, the ANCOVA evaluating the relationship between *Number of 2<sup>nd</sup> or more dates with the same individual* and Categorical Attachment was significant,  $F(3, 368) = 2.878$ ,  $p < .05$ . Pairwise comparisons of the means revealed two trend level differences across attachment types. Preoccupied individuals ( $M = 2.9$ ) have more 2<sup>nd</sup> or more dates with the same person than Fearful-Avoidant individuals ( $M = 1.7$ ). Dismissive-Avoidant individuals ( $M = 2.9$ ) also have

more 2<sup>nd</sup> or more dates with the same person than Fearful-Avoidant individuals ( $M = 1.7$ ). See Table 5.

### **Discussion**

A core assumption of attachment theory is that individuals develop working models and proximity seeking strategies based on their experiences with early attachment figures (Shaver & Mikulincer, 2006) as well as later relationship experience (Zeifman & Hazan, 2000).

Researchers have observed that insecure adults use qualitatively different approach strategies (e.g. hyperactivating and deactivating) when they attempt to engage potential romantic partners (Cassidy & Kobak, 1988). Researchers have also found that when faced with a hypothetical scenario, individuals report apprehension about dating individuals that utilize these strategies (Pietromonaco & Carnelley, 1994; Chappell & Davis, 1998). However, researchers have given little attention to how attachment is related to success in early relationship stages (Eastwick & Finkel, 2008) and whether or not secure individuals truly fare better initiating relationships. The current study attempted to answer questions related to if and how an individual's attachment style may be related to how they date.

Results of the study confirmed that secure individuals may indeed have qualitatively different early dating experiences than their insecure counterparts. However, while adult attachment seems to be a meaningful predictor of certain dating processes, it does not predict others. Furthermore this study confirmed what many researchers have proposed, namely that gender (McClure et al., 2010), physical attractiveness (Hazan & Diamond, 2000; Maner et al. 2003) and age (Schaalje & Holman, 2007) are related to how individuals date.

## **Attachment**

Results from the zero-inflated Poisson regression, the SEM predicting class membership, and the post-hoc ANCOVA's all pointed to a similar conclusion. In the earliest stages of relationship initiation, attachment makes a significant difference in whether individuals go on dates or remain dateless. The regression findings indicated that attachment anxiety and attachment avoidance were associated with an increase in the number of weeks an individual goes without a date in a twenty-five week period. The findings from the SEM were similar. Attachment avoidance and attachment anxiety was significantly associated with membership in Class six (The Dateless) which was characterized most profoundly by high numbers of dateless weeks. Furthermore, the ANCOVA tests revealed that individuals high on both anxiety and avoidance had the highest number of dateless weeks.

These findings were consistent with the responses to hypothetical scenarios set up by Pietromonaco and Carnelley (1994) and Chappell and Davis (1998), which showed that individuals were apprehensive about dating anxious and avoidant people as compared to secure individuals, but reported their greatest apprehension when faced with the possibility of dating an avoidant individual. This is also consistent with Sanford's (1999) study which found that attachment anxiety and avoidance was negatively associated with dating frequency. Schindler, Fagundes and Murdock (2010) found no association between attachment anxiety or avoidance and an increased likelihood to date. Their findings however, may reflect the limitations of a small sample ( $N = 90$ ).

Findings in the current study are also consistent with the theoretical work of Mikulincer and Shaver (2003) who suggest that in the initiation stage of a relationship anxious and avoidant individuals will likely adopt ineffective attachment strategies. Specifically, they theorize that



anxious individuals may come across as hyper-vigilant, and use self-defeating presentation by focusing on what they perceive as negative about themselves. Such behavior could naturally result in few dating experiences. Mikulincer and Shaver (2003) also proposed that avoidant individuals would avoid closeness and intimacy by maximizing emotional and physical distance from others. In a dating context these behavioral patterns would likely lead to reduced dating.

With respect to attachment's relationship with how people date, three other findings are worth noting. In the regression analysis, attachment avoidance was associated with a decrease in the number of relationships people entered into. Attachment avoidance also predicted the probability of having a relationship that lasted zero weeks (i.e. no relationship). These findings are consistent with Schindler, Fagundes and Murdock (2010) who found that attachment avoidance was associated with a decreased likelihood to enter a committed relationship. This finding is also supported by the theoretical work of Mikulincer and Shaver (2003) cited above.

Lastly, the ANCOVA findings suggest that individuals high on both attachment anxiety and attachment avoidance go on less 2<sup>nd</sup> or more dates with the same individual. This finding seems to imply that the combination of high avoidance and high anxiety may limit dating opportunities more than being high on one or the other. Bartholomew (1990) suggests that a fearful-avoidant style is characterized by a desire for intimacy—an anxious characteristic—and a distrust for others—an avoidant characteristic—which often leads to a disabling fear of rejection. Our findings then are consistent with what you might expect from a fearful-avoidant individual, namely, that they will have difficulty getting dates, and at the same time may suffer in their ability to maintain fledgling relationships. Because these findings were a result of univariate tests, due to small cell sizes in the MANCOVA, they should be considered with

caution. Hopefully, future research without the sample limitations of the current study can help tease out dating differences across attachment styles.

In many ways, the non-significant findings are as interesting as the significant ones. Why, for example, are levels of anxiety and avoidance not related to the other dating process variables, such as how many second or more dates individuals go on with the same person, or how quickly individuals become exclusive? Furthermore, why does attachment not predict more of the latent classes that these variables define? One possible explanation is that the reason an individual goes on second or more dates with the same person has as much to do with the other person as it does with them, and since we have no information about the other individual it is hard to tell if attachment had anything to do with it or not. For example an anxious female may date an anxious male and since both of them find a safe haven in each other, attachment at this early stage may not materialize as a problem. However if an anxious individual goes on a date with a secure or avoidant individual, their hyperactivating behavior may trigger a negative response resulting in no subsequent dates. Furthermore, depending on the partners' motives for the relationship, it may or may not matter that much to them that the respondent is insecure. Thus it is hard to know how attachment and these other relationship processes are related without knowing something about the partners' attachment and motives.

### **Physical Attractiveness**

Although it may not be surprising, it is nonetheless interesting that physical attractiveness was the strongest of all the predictors in any of the analyses. Physical attractiveness was associated with all of the dating process variables except *Weeks to Exclusivity* and it predicted class membership in all but Infrequent Responders and Long Relationships. Based on the regression findings, physically attractive individuals will likely have fewer dateless weeks, more

first dates, more second or more dates with the same individual, and more relationships than those who are less attractive. The down side if there is one is that individuals who are physically attractive will also likely experience more break-ups. Physical attractiveness was also a strong predictor of class membership. It seems that while physical attractiveness is beneficial for people in terms of getting dates and dating frequently, it may not help in the maintenance of relationships in the early stages. The latter possibility is based on the fact that Long Relationships, which is characterized by relationships that last an extended period of time, was not predicted by physical attractiveness. These finding makes sense in light of findings by Maner et al. (2003), which suggest that without any other information people are more likely to attend to, and in the case of males, remember those they consider physically attractive. Thus, getting dates should not be difficult for individuals who are physically attractive; however, once more information has been acquired, physical attractiveness may not carry the relationship by itself. Theoretically, functional evolutionists suggest that individuals will invest their cognitive resources in areas that are critical to their survival (Kenrick, Li & Butner, 2003). One such area is mate selection. Because physical attractiveness is important in the mate selection process and it is an easily recognizable characteristic, it would be to one's evolutionary advantage to seek out and date those they see as physically attractive, but long-term survival demands more than the physical attributes and it may be that once a partners sees there is little more to a person than physical attractiveness, they value decreased and the relationship ends.

In sum based on findings in the current study, it would seem that in the early stages of relationship initiation, physical attractiveness has a more salient influence on how individuals date than does adult attachment.

## Understanding Dating Styles

Although the current study had a theoretical focus rooted in attachment, some of the findings also add to the more general body of relationship literature. The relationship initiation and mate selection literature frequently discuss relationship formation, dating, and mate selection from a normative perspective; that is, how these processes generally proceed. The idea of there being a number of different predictable “pathways” people take through the process of relationship formation is seldom noted. There is even less understanding of factors that predict who takes the different pathways.

The current research suggests that individuals and couples take at least five empirically distinct pathways in the initial formation of romantic relationships, and that we can predict to some extent who travels each of these paths. The group we named The Dateless was characterized by many dateless weeks, very few first dates, fewer second dates and no relationships. Those in The Dateless group tended to individuals who were anxious or avoidant, less attractive, and female. This group is especially interesting because it was the only group that the chosen variables predicted with a meaningful significance. The combined variables predicted almost 15% of the variance in this class. Furthermore this class included 38% of our sample which is a significant proportion if you consider there are six classes. While it is little wonder that avoidant, anxious unattractive individuals have a hard time getting dates, the fact that they are mostly female is not as easily explained. One possible explanation for this association is that cultural norms are such that males typically have the prerogative of asking the females on dates. This of course means they choose the girl they want to ask out. It may be that for some reason that we do not measure, a certain proportion of females are asked on dates

somewhat consistently, while a larger proportion of females receive very few invitations to go on dates. Our group The Dateless may be comprised on this group of females.

The three classes Daters Who Commit, Frequent Daters, and Short Relationships were made up of individuals who were rated as more attractive. All three of these groups though distinct in many ways are similar in that the individuals in these groups all go on dates with some frequency. Thus getting dates depends at least to some extent on an individual's level of physical attractiveness.

### **Implications**

Based on findings in the current study dating possibilities for individuals who are more anxious or avoidant in their attachment style seem fairly grim. However, explicit in the writings of Bowlby and his contemporaries is the assumption that although attachment can be stable, it can also and often is amended throughout the life-course as individuals develop new working models for relationships. These working models are amended based on experiences in close relationships that allow individuals to form new "mental representations of self and others" (Miklincer & Shaver, 2007, pp. 149-150). Thus individuals who use anxious or avoidant attachment strategies could be benefited by forming close friendships with individuals who have a secure representation of themselves and others. What is important for individuals who may have an insecure attachment style is that they realize that close relationships can provide them with the security they want and that they have access to those relationships.

The current study also implies that physical attractiveness is very important in the early stages of relationships and can help individuals have more dating opportunities. Although, individuals are not able to entirely change their physical appearance, they can pay attention to their physical appearance and do what they can to make themselves appealing to members of the

opposite sex. Furthermore, since physical attractiveness is only one of many qualities that people look for in a life-long partner (Buss, Shackelford, Kirkpatrick, & Larsen, 2001), individuals can do their best to accentuate their positive qualities in order to increase the chances of forming a relationship.

### **Future Research, Limitations and Conclusions**

Although the current research is helpful in explaining how adult attachment is related to early relationship initiation, and how individuals clump together based on the dating experiences they engaged in over the course of 25 weeks, there are still many questions that remain unanswered. Future research in this area would be helpful in discerning why attachment is not explaining more of what is happening in early relationship formation. Also, it is clear that we do not explain a significant proportion of why individuals are in each specific dating group. Future research should be focused on trying to find out what these individuals are like and why they follow the specific dating patterns that they do.

There are limits to the generalizability of these findings. For one thing, the sample is composed of religiously homogenous students who engage in dating patterns that are outside the American norm in some ways. Another limitation is the relatively short length of time data were collected concerning individuals' dating. Twenty-five weeks was especially limiting to measures such as the number of relationships and the length of those relationships. Lastly, although our sample was fairly large, certain groups of individuals were under-represented which was restrictive to one of the analyses. Similar research using a more diverse and more normative sample would be helpful in deciphering if attachment makes a more or less meaningful difference in more normative dating contexts. As well, following individuals for a more extended period would likely capture differences undetected by analyses in the current study.

Despite these limitations, this study confirmed that some of what previous research had deemed theoretically probable and provided clarification to previous studies. Furthermore, this study was able to gauge the actual dating processes of individuals as they went through them rather than relying on individuals responses to hypothetical scenarios. Specifically this study found that attachment avoidance and anxiety have implications for success in dating. The strongest implication is that avoidant and anxious individuals are likely to have fewer dating opportunities than secure individuals, and that avoidant individuals may suffer from this implication more intensely than anxious individuals. Furthermore, although attachment does seem to make a difference for some in the early stages of relationship formation, physical attractiveness is more powerfully related to how individuals date than is attachment.

## References

- Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S. (1978). *Patterns of attachment: Assessed in the strange situation and at home*. Hillsdale, NJ: Erlbaum.
- Allen, J. P. (2008). The attachment system in adolescence. In J. Cassidy & P.R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (2nd ed., pp. 419–435). New York: Guilford Press.
- Atkins, D. C., Gallop, R. J. (2007). Rethinking how family researchers model infrequent outcomes: A tutorial on count regression and zero-inflated models. *Journal of Family Psychology, 21*(4), 726–735.
- Bartholomew, K. (1990). Avoidance and intimacy: An attachment perspective. *Journal of Social and Personal Relationships, 7*, 147-148.
- Bartholomew, K., & Horowitz, L. M. (1991). Attachment styles among young adults: A test of a four-category model. *Journal of Personality and Social Psychology, 61*(2), 226-244.
- Bowlby, J. (1973). *Attachment and loss: Vol. 2. Separation: Anxiety and anger*. New York: Basic Books.
- Bowlby, J. (1979). *The making and breaking of affectional bonds*. London: Tavistock.
- Busby, D. M., Holman, T. B., & Taniguchi, N. (2001). RELATE: Relationship evaluation of the individual, family, culture, and couple contexts. *Family Relations, 50*, 308-316.
- Buss, D. M., Shackelford, T. K., Kirkpatrick, L. A., & Larsen, R. J. (2001). A half century of mate preferences: The cultural evolution of values. *Journal of Marriage and Family, 63*, 491–503.



- Cassidy, J., & Kobak, R. R. (1988). Avoidance and its relationship with other defensive processes. In J. Belsky & T. Nezworski (Eds.), *Clinical implications of attachment* (pp. 200-323). Hillsdale, NJ: Erlbaum.
- Chadwick, B. A., Top, B. L., McClendon, R., Judd, M., & Smith, L. (2007). Handing out or hooking up: The culture of courtship at BYU. In M. J. Woodger, T. B. Holman, & K. Bell, K. (Eds.), *Latter-day Saint courtship patterns* (pp. 41 – 58). Lanham, MD: University Press of America.
- Chappell, K. D., & Davis, K. E. (1998). Attachment, partner choice, and perception of romantic partners: An experimental test of the attachment-security hypothesis. *Personal Relationships*, 5(3), 327-342.
- Clark, C. L., Shaver, P. R., & Abrahams, M. F. (1999). Strategic behaviors in romantic relationship initiation. *Personality and Social Psychology Bulletin*, 25(6), 707-720.
- Creasey, G. & Jarvis, P. (2008). Attachment theory and research: A special focus on relationship initiation. In S. Sprecher, A. Wenzel, & J. Harvey (Eds.), *Handbook of relationship initiation* (pp. 75-94). New York: Psychology Press.
- Eastwick, P. W., & Finkel, E. J. (2008). The attachment system in fledgling relationships: An activating role for attachment anxiety. *Journal of Personality and Social Psychology*, 95(3), 628-647.
- Goldstein, J. R., & Kenney, C. T. (2001). Marriage delayed or marriage forgone? New cohort forecasts of first marriage for U.S. women. *American Sociological Review*, 66, 506-519.
- Hazan, C., & Diamond, L. M. (2000). The place of attachment in human mating. *Review of General Psychology*, 4, 186–204.

- Hazan, C., Hutt, M. J., Sturgeon, J., & Bricker, T. (1991, April). The process of relinquishing parents as attachment figures. Paper presented at the meeting of the Society for Research in Child Development, Seattle.
- Hazan, C., & Shaver, P. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology*, 52, 511–524.
- Jung, T. & Wickrama, K. A. S. (2008). An introduction to latent class growth analysis and growth mixture modeling. *Social and Personality Psychology Compass*, 2 (1), 302-317.
- Kenrick, D. T., Li, N. P., & Butner, J. (2003). Dynamical evolutionary psychology: Individual decision-rules and emergent social norms. *Psychological Review*, 110, 3–28.
- King, G. (1989). Variance Specification in Event Count Models: From Restrictive Assumptions to a Generalized Estimator. *American Journal of Political Science*. 33:762–784
- Klohnen, E. C., & Luo, S. (2003). Interpersonal attraction and personality: What is attractive—self, similarity, ideal similarity, complementarity or attachment security? *Journal of Personality and Social Psychology*, 85(4), 709-722.
- Lo, Y., Mendell, N. R., & Rubin, D. B. (2001). Testing the number of components in a normal mixture. *Biometrika*, 88, 767–778.
- Maner, J. K., Kenrick, D. T., Becker, D. V., Delton, A. W., Hofer, B., Wilbur, C. J., et al. (2003). Sexually selective cognition: Beauty captures the mind of the beholder. *Journal of Personality and Social Psychology*, 85(6), 1107-1120.
- McClure, M. J., Lydon, J. E., Baccus, J. R., & Baldwin, M. W. (2010). A signal detection analysis of chronic attachment anxiety at speed dating: Being unpopular is only the first part of the problem. *Personality and Social Psychology Bulletin*, 36(8), 1024-1036.

- Mikulincer, M., & Shaver, P.R. (2003). The attachment behavioral system in adulthood: Activation, psychodynamics, and interpersonal processes. In M.P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 35). San Diego, CA: Academic Press.
- Mikulincer, M., & Shaver, P.R. (2007). *Attachment in adulthood*. New York: Guilford Press.
- Muthén, L.K. and Muthén, B.O. (1998-2010). *Mplus User's Guide. Sixth Edition*. Los Angeles, CA: Muthén & Muthén.
- Nylund, K. L., Asparouhov, T., & Muthén, B. (2007). Deciding on the number of classes in latent class analysis and growth mixture modeling: A Monte Carlo simulation study. *Structural Equation Modeling: A Multidisciplinary Journal*, 14, 535–569.
- Ravitz, P., Maunder, R., Hunter, J., Sthankiya, B., & Lancee, W. (2010). Adult attachment measures: A 25-year review. *Journal of Psychosomatic Research*, 69(4), 419-432.
- Sanford, K. (1997). Two dimensions of adult attachment: Further validation. *Journal of Social and Personal Relationships*, 14 (1),133-143.
- Schaalje, B. C., & Holman, T. B. (2007). Courtship statistics for BYU students. In M. J. Woodger, T. B. Holman, & K. Bell, K. (Eds.), *Latter-day Saint courtship patterns* (pp. 41 – 58). Lanham, MD: University Press of America.
- Schindler, I., Fagundes, C. P., & Murdock, K. W. (2010). Predictors of romantic relationship formation: Attachment style, prior relationships, and dating goals. *Personal Relationships*, 17(1), 97-105.
- Shaver, P. R., & Mikulincer, M. (2006). Attachment theory, individual psychodynamics, and relationship functioning. In A.L. Vangelisti & D. Perlman (Eds). *The Cambridge handbook of personal relationships* (pp. 251-271). New York: Cambridge University Press.

- Simpson, J. A., Rholes, W. S., & Nelligan, J. S. (1992). Support seeking and support giving within couples in an anxiety-provoking situation: The role of attachment styles. *Journal of Personality and Social Psychology*, 62(3), 434-446.
- Simpson, J. A., Rholes, W. S., & Phillips, D. (1996). Conflict in close relationships: An attachment perspective. *Journal of Personality and Social Psychology*, 71(5), 899-914.
- Sugiyama, L. S. (2005). Physical attractiveness in adaptationist perspective. In D. M. Buss (Ed.), *The handbook of evolutionary psychology*. (pp. 292-343). Hoboken, NJ US: John Wiley & Sons Inc.
- Thorton, A., & Young-DeMarco, L. (2001). Four decades of trends in attitudes toward family issues in the United States: The 1960s through the 1990s. *Journal of Marriage and Family*, 63, 1009-1037.
- U.S. Census Bureau. (2010). Estimated median age at first marriage, by sex: 1890 to present. Retrieved June 24, 2011, from [www.census.gov/population/socdemo/hh-fam/ms2.xls](http://www.census.gov/population/socdemo/hh-fam/ms2.xls)
- Zeifman, D., & Hazan, C. (2000). A process model of adult attachment formation. In W. Ickes & S. Duck (Eds.), *The social psychology of personal relationships* (pp. 37-54). New York: Wiley.

Table 1. *Correlation Table*

	1	2	3	4	5	6	7	8	9	10	11	12
1. Age	1											
2. Gender	.545**	1										
3. Attractiveness	.146**	.138**	1									
4. Weeks to Exclusivity	0.018	0.121	-0.104	1								
5. Relationship Length	0.068	-0.089	-0.005	-0.099	1							
6. # of Dateless Weeks	0.02	.183**	-.284**	-0.01	-.669**	1						
7. # of First Dates	0.011	0.053	.134**	0.04	-.485**	-0.008	1					
8. # of 2 <sup>nd</sup> plus dates	0.006	0.04	.257**	.404**	-.278**	-.245**	.529**	1				
9. # of Relationships	0.046	0.032	0.066	-0.117	-0.131	-0.117	0.065	-0.02	1			
10. # of Break-ups	.175*	0.113	0.062	.263**	-.507**	.290**	.266**	0.003	.407**	1		
11. Anxious	.102*	0.031	-0.091	-0.12	-0.023	.108**	-0.058	-0.061	-0.11	0.043	1	
12. Avoidant	0.011	-0.066	-0.036	0.123	-0.048	.145**	-.096*	-.100*	-0.009	0.052	.204**	1

Note: \*\*indicates significance at  $p < .01$ . \*indicates significance at  $p < .05$ .

*Table 2. Descriptive statistics for the dating process variables.*

Variable	N	Range	Mean	SD
Number of Dateless weeks	582	0-24	9.67	6.57
Number of Relationships	168	1-2	1.13	.33
Number of 1 <sup>st</sup> Dates	582	0-21	3.63	3.20
Weeks to Exclusivity	110	1-18	3.89	3.05
Number of 2 <sup>nd</sup> or more dates with the same individual	582	0-20	2.26	2.97
Relationship Length	168	1-25	9.16	7.12
Number of Break-ups	168	0-3	.73	.65

*Note:* All statistics above occurred within a twenty-five week period.

Table 3. *Model fit statistics used to decide number of classes in the Latent Class Analysis*

Model	LMR-LRT $p$	BIC
Two-Class	0.000	11632.465
Three-Class	0.000	10834.694
Four-Class	0.017	10540.084
Five-Class	0.018	10291.430
Six-Class	0.000	10134.687
Seven-Class	0.759	10279.648

Table 4. Unstandardized coefficients and estimated percent change in predictor taken from zero-inflated Poisson regressions indicating the relationship between dating process variables and attachment dimensions.

Variables	Physical Attractiveness			Age			Gender			Attachment Anxiety			Attachment Avoidance		
	$\beta$	$\Delta$	Zero-portion	$\beta$	$\Delta$	Zero-portion	$\beta$	$\Delta$	Zero-portion	$\beta$	$\Delta$	Zero-portion	$\beta$	$\Delta$	Zero-portion
Number of Dateless weeks	-.170***	-16	.040	.003	-	-.137	-.290***	-13	.258	.052*	5	-.285	.073**	8	-.348
Number of Relationships	.293***	36	-	.035	-	-	.148	-	-	-.109	-	-	-.190**	-18	-
Number of 1 <sup>st</sup> Dates	.103**	11	-.072	-.009	-	.004	.104	-	-.788	-.026	-	-.030	-.052	-	.076
Weeks to Exclusivity	.094	-	-	-.091*	-19	-	.646*	38	-	-.111	-	-	.167	-	-
Number of 2 <sup>nd</sup> or more dates with the same individual	.239***	28	-.259*	-.030	-	.117	-.113	-	1.175**	-.032	-	.086	-.062	-	.151
Relationship Length	-.037	-	-.423***	.011	-	-.043	-.258	-	-.230	-.067	-	.108	-.050	-	.288**
Number of Break-ups	.188***	62	-	.040	-	-	.109	-	-	-.037	-	-	-.090*	-61	-

Note: \* indicates significance at  $p < .05$ . \*\* indicates significance at  $p < .01$ . \*\*\* indicates significance at  $p < .001$ . Physical Attractiveness, Gender and Age were control variables for in the analysis.  $\Delta$  indicates the percent change in the outcome based on a one unit change in the predictor and was calculated using the formula  $100(\exp^{\beta \hat{\sigma}} - 1)$ , where  $\beta$  equals the regression coefficient,  $\hat{\sigma}$  equals the standard deviation in the predictor and exp signifies exponentiation of the product. The  $\Delta$  only applies to the count portion of the model. Weeks to Exclusivity, Number of Break-ups and Number of Relationships were not estimated using a zero-inflated model and is thus left blank in zero-portion column.



Table 5. *Estimated Means of attachment styles across dating process variables*

Variable	Secure (a)	Preoccupied (b)	Fearful-Avoidant (c)	Dismissive-Avoidant (d)
Number of Dateless weeks	9.36** <sup>c</sup>	9.97** <sup>c</sup>	12.61	10.27
Number of Relationships	1.15	1.14	1.05	1.11
Number of 1 <sup>st</sup> Dates	4.12	4.52	3.65	4.13
Weeks to Exclusivity	4.03	3.56	3.65	4.75
Number of 2 <sup>nd</sup> or more dates with the same individual	2.73	2.93* <sup>c</sup>	1.77	2.93* <sup>c</sup>
Relationship Length	10.18	8.42	9.54	9.30
Number of Break-ups	.62	.82	.63	.94

*Note:* Letter designations indicate the means which are significantly different.

\*\*Significantly different than all other groups at  $p < .01$ . \* indicates trend level significance of  $p < .075$

Figure 1. DISTRIBUTION OF THE VARIABLE CATEGORICAL ATTACHEMENT.

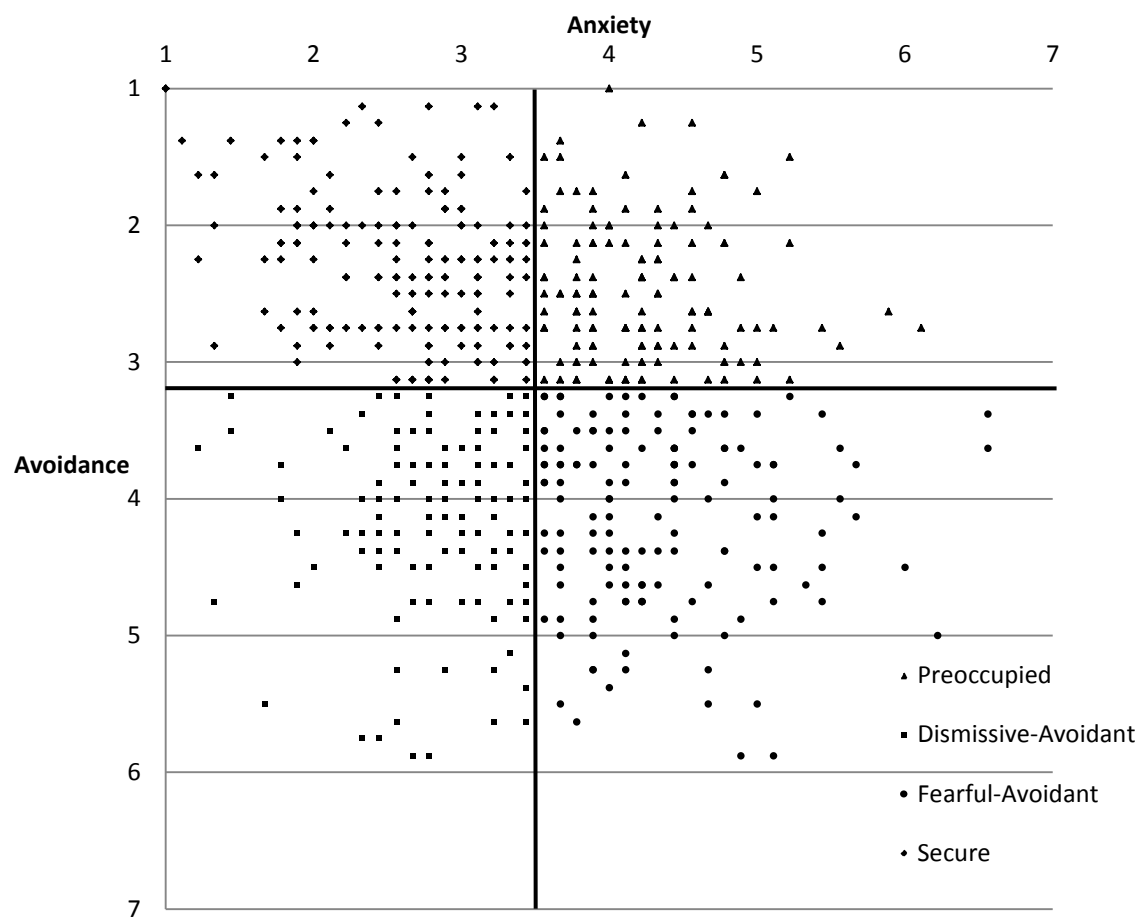


Figure 2. ESTIMATED MEANS DEFINING CLASS MEMBERSHIP FOR THE DATING PROCESS VARIABLES.

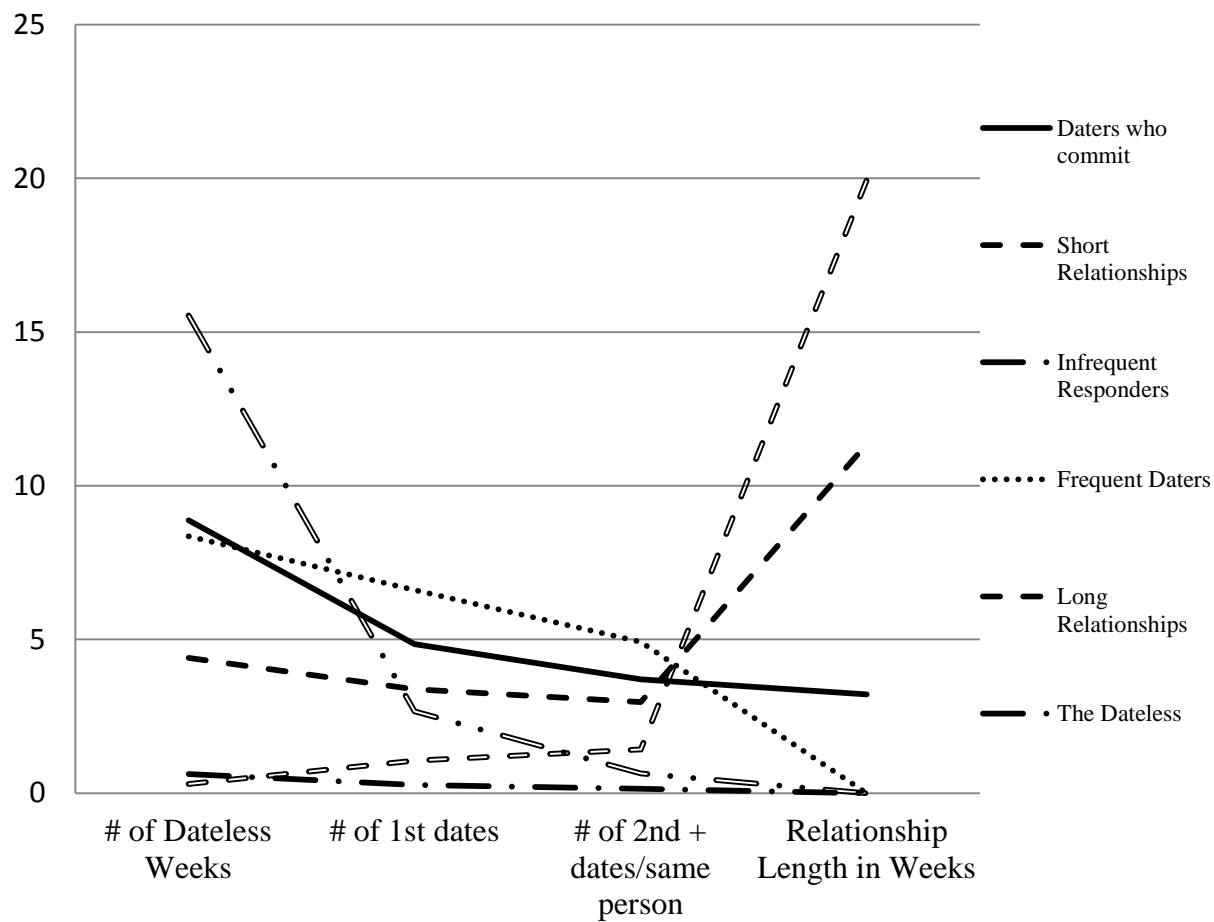
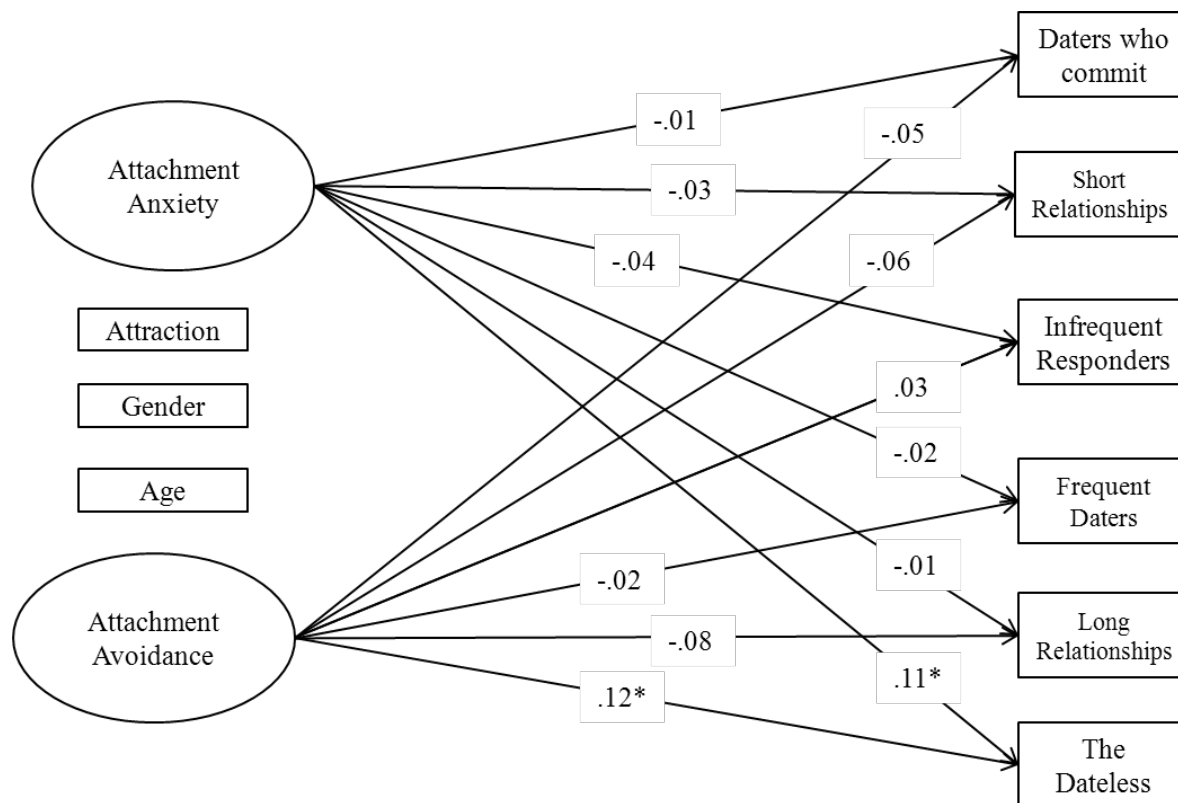


Figure 3. MODEL REPRESENTING RELATIONSHIPS BETWEEN ADULT ATTACHMENT DIMENSIONS AND THE PROBABILITY OF MEMBERSHIP IN A SPECIFIC CLASS OF DATERS AS IDENTIFIED BY PATTERNS IN INDIVIDUALS' DATING PROCESSES.



Notes. \* indicates significance at  $p < .05$ .