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# I ♥ U: ATTACHMENT STYLE AND GENDER AS PREDICTORS OF DECEPTION IN ONLINE AND OFFLINE DATING

A Thesis Presented

by

## MATTITIYAHU S. ZIMBLER

Submitted to the Graduate School of the University of Massachusetts Amherst in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE

May 2009

Psychology

# I♥U: ATTACHMENT STYLE AND GENDER AS PREDICTORS OF DECEPTION IN ONLINE AND OFFLINE DATING

A Thesis Presented

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#### ABSTRACT

#### I ♥ U: ATTACHMENT STYLE AND GENDER AS PREDICTORS OF DECEPTION IN ONLINE AND OFFLINE DATING

#### MAY 2009

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Directed by Paula Pietromonaco

Online dating is becoming an increasingly used method for meeting significant others. This study had two central goals. The first goal was to explore the factors that contribute to deception used to attract a romantic partner online. The second aim was to discover the reasons that people with different attachment styles might lie as well as their justifications and interpretations for those lies. Male and female single college undergraduates (N = 208), who had previously completed an attachment style measure via an online screening, were asked to complete an online dating profile and an email to a potential dating partner. Participants reviewed these correspondences and noted any inaccuracies. They also completed a questionnaire related to lying in romantic relationships. It was hypothesized that both attachment style and gender would affect lying behavior. For online dating, results indicated that women told more self-oriented and subtle lies than men, and that high attachment avoidance and anxiety predicted greater lying behavior for participants with relationship experience. Offline, attachment predicted the motivations, justifications, and acceptability of lying to romantic partners. Implications related to online dating and attachment processes in relational deception are discussed.

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#### CHAPTER 1

#### **INTRODUCTION**

Romantic relationships are not the product of complete honesty. Quite to the contrary, lying is present in some capacity in almost all relationships. When surveyed, almost all individuals (92%) claimed to have been deceptive towards a romantic partner (Knox, Schacht, Holt, & Turner, 1993). In some cases, relational deception is used to avoid sensitive subject matter (Baxter & Wilmot, 1985) or withhold pertinent information (Roloff & Cloven, 1990). Other times, lying is a means to avoid a punitive reaction from one's significant other (Cole, 2001). The ubiquity of relational deception doesn't come as a complete surprise, as there are numerous studies that show people are deceptive a great deal in their everyday lives (DePaulo, Kashy, Kirkendol, Wyer, & Epstein, 1996). What is alarming is that there is evidence that people reserve their most severe lies for those they are romantically involved with (DePaulo, Ansfield, Kirkendol, & Boden, 2004). While the lie teller often sees this deceptive behavior as driven by altruistic goals, such as to spare a partner's feelings, the recipient of the lie generally doesn't share the perspective that kindness and concern are the motivating factors. (Kaplar & Gordon, 2004). Additionally, there is also research that suggests that while there is a great deal of deception in the mate selection process, those involved in that process are aware of its presence (Benz, Anderson, & Miller, 2005).

Meeting a significant other online is becoming an increasingly popular and acceptable way to find love, yet little is known about the veracity of the information people provide in these online forums. While there is certainly an obvious appeal to

knowing a litany of information about dating partners before you meet them, this framework also allows for the possibility of an enormous amount of deception. Recent work suggests that online daters have a variety of motivations for using the Internet to find love including seeking companionship, fulfilling a romantic fantasy, control over how they are presented, and freedom from stereotypic roles (Lawson & Leck, 2006). Concurrently, there is also evidence that deception is more prevalent in computermediated interactions than to face-to-face communications (Zimbler & Feldman, under review.). While this may seem like a recipe for rampant relational deception, Toma, Hancock, and Ellison (2008) reason that blatant deception in online dating is attenuated by the balance between the deceptive opportunities available and the social constraints stemming from the anticipation of meeting the person at some time in the future. In other words, lying a little may make one's profile look more appealing, but lying a lot greatly increases the chances of rejection upon meeting a potential dater in person. As this new technology revolutionizes the art of dating, it is prudent to ask what factors might determine the veracity of these first communications leading up to partner selection. Specifically, this study explored both the frequency of deception in online dating and some of the potential motivating factors of those deceptions.

People are likely to differ in how they approach searching for a potential partner. Attachment theory (Bowlby, 1978), as applied to adults (Hazan & Shaver, 1987; Mikulincer & Shaver, 2003), suggests that individuals differ in their mental representations of romantic relationships. Different experiences lead individuals to develop different sets of beliefs, expectations, and goals with regard to romantic relationships and thus to manifest different attachment styles. These attachment styles

may guide how individuals select new partners and how they present themselves to potential partners. In terms of deception in dating, it is important to understand how one's attachment style is related to both the frequency and purpose of relational lies in seeking a partner.

Previous research has shown that romantic attachment is best conceptualized in such a way that the attachment styles can be represented in a two-dimensional space defined by an individual's feelings about the self vs. feelings about others (Bartholomew, 1990). Those people with secure attachments are thought to have a positive view of self and a positive view of others, which may translate to a more forthright approach when seeking out romantic partners. However, people who see themselves negatively while still holding a positive view of others, which would denote a more anxious-ambivalent attachment style, may increase efforts to self-enhance in order to appear more positively to potential daters. Conversely, individuals who have a positive sense of self but a negative view of others, characteristic of a dismissive-avoidant attachment, may create unrealistic expectations of potential daters, consciously or subconsciously pushing opportunities for intimacy away. Lastly, people with a fearful attachment style would have both a negative view of self and a negative view of others. Fearful avoidant individuals' attachment style has the possibility of affecting both how they self-enhance to attract partners, and how they react to or interpret the social cues of potential daters.

The link between attachment style and deception may be useful in understanding how individuals go about finding a potential dating partner. Deception may be used as a way to preserve an individual's independence (Solomon, 1993), in which case those individuals with avoidant attachment styles would be more likely to lie to their partner.

Conversely, deception can also be used as a strategy to manage one's impression (Goffman, 1959), which would make anxious individuals more apt to utilize lying. Unsurprisingly, there has been evidence to support a positive relationship between both relationship anxiety and avoidance with increased deception in romantic relationships (Cole, 2001). Additionally, research that has directly examined the connection between adult attachment and deception has shown that people higher in attachment anxiety or avoidance also show less authenticity in communicating with their partner (Lopez & Rice, 2006).

Lying between partners can also be framed as a failure to effectively communicate. The evidence that people with insecure attachments are more likely to be deceptive would be consistent with the literature examining the relationship between attachment style and relational communication. People with insecure attachment styles tend to have poor communication patterns, and in times of conflict this can lead to more problematic functioning in the relationship (Pietromonaco, Greenwood & Barrett, 2004). Additionally, it has been found that upon the discovery that a partner is lying, those people with secure attachments are more likely to communicate directly with their partner (Jang, Smith, & Levine, 2002). Those people with an anxious-ambivalent attachment style tend to talk around the issue at hand, while avoidant individuals are more likely to push their partner away or terminate the relationship altogether. In the context of online dating, it is important to evaluate how truthful the initial correspondences are as they set the tone for communication in the relationship to come.

Men and women often differ in how they perceive and behave in romantic relationships (Shulman & Scharf, 2000; Zak, 1998). Thus, it is important to examine the

role of gender in deception in romantic relationships. In general, men and women have been found to lie approximately the same amount (DePaulo et al., 1996). That said, men and women tend to lie is different ways. While men more often tell self-oriented lies (ex. "I was the captain of my soccer team."), women tend to lie in a manner that enhances the other person (ex. "You look great in that dress.") (DePaulo et al., 1996). In terms of attachment, it has been found that attachment styles that exaggerate gender roles can lead to dissatisfaction both with themselves and the relationship (Pietromonaco & Carnelley, 1994). Furthermore, how partner attachment styles match up with one's own attachment style can lead to either increased (for two secure individuals) or decreased (for two avoidant individuals) relationship satisfaction (Pietromonaco & Carnelley, 1994). The present study examined whether men and women differ in their patterns of deception in a romantic relationship context and whether gender might moderate the effects of attachment style.

In addition to examining lying behavior in an online dating context, this study also investigated how attachment styles might be associated with participants' motivations and justifications for their lies. Framing participant's deception in terms of romantic attachment styles is particularly important in understanding how different people conceptualize the lies they tell. For example, avoidant people may feel more justified telling a lie they feel is aimed at protecting their partner, and may also experience less guilt afterwards. Conversely, highly anxious people who are constantly monitoring and evaluating their relationships may feel their lies are a result of their partners' provocation. In relationships, every lie does not carry the same weight. The importance and impact of each lie results from both the lie teller's intent and the lie

receiver's interpretation. This study assessed the role of attachment in understanding motivations for deception and beliefs about the acceptability of deception in romantic relationships.

#### Predictions for Deception in Online Dating

Based on previous research, several predictions were made about the association between attachment and online deception. It was hypothesized that participants who were low in avoidance and low in anxiety would be relatively honest, with only normative self-promoting lies. For these subjects, having a positive view of both themselves and others would not necessitate the need to use deception in order to attract a potential partner. It was also hypothesized that those participants high in anxiety and low in avoidance would be more apt to lie, particularly in a way that is self-promoting. This pattern would make sense considering that these individuals have a negative view of themselves and a positive view of others. Because of this perceived discrepancy between the value of themselves versus others, these participants would feel the need to enhance their online profile in order to make it more attractive to romantic others. Participants high in avoidance and low in anxiety were also hypothesized to be high in deception. In this case, however, the lies would be used to drive potential partners away. This distancing could be accomplished either through self-deprecation, showing little interest, or creating unattainable standards for romantic others. Finally, participants high in avoidance and high in anxiety were hypothesized to show less deception in their online profile. These individuals with a low sense of self and others may be most interested in driving potential daters away. Considering their view of themselves, there would be little

reason to lie in order to self-promote or to self-deprecate. Rather, these fearful-avoidant participants may display their motives with a lack of effort or elaboration in their profile.

We also expected that the gender differences seen in prior research would be found across all attachment conditions. In particular, differences in male and female participants rate of lying would be negligible, but the men would tend to self-promote while the women would lie to enhance their partner's compatibility.

Predictions for Motivations and Beliefs about Deception

Hypotheses for participants' motivations and attitudes about deception were made based on prior research dealing with attachment and deception in relationships. Considering that more avoidant individuals tend to push partners away, it was hypothesized that participants high in avoidance would endorse the belief that their lies were in their partner's best interest, that their lies were justified and provoked, and that they would feel little guilt about having lied to partners in the past. All of these hypotheses create the picture of personality style that looks to create and promote an amount of emotional distancing between themselves and their partners. Concordantly, these highly avoidant individuals were also hypothesized to take a more permissive viewpoint when it came to the acceptability of lying about various relationship relevant topics.

Participants who score higher on anxiety are hypothesized to be less permissive about lying in general. These individuals who are constantly evaluating their romantic bonds, social value, and possibility rejection, should express attitudes that denounce relational deception. Highly anxious individuals are predicted to lie to make themselves look better, but to feel more guilt over lying to partners in the past. Lastly, anxious

participants are hypothesized to be less permissive of lies concerning any relationship relevant domain.

#### CHAPTER 2

#### METHOD

Participants were pre-screened using the Experiences in Close Relationships Questionnaire (ECR). Participants were also pre-screened to assure that they were not in a committed relationship at the time of the study. When the participants arrived, the experimenter told them that this study was interested in how people meet potential romantic partners online. The participants completed both an online dating profile and an email to potential romantic partners. After the emails were completed, the participants completed a post session questionnaire aimed at a more in depth understanding regarding their feelings about relational deception.

#### Participants

A sample of 208 undergraduate students (44 male, 164 female) at a large state university participated in this study. Participants were recruited by emails inviting students to participate in an "Online Dating Study." This sampling method was chosen in order to observe whether people with particular attachment styles were more drawn to online dating than people with other attachment styles. Participants were pre-screened in order to ensure that they were not in a committed relationship at the time of the study. All participants received extra credit in their psychology courses for their participation.

In a preliminary examination of the data, 21 participants (3 male, 18 female) were excluded from attachment related analyses because they were either in a committed relationship at the time of the study or failed to complete the prescreen which included the Experiences in Close Relationships—Short Form. Our total remaining sample

included 187 participants (41 males, 146 females). The mean age of the sample was 19.19 years (SD = 1.22) and the participants averaged 1.82 years (SD = 0.98) of college.

#### Measures

#### Number of Lies Told

The number of lies told was measured by asking participants to read over the transcript of their online dating profile and their Email to potential daters, and to identify any statements that could be considered not 100% accurate. In order to ensure that those statements identified were indeed lies and to be able to identify what kind of lie was written, participants also wrote down what a more accurate response would have been for each inaccuracy. In the analysis of this data, distinctions were made between Profile Lies (lies told in the online profile), Email Lies (lies told in the Email to potential daters), and Total Lies (combined total of lies in the profile and Email). These distinctions were made because the online profile's design may have artificially inflated the number of lies told. Many participants felt the forced multiple-choice format of the online profile necessitated small lies because, in many cases, none of the options accurately captured their conceptions of themselves.

#### Content of Lies

In analyzing the lies told, the taxonomy previously developed by DePaulo et al. (1996) was utilized. Using this methodology, lies were independently scored across three dimensions: content, rationale, and type (See Table 1 for a summary and examples of the coding scheme).

Lies were coded across content, rationale, and type by two coders. A minimum inter-rater reliability of 70% agreement was obtained on an overlapping 20% of the data

that both coders independently analyzed for lie content, rationale, and type. Coders read both the lie and what the more truthful statement would have been in order to categorize each lie. In analyzing the content of lies told, the lies were sorted into categories depending on whether the lies involved feelings, plans, achievements, facts, or explanations. Lie content focuses on the subject of the lie. In analyzing the rationales for lies, lies were categorized as self-oriented and other-oriented lies. Another way to think of lie rationale is whether the lie told was to protect or enhance the person lying, or another person. In analyzing lie type, lies were categorized into outright lies, subtle lies, and lies of exaggeration. Lie type specifically assesses the extent of the deceptive statements. For example, statements that are totally false, overstatements of facts, or purposeful omissions of relevant information would all be different lie types.

#### Attachment Style

Attachment style was assessed based on the The Experiences in Close Relationships Scale (ECR) – Short Form. The original ECR is a 36-item self-report measure used to assess attachment styles concerning romantic relationships (Brennan, Clark, & Shaver, 1998). The ECR—Short Form (Wei, Russell, Mallinckrodt, & Vogel, 2007) is a 12-item self-report version of the original ECR that measures attachment across the two continuous dimensions of anxiety and avoidance. Studies have shown that the short form has equal validity to the original ECR and the Short Form has produced comparable results to the ECR when embedded within it (Wei et al., 2007). The ECR— Short Form was administered to participants as part of a prescreening questionnaire that all students in Introductory Psychology and two other lower level psychology courses are asked to complete at the beginning of the each semester. Both the Anxiety and

Avoidance subscales are measured by 7-point Likert scale, where 1 signifies "*disagree strongly*," 3 signifies "*neutral/mixed*," and 7 signifies "*Agree strongly*." Reliability (Chronbach's Alpha) for this sample was .70 on the Anxiety subscale and .74 on the Avoidance subscale.

Motivations, Justifications and Acceptability of Lying in a Romantic Relationship

The second goal of this research was to clarify how one's attachment style might be associated with motivations to tell relational lies, lie justification, and the acceptability of lying in particular situations or about particular topics. To examine these questions, this second set of analyses looked at the responses to the 34-item post-session questionnaire (PSQ) with Likert scale responses ranging from 1 (*Not at all*) to 11 (*Very much*), dealing with motivations and justifications for lying in romantic relationships (see Appendix B). The questionnaire was broken down into six composite subscales: Lying to protect one's partner, lying to benefit oneself, feelings of guilt from lying, rationalization for lying, feeling provoked by your partner into lying, and acceptable situations or subjects to lie about. These subscales were derived from a factor analysis (see Footnote 1).<sup>1</sup>

#### Procedure

Once the participants were situated in the lab, they completed an online profile, similar to those found on the popular dating website Match.com. After completing the

<sup>&</sup>lt;sup>1</sup> Three separate varimax rotation factor analyses were conducted for each of these subsets of items. The resulting factor loadings can be seen in Appendix A. Six composite subscales were created based on the factor analysis. These factors, which were used to the subsequent analyses, were interpreted as: Lying to protect one's partner (PSQ 3-6; Alpha = .883), lying to benefit oneself (PSQ 7-10, 12-13; Alpha = .869), feelings of guilt from lying (PSQ 14-15; Alpha = .744), rationalization for lying (PSQ 16-19; Alpha = .756), feeling provoked by your partner into lying (PSQ 20-21; Alpha = .772), and acceptable situations or subjects to lie about (PSQ 23-32; Alpha = .790).

profile, the participants were additionally asked to write an email that they learned would be shared with other potential daters in the study. The instructions for this email, which was not in actuality dispersed to anyone, asked participants to include important information about themselves, what they were looking for from a partner, and what they were looking for in a relationship. In order to increase the mundane realism of the experience, the experimenter told the participants that they would have an opportunity at the end of the session to decide whether or not they would like to share their dating information with subsequent participants, and therefore none of the other participants who they might have encountered while entering the study would be "paired" with them. After sending their email, participants were given a post-session questionnaire including items related to both what they considered a lie, and the feelings about relational deception.

Once the email and post session questionnaire were complete, the experimenter gave participants the transcript of both their online profile and the email they sent. Participants reviewed the content of these documents, and then recorded any statements made that might not be 100% accurate. The researcher provided examples of various different kinds of inaccuracies that occur in everyday interactions. The participants were also asked to provide information as to what a more accurate response would have been for each inaccuracy. This process was used both to ensure the statements identified were actually lies, and to help coders decide what type of lie was being made. Participants were asked to record all inaccuracies, no matter how big or small they might have been. If there was any question as to whether a particular statement was a lie or not, they were asked to record it. Once this process is complete, participants were carefully debriefed

with particular attention paid to making sure they understood why the true intention of the study was not given outright and to ensure that they realized that their responses would not be shared with any potential daters. After the experimenters answered any questions the participants had, they were dismissed.

#### CHAPTER 3

#### RESULTS

#### Number of Lies Told

The three dependent variables initially analyzed were: lies in the online profile (Profile Lies, M = 3.87, SD = 3.07), lies told in the participants' Emails (Email lies, M = .37, SD = .80), and total lies told across both the profile and Email (Total Lies, M = 4.24, SD = 3.21). To test the hypothesis that attachment style would predict the amount of lies told, multiple regressions were performed on all three dependent variables. Step 1 of the regressions included only gender dummy coded (Male = 0, Female = 1), followed by the main effects of the continuous variables of attachment anxiety and avoidance at Step 2. Finally, in Step 3 of the regression analysis, the anxiety by avoidance interaction term was added into the model. The results of these initial analyses yielded no significant differences in lie frequency by attachment style, however, perhaps more important than the number of lies told were the types of lies told.

#### Type of Lies Told

The dependent variables Total Lies, E-mail Lies, and Profile Lies were coded by lie content, rationale, and type. Lies not accurately captured by any of the categorizations were dropped from the analysis. The percentages of each categorization can be found in Table 2.

In order to test whether attachment anxiety, attachment avoidance, and gender were related to the difference in the quality of the lies told, a regression analysis was conducted on lie content, rationale, and type categories of the Total Lies. The dummy coded gender variable was entered at Step 1 of the regression, the attachment subscales of

anxiety and avoidance at Step 2, and the anxiety by avoidance interaction term at Step 3. The results showed a marginally significant effect between gender and self-oriented lies t(1, 176) = 1.921, p = .056 as well as significant relationship between gender and subtle lies t(1, 176) = 2.357, p = .020. These findings indicate that, counter to our hypotheses, women (M = 3.425, SD = 2.516) told more self-oriented lies than did men (M = 2.488, SD = 2.873). Women (M = 1.932, SD = 2.023) also told significantly more subtle lies than men (M = 1.146, SD = 1.333). These results were supported by a regression analysis that looked at Email Lies' content, rationale, and type as the dependent variables. The regression included gender at Step 1, the attachment subscales of anxiety and avoidance at Step 2, and the anxiety by avoidance interaction term at Step 3. Women again had marginally higher amounts of self-oriented Email lies t(1, 176) = 1.905, p = .058 and subtle Email lies t(1, 176) = 1.902, p = .059.

Exploratory Analyses: Examining Only Participants with Relationship Experience

We further explored the data to determine whether participants who were more likely to use online dating might show the predicted pattern. Although anyone can engage in online dating, in most cases, online daters are people who have had trouble meeting potential partners face-to-face. For this reason, we looked separately at participants who had some relationship experience. Specifically, we looked at those participants who had reported being in more than one significant relationship (N = 121, 26 males and 95 females), because these are the people most apt to utilize online dating. This sub-sample did not differ from the general sample in Total Lies (M = 4.38, SD = 3.22), Email Lies (M = .38, SD = .87), Profile Lies (M = 4.00, SD = 3.06), Age (M = 19.19, 1.324), or years of schooling (M = 1.89, SD = 1.04). The same initial multiple regressions were run on this sample for the dependent variables Total Lies, Email Lies, and Profile Lies. Results showed that women told significantly more Total lies t(1, 119) = 2.375, p = .019 and Profile Lies t(1, 119) = 2.281, p = .024 than men. There was also a significant interaction of anxiety and avoidance in the number of Email Lies told t(1, 116) = 2.047, p = .043. Figure 1 shows that, for those participants low in avoidance, there were relatively low levels of deception regardless of high or low anxiety. However, participants high in avoidance and low in anxiety (dismissive-avoidant) had the least number of lies, while those participants high in avoidance and high in anxiety (i.e. more fearful-avoidant) had the most Email lies.

Motivations, Justifications, and Acceptability of Lying in a Romantic Relationship

We performed separate multiple regressions for each of the composite variables (e.g., lying to protect one's partner, lying to protect the self) with gender as a predictor included at Step 1, anxiety and avoidance entered at Step 2, and the anxiety by avoidance interaction added at Step 3.

#### Lies to Protect the Partner

It was hypothesized that those participants high in anxiety and low in avoidance (more anxious-ambivalent) would feel the greatest need to rationalize their deception as being motivated by a need to protect their partner. However, we did not find the hypothesized main effects; instead, there was a significant anxiety x avoidance interaction regarding being motivated to lie in order to protect one's partner t(1, 171) = -2.703, p = .008. Figure 2 shows that participants high in avoidance and high in anxiety (i.e., more fearful-avoidant) were more likely to report that partner protection was the not the major motivation for their deception. Conversely, those participants high in

avoidance and low in anxiety (i.e. more dismissive-avoidant) were more likely to report that their lies were told in order to protect their partner's best interests.

Participants who were higher in avoidance and higher in anxiety (i.e. more fearful-avoidant) consistently implicated themselves in their rationalizations for lying to their partners. This analysis differed from the previous one in that in this instance, "partner's best interest" was considered to be the rationale for the lie after it was told, as opposed to the motivating factor for the lie before it was told. There was a marginally significant anxiety x avoidance interaction (see Figure 3) regarding lies meant to protect one's partner t(1, 169) = -1.668, p = .097. Understandably, most participants felt their lies were relatively justified and the result of an isolated incident. The exception to this trend was, once again, individuals who were high in both anxiety and avoidance (i.e. more fearful-avoidant), who scored the lowest on this dimension, failing to externalize responsibility for their deception.

We also explored situations in which the partner was blamed for the deception. Respondents classified these lies as being provoked by their partner. Interestingly, there was a significant gender difference, t(2, 173) = 2.640, p = .009, and a marginally significant main effect of anxiety, t(2, 173) = 1.814, p = .071, for feelings of being provoked by one's partner into lying. Women were more likely than men to report that their partner was to blame for their deception. Similarly, those individuals high in anxiety were also more apt to report feeling pushed into lying by their partner.

#### Guilt From Telling a Lie

It was hypothesized that those participants higher in anxiety and lower in avoidance would feel more guilt about lying to their partners. This hypothesis was

confirmed by a regression analysis including anxiety, avoidance, and gender as predictors and the composite dependent variable dealing with feelings of guilt due to lies told. Results showed significant main effects for both anxiety t(2, 173) = 2.502,  $\beta = .190$ , p =.013 and avoidance, t(2, 173) = -2.167,  $\beta = -.164$ , p = .032, for the composite factor of guilt due to lying. Those participants high in anxiety felt significantly more guilt when they initially told their partner a lie. These participants also reported still feeling guilty about lying to a partner in the past. Those participants who scored low in avoidance also felt, and held onto, more guilt after lying to their significant other.

#### Acceptability of Lies

The third area examined whether individuals viewed lying to a romantic partner as acceptable in any particular situations. It was hypothesized that individuals who were high in anxiety would find relational deception unacceptable in any circumstance. On the other hand, those participants high in avoidance were hypothesized to have a more permissive attitude towards lying in morally ambiguous situations. Our results were consistent with this second hypothesis. A main effect of avoidance for acceptability of lying in specific situations or about particular topics, t(2, 173) = -3.198, p = .002, indicated that more avoidant individuals found lying to be more acceptable regardless of the situation. The individual issues that avoidant respondents deemed more acceptable to lie about included: Lying about seeing an ex (just as friends), saying "I love you" when you don't, spying on your partner by going into their email or social networking profiles, and even lying about having a sexually transmitted disease (see Table 3 for the complete results).

#### CHAPTER 4

#### DISCUSSION

Consistent with the idea that deception persists in almost all facets of everyday life (DePaulo et al., 1996), 90% of all participants recorded lying at least once in their online profiles or Email to potential daters. While previous research explored the role of deception in relationship formation (Johnson et al., 2004), this study extends the previous literature in two distinct ways. First, this study examined how adult romantic attachment is linked to deception in seeking out a partner. Second, it explored the reasons that people with different attachment styles might lie as well as their justifications and interpretations for their lies.

The findings from this study are discussed in two sections. The first section will deal with those findings that were a product of the experimental online dating manipulation. These results pointed to counter-intuitive gender difference in online dating deception, as well as how relationship experience understanding how attachment style affects the online dating experience. The second section of the discussion deals directly with how attachment style daters' lying in romantic relationships. These findings clearly show that aspects of lie telling and receiving are informed and interpreted through the lens of romantic attachment.

#### Lying in the Online Dating Simulation

In our preliminary analysis of the lies told by participants, an important trend was observed. There was a pattern of responses that emerged in the explanation of lies identified from the online profile. It seems many participants identified their responses as lies because they did not feel that any of the multiple-choice responses offered correctly described them. For example, one respondent, in response to a question regarding their best feature, wrote, "I would have said 'face,' but that wasn't an option." There was some debate over how to deal with lies of this nature. While these responses certainly can be classified using the coding outlines of DePaulo et al. (1996), these lies are primarily a function of forced response and a lack of adequate answer options. This is a particularly important point in that the online profile used in this research was taken directly from a popular online dating service, with only minor revisions made to make the questions relevant to the college sample. What this points to is a homogenizing factor innate to online dating profiles which forces its users to put themselves into what many feel like are disingenuous pigeonholes. What purpose this serves in attracting, or repelling, a romantic partner is a question outside the breadth of this experiment, but while our analysis was conducted taking this factor into account, future research may be directed towards pinpointing its effect on relationship success. In terms of this study, this problem was addressed by separately analyzing lies told in terms of Profile Lies, Email Lies, and Total Lies.

#### Gender and Online Dating Deception

As hypothesized, gender was not a factor in the number of lies told across both the online profile and the email. However, contrary to our hypothesis, women were found to tell more self-oriented lies, characterized as lies told to enhance one's image or further one's interests. This is surprising particularly because prior research has found that men more often tell self-oriented lies to promote themselves, while women more often utilize other-oriented lies to enhance their partner (DePaulo et al., 1996). It is possible that the anonymity of online dating lends itself to an increase in sexual freedom,

allowing women to take what has previously been characterized as a more "masculine" approach to searching for a mate. Behind the relative safety of the computer screen, it appears that women feel uninhibited enough to take a more active, one might say sexually aggressive, approach in self promoting in order to attract potential suitors.

Less startling was the finding that women told more subtle lies than their male counterparts. While there is a dearth of empirical evidence on this subject, subtle lies are characterized as white lies and small lies of omission that are often used to facilitate social interaction. This type of conversational facilitation is in keeping with the rubric of women as more socially adept.

Relationship Experience as a Moderator of Attachment Style and Deception

One variable of interest in this study was whether or not relationship experience might play a part in predicting the attachment effects of online dating deception. The reasoning behind this idea is that online dating on some level presupposes some level of familiarity with dating in general. Those people who have never been in a relationship, or more generally lack relationship experience, would not be as likely to start the dating process by utilizing the internet, nor would they be as adept at constructing their "dating selves" for the email to potential daters. In order to test for this effect, our analysis was rerun with those participants who reporting having been in one relationship or less excluded from the sample.

Contrary to our initial hypothesis, individuals who were higher in avoidance and lower in anxiety, or more dismissive-avoidant, were found to tell the least amount of lies in their emails to potential dating partners. The dismissive-avoidant attachment style is characterized by individuals who do not necessarily fear rejection but rather their loss of

independence. Workaholics are a good example of one type of dismissive-avoidant prototype. A workaholic's primary concern and priority is his or her job. This leaves little room for a romantic relationship that could serve as competition for the individual's time and resources as they pursue their occupational goals. The instructions for the email to potential daters asked participants to include information about themselves, what they are looking for in a partner, and what they are looking for in a relationship. It is possible that this email gave dismissive individuals the opportunity and permission to be honest about their relationship concerns and forewarn potential dating partners that they would have to be content with a romantic relationship being a lower priority for the dismissive individual. This finding suggests that dismissive-avoidant individuals may benefit from online dating websites that explicitly give them a forum to express their relationship trepidation so that they can find a partner who will not be disappointed by unfulfilled expectations later on in the relationship.

Counter to our original hypothesis, participants high in avoidance and high in anxiety, or characteristically fearful-avoidant, told the most Email Lies. Fearful individuals generally avoid relationships for fear of emotional pain and being rejected. Online dating provides an opportunity for these individuals to put a version of themselves forwards for others to evaluate and respond to. These individuals, though reluctant to pursue contact face-to-face, may be motivated to put forward the best version of themselves and their relationship needs when constructing their emails. In this case, online dating removes the fear of immediate rejection, giving fearful individuals a space to create a "less rejectable" version of themselves. The other outcome of this prospect, however, is an increase in deceptive statements in the subsequent Email. It should be

mentioned that while the initial outcome of the enhanced profile may be attracting more potential daters, the fact that increased deception is used to attract these partners could ironically lead to an eventual future rejection.

Taken together, these results suggest that online dating provides prospective daters an avenue around some of the relationship pitfalls that may have hampered them in the past. For those people who find themselves failing to meet their partners expectations, online dating provides a forum for them to be clear about what can reasonably be expected of them. For others who fear the immediate rejection of asking a stranger out on a date, online dating provides a virtual middleman behind which they can be free of other's evaluation. In these ways, online dating provides those people who have relationship experience but have ultimately been unlucky in love, with a useful tool for avoiding past pitfalls in finding a new partner.

Attachment Theory and Deception in Romantic Relationships

In investigating the nature of the association between attachment and deception in online dating, it is important to also understand the role that attachment plays in the motivation and construal of lies told within the context of romantic relationships. To that end, one of the important focuses of this research was directed towards gaining a greater understanding of how the attachment dimensions of anxiety and avoidance inform the process of lying, from inception to interpretation. This analysis allows us to get a more complete picture of deception as the complex interplay between two individuals, rather that a homogenized predictor of relationship success.

When asked to what extent their relationship lies were intended to protect their partner, participants higher in avoidance and lower in anxiety, or more dismissive-

avoidant individuals, expressed this view the strongest. On the other end of the anxiety spectrum, more fearful-avoidant participants, high in both avoidance and anxiety, were the least likely to endorse partner protection as the motivation for their lies. In terms of attachment prototypes, it makes intuitive sense that dismissive avoidant people, whose aim is to keep there independence, would believe that their deception is in their partner's best interest. This mindset allows them to keep an emotional distance from their partner while at the same time feel good about themselves. By telling lies that avoid upsetting your partner, one also prevents relationship conflict. While this may seem like a positive outcome on the surface, this deception also serves to avoid relational communication that can lead to a closeness derived from better understanding one's partner's point of view. In the case of fearful-avoidant individuals, once again attachment theory provides a basis for understand our results. Fearful-avoidant individuals are characterized by avoiding relationships in order to avoid being hurt or rejected. This is a very self-focused motivation. The tendency of participants high in avoidance and anxiety to respond that partner protection was not as great a factor in their relationship lies is consistent with their self-focused perspective of relationships. In this case, the motivation is to protect and avoid pain directed at oneself, not at one's partner.

This research found that the amount of guilt felt and held onto after telling a partner a lie varied depending on both relationship anxiety and relationship avoidance. Those participants high in anxiety expressed the greatest amount of guilt over deceiving their partner. Considering relationship anxiety is a measure of worry pertaining to the partnership, it is not surprising that participants who worry more about their partner would also be more prone to feel guilty over wronging them. Contrary to relational

anxiety, those participants who scored high in avoidance expressed the least guilt over lying to their significant other. This finding could be viewed through the lens of the participant's commitment to the relationship and partner. Those individuals who keep their partners at arms length emotionally seem less prone to feeling badly about deceiving them. In fact, deception may be a tool avoidant people utilize to keep and maintain a "safe" distance in their relationships.

In keeping within the framework of participants' feelings about having lied, our next analysis concentrated on how justified people felt in lying. This dimension included various self-focused rationales for lying including being a generally honest person, lying only in one special circumstance, and the end result of the lie being positive. Overall, most participants agreed with these measures that implicated the power of the situation, rather than themselves, as justification for their deceptive actions. The notable exception to this trend was participants high on both anxiety and avoidance, or more fearfulavoidant individuals. Fearful participants once again took more personal responsibility for their lies, expressing less sentiment that the lies told were either justified or a factor of an isolated incident. One conceptualization of the fearful-avoidant prototype is that these individuals have more negative feelings about themselves and others. These results illustrate these "negative feelings of themselves" as their reasoning for lying, and excludes the idea that they are basically honest people with some justification for lying.

When participants were asked to what extent they felt that the relationship lies they told were due to their partner provoking them into lying, women endorsed this view significantly more than men. This finding points to the idea of women taking a reactive approach in the relationship. Female participants may feel increased provocation as a

result of their male partner's jealousy or unreasonable expectations. Another interpretation of this finding is that the men felt that the lies they told were selfmotivated, in essence taking responsibility for their relational deception. It is difficult from these preliminary results to know whether these findings are a result of increased partner-blame from women, increased self-blame from men, or a combination of both of there theories. Certainly, this could be an avenue for future research.

A marginal main effect of anxiety was also found in connection with feeling provoked into lying wherein the more anxious the participant the more they felt their deception was a result of their partner's provocation. Considering that people high in relationship anxiety tend to constantly be checking in and evaluating their relationship, it is understandable that this dynamic, with the addition of conflict, could lead quickly to reacting to any perceived change in the partner's behavior.

The final questions on the post-session questionnaire asked participants how acceptable it was to lie to your romantic partner about a variety of subjects. These subjects included topics such as saying "I love you," the number of partners you've had previously, and spying on your partner. Taken together, the variety of the topics combine to form a point of view that reflects the question, "Is it acceptable to lie to you partner under any circumstance?" Consistent with the concept of relationship avoidance, the more avoidant the participant, the more they endorsed lying for any reason. For avoidant individuals, lies may be used as a means with which to perpetuate emotional distance in their relationships. This permissive attitude towards deception may also indicate an avoidant individual's relative lack of commitment towards their relationship, as many lie

topics, such as "lying about having an STD," could result in negative consequences for their partner.

Taken together, these findings on lie motivation and justification paint a complex picture of deception in romantic relationships. In future research it will be important to investigate deception through an attachment theory relevant lens. This research provides support for the idea that the impact lies make in a relationship has as much to do with the individuals involved as it does with the content of the lies themselves. This study began with the idea that lying could be seen as a failure to communicate in one's relationship. It appears that in many cases deception is being used as a tool to dictate the emotional closeness or distance the person feels most comfortable with. Our original idea could therefore be revised to say that lying can be seen as an indirect means of communicating one's feeling in a relationship.

#### Limitations

As with most deception research, methodological problems exist with the assessment of lying. The use of self-report is problematic because it is possible that the reports of lies are not completely accurate themselves. That said, having the participants record what the more accurate response to each lie would have been does give the researcher a clearer picture of the context in which each deceptive statement is being used. There is, however, reason to suggest that in a procedure of this kind, the total number of lies is actually underestimated, in that participants would be least likely to reveal any lies that would cast them in a negative light. Additionally, of those participants who reported no lies, it is quite possible that some were being deceptive about not lying. In either case, the result would be an underestimation of the total

deception. Even with these concerns, it is considered unlikely that this potential underestimation would have any systematic difference across experimental conditions that would in turn lead to inaccurate assumptions from the data.

One potential reason for the lack of more robust findings from the experimental manipulation is believe to be due to the studies sample. One of the factors that draws people to online dating is the perceived lack of an available and viable dating pool from which to date. The use of college students in our sample is problematic in that on a large college campus that viable dating pool is every present in their daily lives. While many of our participants may use online dating websites at some point, most likely it will be post-college, when the availability of potential dates is significantly reduced.

#### <u>Summary</u>

With online dating becoming a ubiquitous form of meeting potential romantic partners, this research takes a first step in understanding how large a part deception plays in those initial communications. Our findings suggest that online dating may give some populations the opportunity to explore a different approach to mate selection. The relative anonymity of online dating allows women to more openly talk about themselves and allows those with more relationship experience the chance to communicate their expectation for a relationship before meeting potential partners. This study, however, also suggests a more negative conclusion, that online dating allows users to create disingenuous versions of themselves in order to more successfully find a partner. The end result of this deceptive approach may end up reinforcing the fear of rejection that was the initial impetus for creating the false profile to begin with. Whatever the motivation, it is clear from this research that the online dating universe is far more complex than it may seem on the surface and further study on this topic could yield a richer understanding of modern dating life.

	Content of lie
Feelings	Lies about affects, emotions, opinions, and evaluations.
Achievement	Lies about achievements, accomplishments, knowledge, and
	so on.
Actions, plans	Lies about what the liars did, are doing, plan to do, where they
	are.
Explanations	Lies about liars' reasons or explanations of their behavior.
Facts	Lies about facts, objects, events, people, or possessions.
	Rationale for lie
Self-oriented	Lies told to protect or enhance the liars or advantage liars'
	interests.
Other-oriented	Lies told to protect or enhance others or advantage other's
	interests.
	Type of lie
Outright	Total falsehoods.
Exaggerations	Lies in which liars overstate the facts, or convey an impression
	that exceeds the truth.
Subtle	Lying by evading or omitting relevant details. Also behavioral
	and white lies.

Table 1. Lie Taxonomy and Definitions

*Note.* More detailed definitions are found in DePaulo, Kashy, Kirkendol, Wyer, and Epstein (1996).

			Co	ontent (%)	Ratior	nale (%)	Type(%)				
	Ν	Feelings	Achievements	Actions	Explanations	Facts	Self	Other	Outright	Exaggeration	Subtle
Total Lies	792	49.5	4.8	30.5	0.9	14.3	76.0	24.0	39.8	18.6	41.6
Email Lies	70	58.6	1.4	25.7	5.7	8.6	67.1	32.9	20.0	20.0	60.0
Profile Lies	722	48.6	5.1	31.1	0.1	15.0	76.5	23.5	42.0	18.8	39.1

Table 2. The Percentages of Total Lies, E-mail Lies, and Profile Lies for Lie Content, Rationale, and Type

Anxiety	Avoidance	Interaction
(Beta)	(Beta)	(Beta)
133~	.263***	007
035	.210**	003
.112	.174*	.044
.012	.137~	136
.112	.174*	.044
.030	.140~	.010
013	.242**	025
	( <i>Beta</i> ) 133~ 035 .112 .012 .112 .030	(Beta)  (Beta)   133~  .263***   035  .210**    .112  .174*    .012  .137~    .112  .174*    .030  .140~

Table 3. Summary of Multiple Regression Analysis for Anxiety and Avoidance predicting
Lie Acceptability in Particular Situations

~ p = .08 \*p < .05 \*\*p < .01 \*\*\*p = .001

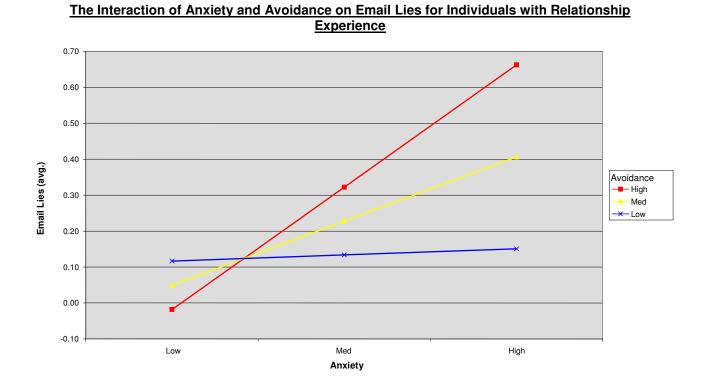


Figure 1. The Interaction of Anxiety and Avoidance on Email Lies for Individuals with Relationship Experience.

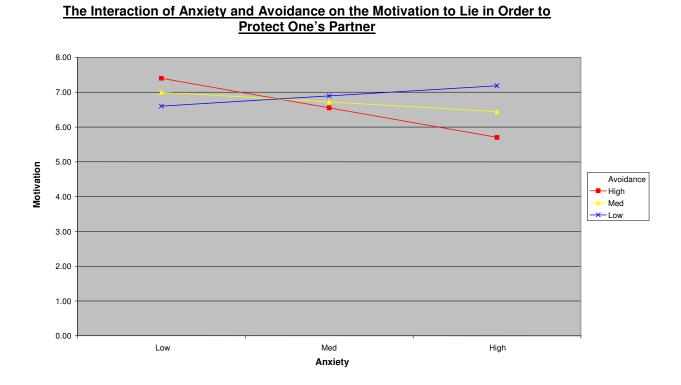


Figure 2. The Interaction of Anxiety and Avoidance on the Motivation to Lie in Order to Protect One's Partner

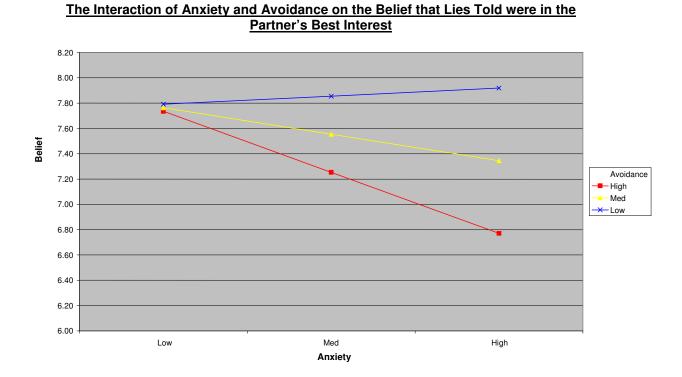


Figure 3. The Interaction of Anxiety and Avoidance on the Belief that Lies Told were in the Partner's Best Interest

# APPENDIX A

Factor Analyses for the Creation of Post-Session Questionnaire Composite Variables

Factor	Chronbach's Alpha
Lies to protect one's partner (4 items)	α = .883
e.g. "lied to avoid getting hurting your partner"	
Lies to benefit oneself (6 items)	$\alpha = .869$
e.g. "lied because it was easier than telling the truth"	
Feelings of guilt from lying (2 items)	α = .774
e.g. "did you feel guilty lying in your romantic	
relationship"	
Rationalizations for lies told (4 items)	<i>α</i> = .756
e.g. "lied was just one special circumstance"	
Feeling provoked into lying by your partner (2 items)	α = .772
e.g. "did you feel your partner was to blame for the lie"	
Acceptable situations or subjects to lie about (10 items)	α = .883
e.g. "it's acceptable to lie about cheating in past	
relationships"	

# APPENDIX B

# MATERIALS

#### Post-Session Questionnaire

Please read each question carefully and circle the number that best corresponds to your answer.

1. In your past relationships, how often did you lie:

- A) Never
- B) Once a week
- C) Twice a week
- D) Three times a week
- E) Four times a week
- F) Five times a week
- G) Every day
- H) Multiple times a day

2. In your past relationships, how often do you think your partner lied to you:

- A) Never
- B) Once a week
- C) Twice a week
- D) Three times a week
- E) Four times a week
- F) Five times a week
- G) Every day
- H) Multiple times a day

In general, when you lied in your romantic relationships, to what extent was it:

### 3. To avoid getting your partner upset:

l Not at all	2	3	4	5	6	7	8	9	10 Ve	11 ery much
4. To prote	ect your	partner	:							
l Not at all	2	3	4	5	6	7	8	9	10 Ve	11 ery much

5. To avoid hurting your partner:

1 Not at all	2	3	4	5	6	7	8	9	10 11 Very much				
6. In your partner's best interest:													
1 Not at all	2	3	4	5	6	7	8	9	10 11 Very much				
7. To prote	7. To protect yourself:												
1 Not at all	2	3	4	5	6	7	8	9	10 11 Very much				
8. To avoid	8. To avoid negative consequences:												
1 Not at all	2	3	4	5	6	7	8	9	10 11 Very much				
9. In your best interest:													
1 Not at all	2	3	4	5	6	7	8	9	10 11 Very much				
10. Because	e it was	easier t	han tell	ing the	truth:								
1 Not at all	2	3	4	5	6	7	8	9	10 11 Very much				
11. To deli	berately	hurt yo	our parti	ner:									
1 Not at all	2	3	4	5	6	7	8	9	10 11 Very much				
12. To get your partner to like you more:													
1 Not at all	2	3	4	5	6	7	8	9	10 11 Very much				
13. To make yourself look better than you are:													
1 Not at all	2	3	4	5	6	7	8	9	10 11 Very much				

In general, when you lied in your romantic relationships, to what extent:

14. Did you feel guilty:

1 Not at all	2	3	4	5	6	7	8	9	10 11 Very much					
15. Do you	15. Do you still feel guilty:													
1 Not at all	2	3	4	5	6	7	8	9	10 11 Very much					
16. Did you feel like you were basically an honest person:														
1 Not at all	2	3	4	5	6	7	8	9	10 11 Very much					
17. Did you feel like there would be a happy resolution afterwards:														
1 Not at all	2	3	4	5	6	7	8	9	10 11 Very much					
18. Did you feel like it was just one special circumstance:														
1 Not at all	2	3	4	5	6	7	8	9	10 11 Very much					
19. Did you	ı feel yo	our lie v	vas justi	fied:										
1 Not at all	2	3	4	5	6	7	8	9	10 11 Very much					
20. Did you	ı feel yo	our part	ner prov	oked y	ou into l	lying:								
1 Not at all	2	3	4	5	6	7	8	9	10 11 Very much					
21. Did you	ı feel yo	our part	ner was	to blam	ne:									
1 Not at all	2	3	4	5	6	7	8	9	10 11 Very much					

22. To what extent do you feel lies of omission are considered lies. For example, telling your partner you went out with a group of friends, but not telling him or her that one of the friends was an ex-significant other.

1 definitely	2 y a lie	3	4	5	6	7	8	9	10 not a	11 a lie at all			
To what extent do you feel that lying to a romantic partner about the following subjects is acceptable:													
23. Cheating:													
1 Completely	2 y accept	3 able	4	5	6	7	8	9 Comple	10 tely una	11 acceptable			
24. Saying "I love you" when you don't or aren't sure that you do:													
1 Completely	2 y accept	3 able	4	5	6	7	8	9 Comple	10 tely una	11 acceptable			
25. Lying about where you are going:													
1 Completely	2 y accept	3 able	4	5	6	7	8	9 Comple	10 tely una	11 acceptable			
26. Lying	about se	eeing ar	ı ex (jus	st as frie	nds):								
1 Completel	2 y accept	3 able	4	5	6	7	8	9 Comple	10 tely una	11 acceptable			
27. Lying	about tł	ne numb	er of pa	artners y	vou've s	lept wit	th:						
1 Completely	2 y accept	3 able	4	5	6	7	8	9 Comple	10 tely una	11 acceptable			
28. Lying	about h	ow drur	nk or sto	oned you	u are:								
1 Completely	2 y accept	3 able	4	5	6	7	8	9 Comple	10 tely una	11 acceptable			

29. Ly	29. Lying about if you've cheated in past relationships:												
		2 accept			5				9 Complet		11 cceptable		
30. Lying about spying on your partner (going into their email or Facebook/MySpace accounts):													
		2 accept		4	5	6	7	8	9 Complet		11 cceptable		
31. Ly	ying a	about b	eing tes	ted for s	sexually	transm	itted dis	seases	s:				
1 Comp	l letely	2 accept	3 able	4	5	6	7	8	9 Complet	10 ely una	11 cceptable		
32. Lying about having a sexually transmitted disease:													
		2 accept		4	5	6	7	8	9 Complet		11 cceptable		

#### REFERENCES

- Bartholomew, K. (1990). Avoidance of intimacy: An attachment perspective. *Journal of Social and Personal Relationships*, 7(2), 147-178.
- Baxter, L., & Wilmot, W. (1985). Taboo Topics in Close Relationships. Journal of Social and Personal Relationships, 2(3), 253-269.
- Benz, J.J., Anderson, M.K., & Miller, R.L. (2005). Attributions of Deception in Dating Situations. *Psychological Record*, 55(2), 305-314.
- Bowlby, J. (1978). Attachment theory and its therapeutic implications. *Adolescent Psychiatry*, *6*, 5-33.
- Brennan, K. A., Clark, C. L., & Shaver, P.R. (1998). Self-Report measurement of adult attachment: An integrative overview. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 46-76). New York: Guilford Press.
- Cole, T. (2001). Lying to the one you love: The use of deception in romantic relationships. Journal of Social and Personal Relationships, 18(1), 107-129.
- DePaulo, B.M., Ansfield, M.E., Kirkendol, S.E., & Boden, J.M. (2004). Serious Lies. *Basic* and Applied Social Psychology, 26(2), 147-167.
- DePaulo, B.M., Kashy, D.A., Kirkendol, S.E., Wyer, M.M., & Epstein, J.A. (1996). Lying in everyday life. *Journal of Personality and Social Psychology*, 70(5), 979-995.
- Goffman, E. (1959). The presentation of self in everyday life. Oxford England: Doubleday.
- Hazan, C., & Shaver, P. (1987). Romantic love conceptualized as an attachment process. Journal of Personality and Social Psychology, 52(3), 511-524.
- Jang, S.A., Smith, S.W., & Levine, T.R. (2002). To stay or to leave? The role of attachment styles in communication patterns and potential termination of romantic relationships following discovery of deception. *Communication Monographs*, 69(3), 236-252.

- Kaplar, M.E., & Gordon, A.K. (2004). The enigma of altruistic lying: Perspective differences in what motivates and justifies lie telling within romantic relationships. *Personal Relationships*, 11(4), 489-507.
- Knox, D., Schacht, C., Holt, J., & Turner, J. (1993). Sexual lies among university students. *College Student Journal*, 27(2), 269-272.
- Lawson, H., & Leck, K. (2006). Dynamics of Internet Dating. *Social Science Computer Review*, 24(2), 189-208.
- Lopez, F., & Rice, K. (2006). Preliminary development and validation of a measure of relationship authenticity. *Journal of Counseling Psychology*, *53*(3), 362-371.
- Mikulincer, M., & Shaver, P. (2003). The Attachment Behavioral System in Adulthood: Activation, Psychodynamics, and Interpersonal Processes. Advances in experimental social psychology, (Volume 35, pp. 53-152). San Diego, CA US: Elsevier Academic Press.
- Pietromonaco, P.R., & Carnelley, K.B. (1994). Gender and working models of attachment: Consequences for perceptions of self and romantic relationships. *Personal Relationships*, 1(1), 63-82.
- Pietromonaco, P.R., Greenwood, D., & Barrett, L. (2004). Conflict in Adult Close Relationships: An Attachment Perspective. Adult attachment: Theory, research, and clinical implications (pp. 267-299). New York, NY US: Guilford Publications.
- Roloff, M., & Cloven, D. (1990). The chilling effect in interpersonal relationships: The reluctance to speak one's mind. *Intimates in conflict: A communication perspective* (pp. 49-76). Hillsdale, NJ England: Lawrence Erlbaum Associates, Inc.
- Shulman, S., & Scharf, M. (2000). Adolescent romantic behaviors and perceptions: Age-and gender-related differences, and links with family and peer relationships. *Journal of Research on Adolescence*, 10(1), 99-118.

Solomon, R.C. (1993). What a tangled web: Deception and self-deception in philosophy. *Lying and deception in everyday life* (pp. 30-58). New York, NY US: Guilford Press.

- Toma, C., Hancock, J., & Ellison, N. (2008). Separating fact from fiction: An examination of deceptive self-presentation in online dating profiles. *Personality and Social Psychology Bulletin*, 34(8), 1023-1036.
- Wei, M., Russell, D., Mallinckrodt, B., & Vogel, D. (2007). The Experiences in Close Relationship Scale (ECR)-short form: Reliability, validity, and factor structure. *Journal of Personality Assessment*, 88(2), 187-204.
- Zak, A. (1998). Individual differences in perceptions of fault in intimate relationships. *Personality and Individual Differences*, 24(1), 131-133.
- Zimbler, M.S., Feldman, R.S. (under review). Liar Liar, Hard-Drive on Fire: How Media Context Affects Lying Behavior.