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Su Ahn Jang

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TO STAY OR TO LEAVE?  
THE ROLE OF ATTACHMENT STYLES AND COMMUNICATION PATTERNS  
FOLLOWING DISCOVERY OF DECEPTION AND POTENTIAL TERMINATION  
OF ROMANTIC RELATIONSHIPS

BY

Su Ahn Jang

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# ABSTRACT

## TO STAY OR TO LEAVE? THE ROLE OF ATTACHMENT STYLES AND COMMUNICATION PATTERNS FOLLOWING DISCOVERY OF DECEPTION AND POTENTIAL TERMINATION OF ROMANTIC RELATIONSHIPS

BY

Su Ahn Jang

This study investigated the communication patterns and relational outcomes after the discovery of deception in romantic relationships as a function of the attachment styles of the individuals who received the deception. Attachment style, information importance, emotional intensity, and communication patterns of the 213 participants who had discovered the lie of a romantic partner were administered. Analysis revealed that secures were more likely to talk about the issue, anxious/ambivalents were more likely to talk around and avoid the issue, and finally, avoidants were more likely to avoid partners. The results are consistent with the hypotheses that communication patterns following discovery of the partner's deception and subsequent relational outcome decisions are related to attachment styles in individuals. Implications of this thesis are discussed in the context of attachment theory.

To my marvelous family with love

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## INTRODUCTION

Romantic relationships do not always last happily ever after. If they did, everyone would be with his or her very first love. Some of the causes of the termination of close relationships include competing relationships, sexual behavior, betraying confidence, unexplained loss of contact or closeness, change in personality/value, and deception (Planalp & Honeycutt, 1985; Planalp, Rutherford, & Honeycutt, 1988). One of the events that increase uncertainty in personal relationships is discovery of deception, and it has a strong effect on beliefs about the honesty of the partner in the relationship (Planalp & Honeycutt, 1985). According to Planalp and Honeycutt, discovery of deception increases uncertainty in relationships, and as a consequence, causes four events in a sequence: (1) a strong effect on beliefs about the honesty of the other in the relationship (2) negative emotional responses (3) communication patterns of either avoidance or engagement which involves either argument or talking through a problem, and (4) consequences for relationships such as terminating or continuing the relationship.

People, in general, believe that their partner is an honest person (McCornack & Park, 1996; Cole 2001). Nevertheless, ninety-two percent of people admit lying to

their significant others (Cole, 2001). Therefore, it is likely that when people cannot detect deception, they tend to assume that the truth is being told (Levine & McCornack, 1992). Negative consequences result when the lies and deceptions of one partner are discovered by the other. Discovering deception has a positive association with relationship dissolution, however, it does not necessarily result in the termination of all relationships (McCornack & Levine, 1990; Planalp & Honeycutt, 1985; Planalp et al., 1988). It is probable that situations or relational variables in every relationship may play some role in making a decision to end the relationship, but it is also feasible to suspect that certain traits may play an important role. Therefore, it should be determined if certain traits, such as the attachment styles of the deceived partners, may have an impact on making the decision to terminate the relationship. Moreover, discrepancies in communication patterns following the deception incidents such as avoiding the issue/person, arguing over the issue, or talking over/around the issue, could also be an effect of the attachment styles of the people involved (Planalp & Honeycutt, 1985; Planalp et al., 1988).

The present paper attempts to answer two important questions. First, are a deceived partner's communication patterns following the deception incident are linked to his or her attachment style? Second, is a deceived partner's

decision to terminate the relationship upon the discovery of the deceptive communication in the deceiving partner linked to his or her attachment style? In other words, this paper examines whether or not the communication patterns and termination of romantic relationships after discovery of deception are correlated with the secure, anxious/ambivalent or avoidant styles of the deceived partners. According to attachment theory, different dispositions among these three attachment groups may cause members of each group to enact different choices and outcomes in reaction to discovery of their romantic partner's deception (Bowlby, 1979). To produce background for these inquiries, reviews of the literature on discovery of deception, Attachment Theory, communication patterns under distress, and relational termination are provided below.

## LITERATURE REVIEW

### Discovery of Deception

In the current investigation, relational deception is defined as when a person produces a message with the intent to mislead a relational partner about a matter of some consequences to the partner or relationship (McCornack & Levine, 1990). Such a restricted definition of deception is essential for two reasons. First, by limiting the definition, less extreme forms of information modification such as politeness, being not clear, avoiding truth, or

white lies are eliminated (McCornack & Levine, 1990). Second, the emotional impact after discovery of deception would differ with the intensity of deception. As a general rule, the emotional impact of the discovery of white lies will be different than that of lie about a partner's infidelity. For these two important reasons, the definition of deception in this research is limited to that given above which highlights intentionality on the part of the deceiver.

Research reveals that the discovery of deception, when it is defined as it is here within a relationship, tends to be an intense negative emotional experience, and thus may lead to the eventual termination of the relationship (McCornack & Levine, 1990). The negative emotional intensity is positively associated with "degree of relational involvement, and importance attributed to the information or event that was lied about" (p. 122). Therefore, to examine outcomes after detection of lies, current research requires the measurement of information importance. Information importance reflects the individual's perception of the relevance of the lie told. McCornack and Levine explain information importance as "the degree of effort expended on the processing and subsequent search for information should be directly proportional to the degree of importance placed upon the information that was lied about" (1990, p.123). A lie holds low information importance if the issue lied about is trivial and easily

forgivable. But, if the issue lied about is very important to a relationship, it holds high information importance. Peoples' threshold of tolerance for an identical lie is different; therefore, it is important to collect this information importance measurement from each respondent in the current study. Finally, the relationship between "information importance and relational termination may very well be causal" (McCornack & Levine, 1990, p.131). Information importance has been shown to predict relationship termination. The current research will replicate this measurement to observe the causal relationship between information importance and relationship termination in this study.

All things considered, discovering deception is definitely an anxiety-provoking situation. However, McCornack and Levine (1990) reported that only 24 percent of their subjects stated that their relationships had terminated since the time the deception was discovered, while the remaining 76 percent of the subjects stayed in the relationship. Similarly, Planalp and Honeycutt (1985) reported that upon reception of partners' uncertainty increasing behaviors which include competing relationships, unexplained loss of contact or closeness, sexual behavior, betraying confidence, change in personality/values, and deception, 27 percent terminated their relationships and 73 percent continued their relationships. The replication



study (Planalp et al., 1988) found an even smaller termination rate of only 9 percent terminating their relationships and remaining 91 percent continuing the relationships. One common assumption about deception is that lies are fundamentally destructive and frequently result in the termination of relationships (Hample, 1980); yet, this notion may not be accurate according to the McCornack and Levine (1990) as only one out of four subjects decided to end their relationships. Then, it would be relevant to further investigate why some terminated and the others continued their relationships following deception. Perhaps the attachment styles of the relationship terminators and deceived parties may hold the key to this question. One important note is that all three studies included friendships as well as romantic relationships, however, the current study will only look at the romantic couple relationships in regards to their relationship consequences following discovery of deception. Thus, if the data in above three studies are separated to two groups, romantic relationships and friendships, the proportion of those who leave and stay in relationships may be different in each group. Terminating an intimate relationship may not be as simple as stopping the subscription to the daily newspaper because one of the columns carried some false information. At this point, it is fundamental to gain knowledge about the nature of attachment styles in people.

### Attachment Theory

Evidence is accumulating that human beings of all ages are happiest and able to deploy their talents to best advantage when they are confident that, standing behind them, there are one or more trusted persons who will come to their aid should difficulties arise. The person trusted, also known as an attachment figure, can be considered as providing his (or her) companion with a secure base from which to operate (Bowlby, 1979, p.103).

Bowlby explored why infants forge strong emotional bonds with their primary caregivers. Bowlby's attachment theory suggests that the quality of the attachment style is largely determined by the caregiver's emotional availability and responsiveness to the infant's needs. This relationship has a profound impact on the child's developing personality and view of the social world and the way in which that child will pass attachment propensities on to following generations (1979). When an infant is separated from its primary caregiver, the infant goes through a series of three emotional reactions: protest, despair and detachment. In the protest stage, the infant actively searches for its primary caregiver, cries, and resist other's soothing efforts. In the despair stage, the infant is in a state of passivity and sadness. In the detachment stage, the infant is in defensive disregard for, and avoidance of, the primary

caregiver if he/she returns. A primary caregiver who is consistent and satisfies his/her infant's needs would help establish a secure attachment style for his/her child. Furthermore, the primary caregiver who is inconsistent or slow to respond to an infant's cry or needs would foster an infant who in crying more than usual, combines attachment behaviors with blatant expressions of anger, and seems generally anxious. However, if a primary caregiver refuses or rejects the infant's attempts to make physical contact, the infant may learn to avoid him/her. Through repeated interactions with the primary caregiver, infants develop internal working models holding beliefs and expectations concerning whether the caregiver is caring and responsive, and also if themselves are worth of attention and care. These working models are eventually carried further into context of new relationships where they guide individuals' expectations, perceptions and behaviors (Bowlby, 1973).

Based on Bowlby's ideas, Ainsworth, Blehar, Waters, and Wall (1978) have developed three attachment styles or types: secure, anxious/ambivalent, and avoidant. Infants in the anxious/ambivalent style frequently display protest behaviors, while infants in the avoidant style frequently display detachment behaviors. Infants in the secure style do not display either of the above distressing behaviors because their mothers satisfy their needs. Furthermore, the three attachment styles established in children can also be

found in adult close relationships. Qualities of relationships have been shown to be related to caregiver relationship history, and individual variation in such relationships forecasts qualities of later relationships (Sroufe & Fleeson, 1986). As children grow older, their need of parental presence gradually decreases, and their bonds of attachment with the parents must become attenuated and ultimately end (Weiss, 1986). Otherwise, living apart from parents would be emotionally disturbing. Eventually children grow up and may find love, and may get married and have their own family.

Hazan and Shaver (1987) state, "romantic love is an attachment process, experienced somewhat differently by different people because of variations in their attachment histories" (p. 511). First, secure attachment style lovers described themselves as happy, friendly, and accepting and supportive of their partner despite mistakes. Furthermore, they believe real love exists and that it does not end as a result of difficulties they might face (Hazan & Shaver, 1987). Also, secure lovers are trusting in their relationships and high in self-confidence (Feeney & Noller, 1990). Overall, they see love as positive affect. Furthermore, their relationships tend to last longer than either the avoidant or anxious/ambivalent attachment style lovers (Hazan & Shaver, 1987).

Feeney and Noller (1990) found that the two insecure

types, anxious/ambivalent and avoidant styles, "clearly share important features because they obtained similar scores on most of the measures that differentiated them from secure style (Unfulfilled Hopes, Self-Conscious Anxiety, Personal and Social Self-Esteem); however, the two insecure types differ in fundamental ways" (p. 289).

Anxious/ambivalent attachment style lovers describe having more self-doubts, being misunderstood and under-appreciated, and see their significant relationship as an experience packed with obsession, jealousy, emotional extremes, extreme sexual attraction, and desire for reciprocation and union (Hazan & Shaver, 1987). They report negative self-images while idealizing their partners (Feeney & Noller, 1992), and are distinguished by dependence and by the strong longing for commitment in relationships (Feeney & Noller, 1990). They show a greater sense of personal loss and disappointment that leads to a combined clinging and hating reaction (J. Aronoff, personal communication, August 8, 2001). Finally, avoidant attachment style lovers, in most cases, fear and avoid intimacy, feel jealousy, and find it difficult to completely trust and depend on others (Simpson, 1990). They see their partners as being extremely zealous to make long-term commitments (Hazan & Shaver, 1987).

An additional important aspect from the Hazan and Shaver study indicates that approximately 56% of subjects categorized themselves as secure, approximately 20% as

anxious/ambivalent, and approximately 24% as avoidant (1987). This tendency is consistent with Campos, Barrett, Lamb, Goldsmith, and Stenberg's (as cited in Hazen & Shaver, 1987) results obtained in three types of infants: 62% secure, 15% anxious/ambivalent, and 23% avoidant. The findings imply that more than half of the population would have secure attachment styles and rest are divided fairly equally into anxious/ambivalent and avoidant attachment styles. At this point, it is necessary to review the literature on communication patterns under distress in order to understand how attachment styles might have an impact on individuals' communication patterns and later on relational termination.

#### Communication Patterns Under Distress

Planalp and Honeycutt (1985) reported that the third effect of the uncertainty increasing events such as a deception is individuals' differences in communication patterns following the incident. People display one of the following communication patterns after uncertainty increasing events; talk over the issue, talk around the issue, argue over the issue, avoid the issue, or avoid the person. This finding was confirmed yet again in their replication study (Planalp et al., 1988). Individuals who engaged in communication after the uncertainty increasing incident were linked with positive relational outcomes so that they were likely to become more intimate or at least remain at the same level of intimacy with their partners.

Conversely, individuals who avoided communication following the incident were linked with negative relational outcomes so that they were more likely to become less close or terminate their relationships. There was no specific finding concerning arguing over the issue and subsequent relational outcomes. Seventy-three percent of the participants in study one (Planalp & Honeycutt, 1985) and 91 percent in study two (Planalp et al., 1988) engaged in some form of communication and continued their relationships, while the rest avoided communication and terminated relationships with their partners.

There is evidence that people with different attachment styles differ in communication patterns (Bretherton, 1990). Secure people have "the ability to engage in emotionally open, fluent and coherent communication within attachment and relationships" (Bretherton, 1990, p. 58), but insecure people, including anxious/ambivalent and avoidant attachment seem to be characterized by "selective ignoring of signals, incoherence and dysfluent communication" (p. 58). Thus, following deception, it is plausible that people with different attachment styles may have dissimilar communication patterns. Literature on attachment and communication patterns will be explored next in order to discern the discrepancy in communication patterns under distress concerning three attachment groups.

Simpson, Rholes, and Nelligan (1992) report that secure lovers seek out and provide support as their level of anxiety increases under anxiety provoking situations, and these propensities may facilitate and perhaps produce stronger interdependence and have a positive effect in their relationships. People with secure attachment styles find it easy to trust others, and easy to forgive their partners' faults because their working models lead them to expect positive outcomes from close relationships. Communication with partners in distress may be seen as seeking out explanation, comfort, and support in order to decrease uncertainty from their partners in resolving the issue of deception. These findings are consistent with the role of attachment relationships in affect regulation rules that guide reactions to emotionally distressing situations (Kobak & Sceery, 1988). Affect regulation can be explained in that "all members of the species seek to maintain a set goal of 'felt security', the specific strategies used to achieve this goal are viewed as contingent on an individual's history of regulating distress with attachment figure" (Kobak and Sceery, 1988, p. 135). Specifically, secure lovers are thought to reflect rules that allow acknowledgement of distress and turning to their romantic partner for support. According to Kobak and Sceery (1988) securely attached lovers tend to deal with negative feelings constructively by admitting distress feelings and seeking



support from their partners. They are more likely to open up and discuss their emotions than other attachment groups (Feeney, 1995). Secure adults are able to discuss attachment relationships without insisting that they or their partners are perfect (Bretherton, 1990). Thus, secure lovers are likely to initiate talking about the uncertainty increasing events they have experienced. Given these considerations, the following two-part hypothesis is proposed for the secure attachment group:

H1A: Participants who are classified as having the secure attachment style on the attachment scales will be more likely to display the communication pattern of talking over the issue with their partners following the discovery of their romantic partners' deception than will participants who are classified as having the anxious/ambivalent or avoidant attachment style.

H1B: Participants who are classified as having the secure attachment style on the attachment scales will be more likely to display the communication pattern of talking around the issue with their partners following the discovery of their romantic partners' deception than will participants who are classified as having the anxious/ambivalent or avoidant attachment style.

Anxious/ambivalent lovers are marked by excessive

awareness of negative affect and toward attachment figures (Kobak & Sceery, 1988). Another study by Simpson, Rholes and Phillips concentrated on "conflictual interactions which accentuate the importance of maintaining a cooperative partnership" (1996, p. 900). Simpson et al. (1996) argue that major conflicts with attachment figures such as romantic partners can bring up questions about the partners' availability, and it also can test the partners' ability to maintain cooperative relationships. They focused their research on anxious/ambivalent and avoidant people and conflictual interactions with their romantic partners. Highly anxious/ambivalent lovers exhibited lower quality communication about issues with their partners. In addition, highly anxious/ambivalent lovers who communicated about a major problem/issue felt great anger and hostility toward their romantic partners. Anxious/ambivalently attached lovers are thought to show awareness of negative feelings, and it is known that they seem to express anger directly toward their attachment figure (Kobak & Sceery, 1998; Simpson et al., 1996). However, Feeney argues "anxious/ambivalent individuals may try to control or bottle up emotions such as anger so as not to place the relationship at risk" (1999, p. 170), and as a consequence, anxious/ambivalent lovers control their own sadness and avoid discussing negative feelings with their partners (Feeney, 1998). Hence, anxious/ambivalent lovers may avoid

talking about the specific uncertainty increasing event because they may not want to jeopardize their relationships, while they continue to engage in general communication with their partners. Given these ideas, the following second hypothesis and first research question are proposed regarding the anxious/ambivalent attachment group:

H2: Participants who are classified as having the anxious/ambivalent attachment style on the attachment scales will be more likely to display the communication pattern of avoiding the issue with their partners following the discovery of their romantic partners' deception than will participants who are classified as having the secure or avoidant attachment style.

RQ1: Which attachment style is most likely to argue over the issue?

Finally, avoidant lovers' seeking-out behavior decreases with increasing anxiety, and these predispositions may promote weaker interdependence and greater negative affect in their relationships (Simpson et al., 1992). Avoidant lovers reflect the affect regulation rules that restrict the acknowledgement of distress and the seeking of comfort and support from partners (Feeney and Noller, 1992; Kobak & Sceery, 1988). Highly avoidant lovers exhibited

minimal interpersonal involvement under distressed situations (Simpson et al., 1996). Moreover, avoidant lovers also tend to repress expression of negative feelings to reduce conflict with their partners (Kobak & Sceery, 1998; Simpson et al., 1996). Avoidant lovers tend to "defend themselves against closeness by processes that restrict the flow of ideas about attachment relationships intrapsychically and interpersonally" (Bretherton, 1990, p. 75). In addition, expression of anger decreases proximity; hence angry impulses are veiled or cutoff and replaced with a detached avoidance (Bartholomew, 1990). Thus, they avoid their partners under distress. Given these considerations, the following third hypothesis is proposed for the avoidant attachment group:

H3: Participants who are classified as having the avoidant attachment style on the attachment scales will be more likely to avoid their partners following the discovery of their romantic partners' deception than will participants who are classified as having the secure or anxious/ambivalent attachment style.

Furthermore, the proportion of relationship terminators, the communication avoidance group, matched the proportion of avoidance attachment group (Hazan & Shaver, 1987). The literature on relational termination will aid in

explanation concerning attachment styles and communication patterns and their influence on the decision to terminate the relationships.

### Relational Termination

Bowlby (1982) has argued that the attachment scheme should be most strongly triggered under conditions of distress. Further, it is in these situations that the behavioral properties associated with attachment styles especially in relation to relationships such as romantic love should be most clearly evident (Rubin, 1970). When an individual experiences her/his partner's lie or deception, the emotional intensity of the recipient is likely to amplify, and in general, the experience causes strong negative emotions (Planalp & Honeycutt, 1985). Assessing relational involvement and information importance will aid in understanding the emotional intensity of the deception recipient. If the experience of deception causes anxiety and intense negative emotion, it is likely that people are under conditions of distress. Weiss (1986) argues that interruption of attachment seems to give rise in adults to the same feelings and behavioral expressions that occur in children. However, if individuals do not feel distress after lies or deception, it is due to their experience of low information importance, and consequent low emotional intensity. Thus, attachment styles should be most powerfully activated in conditions of distress (Bowlby,

1979).

Past research by Feeney and Noller (1992) on relationship dissolution and attachment styles report that there is no significant association between attachment style and perceptions of who initiated the break up in the study. Yet, the likelihood of attributing initiation of the break up exclusively to the partner was somewhat greater for anxious/ambivalent lovers than for the other attachment style lovers. However, the anxious/ambivalent lovers reported being more surprised than avoidant or secure lovers at the break ups and also reported being the most upset. Anxious/ambivalent lovers tend to be poorly prepared for the dissolution of their relationships, and are generally highly dependent on their relationship partners (Feeney & Noller, 1992). An intriguing finding of the tendency for premature involvements with new love partners of anxious/ambivalent lovers implies an anxious, clinging relationship style. Therefore, it could be inferred that anxious/ambivalent lovers would have a difficult time breaking up with their partners in spite of the partners' deception because of their dependent nature.

To confirm previous research, a four-year study done by Kirkpatrick and Hazan (1994) showed that attachment styles are highly stable over time; secure subjects reported fewer breakups than non-secure subjects, and anxious/ambivalent subjects were as likely as secure

subjects to maintain relationships over the four years. In addition, Feeney and Noller (1990) argue that secure subjects may be more successful than the other two styles in their romantic relationships. As secure lovers described themselves as happy, trusting and friendly, and accepting and supportive of their partners despite mistakes, it would be plausible to suspect that secure lovers would stay in relationships and somehow resolve the predicament caused by discovery of a lie. Secure lovers' nature of tolerance and support of their partners despite faults would be strongly triggered in such a distress situation. Therefore, following a deception incident, secure lovers are likely to communicate with their romantic partners to understand why they have lied, seek answers to the problem, and try to build stronger relationships. However, in quite a different manner than secure lovers, the anxious/ambivalent attachment lovers are expected to remain in their existing relationships. Their clinging and dependent disposition causes them to stay in the relationship no matter what the predicament may be. It is not because anxious/ambivalent lovers are trying to repair their relationship to build a stronger bond, but their dependent and clinging nature holds them back from separating from their partners. In addition, anxious/ambivalent lovers display a pattern of avoiding the issue while they continue communicating with their partners following the deception incident. In general, those who

engaged in communication after the incident were linked with positive relational outcomes so that they were more likely to become more intimate or at least remain at the same level with their romantic partners (Planalp & Honeycutt, 1985; Planalp et al., 1988). Although incidents and issues centering on the deception are not explicitly discussed, they still keep the communication lines open with their partners, which may help them stay in the relationship. Yet, avoidant lovers would have more doubts about their already tentative relationships. They fear intimacy and experience difficult times completely trusting and depending on others. Therefore, avoidant lovers would be more likely to break the bonds upon detecting deception. Further, avoidant lovers tend to avoid communicating with their partners following the deception incident. Those who avoided communication following the incident were linked with negative relational outcomes, so that they were more likely to become less close or terminate their romantic relationships (Planalp & Honeycutt, 1985; Planalp et al., 1988). Finally, the proportions of relationship termination upon deception assessed by McCornack and Levine matches the proportion of the anxious/ambivalent group (1990). They report that 24 percent of the subjects ended the relationships and 76 percent stayed in the relationship. It is feasible that the 24 percent of the subjects correspond with the avoidant attachment lovers and the 76 percent correspond with the



secure and anxious/ambivalent attachment lovers. Given above ideas, the following fourth hypothesis and second research question can be offered:

H4: Participants who are classified as having the secure or anxious/ambivalent attachment styles on the attachment scales will be less likely to terminate their relationships upon discovery of their romantic partners' deceptive communication than will participants who are classified as having the avoidant attachment styles.

RQ2: What are the associations among emotional intensity, information importance, and termination of the relationship?

## METHOD

### Participants

Two hundred thirteen students (101 male and 112 female) enrolled in undergraduate communication and telecommunication courses at a large Midwestern university participated in the current study. Participants ranged in age between 18 and 37 with a mean of 21.9 ( $SD=2.6$ ), and most of them were single except nine married participants. Of the total sample 72.4% were Caucasian, 13.8% were African American, 9% were Asian Americans, and 4.8% were other ethnicity. The duration of the relationship ranged from 3

weeks to 12 years with a mean of 19.7 months ( $SD=19.5$ ).

### Procedures

All students who wished to participate were invited to take part in the study. Opportunity to participate in the study was announced in undergraduate communication and telecommunication classes, and the participants participated after a regularly scheduled class period. Participants were instructed to recall their present or most recent romantic relationship in which they discovered that a romantic partner had lied to them, then to complete an extensive questionnaire including demographic questions. Half of the participants received attachment scales before they were instructed to recall a deception episode, and the other half received the reverse treatment to avoid order effects. Before participants were instructed to recall a deception episode, the facilitator defined a lie for them using the definition given earlier. The questionnaires included the information importance scale, emotional intensity scale, attachment scales, and communication pattern scale. After the session, all the participants were thanked for their participation and assured that their responses would be processed in confidence. All participants received extra credit or research credit points based on the policies of their class. An alternative task with equal credit points was given to those individuals who could not recall a deception incident or did not wish to fill out the survey.

### Measurements

Participants were instructed to remember a recent situation in which they discovered that their present or past girlfriend/ boyfriend had lied to them. Then, they were asked to write their description of the deception event. Three open-ended questions were incorporated to describe lies and situations in order to describe the event; (1) "how long ago did this event (telling of the lie) originally take place?", (2) "how long after the original lie took place did you discover that it was a lie?", and (3) "how did you find out it was a lie?".

In order to assess the emotional intensity of the participants after the discovery of the deception, an 8 item 7-point Likert-type scale developed by McCornack and Levine was used (1990). The 8 items were answered with '1' representing strongly disagree and '7' representing strongly agree. (See Appendix A for items for all scales.)

Information importance was measured by a 4-item 7-point Semantic Difference type scale designed by Levine and McCornack (1990). The four items ask how significant, important, major, and relevant the participants thought the event/issue was. The 4 items were answered with '1' representing strongly disagree and '7' representing strongly agree. McCornack and Levine (1990) reported evidence consistent with the reliability and validity of their measures.

The attachment style of participants were measured by two instruments; Hazan and Shaver's (1987) categorical forced-choice measurement, and 13 statements/items that respondents rate on 7-point Likert-type scales (Simpson, 1990). Many researchers adopt Hazan and Shaver's categorical forced-choice measure because of its brevity, face validity, and ease of administration despite its limitations (Crowell, Fraley & Shaver, 1999). Test-retest stability of the forced-choice measurement is 70% (equivalent to a Pearson  $r$  of approximately .40). Simpson (1990) divided the three descriptions of forced-choice measurements to form separate items that could be individually rated on Likert-type response scales. This scale has alpha and test-retest reliability estimates of .70 (Crowell et al., 1999). Simpson's Likert-type scale was used as the primary attachment scale in current study. Out of the 13 items, first 5 items assess secure, next 4 items evaluate avoidant, and subsequent 4 items measure anxious/ambivalent attachment styles. In order to score this measure, means of the three attachment scales are assessed, and participants are assigned to the attachment style on which they score most highly (Simpson, 1990; Simpson, Rholes & Nelligan, 1992). All thirteen items were taken from Hazan and Shaver's three attachment vignette description (Simpson, 1990). Each item was answered on 7-point Likert-type scale with '1' representing strongly

disagree and '7' representing strongly agree. In order to assess order effects, half of the participants received the attachment scales before they were instructed to recall their deception event, and the other filled the scale out after recalling the deception event.

A communication pattern scale was developed for the present research. This newly crafted scale was based on five open-ended communication pattern questions by Planalp and Honeycutt (1985). These questions concerned talking over the issue, arguing over the issue, talking around the issue, avoiding the issue, and avoiding the person. The proposed twenty-item Likert-type scale consists of 4 questions for each of the 5 patterns in Planalp and Honeycutt (1985). The 4 items in each scale were distributed randomly. Each item was answered on a 9-point Likert-type scale with '1' representing not at all and '9' representing very much. Two open-ended questions followed to further understand the participants' communication patterns following the deception incident. These open-ended questions were also generated for the present study. Participants were asked to remember what they had talked about in the event that they did talk to their partners. In addition, if participants used approaches other than the five styles of communication pattern presented in the measure, they were asked to write about them.

Finally, five questions asking about their

relationship status and four demographic questions were asked at the end of the questionnaires. The first item, "how long is/was the duration of the relationship with the partner?" was measured in months. The second item, "are you still in the relationship with that partner?" was measured by dichotomous 'yes/no' fashion. If the participants answered 'yes' to this question, they were instructed to skip the following 3 items and directly go to the demographic questions. The other participants who answered 'no' to question 2, were instructed to finish the next 3 items before the demographic questions. The third item, "who initiated the termination after the deception incident?" was measured by nominal fashion with three alternatives; 'partner', 'I did' and 'mutual'. The fourth item, "was the deception solely the reason for the relationship termination?" was measured by dichotomous 'yes/no' measure. Finally, the fifth item, "what were the other reasons for the termination?" was an open-ended question. Subsequently, the four demographic questions, sex, status, age, and race of the participants were solicited in the very last section of the survey.

## RESULTS

### Scale Reliability and Dimensionality

Confirmatory factor analysis by Hunter was performed to test the dimensionality of all ten multiple item scales:

information importance; emotional intensity; talk about the issue; talk around the issue; argue about the issue; avoid the issue; avoid the person; and the secure, anxious/ambivalent, and avoidant attachment scales. The data were consistent with the anticipated ten-factor model, in which internal consistency and parallelism were generated with small errors. This procedure resulted in the deletion of a total of six items. Question two in emotional intensity scale was deleted due to sufficient error (.12) in the internal consistency test. In addition, five items were deleted due to sufficient error in parallelism test. Three items in the communication pattern scale were deleted: question 7 in talking about the issue scale was deleted (.18-.25), question 20 in talking around the issue scale was deleted (.18-.33), and question 8 in argue about the issue was deleted (.16-.29). Finally, two items in Simpson's attachment scale were deleted: question 4 in secure attachment was deleted (.17-.31), and question 12 in anxious/ambivalent attachment was deleted (.16-.33).

The Standardized item alpha for communication pattern scales are: .84 for talking about the issue, .67 for talking around the issue, .86 for arguing about the issue, .70 for avoiding the issue, and .85 for avoiding the person scale. The correlation matrix and reliabilities for all ten scales are reported in Table 1, and mean and standard deviation of the scales are reported in Table 2.

Table 1.  
Pearson's Correlation and Reliabilities

	1	2	3	4	5	6	7	8	9	10	11
1.Information	<b>.89</b>	.57**	.08	-.08	.33**	-.12	.29**	-.06	.19**	.10	.30**
2.Emotional	.57**	<b>.93</b>	.24**	-.02	.58**	-.16*	.28**	-.01	.07	.05	.13
3.Talk About	.08	.24**	<b>.84</b>	-.19**	.41**	-.51**	-.28**	.16*	-.09	-.04	-.05
4.Talk Around	-.08	-.02	-.19**	<b>.67</b>	-.15*	.53**	.07	.07	.00	.24**	-.06
5.Argue	.33**	.58**	.41**	-.15*	<b>.86</b>	-.30**	.21**	.06	.07	.04	.10
6.Avoid Issue	-.12	-.16*	-.51**	.53**	-.30**	<b>.70</b>	.28**	.03	-.02	.14*	.01
7.Avoid Person	.29**	.28**	-.28**	.07	.21**	.28**	<b>.85</b>	-.12	.17*	.09	.37**
8.Secure	-.06	-.01	.16*	.07	.06	.03	-.12	<b>.68</b>	-.65**	-.29**	-.11
9.Avoidant	.19**	.07	-.09	.00	.07	-.02	.17*	-.65**	<b>.79</b>	.41**	.19**
10.Anxious	.10	.05	-.04	.24**	.04	.14*	.09	-.29**	.41**	<b>.47</b>	.08
11.Termination	.30**	.13	-.05	-.06	.10	.01	.37**	-.11	.19**	.08	

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).



Table 2.  
Mean and Standard Deviation for 10 variables

	M	SD
Information Importance	4.97	1.72
Emotional Intensity	5.11	1.60
Talking About	5.74	2.51
Talking Around	3.31	1.94
Argue	4.65	2.56
Avoid Issue	2.83	1.77
Avoid Person/Partner	3.61	2.40
Secure	4.78	1.11
Avoidant	3.40	1.35
Anxious/Ambiv.	3.30	1.24

### Attachment Styles

The present study used two instruments to assess Attachment Styles. They resulted in slightly different outcomes. The two scales produced 79% agreement with kappa of .61. The Simpson's (1990) attachment scale was used as the primary measurement.

The Hazan and Shaver's (1987) categorical forced-choice measurement categorized 57.7% (N=126) as secures, 8.5% (N=18) as anxious/ambivalents, and 31.8% (N=67) as avoidants. However, Simpson's Attachment Scale (1990) resulted in 64% (N=135) of participants being classified as secures, 12% (N=26) as anxious/ambivalents, and 24% (N=50) as avoidants. Simpson's result was most consistent with Campos, Barrett, Lamb, Goldsmith, and Stenberg's (as cited in Hazen & Shaver, 1987) results obtained in three types of infants: 62% secure, 15% anxious/ambivalent, and 23%

avoidant. Therefore, the Simpson (1990) measure was adopted here. The phi between the Hazan and Shaver's and Simpson's attachment scale showed that they were associated significantly [ $\phi(211)=.81$ ,  $p<.01$ ]. The cross tabulation table for the two attachment styles is presented in Table 3.

Table 3.  
Crosstabulation for the Two Attachment Scales

Count		Hazan & Shaver Scale			Total
		Secure	Avoidant	Anxious	
Simpson Scale	Secure	114	11	10	135
	Avoidant	5	45		50
	Anxious	7	11	8	26
Total		126	67	18	211

The attachment styles of the participants indicate that the vast majority of the participants were secure. Slightly more participants fell into the secure attachment style in the Simpson's attachment scale. As expected, the anxious/ambivalent and avoidant participants are smaller in proportion. Out of 213 participants, Simpson's attachment scale (1990) counts 68 male and 68 female as secure, 11 male and 15 female as anxious/ambivalent, and 22 male and 29 females as avoidant attachment lovers.

#### Communication Patterns

The proposed hypotheses focused on participants' with different attachment styles and their communication patterns following the discovery of their romantic partners'

deception; talking about the issue (H1A), talking around the issue (H1B), avoiding the issue (H2), and avoiding the person (H3) were tested. One-way analysis of variance (ANOVA) with contrasts was used to test the above four hypotheses.

Hypothesis 1A predicted that secure participants would report that they talked to their partners about the topic more than members of the other two groups. A one-way ANOVA with contrasts reported that the secure attachment group did talk more often [ $t(210)=2.17$ ,  $p<.05$ ,  $\eta^2=.15$ ]. Secures reported that they talked about the issue most ( $M=6.01$ ,  $SD=2.45$ ), followed by the avoidant ( $M=5.41$ ,  $SD=2.55$ ) and finally the anxious/ambivalent ( $M=4.99$ ,  $SD=2.61$ ) attachment style groups.

Hypothesis 1B forecasted that secure participants would report that they talked around the issue more than members of the other two groups. A one-way ANOVA with contrasts found that secure attachment group did not talk around the issue most often. In fact, the anxious/ambivalent attachment group talked around the issue more often [ $t(210)=-2.64$ ,  $p<.01$ ,  $\eta^2=.18$ ] than did the other two groups. Anxious/ambivalent participants reported that they talked around the issue more ( $M=4.22$ ,  $SD=2.10$ ) than the secure participants ( $M=3.23$ ,  $SD=1.88$ ) or avoidant participants ( $M=3.06$ ,  $SD=1.92$ ).

Hypothesis 2 predicted that anxious/ambivalent

participants would report avoiding talking about the issue with their partner more than members of the other two groups. A one way ANOVA with contrasts supported that anxious/ambivalents did avoid talking about the issue [ $t(210)=-2.52$ ,  $p<.05$ ,  $\eta^2=.17$ ] most often. Anxious/ambivalent participants ( $M=3.63$ ,  $SD=1.79$ ) reported that they were more likely to avoid talking about the issue with their partner while interacting with partners than secure ( $M=2.76$ ,  $SD=1.66$ ) or avoidant ( $M=2.61$ ,  $SD=1.97$ ) participants.

Hypothesis 3 anticipated that avoidant participants would report avoiding the person/partner following the discovery of partners' deception more than the other two groups. A one-way ANOVA with contrasts displayed that the avoidant attachment group did avoid their partners more often [ $t(210)=-2.19$ ,  $p<.05$ ,  $\eta^2=.15$ ]. Avoidants reported that they avoided their partners most ( $M=4.43$ ,  $SD=2.49$ ) followed by the anxious/ambivalent ( $M=3.78$ ,  $SD=2.10$ ) and finally secure ( $M=3.26$ ,  $SD=2.26$ ) attachment groups.

#### Arguing About the Issue

Research question one inquired about which group would argue most following the discovery of their partners' deception. A one-way ANOVA was performed, and no significant difference were found in the amount of arguing about the issue in the three attachment groups [ $F(2,210)=0.21$ ,  $p>.05$ ]. The means for avoidants ( $M=4.85$ ,  $SD=2.74$ ), anxious/ambivalents ( $M=4.65$ ,  $SD=2.74$ ) and secures

( $M=4.58$ ,  $SD=2.48$ ) were not significantly different from one another. The means for the five communication patterns in the three attachment groups are presented in Table 4.

Table 4.  
Table of Means for Five Communication Patterns

Sex			Talk	Talk Around	Argue	Avoid Issue	Avoid Person
Secure	Male	M	5.74	3.25	4.00	2.97	3.31
		SD	2.24	1.84	2.34	1.57	2.27
	Female	M	6.28	3.22	5.15	2.55	3.21
		SD	2.63	1.93	2.50	1.74	2.47
	<b>Total</b>	M	<b>6.01</b>	<b>3.23</b>	<b>4.58</b>	<b>2.76</b>	<b>3.26</b>
Avoidant	Male	M	4.83	3.20	3.56	3.30	4.49
		SD	2.87	1.60	2.58	2.21	2.35
	Female	M	5.84	2.95	5.83	2.09	4.39
		SD	2.25	2.15	2.47	1.63	2.63
	<b>Total</b>	M	<b>5.41</b>	<b>3.06</b>	<b>4.85</b>	<b>2.61</b>	<b>4.43</b>
Anxious	Male	M	4.67	4.27	3.76	4.25	3.73
		SD	2.44	2.34	1.69	1.75	1.91
	Female	M	5.22	4.18	5.31	3.17	3.82
		SD	2.80	1.95	3.20	1.73	2.29
	<b>Total</b>	M	<b>4.99</b>	<b>4.22</b>	<b>4.65</b>	<b>3.63</b>	<b>3.78</b>
Total	Male	M	5.43	3.35	3.88	3.18	3.61
		SD	2.43	1.86	2.32	1.77	2.28
	Female	M	6.03	3.28	5.35	2.51	3.60
		SD	2.56	2.01	2.58	1.72	2.52
	<b>Total</b>	M	<b>5.74</b>	<b>3.31</b>	<b>4.65</b>	<b>2.83</b>	<b>3.61</b>

### Relational Termination

A Chi-square test was performed to test hypothesis four, which proposed that the avoidant attachment group would be more likely to terminate their relationship following the discovery of partners' deception than the other two groups. This idea was supported significantly by

the data [ $\chi^2=19.85$ ,  $df=2$ ,  $p<.0001$ ]. Indeed, the avoidant subjects terminated their relationships following the discovery of their partners' deception more often than would be predicted by the marginal totals. Twenty-nine secure participants (14%), and 6 anxious/ ambivalent participants (23%) ended their relationship following the discovery of the partners' deception. On the other hand, 23 avoidant participants (45%) terminated their relationship following the discovery of partners' deception. According to the Chi-square test, 102.6 secure participants were expected to be together while 30.4 were expected to terminate the relationship. Yet, in reality, 114 of them were still together and only 19 ended their relationships after the discovery of deception. Anxious/ambivalent subjects had the same numbers of observed and expected counts. Finally, 39 avoidants were expected to be together and 12 were expected to end their relationships, while 28 avoidants continued relationships and 23 of them terminated. It was evident that avoidant participants ended their relationship after the deception incident more often than secure and anxious/ambivalent participants.

In the termination outcomes for entire sample, 48 participants (22.9%) terminated their relationship solely due to the deception incident, and the rest 162 participants (77.1%) continued relationships after the deception incident. Of the 48 participants who ended their relationship after

the deception incident, 27 were male and 21 were female. Furthermore, out of those 162 participants who continued their relationships after the deception incident, 55 participants (34%) reported that they are still together with their partner, and 107 participants (66%) reported that they ended their relationships due to reasons other than the deception incident. The Chi-square table for observed and expected counts for each attachment group is accessible in Table 5.

Table 5.  
Chi-Square Table for Relational Termination

			Status		Total
			still together	Ended	
Attachment	Secure	Observed Count	114	19	133
		Expected Count	102.6	30.4	133.0
		Status in %	85.7%	14.3%	100.0%
	Avoidant	Observed Count	28	23	51
		Expected Count	39.3	11.7	51.0
		Status in %	54.9%	45.1%	100.0%
	Anxious	Observed Count	20	6	26
		Expected Count	20.1	5.9	26.0
		Status in %	76.9%	23.1%	100.0%
Total	Observed Count	162	48	210	
	Expected Count	162.0	48.0	210.0	
	Status in %	77.1%	22.9%	100.0%	

### Discovery of Deception

Research question two was proposed to observe the relationship among emotional intensity, information importance, and termination of the relationship.

Discovering deception from the romantic partner provoked high emotional intensity ( $\underline{M}=5.11$ ,  $\underline{SD}=1.60$ ) [ $\underline{t}(211)=46.51$ ,  $p<.0001$ ]. The participants' rating of the information importance was also substantial ( $\underline{M}=4.97$ ,  $\underline{SD}=1.72$ ) [ $\underline{t}(212)=42.02$ ,  $p<.0001$ ]. The correlation between information importance and emotional intensity was significant [ $\underline{r}(212)=.57$ ,  $p<.01$ ]. The higher the emotional intensity the participants felt, the higher they rated the information importance. The correlation between emotional intensity and the termination of the relationship was not significant [ $\underline{r}(209)=.13$ ,  $p>.05$ ]. Also, as far as the three different attachment groups are concerned, there was not a significant difference in emotional intensity level [ $\underline{F}(2,209)=3.67$ ,  $p>.05$ ]. Members of the secure ( $\underline{M}=5.02$ ,  $\underline{SD}=1.61$ ), anxious/ambivalent ( $\underline{M}=5.37$ ,  $\underline{SD}=1.65$ ), and avoidant groups ( $\underline{M}=5.08$ ,  $\underline{SD}=1.44$ ) all reported that discovery of a partners' lie was an emotional experience. The correlation between information importance and the decision to terminate the romantic relationship was significant [ $\underline{r}(210)=.30$ ,  $p<.05$ ]. In addition, participants' evaluation of information importance was significantly different among the three attachment groups [ $\underline{t}(210)=-2.87$ ,  $p<.01$ ]. The avoidant attachment group members rated information importance higher ( $\underline{M}=5.61$ ,  $\underline{SD}=1.71$ ) than anxious/ambivalent ( $\underline{M}=4.78$ ,  $\underline{SD}=1.66$ ) or secure ( $\underline{M}=4.76$ ,  $\underline{SD}=1.69$ ) group members following the partners' lie.



### Post Hoc Analyses of Sex Differences

Though the sex differences were not hypothesized in the current investigation, post hoc analyses were conducted to observe possible sex differences in the present sample. To assess effects on sex differences, t-tests were performed on the five communication patterns, emotional intensity, and information importance.

In the five communication patterns, only two communication patterns revealed sex differences. Avoiding the issue and arguing about the issue exposed sex differences, and there were no significant sex differences in talking about the issue, talking around the issue, and avoiding the issue communication patterns. First, a t-test was performed to observe the possible sex differences in avoiding the issue. Male participants ( $M=3.18$ ,  $SD=1.77$ ) avoided the issue more often than female ( $M=2.51$ ,  $SD=1.72$ ) participants [ $t(211)=2.79$ ,  $p<.05$ ]. Second, a t-test was performed on arguing about the issue. It found that female participants ( $M=5.35$ ,  $SD=2.58$ ) argued significantly more than male participants ( $M=3.88$ ,  $SD=2.23$ ) [ $t(211)=-4.33$ ,  $p<.0001$ ]. Third, a t-test was performed to observe the possible sex differences in talking about the issue and found no significant sex difference. It found that both male participants ( $M=5.43$ ,  $SD=2.43$ ) and female participants ( $M=6.03$ ,  $SD=2.56$ ) [ $t(211)=1.75$ ,  $p>.05$ ] talked about the issue. Fourth, a t-test was performed to talking about the

issue and found no significant sex difference. Male participants ( $\underline{M}=3.35$ ,  $\underline{SD}=1.86$ ) talked around the issue as much as female participants ( $\underline{M}=3.28$ ,  $\underline{SD}=2.01$ ) [ $\underline{t}(211)=.26$ ,  $p>.05$ ]. Finally, a t-test was performed on avoiding the person and revealed no significant sex difference. Male participants ( $\underline{M}=3.61$ ,  $\underline{SD}=2.28$ ) avoided their partners as often as the female participants ( $\underline{M}=3.60$ ,  $\underline{SD}=2.52$ ) [ $\underline{t}(211)=.05$ ,  $p>.05$ ].

Emotional intensity and information importance were tested and there were significant sex differences in both factors. Female participants ( $\underline{M}=5.20$ ,  $\underline{SD}=1.69$ ) felt more emotional intensity than male participants ( $\underline{M}=4.70$ ,  $\underline{SD}=1.72$ ) [ $\underline{t}(211)=-2.13$ ,  $p<.05$ ]. In similar fashion, female participants ( $\underline{M}=5.53$ ,  $\underline{SD}=1.50$ ) rated more information importance on the issue than male participants ( $\underline{M}=4.46$ ,  $\underline{SD}=1.58$ ) [ $\underline{t}(210)=-4.22$ ,  $p<.0001$ ]. The result for the t-tests on sex differences is presented in table 6.

Table 6.  
T-tests on Sex Differences

	Mean		T-test		
	Male	Female	t	df	Sig.
Talk About	5.43	6.03	-1.75	211	.08
Talk Around	3.35	3.28	.26	211	.79
Argue	3.88	5.35	-4.33	211	.00
Avoid the Issue	3.18	2.51	2.79	211	.01
Avoid Person	3.61	3.60	.05	211	.96
Emotional	4.64	5.53	-4.22	210	.00
Information	4.70	5.20	-2.13	211	.03

## DISCUSSION

### General Discussion

In the current investigation, communication patterns and relational outcomes after the discovery of deception in romantic relationships were investigated as a result of the attachment styles of the individuals who received the deception. The results are consistent with the hypotheses that communication patterns following discovery of the partner's deception and subsequent relational outcome decisions are related to attachment styles in individuals. Deceived parties reported that they communicated with deceivers differently according to their attachment style. Further, such different communication patterns under distress situations that originate from different attachment backgrounds in individuals resulted in relational termination in some romantic couple relationships. The discussion below will highlight the findings with regard to each attachment style group and discuss the present findings in terms of previous research.

First, secure attachment group individuals reported that they talked directly about the issue with their partners more often than the other two groups following the discovery of a partners' lie as hypothesized. Indeed, other research confirms that people with different attachment styles differ in communication patterns such that secure individuals have the ability to engage in emotionally open

communication within their relationships (Bretherton, 1990). The findings also reinforce Planalp & Honeycutt's (1985) suggestion that individuals who engage in communication after uncertainty increasing incidents often enjoy positive relational outcomes. Secure attachment group members report that they are least likely to terminate their romantic relationships following a deception incident. By talking with their partners, secure deal with negative feelings constructively by initiating talk about the deception event.

Next, anxious/ambivalent group members reported that they talked around the issue more than members of the other groups. They also reported avoiding the issue when they engaged in communication with their partners after the discovery of partners' deception as hypothesized. Highly anxious/ambivalent individuals have been found to exhibit lower quality communication about issues with their partners (Simpson, 1996). There are two conflicting views on just what constitutes this lower quality communication in the anxious/ambivalent attachment group. Some researchers suggest that the anxious/ambivalent group argues more than the other two groups (Kobak & Sceery, 1998; Simpson et al., 1996), while Feeney suggests that they avoid talking about the specific event because they may not want to jeopardize their romantic relationships, though they continue to engage in general communication with their partners (1998; 1999). Present research strengthens Feeney's findings on

communication patterns for anxious/ambivalent individuals (1998, 1999). Further, the findings also match previous results that anxious/ambivalent participants keep the communication lines open with their partner, which helps them remain in the relationship (Planalp & Honeycutt, 1985; Planalp et al., 1988).

Finally, individuals in the avoidant group avoided their partner the most after uncovering their partners' deception. In other words, avoidant individuals were less likely to talk about the issue and more likely to avoid the partner. Highly avoidant individuals have been found to exhibit minimal interpersonal involvement and to avoid communication with their partner under distressed situations (Bartholomew, 1990; Simpson et al., 1996), and the present research fortifies it once again. Moreover, avoidants have more doubts about their already tentative relationships, and fear intimacy and experience difficult times completely trusting and depending on others (Simpson, 1990). Thus, they avoid communication with their partners following the deception incident that is linked with negative relational outcomes, so that they are most likely to terminate their romantic relationships as was found here.

It is important to note that the three attachment groups talk, talk around, argue, avoid the issue and avoid the person to some degree. The means on a 9-point scale ranged from 2.61 to 6.01, and all three groups used all

five-communication patterns. These results show that the participants did not talk, talk around, argue, avoid issue and/or avoid the partners, in the extreme. Participants used the five communication patterns moderately. Also, there are two notable sex differences among the three groups in their communication patterns. First, it is understandable that deceptions create some arguments, but no significant difference in the three groups was found. However, the mean of the arguing over the issue was 4.65, which fell around the neutral point in the one to nine point scale. Yet, the results indicate that females are more likely to argue about the issue than males. Second, males are significantly more likely to avoid the issue than females. Though, sex differences were not predicted in the current investigation, these findings are interesting.

In addition, the present research replicated some of the McCornack and Levine (1990) findings concerning relational dissolution and deception. The assumption that deception leads to relational dissolution in all cases was not an accurate one. True, it creates relational conflicts which make couples go through difficult times, but the results of this study demonstrated that many couples communicated with each other and remained in their relationships following the deception incident. The results suggests that discovering partners' deception is an intense emotional experience; however, it is not significant enough

to influence making a decision to end the relationship in all cases. However, information importance was a factor that influenced making a decision to terminate the romantic relationships. Information importance was the strongest predictor of the termination of the relationships in McCornack and Levine study (1990). The current study also displays the information importance as a predictor of termination of relationships.

### Limitations

Several limitations of this research must be recognized. First, limitations due to the attachment scale used in the survey must be acknowledged. The participants filled out the two attachment assessment scales. The two attachment scales did not produce the same classifications for some of the participants. Simpson's attachment scale (1990) was proposed as the primary scale, thus was used in the analysis. Perhaps, some other way such as using interviews to assess the attachment category of participants may be aid in deciding which methods of classification is best. Second, a potential problem here may be that only the deceived person's attachment styles were assessed. Yet, it would be extremely difficult to have both of the parties participate in the study. If the relationship continued, it would be a reasonable request, however, if the relationship had ended, it could be offensive to ask the other party to come in to fill out the questionnaires after the fact.

Third, research based on retrospective accounts could retain potential problems because the participants may be influenced by reconstructive memory. The participants may not accurately recollect their emotional state or the incidents because of blocked memories (McCornack & Levine, 1990). It is challenging for participants to recall and accurately remember discarded memories.

#### Directions for Future Research

This study provides many ideas that may be elaborated on and pursued in the future. This study found that engaging in communication is linked to positive relational outcomes and avoiding communication is associated with negative relational outcomes. Attachment styles of both parties should be assessed in the future to improve upon these results. Those secure participants that terminated may be forced to end their relationship because their partners were avoidants. It is not possible to find out, unless the both parties' attachment styles are assessed. A more detailed and accurate result can be obtained with both parties' attachment assessment.

Other uncertainty reducing events besides deception such as competing relationships, sexual behavior, betraying confidence, unexplained loss of contact or closeness, change in personality/value (Planalp & Honeycutt, 1985) could be tested and observed in terms of similarities or differences. It is useful not only to examine the relationships between



attachment style and romantic relationships, but also different variables such as love styles, loneliness, and/or cultural factors. Additional research is essential to verify this claim as well as to examine other groups of respondents such as married couples and friendships.

### CONCLUSION

People end their romantic relationships due to various reasons, all of which would be impossible to describe herein. One of the possible reasons is the discovery of deception. The experience of being deceived by a romantic partner can provoke anger, emotional intensity, and doubt about the partner as well as the relationship. However, it was found that deception is not necessarily linked with termination of romantic relationships. Only 22.9 percent of the participants herein terminated their relationships. The results suggest an important implication on the value of communication. Communication with partners was beneficial to staying in the relationships. Even talking around the deception issue and avoiding the deception issue while talking were related to continuing in the relationship.

In sum, the results of current study provide considerable support for the role of an attachment theory perspective on romantic relationships. The findings strengthen the fundamental characteristics of the three attachment styles. In accordance with attachment theory,

avoidant attachment members avoided their partners following uncertainty increasing situation while the secure and anxious/ambivalent group members engaged in various types of communication patterns. The avoidant attachment group was most likely to engage in relational termination. The current research provides new insights into the communication patterns of individuals with different attachment styles.

## APPENDIX A: Deception Incident Questions

Instructions: Please answer the following questions to the best of your ability, providing as much detail as possible. Please print or write your answers neatly. Thank You.

A LIE is defined as the deliberate falsification or omission of important information by a communicator, with the intent to deceive or mislead the conversational partner.

Please think of a recent situation in which you discovered that your present or past girlfriend/ boyfriend had lied to you. Once you can think of such a situation, take a minute to recall as much information about what happened as you can. Now, keeping this situation in mind, answer each of the questions below, providing as much detail as you can. If you have questions while you are filling this out, simply raise your hand and ask the researcher.

If you cannot think of a situation where you found out that someone lied to you, please raise your hand right now, and you will be given a survey on a different topic.

Recall as much as you can about the situation in which the person originally lied to you. In as much detail as possible, describe the event where you were lied to: what was the lie about? If you can, be sure to write down the exact thing that the person said to you. Please write your description of the event here.

How long ago did this event (the telling of the lie) originally take place?

How long after the original lie took place did you discover that it was a lie?

And, how did you find out it was a lie? Did you find personally out or did you have other sources tell you? Please describe how you found out.

## APPENDIX B: Information Importance Scale

Now, think only about the event or issue that your partner lied about (rather than the fact that your partner lied). Using each of the following scales, rate how important you think that this event/issue was<sup>1</sup>:

1. Significant	1	2	3	4	5	6	7	Insignificant
2. Unimportant	1	2	3	4	5	6	7	Important
3. Minor	1	2	3	4	5	6	7	Major
4. Relevant	1	2	3	4	5	6	7	Irrelevant

## APPENDIX C: Emotional Intensity Scale

Now, please indicate how much you agree/disagree with each statement with the scale provided<sup>2</sup>.

Strongly	1	2	3	4	5	6	7	Strongly
Disagree								Agree

\_\_\_\_\_ 1. Finding out that my partner had lied to me was an intense emotional experience.

\_\_\_\_\_ 2. I did not feel a strong sense of physical arousal when I first found out that my partner had lied to me.

\_\_\_\_\_ 3. I experienced strong emotion when I found out that my partner had lied to me.

\_\_\_\_\_ 4. I did not feel very emotional when I discovered that my partner had lied.

\_\_\_\_\_ 5. When I first found out that my partner had lied, I felt a surge of emotion.

\_\_\_\_\_ 6. I did not experience a very strong emotional reaction upon discovering that my partner had lied to me.

\_\_\_\_\_ 7. When I discovered that my partner had lied, I got really emotionally worked up.

\_\_\_\_\_ 8. I experienced a piercing emotional feeling upon discovering that my partner had lied.

#### APPENDIX D: Hazan & Shaver's Attachment Scale

Now, which of the following best describes your feelings?  
Please choose one that best describe you and mark an X next  
to it.

\_\_\_\_\_ I find it relatively easy to get close to others  
and am comfortable depending on them and having them depend  
on me. I don't often worry about being abandoned or about  
someone getting too close to me.

\_\_\_\_\_ I am somewhat uncomfortable being close to others;  
I find it difficult to trust them completely, difficult to  
allow myself to depend on them. I am nervous when anyone  
gets too close, and often, love partners want me to be more  
intimate than I feel comfortable being.

\_\_\_\_\_ I find that others are reluctant to get as close  
as I would like. I often worry that my partner doesn't  
really love me or won't want to stay with me. I want to  
merge completely with another person, and this desire  
sometimes scares people away.

## APPENDIX E: Simpson's Attachment Scale

Please indicate how much you agree/disagree with each statement with the scale<sup>3</sup>.

Strongly	1	2	3	4	5	6	7	Strongly
Disagree								Agree

\_\_\_\_\_1. I find it relatively easy to get close to others.

\_\_\_\_\_2. I am not very comfortable having to depend on other people.

\_\_\_\_\_3. I am comfortable having others depend on me.

\_\_\_\_\_4. I rarely worry about being abandoned by others.

\_\_\_\_\_5. I don't like people getting too close to me.

\_\_\_\_\_6. I am somewhat uncomfortable being too close to others.

\_\_\_\_\_7. I find it difficult to trust others completely.

\_\_\_\_\_8. I am nervous whenever anyone gets too close to me.

\_\_\_\_\_9. Others often want me to be more intimate than I feel comfortable being.

\_\_\_\_\_10. Others often are reluctant to get as close as I would like.



\_\_\_\_\_11. I often worry that my partner(s) don't really love me.

\_\_\_\_\_12. I rarely worry about my partner(s) leaving me.

\_\_\_\_\_13. I often want to merge completely with others and this desire sometimes scares them away.

## APPENDIX F: Communication Pattern Scale

Now, think about how you dealt with the situation<sup>4</sup>?

Not	1	2	3	4	5	6	7	8	9	Very
At All										Much

\_\_\_\_\_1. I talked over the deception incident with my partner.

\_\_\_\_\_2. I pretended nothing happened after the incident while interacting with my partner.

\_\_\_\_\_3. I did not target the lie when talking with my partner, but I asked questions around the issue.

\_\_\_\_\_4. I argued over the deception incident with my partner.

\_\_\_\_\_5. When the incident was brought up by my partner, I told him/her that I did not want to talk about it.

\_\_\_\_\_6. I did not want to see my partner after the lie, so I stopped interaction with him or her.

\_\_\_\_\_7. It was fairly easy for me to discuss the deception incident with my partner.

\_\_\_\_\_8. I started fights about the lie with my partner.

\_\_\_\_\_9. I was afraid of asking my partner directly about the deception incident, so I asked about things around the specific issue.

\_\_\_\_\_10. I stopped going to places where my partner might be present after the deception incident.

\_\_\_\_\_11. I ignored my partner's phone calls and email after the lie was discovered.

\_\_\_\_\_12. I wanted to understand why my partner lied to me, so I asked my partner about it and we talked about it.

\_\_\_\_\_13. I could not believe my partner lied to me, so I got angry and we had a dispute.

\_\_\_\_\_14. I was not able to talk about the deception incident, so I talked around the issue.

\_\_\_\_\_15. I stayed away from speaking about the discovery of the lie when talking with my partner.

\_\_\_\_\_16. I avoided my partner after the incident.

\_\_\_\_\_17. I wanted to know why my partner had lied to me, so I talked it over to clear it up.

\_\_\_\_\_18. I could not control my anger, so I argued over the deception incident with my partner.

\_\_\_\_\_19. I avoided talking about the deception incident with my partner.

\_\_\_\_\_20. I talked around the deception incident with my partner.

APPENDIX G: Open-Ended Questions Assessing Communication  
Pattern Scale<sup>5</sup>

If you talked, argued, or talked around the issue with your partner, what did you say?

If you used any types of coping strategies to deal with the discovery of deception, please write them here.

## APPENDIX H: End Status Questions

Now, please complete the following questions below.

1. How long is/was the duration of the romantic relationship with the partner?

\_\_\_\_\_ Months

2. Are you still in the relationship with that partner?

Yes                      No

(If No, please continue, if Yes, go to question number 6.)

3. Who initiated the termination after the deception incident?

\_\_\_\_\_ Partner                      \_\_\_\_\_ I did                      \_\_\_\_\_ Mutual

4. Was the deception solely the reason for the relationship termination?

Yes                      No

5. What were the other reasons for the termination?

## APPENDIX I: Demographic Questions

6. I am (circle one)                      Male                      Female
7. My age is (in years):                      \_\_\_\_\_
8. I am (circle one)                      Married                      Single
9. I am                      \_\_\_\_\_ African American/Black  
                                 \_\_\_\_\_ Asian American/Pacific Islander  
                                 \_\_\_\_\_ Caucasian/White  
                                 \_\_\_\_\_ Mexican American/Chicano  
                                 \_\_\_\_\_ Puerto Rican  
                                 \_\_\_\_\_ Native American/Alaskan Native  
                                 \_\_\_\_\_ Hispanic

## ENDNOTES

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- <sup>1</sup> Information Importance Scale Items 2 and 3 were reversed items.
- <sup>2</sup> Emotional Intensity Scale Out of the 8 questions, item 2, 4, and 6 were reversed items.
- <sup>3</sup> Simpson's Attachment Scale Items 2, 5 and 12 are reversed items.
- <sup>4</sup> Communication Pattern Scale Items 1, 7, 12, 17 measured talking about the issue scale; items 3, 9, 14, 20 measured talking around the issue scale, items 4, 8, 13, 18 measured arguing over the issue scale; items 2, 5, 15, 19 measured avoiding the issue scale; and items 6, 10, 11, 16 measured avoiding person scale.
- <sup>5</sup> Open-ended questions assessing communication pattern were not analyzed in this thesis.

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