

# Individual differences and lying in everyday life

### **Edel Ennis**

University of Ulster at Magee

# **Aldert Vrij & Claire Chance**

University of Portsmouth

ABSTRACT

This study explores individuals' reported frequency of lying to strangers and close friends as a function of (i) type of lie told (self-centered, other-oriented or altruistic) and (ii) attachment style in social relationships. One hundred university students (average age = 23.09, SD = 5.36) completed self-report questionnaires. The close friend could be either a best friend (N = 52) or a romantic partner (N = 48). Results revealed that frequency and nature of lies told to strangers differ from those told to close friends. Attachment-related anxiety was positively related to frequency of lying to strangers and best friends, while attachment avoidance primarily related to deception towards one's romantic partner. Results are discussed as

KEY WORDS: attachment • close friends • deception • romantic relationships • strangers • type of lies

contributing to understanding the use and function of decep-

tion in everyday life.

This article examines whether attachment style in social relationships contributes to understanding the use and function of deception in everyday life. Lying is a frequent and fundamental part of everyday life (DePaulo, Kashy, Kirkendol, Wyer, & Epstein, 1996). Although definitions can vary, this article defines a lie as: "A message that one gives to another in which they are deliberately deceiving them." Our definition thus includes practices

All correspondence concerning this article should be addressed to Edel Ennis, Department of Psychology, University of Ulster at Magee, Northland Rd, Londonderry BT48 7JL, UK [e-mail: E.Ennis@ulster.ac.uk]. Ruth Sharabany was the Action Editor on this article.

such as omission of detail and we use the terms "lying" and "deception" interchangeably. We suggest that people use deception to define their social relationships in a preferred manner, which depends on feelings about the self (attachment anxiety) and others (attachment avoidance).

Internal working models develop from early childhood relationship experiences, In turn, later relationships are perceived and based on these models (Bowlby, 1969). Adult attachment is considered to be best conceptualized in terms of individual differences on dimensions of attachment anxiety and attachment avoidance (Brennan, Clark, & Shaver, 1998; Cole. 2001; Mikulincer & Shaver, 2005). Attachment anxiety represents a negative model of self (Bartholomew & Horowitz, 1991) that includes preoccupation with intimacy, jealousy, and fear of abandonment, as well as a dependency on close other's approval rather than an internal sense of self worth (Brennan et al., 1998; Cole, 2001). Attachment avoidance is characterized by a negative model of other people (Bartholomew & Horowitz, 1991) that includes lack of trust, fear of intimacy, and avoidance of closeness due to expectations that others will not be available and supportive (Brennan et al., 1998; Cole, 2001). Consistent with other researchers (e.g., Sonnby-Borgstrom & Jonsson, 2003), we will also use "model of self" interchangeably with attachment anxiety, and "model of others" to refer to attachment avoidance.

People lie to achieve social interaction goals. They lie to influence others, make a good impression, or to reassure and support others (DePaulo, Lindsay, Malone, Muhlenbruck, Charlton, & Cooper, 2003; Kashy & DePaulo, 1996). Avoidant and anxious individuals may both use deception to accomplish social interaction goals in romantic relationships. Deception may provide avoidant individuals the ability to maintain a desired sense of autonomy. For example, deception may help an individual avoid disclosing personal information. Due to their negative opinion of the self and their fear of abandonment, anxious individuals may use deception as a means of presenting a more pleasing persona to their romantic partner. Deception may also be used to appease the partner. Consistent with these assumptions, Cole (2001) found that attachment anxiety and attachment avoidance were both associated with an increased deception in romantic relationships.

Cole (2001) considered deception as a single category. People, however, lie for a variety of reasons. Reasons for lying are typically divided into three categories (DePaulo & Kashy, 1998; DePaulo, Wetzel, Sternglanz, & Walker Wilson, 2003; Vrij, 2000). "Self-centred" lies are told to protect the self (e.g., "I did not do it"). "Other-oriented" lies are told to protect another (e.g., "your hair looks nice today"). Finally, "altruistic" lies are told to protect a third party (e.g., "Julie could not have done that as she was at home with me at 9 p.m.") (DePaulo et al., 1996; Vrij, 2000). Although other-oriented and altruistic lies may also protect one's own wellbeing (e.g., to help maintain a relationship or protection from hassles and arguments stemming from the truth). Assuming that types of lies fulfil different functions, they may relate in unique ways to attachment anxiety and attachment avoidance. The current study expands existing research by investigating how attachment relates to the different types of lies.

Attachment styles are generally associated with attachment figures (Bartholomew & Shaver, 1998), particularly romantic partners (e.g., Cole, 2001). However, evidence suggests that attachment styles may also influence a range of relationship types (including imaginary ones) in addition to close relationships (Cole & Leets, 1999; Cohen, 2004). Individuals with fearful or dismissing attachment styles disclose equal amounts of personal information to strangers and romantic partners (Keelan, Dion, & Dion, 1998). Among Bartholomew's four attachment prototypes, fearful and dismissing align with high attachment avoidance (Fraley, 2005). Furthermore, intensity of TV viewers' parasocial relationships, and their reactions to the possible loss of this TV character can be predicted by the viewer's attachment style (Cohen, 2004; Cole & Leets, 1999).

Because Cole (2001) examined the relationship between attachment and deception only among romantic partners, we examine whether attachment relates to deceptive behaviours across different relationships types (i.e., strangers, close friends, and romantic partners). Depending on the individual's attachment beliefs and needs, deception can be directed toward a strangers (e.g., at the gym) to either encourage or prevent the development of emotional bonds (e.g., a friendship or romantic relationship). While childhood attachments develop from need (i.e., food and affection), the development of adult relationships is choice based. Individuals possess a general tendency to either engage or not engage in deception. Cole showed that frequency of deception was stable across romantic relational partners rather than governed by relationship-specific factors such as reciprocity. This consistency regarding deception has only been documented in romantic relationships.

DePaulo et al. (1996) found that most lies benefit the self. In a more detailed analysis of DePaulo et al.'s data, DePaulo and Kashy (1998) examined the frequency of telling self-centered and other-oriented/altruistic lies to close friends and strangers. Assuming that lying cannot serve genuine relatedness, they predicted less lying in close relationships than in casual relationships. Their findings supported this prediction. They also predicted and found that lies told to close friends would be disproportionately other-oriented/altruistic. People communicate their love and support to others, in part, by lying to them: In lying, an individual might compliment, pretend to agree with, and claim to understand his/her partner. Therefore, we predict that self-centred lies would be most common but would typically be told to strangers as opposed to close friends, while other-oriented and altruistic lies would typically be told for the benefit of close friends as opposed to strangers (Hypothesis 1).

We seek to extend existing research by examining the frequency and nature of everyday deception directed towards both strangers and close friends. Of specific interest is the role of the dimensional constructs underlying attachment: Attachment avoidance and attachment anxiety. Attachment relates to the nature and function of deception as both occur in similar situations. Specifically, the attachment system is activated when a potential or actual threat is perceived (Mikulincer & Shaver, 2005). Such

threats (to the self or someone else) may also cause individuals to lie (Mikulincer & Shaver, 2005).

To maintain autonomy, attachment avoidance will be positively correlated with reported frequency of telling self-centred lies to both strangers and close friends (Hypothesis 2). Self-centred lies allow an individual to avoid disclosing personal information and protect one's privacy, but this damages trust. This form of deception may allow an individual to maintain autonomy and avoiding intimacy, which are important to avoidant individuals (Bartholomew & Horowitz, 1991; Brennan et al., 1998). Evidence supports this suggestion. Given a goal of consistently "deactivating" the attachment system, avoidant individuals tend to both dismiss threat-related cues and suppress anger (Mikulincer & Shaver, 2005). This deactivation serves to avoid frustration and distress associated with attachment figure unavailability (Mikulincer & Shaver, 2005). Self-centred lies (told to both the self and others) may represent a means of achieving both outcomes (i.e., "That is not really a threat to me" and "I am not really emotionally hurt").

Assuming that other-oriented or altruistic lies are generally told for the benefit of another person, and do not maintaining autonomy, these lies are expected to be unrelated to attachment avoidance, assuming that attachment avoidance implies a negative model of others and fear of intimacy. As such, highly avoidant individuals are likely unconcerned with protecting either the other person's wellbeing or the relationship. Because they do not wish to depend on or be close to others, avoidant individuals are less likely to experience joy or gratitude in response to a partner's positive behaviour (Mikulincer & Shaver, 2005). Similarly, avoidant individuals tend to act in a hostile manner towards a distressed partner and tend not to experience personal happiness following the partner's achievements (Mikulincer & Shaver, 2005). Therefore, we cautiously expect the same relationships between attachment and frequency of lying to both strangers and close friends. Attachment avoidance will be associated with a desire to maintain privacy towards all individuals, not just close friends.

We predict a positive correlation between attachment anxiety and frequency of telling self-centred and other-oriented lies to both strangers and close friends. We also predict a positive correlation between attachment anxiety and frequency of telling altruistic lies *about* strangers and close friends (Hypothesis 3). Given attachment anxiety's negative model of self (Bartholomew & Horowitz, 1991; Brennan et al., 1998), self-centred lies may be used to present a more pleasing persona. Such an expectation is based on the fear that others will dislike the true self. Presentation of a more pleasing persona is similar to the "hyperactivating" strategies characteristic of anxious individuals (Mikulincer & Shaver, 2005). These strategies tend to include energetic and insistent attempts to attain the partner's proximity, love, and support. The overdependent partner relies on the partner's support and sees the self as helpless regarding affect regulation (Mikulincer & Shaver, 2005).

Fear of abandonment and dependency on approval from close others also characterize attachment anxiety (Bartholomew & Horowitz, 1991; Brennan

et al., 1998). Therefore high attachment anxiety individuals likely use otheroriented and altruistic lies to please others, prevent upsetting them, and develop emotional bonds. Given a tendency focus on negative thoughts, anxiously attached individuals likely respond to a partner's negative behaviour with intense and prolonged bouts of anger (Mikulincer & Shaver, 2005). Due to their fear of separation, desperate desire for a partner's love, and overly dependent attitude, however, anxiously attached individuals need restrain their resentment and anger by redirecting it towards the self in the form of self-criticism, fear, and sadness (Mikulincer & Shaver, 2005). This self-directed anger can be further exacerbated by doubts about self worth (Mikulincer & Shaver, 2005). Therefore, anxious individuals may use deception to direct anger away from the partner and redirect it towards the self (e.g., "It was my fault really").

We expect the same relationships between attachment and frequency of lying for both strangers and close friends. Individuals high on attachment anxiety may present a positive image to all individuals, not just their close friends. In addition, people high on attachment anxiety are preoccupied with intimacy. As a consequence, they may interact with strangers by presenting a pleasing persona to facilitate emotional bonds. Overall, using self-report measures, this project examines the relationships between individual differences in attachment anxiety and attachment avoidance and lying to both strangers and close friends in everyday life.

#### Method

## **Participants**

One hundred university students (47 males and 53 females) took part in the study. Their average age was M = 23.09 (SD = 5.36) years old. Ages ranged from 18 to 44 years.

#### **Materials**

The survey instrument consisted of two questionnaires: (i) The deception questionnaire and (ii) the Experiences in Close Relationships – Revised questionnaire (ECR-R) (Fraley, Waller, & Brennan, 2000). The deception questionnaire consists of two parts, one about lies to strangers, and a second about lies to a close friend (either a best friend or a romantic partner). Instructions read: "This questionnaire is designed to investigate the lies we tell to other people. In this investigation lying is neither condemned nor condoned and there are no 'right' or 'wrong' answers. A lie is defined as: 'a message that one gives to another in which they are deliberately deceiving them'. These lies could be serious lies or white lies. With this definition in mind, could you please answer the following questions as accurately as possible."

In the close friend section, participants were instructed to consider either a close friend (either a best friend or romantic partner) with whom they had an emotional attachment. Because not all participants were in a

romantic relationship, instructions indicated that they could consider a close friend with whom the participant has a close emotional attachment. We will examine possible effects of partner type (best friend vs. romantic partner) as it is unclear how this variable might influence either attachment or deception. Both friendships and romantic relationships evoke attachment models (Peluso, Peluso, White, & Kern, 2004) and levels of closeness are similar between lovers and best friends (DePaulo & Kashy, 1998).

The close friend and stranger questionnaires were identical except that the words "close friend" were replaced by "stranger." Instructions indicated that participants should consider "strangers, these are people with whom you have no emotional bond".

For the deception questions, the terms "stranger" and "close friend" were used to manipulate this variable. We asked 13 questions: One general openended question about lying in general ("How many lies on average do you tell to your close friend per week?") and 12 closed-ended questions. Six questions focused on self-centred lies (e.g., "How often do you tell lies to your close friend to prevent yourself from embarrassment and/or shame?"), three on altruistic lies (e.g., "How often do you lie to protect your close friend's secrets or things that they have disclosed confidentially to you?"), and three on other-oriented lies (e.g., "How often do you lie to your close friend to make him/her feel better about him/herself?") (DePaulo et al., 1996; DePaulo & Kashy, 1998; DePaulo, Wetzel, Sternglanz, & Walker Wilson, 2003; Vrij, 2000). All 12 questions were accompanied by 7-point Likert scales (1 = never/7 = very often). The self-centred questions ( $\alpha$  = .88 for close friend; .88 for stranger), altruistic ( $\alpha = .77$  for close friend; .69 for stranger) and other-oriented ( $\alpha = .87$  for close friend; .90 for stranger) questions clustered into internally consistent subscales as expected. The three indices of deception to/about close friends were all significantly interrelated (r = .61 to .72, df = 99, p < .001), as were the three indices of deception to/about strangers (r = .44 to .78, df = 99, p < .001).

The Experiences in Close Relationships Scale – Revised (ECR-R; Fraley et al., 2000) consists of 36 items, each accompanied by a 1 (strongly disagree) to 7 (strongly agree) Likert scale. Similar to other investigations (e.g., Sibley & Liu, 2004), the two scales were moderately correlated (r = .42, p < .01) and internally consistent ( $\alpha = .93$  and  $\alpha = .94$ ).

# Design

The study utilized a within-subjects mixed design. The two within-subjects factors were emotional closeness (deception to close friend versus deception to stranger) and type of lie (self-centred, other-oriented, and altruistic lies). The between-subjects factor was the nature of the close friend (i.e., best friend or romantic partner). Just over half (n = 52) of the participants reported on deception to a close friend, while the other half reported on deceiving their romantic partner.

#### **Procedure**

The study was carried out in the university's Student Union and Foyer areas. Students were approached to participate in a 15-minute study regarding "Individual differences and lying in everyday life". Participants completed the questionnaires individually in reasonably quiet conditions. All participants completed all three questionnaires in the same order (close friend deception, stranger deception, and attachment). We complied with the ethical guidelines of the British Psychological Society.

## **Results**

Mean scores for attachment anxiety and attachment avoidance were 59.13 (SD = 22.6) and 51.89 (SD = 21.12) respectively. Table 1 reports the means for each deception conditions. To allow parametric analysis, square-root transformations were applied to all deception measures to reduced positive skewness. Table 1 also reports descriptive statistics for both transformed and untransformed data. Subsequent analyses and presentation of the deception measures use the transformed data.

# Frequency and nature of lies to strangers and close friends

As predicted in Hypothesis 1, a paired t-test indicated that participants reported telling more lies per week to strangers when compared with close friends, t(96) = -4.66, p < .001 (see Table 1). Data from the close friends questions indicate no difference between lying to a best friend (M = 2.10, SD = 1.27) or romantic partner (M = 1.90, SD = 0.99), t(98) = .88, ns.

Hypothesis 1 also predicted that lies would most commonly be told for the benefit of the self rather than for others; self-centred lies will be generally told to strangers as opposed to close friends; whereas other-oriented and altruistic lies will typically be told for the benefit of close friends rather than strangers. A repeated measures ANOVA utilizing a 3 (type of lie: Self-centred vs. other-oriented vs. altruistic)  $\times$  2 (emotional closeness: Close

TABLE 1

Descriptives for self-centered and other-oriented lies to, and altruistic lies about close friends and strangers (based on overall sample)

	Close friend			Stranger			
	Range	Mean (SD) (before)*	Mean (SD) (after)	Range	Mean (SD) (before)	Mean (SD) (after)	Sig diff*
Open general question	0–21	3.27 (3.44)	1.52 (.98)	0-30	5.31 (5.44)	2.01 (1.14)	P < .001
Self-centered Altruistic Other-oriented	1–6.33 1–6.33 1–6.33	2.77 (1.29) 3.38 (1.39) 3.43 (1.40)	1.62 (.38) 1.79 (.40) 1.81 (.40)	1–7 1–6.33 1–7	3.84 (1.49) 2.70 (1.19) 2.93 (1.49)	1.91 (.40) 1.61 (.36) 1.65 (.44)	P < .001 P < .001 P < .01

<sup>\*</sup> Before = before data transformation; After = after data transformation.

<sup>\*</sup> Significant difference between stranger and close friend data.

friend vs. stranger)  $\times$  2 (nature of close friend relationship: Best friend vs. romantic partner) mixed design was employed.

The emotional closeness factor did not exert a significant main effect  $F(1, \frac{1}{2})$ 196) = 0.20, ns. Thus, contrary to the open-ended questions, across all three closed-ended measures of deception, participants reported comparable frequencies of lying to strangers and close friends. As predicted in Hypothesis 1, type of lie exerted a significant main effect (F(2, 196) = 4.21, p < .05, $m^2 = .04$ ), with participants reporting telling significantly more self-centred (M = 1.77, SD = .03) than altruistic lies, M = 1.70, SD = .03. Frequency of telling other-oriented lies (M = 1.73, SD = .03) did not differ significantly from the other two types of lies. Although not relevant to our predictions, the between-subjects factor of the nature of close friend relationship exerted a significant main effect (F(1, 98) = 6.24, p < .05). Thus, across all three forms of deception, participants reported more lying to the best friend (M = 1.80, SD = .04) than to romantic partner, M = 1.66, SE = .04. Interactions between emotional closeness and nature of close friend relationship as well as the type of lie and the nature of close friend relationship were not significant, F(1, 196) = .26, ns; F(2, 196) = .14, ns.

Relevant to Hypothesis 1, results also showed a significant type of lie by emotional closeness interaction effect, F(2, 196) = 59.54, p < 0.001,  $n^2 = .38$ . As predicted in Hypothesis 1, participants reported telling significantly more self-centred lies to strangers (M = 1.92, SD = .40) when compared with close friends (M = 1.62, SD = .38); significantly fewer other-oriented lies to strangers (M = 1.65, SD = .44) when compared to close friends (M= 1.81, SD = .40); and significantly fewer altruistic lies about strangers (M = 1.61, SD = .36) when compared with close friends (M = 1.80, SD = .40). Results also showed a significant type of lie by emotional closeness by nature of close friend relationship (best friend vs. romantic partner) interaction F(2, 196) = 4.77, p < .001, partial  $\eta^2 = .05$ . Specifically, the trend described earlier of telling significantly more altruistic lies about close friends compared to strangers was evident only when participants reported on their best friend. When considering romantic partner, however, participants reported telling the same number of altruistic lies about this romantic partner (M = 1.65, SD = .37) compared to strangers (M = 1.58, SD = .35), t(47) = 1.21, ns. In both groups, participants reported telling significantly more self-centred lies and significantly fewer other-oriented lies to strangers compared to close friends.

# Deception, attachment anxiety, and attachment avoidance

In testing hypotheses relating to attachment anxiety and avoidance to deception, we conducted partial correlations because of the moderate correlation between the attachment dimensions. Data from the entire sample were used to examine the strangers data, however, deception towards close friends data were analysed separately for best friends and romantic partners. Hypothesis 2 predicted that *attachment avoidance* (after controlling for attachment anxiety) would be positively correlated with frequency of self-centred lies to both strangers and close friends. Attachment

avoidance was expected to be uncorrelated with frequency of other-oriented lies to either strangers or close friends or frequency of altruistic lies about either strangers or close friends.

Table 2 presents correlations between the attachment dimensions and frequency of lies. In all cases, when one attachment dimension is correlated with deception, the other dimension is controlled. As predicted, attachment avoidance was positively correlated with the frequency of telling self-centred lies, but only when the lie target was one's romantic partner. Contrary to our prediction, attachment avoidance was uncorrelated with frequency of self-centered lies to either strangers or best friends. Also, although not predicted, attachment avoidance was significantly positively associated with the frequency of telling other-oriented lies to strangers and romantic partners, and significantly negatively correlated with the frequency of telling other-oriented lies to best friends. As expected, attachment avoidance was unrelated to the frequency of altruistic lies about either strangers or best friends. However, contrary to expectation, the association between attachment avoidance and frequency of telling altruistic lies about one's romantic partner narrowly missed statistical significance.

Hypothesis 3 predicted that attachment anxiety (after controlling for attachment avoidance) would correlate positively with self-reported frequency of telling self-centred and other-oriented lies to both strangers and close friends, and altruistic lies about strangers and close friends. As hypothesized, attachment anxiety was significantly positively correlated with the frequency of telling self-centred and other-oriented lies to both strangers and best friends, as well as telling altruistic lies about both strangers and best friends (Table 2). When the close friend was a romantic partner, results only partially supported our initial prediction. Attachment anxiety was significantly positively correlated with the frequency of telling

TABLE 2
Partial correlation coefficients (one-tailed tests) between anxiety, avoidance and deception (calculated using transformed data)

	Anx	Av
Lies told to strangers $(N = 100)$		
Self-centered	.33***	.11
Other-oriented	.22**	.18*
Altrustic	.28**	.07
Lies told to best friends $(N = 52)$		
Self-centered	.47***	06
Other-oriented	.31*	24*
Altrustic	.38**	10
Lies told to romantic partners $(N = 48)$		
Self-centered	.09	.32*
Other-oriented	.13	.34*
Altrustic	.30*	.23 (p = .06)

<sup>\*\*\*</sup>p < .001; \*\*p < .01; \*p < .05.

altruistic lies about one's romantic partner, but unrelated to frequency of telling either self-centred or other-oriented lies to one's romantic partner (Table 2). Power analyses show substantial (74 and 60%) chance of detecting the initial associations documented with regard to self-centred lies and other-oriented lies. This suggests the absence of these two associations is not simply due to the reduction in power associated with dividing the overall sample (N = 100) into subgroups (N = 48).

## **Discussion**

This study examined people's frequency of lying. Similar to previous studies, people reported telling more lies to strangers than to close friends. Also replicating previous findings, the present study revealed that if people lie, they tell different lies to their close friends than to strangers: They tell more self-centred lies to strangers, more other-oriented lies to close friends, and more altruistic lies about close friends than about strangers.

Results relevant to the relationship between people's attachment needs and lying presented an interesting pattern. People's anxieties about how others judge them (attachment anxiety), rather than their privacy needs (attachment avoidance) predicted the frequency of lying to strangers and close friends who are not romantic partners. The perception of the self also relates to interactions with strangers. Such a finding adds to the existing body of research documenting that attachment relates to a large range of relational activities (Cohen, 2004; Cole & Leets, 1999; Keelan et al., 1998) and its impact may not be restricted to behaviour within close emotionally involved relationships. Nonetheless, attachment anxiety does share variance with other more general measures such as neuroticism (e.g., Bakker, Van Oudenhoven, & Van Der Zee, 2004). Therefore, future research needs to examine whether lying to strangers is uniquely predicted by attachment anxiety or is related to other more general measures such as neuroticism or a general lack of self-esteem.

When the close friend was a romantic partner, attachment anxiety only predicted frequency of telling altruistic lies about them. This result suggests people high on attachment anxiety may consider lying to others about their romantic partner as a qualitatively different process when compared with actually lying to their romantic partner. Anxious people may refrain from lying to their romantic partners due to the negative consequences that deception might have on their ultimate goal of achieving intimacy and enduring commitment. While deception may allow presentation of a more pleasing persona, individuals dependent on deception in their relationship experience less intimacy and perceived understanding (Cole, 2001). Also, frequent liars may become opaque to their partners. Partners then may have insufficient knowledge about the liars to adequately respond to their needs (Finkenauer & Rime, 1998).

Consistent with Cole (2001), when participants reported on a romantic partner, attachment anxiety only predicted frequency of telling altruistic

lies about them. We predicted that to maintain autonomy, attachment avoidance would be positively correlated with self-reported frequency of self-centred lies to both strangers and close friends but would bear no relation to the frequency of telling either other-oriented lies or altruistic lies. Results only partially supported our prediction in that attachment avoidance was related only to frequency of telling self-centered lies about one's romantic partner. In interactions with other individuals, avoidant individuals may use different strategies to maintain autonomy, for example, limiting the number of social interactions. As expected, attachment avoidance was unrelated to frequency of telling altruistic lies about either strangers or close friends who were not romantic partners.

Contrary to our hypothesis however, high levels of attachment avoidance were significantly associated with an increased frequency of telling altruistic lies about one's romantic partner. As avoidant individuals have difficulty trusting their romantic partner and fear intimacy, they may have difficulty communicating their emotions and commitment to their romantic partner. Telling altruistic lies to benefit their romantic partner may be a compensatory, less intense, means of demonstrating affection. Such lies likely maintain the relationship at a certain level, but have the advantage of being insufficient for the development of intimacy. However, this proposition is speculative and demands further research.

This result could also fit with greater idealization of parents within the Adult Attachment Interview (AAI) indicating an insecure/dismissing (which conceptually aligns with high avoidance) attachment style (Bartholomew & Shaver, 1998; Crowell & Treboux, 1995). This corresponds to telling altruistic lies (e.g., "My parents were always supportive of me"). However, there is little evidence as to whether this tendency also extends to making avoidant individuals particularly prone to idealizing their romantic partner. People generally have a tendency to idealize their romantic partner (Geher et al., 2005), and altruistic lies may allow this to happen (e.g., "He/she does all the cooking"). Geher et al. (2005) reported that attachment avoidance is related to a small discrepancy between ratings of traits of current romantic partners and traits or former romantic partners. Whether this is because avoidant individuals rated both partners extremely positively (idealization) or rated both individuals negatively (in line with their characteristic negative model of others) is unclear.

Contrary to expectations, higher levels of attachment avoidance were also significantly associated with an increased frequency of telling other-oriented lies to both strangers and romantic partners, and a decreased frequency of telling other-oriented lies to close friends who were not romantic partners (i.e., "best friends"). Attachment avoidance might be more complex than just a "model of others" given that it was differentially related to best friends as opposed to romantic partners. It also appears important to consider the exact nature of the emotional bond (as opposed to just "emotional closeness") when examining deception patterns and their correlates.

We acknowledge that those participants who reported discussing deceiving their romantic partner are a not the same individuals who reported

deceiving their best friend. Further research is necessary using both a within-subjects and longitudinal design. The predictors of deception to best friends may genuinely differ from the predictors of deception towards romantic partners. Alternatively, being part of a romantic couple may influence behaviours as well as feelings about others and ourselves such that our model of others becomes the major predictor of deception as opposed to our model of self. In such a case, for romantically attached individuals, attachment avoidance might also be the major predictor of their deception towards other close friends. Relationship status may be important to consider.

Self-report measures of deception are commonly used (e.g., Cole, 2001), but often questioned based on response biases and individuals' awareness of how frequently they lie. We have several reasons to believe that our findings are valid. Our findings related to frequency of lying correspond with the findings of DePaulo and her colleagues who used a diary study. If two studies obtained similar results using different methodologies, the validity of both sets of findings is strengthened. Participants in both studies could have relied on similar response biases; however, if true, this bias is likely to be pervasive. Our findings indicated that such a bias did not take place because self-centred lies were the most frequently mentioned type of lie, and such lies have negative connotation for the self (DePaulo et al., 1996). Finally, we would like to emphasize that the main contribution of this article was not the frequency of telling different types of lies to strangers, close friends or partners per se, but the frequency of telling such lies in relationship to attachment styles. We find it hard to believe that such complex relationships could have been entirely created by a response bias.

Similarities in results between this study and those of DePaulo also suggest that the fixed order of questionnaire administration in this study was not problematic. Consistency in results is also noteworthy in that DePaulo worked with a US sample whereas the current study was performed in the UK. While this suggests cross-cultural generalization, future research on the role and frequency of deception across cultures is clearly worthy of future research. For example, the average frequency of telling lies likely varies across cultures. What might be considered low frequency in culture might be unacceptably high in another.

Our results also suggest that despite providing a definition, participants might have subjectively defined lies as specifically planned deception rather than a part of a general response mode. There may be cultural influences on what forms of interaction might be considered deception. For example, in modern cultures, many people have "learned" to withhold, omit or distort personal information when interacting with strangers and perceive this as being careful rather than as deceptive. Withholding the same information in intimate relationships (e.g., one's true identity), however, would clearly be interpreted as lying. Although the current data do not allow for an examination of culture, this issue should be considered in future deception research.

The current study used a self-report measure of attachment. Such a method is recommended (Bartholomew & Shaver, 1998) when investigating

current conscious experiences and the influence of attachment on personal adjustment and adult relationships, One final point concerning attachment deserves recognition. We discussed autonomy (for example) as a motivation for lying and have presented evidence to support this claim. These motivations are presumptive, however, and require further detailed examination.

Overall, consistent with Cole (2001), deception clearly plays a role in achieving desired outcomes and regulating intimacy within romantic and other relationships. The frequency of deception in social interactions is related to individuals' feelings about both themselves and others. Examining people's attachment contributes to our understanding of the use and function of deception in everyday life. Attachment anxiety predicts frequency of deception towards and about strangers and best friends, whereas attachment avoidance predicts frequency of deception towards and about one's romantic partner. The precise nature of emotional bonds is important to consider. Although individuals may report comparable levels of closeness to lovers and best friends (DePaulo & Kashy, 1998), the predictors of deception towards close friends clearly differ from those for deception towards lovers. As suggested by DePaulo and Kashy (1998), future research should consider other factors such as interpersonal attractiveness. Finally, the current results support existing research documenting that attachment relates to interactions across a variety of relationships.

#### REFERENCES

- Bakker, W., Van Oudenhoven, J. P., & Van Der Zee, K. I. (2004). Attachment styles, personality, and Dutch emigrants' intercultural adjustment. *European Journal of Personality*, 18, 387–404.
- Bartholomew, K., & Horowitz, L. M. (1991). Attachment styles among young adults: A test of the four-category model. *Journal of Personality and Social Psychology*, 61, 226–244.
- Bartholomew, K., & Shaver, P. R. (1998). Methods of assessing adult attachment: Do they converge? In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 25–45). New York: Guilford Press.
- Bowlby, J. (1969). Attachment and loss: Vol. 1 attachment. New York: Basic Books.
- Brennan, K. A., Clark, C. L., & Shaver, P. R. (1998). Self-report measurement of adult attachment. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 46–76). New York: Guilford Press.
- Cohen, J. (2004). Parasocial break-up from favorite television characters: The role of attachment styles and relationship intensity. *Journal of Social and Personal Relationships*, 21, 187–202.
- Cole, T. (2001). Lying to the one you love: The use of deception in romantic relationships. *Journal of Social and Personal Relationships*, 18, 107–129.
- Cole, T., & Leets, L. (1999). Attachment styles and intimate television viewing: Insecurely forming relationships in a parasocial way. *Journal of Social and Personal Relationships*, 16, 495–511.
- Crowell, J. A., & Treboux, D. (1995). A review of adult attachment measures: Implications for theory and research. *Social Development*, 4, 294–327.
- DePaulo, B. M., & Kashy, D. A. (1998). Everyday lies in close and casual relationships. *Journal of Personality and Social Psychology*, 74, 63–79.

- 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, 979–995.
- DePaulo, B. M., Lindsay, J. L., Malone, B. E., Muhlenbruck, L., Charlton, K. & Cooper, H. (2003). Cues to deception. *Psychological Bulletin*, 129, 74–118.
- DePaulo, B. M., Wetzel, C., Sternglanz, R. W., & Walker Wilson, M. J. (2003). Verbal and nonverbal dynamics of privacy, secrecy, and deceit. *Journal of Social Issues*, 59, 391–410.
- Finkenauer, C., & Rime, B. (1998). Socially shared emotional experiences vs emotional experiences kept secret: Differential characteristics and consequences. *Journal of Social and Clinical Psychology*, 17, 295–318.
- Fraley, R. C. (2005). *Information on the Experiences in Close Relationships-Revised (ECR-R) adult attachment questionnaire*. Retrieved November 1, 2006 from http://www.psych.uiuc.edu/~rcfraley/measures/ecrr.htm
- Fraley, R. C., Waller, N. G., & Brennan, K. A. (2000). An item response theory analysis of self-report measures of adult attachment. *Journal of Personality and Social Psychology*, 78, 350–365.
- Geher, G., Bloodworth, R., Mason, J., Stoaks, C., Downey, H. J., Renstrom, K. L., & Romero, J. F. (2005). Motivational underpinnings of romantic partner perceptions: Psychological and physiological evidence. *Journal of Social and Personal Relationships*, 22, 255–281.
- Kashy, D. A., & DePaulo, B. M. (1996). Who lies? Journal of Personality and Social Psychology, 70, 1037–1051.
- Keelan, J. P. R., Dion, K. L., & Dion, K. K. (1998). Attachment style and relationship satisfaction: A test of a self disclosure explanation. *Canadian Journal of Behavioural Science*, 30, 24–35.
- Mikulincer, M., & Shaver, P. R. (2005). Attachment theory and emotions in close relationships: Exploring the attachment-related dynamics of emotional reactions to relational events. *Personal Relationships*, 12, 149–168.
- Peluso, P. R., Peluso, J. P., White, J. F., & Kern, R. M. (2004). A comparison of attachment theory and individual psychology: A review of the literature. *Journal of Counselling and Development*, 82, 139–145.
- Sibley, C. G., & Liu, J. H. (2004). Short-term temporal stability and factor structure of the revised experiences in close relationships (ECR-R) measure of adult attachment. *Personality and Individual Differences*, *36*, 969–975.
- Sonnby-Borgstrom, M., & Jonsson, P. (2003). Models-of-self and models-of-others as related to facial muscle reactions at different levels of cognitive control. *Scandinavian Journal of Psychology*, 44, 141–151.
- Vrij, A. (2000). Detecting lies and deceit: The psychology of lying and its implications for professional practice. Chichester: John Wiley and Sons.