

Long-Distance vs. Geographically-Close Relationships: The Role of Maintenance and Attachment Styles in Shaping Relationship Quality

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This study examined the role of attachment styles and relationship maintenance of a geographically-close and long-distance relationships. It was hypothesized that people in long-distance relationships would engage in more security maintenance processes and fewer growth maintenance processes. This effect was hypothesized to be amplified for people who fear abandonment. A self-reported survey was completed by 200 undergraduate students in close relationships, 100 of which were in long-distance relationships. Contrary to predictions, people in long-distance relationships and who score high on fear of abandonment did not engage in more or less security maintenance or growth maintenance processes overall. The present study does provide insight into how long-distance relationships function in terms of their maintenance behaviours and attachment styles.

Keywords: long-distance relationships, geographically-close relationships, attachment style, relationship maintenance, growth-security framework

Cette étude investigate le rôle des styles d'attachement et du maintien d'une relation amoureuse à courte distance et à longue distance. Il est prédit que les individus dans une relation à longue distance adopteront d'avantages des comportements de sécurité et à l'inverse adopteront peu de comportements de développement. Cet effet serait amplifié chez les individus craignant l'abandon. Un rapport d'auto-évaluation a été complété par 200 étudiants du premier cycle en relation dont 100 étant dans une relation à longue distance. Contrairement aux prédictions, les individus dans une relation à longue distance et ayant une peur de l'abandon n'ont pas adopté plus de comportements de sécurité et moins de comportements de développement. Cette étude a tout de même permis d'éclaircir les comportements de maintien d'une relation amoureuse à longue distance et sur les styles d'attachement.

Mots-clés : relation à longue distance, relation à courte distance, styles d'attachement, comportements de sécurité, comportements de développement

Long-distance relationships (LDR) are becoming more prominent in our society as technological advances in communication (e.g., Skype, text messaging) have facilitated their maintenance (Pistole, Roberts, & Chapman, 2010). This type of relationship is especially common in first year university students separated from their partners due to university attendance (Stafford, 2005): in Canada, approximately one third of all LDR are maintained by young adults aged 20 to 24 (Statistics Canada, 2013). In recent years, due to the rising number of LDR, there has been an increase in the amount of research analyzing the

relational satisfaction and dynamics of such relationships. Despite this increase, minimal research has examined the maintenance processes that people in LDR use in order to reduce the effects of the unique challenges people in this type of relationship face.

What is a Long-Distance Relationship?

Researchers disagree about what distinguishes a LDR from a geographically-close relationship. Many researchers (Kelmer, Rhoades, Stanley, & Markman, 2013; Mietzner & Li-Wen, 2005) have defined a LDR according to what the U.S. Department of Transportation considers a long-distance trip. This definition states that a trip is considered long-distance when the person's residence is at least 50 miles

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(80.47 km; one-way) from their furthest destination. Therefore, by way of this definition, these researchers consider a relationship to be long-distance when the people involved live at least 80.47 km apart. However, most researchers (Merolla, 2012; Pistole et al., 2010; Roberts & Pistole, 2009) allow participants to self-define their relationships as long-distance based on the recommendations given by Stafford (2005). These studies generally include follow-up questions pertaining to the number of visits and distance between the partners in order to ensure that the self-definition of long-distance is not being over-generalized to include geographically-close relationships. Regardless of which definition is chosen, people in LDR are generally separated by some distance for long periods of time, but still manage to preserve their relationship.

Are Security Concerns Greater in Long-Distance Relationships?

It is a common belief that living in close proximity to one another is a fundamental aspect in maintaining a satisfying relationship. It is thought that satisfaction and security in a relationship are developed through verbal and non-verbal interactions that can only occur when the couple is face-to-face (Merolla, 2012). Contrary to this belief, previous research has found that break-up rates for people in LDR are equal to those of their geographically-close counterparts (Guldner & Swenson, 1995). However, there is evidence that certain stressors and day-to-day experiences are only experienced by people in LDR which may lead to chronic security concerns within this type of relationship.

Long-distance relationships are particularly characterized by a *separation-reunion cycle*, where the partners live in different locations and travel in order to be together for a limited amount of time (e.g., two days) before separating once again (Pistole, Roberts, & Mosko, 2010; Roberts & Pistole, 2009). This special dynamic, which varies from that of geographically-close relationships, may cause people in LDR to have unique experiences that can lead to chronic security concerns (Roberts & Pistole, 2009). Specifically, this dynamic creates a unique emotional climate where communication skills become an integral part of maintaining a sense of closeness.

Emotional climate. This separation-reunion cycle can cause emotional highs and lows as the couple attempts to maintain intimacy and relational

satisfaction from a distance (Groves & Horm-Wingerd, 1991). For instance, research has shown that LDR are associated with increased levels of depression symptoms when compared to geographically-close relationships (Guldner, 1996). In terms of reunions, even though they are seen as happy events, they are also associated with anxiety. Before the reunions occur, the people within LDR may hold high expectations, and the perceived need to meet these expectations during the reunion can cause anxiety. If these expectations are not met in the limited amount of time that they have together, a sense of disappointment may occur (Groves & Horm-Wingerd, 1991). Furthermore, the anticipated separation when together can be a source of stress and anxiety for both people involved (Pistole, Roberts, & Chapman, 2010). Unfortunately, these emotional highs and lows are a form of instability, which may result in feelings of chronic insecurity within the relationship.

Communication skills. Long-distance and geographically-close relationships also differ from one another in the sense that the increased distance between the relational partners in long-distance relationships limits the amount of face-to-face interactions the couple can engage in. Despite these limitations, research has identified some skills and behaviours that help people in LDR maintain a sense of closeness and security while separated from one another. For instance, Mietzner and Li-Wen (2005) found that many partners in LDR compensate for the distance by developing and increasing the quality of their communication skills. Their research showed that people in LDR, when compared to people in geographically-close relationships, tend to write to their partners more often and were more likely to discuss their relationship and future as a couple while on the phone and in person (Mietzner & Li-Wen, 2005). In an attempt to maintain security within their relationship, people in LDR attempt to avoid conflicts as much as possible (Pistole, Roberts, & Mosko, 2010). This may be done so that feelings of chronic insecurity are not displayed to their partner.

Despite the many differences between long-distance and geographically-close relationships, research indicates that the overall satisfaction and quality of their relationships do not differ even though people in LDR may be experiencing more chronic security concerns within their relationship (Guldner & Swenson, 1995; Roberts & Pistole, 2009). For this reason, it has been suggested that people in LDR

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engage in different maintenance processes than people in geographically-close relationships that allow them to maintain relational satisfaction and security while at a distance (Pistole, Roberts, & Chapman, 2010). Previous research on the maintenance processes of people in LDR has mainly focused on security processes, but some scholars believe that these processes are just one general way to maintain relationships.

Growth-Security Framework of Relational Maintenance in Long-Distance Relationships

Gable and Reis (2001) proposed a growth-security framework in order to assess the different types of maintenance processes that people engage in while in a relationship. They arranged maintenance processes into two categories: growth maintenance processes and security maintenance processes. Growth maintenance processes are those that focus on obtaining desired positive outcomes by focusing on development and accomplishments. Thus, these processes focus on novel development, explorations, and growth that can lead to positive desired outcomes. For example, capitalization is often categorized as a growth maintenance process as it focuses on obtaining desired outcomes through communicating personal development and accomplishments with your partner. In contrast, security maintenance processes are those that focus on avoiding undesired negative outcomes by emphasizing security and safety. Specifically, these processes emphasize focusing on positive and familiar aspects or activities in the relationship to ensure that undesired negative outcomes are avoided. For example, viewing your partner as a safe haven is generally considered a security maintenance process as it focuses on avoiding undesired feelings by emphasizing the safety that their partner provides. The researchers who proposed this framework believed that it is a balance of these two categories of maintenance behaviours that lead to greater relational satisfaction while in a relationship (Gable & Reis, 2001).

Previous research on the maintenance processes of people in LDR has mainly focused on security processes. Thus, it is still unclear how much people in LDR engage in growth maintenance processes in order to maintain security in their relationships. In addition, it is not clear if people modify maintenance behaviours (i.e., growth and security) based on the type of relationship that they are in (i.e., long-distance vs. geographically close).

The present study aimed to examine engagement in security and growth maintenance processes in LDR and compare that to engagement in security and growth maintenance processes in geographically-close relationships. The underlying argument of this article is that situations that have more chronic security concerns (i.e., long distance relationships) will be associated with more security-focused maintenance processes and less growth-focused ones. Since LDR are marked by many unique experiences that can cause chronic security concerns, it was predicted that people in LDR would engage in more security processes than people in geographically-close relationships. In contrast, because of the lack of chronic security concerns, it was predicted that people in geographically-close relationships would engage in more growth processes than people in LDR. The underlying argument of this hypothesis was also extended to individual differences in chronic security concerns.

Individual Differences in Maintaining Long-Distance Relationships

Individual differences in how a person perceives, behaves, and experiences their relationship can cause chronic security concerns. Hazan and Shaver (1987) suggested that the attachment style of a person plays a crucial role in how they experience and behave in their relationships. The primary purpose of Bowlby's (1980) attachment research was to describe and explain the bond that an infant develops with their primary caregiver. He speculated that how a caregiver responds to a child's needs (i.e., hunger, comfort, safety) prompts the child to form either positive or negative internal working models of the self and others. A child would develop a specific attachment style based on these working models and that this attachment style would guide future patterns of expectations, desires, emotions, needs, and social behaviours (Mikulincer & Shaver, 2010).

It has been proposed that the connection that forms between romantic partners occurs through an attachment process much like the one that occurs between an infant and their primary caregiver (Brennan & Shaver, 1995; Hazan & Shaver, 1987; Kirkpatrick & Davis, 1994; Pistole, Roberts, & Chapman, 2010; Simpson, 1990). For this reason, Hazan and Shaver (1987) believed that adult attachment should be broken down into the same three

groups that infant attachment has been broken down into: secure attachment, avoidant attachment, and anxious/ambivalent attachment.

Securely attached people feel at ease with intimacy and autonomy, and tend to have more positive views and a higher regard for themselves and their partner (Bartholomew & Horowitz, 1991; Pistole, Roberts, & Chapman, 2010). Once in a romantic relationship, they report having higher levels of happiness, satisfaction, intimacy, trust, and commitment than people who display other attachment styles (Hazan & Shaver, 1987; Kirkpatrick & Davis, 1994). People who are securely attached form more stable and supportive relationships regardless of whether they are in a geographically-close or long-distance relationships (Simpson, 1990).

People who display an avoidant attachment style or a “fear of closeness” (Fraley, Waller, & Brennan, 2000) are characterized by their fear of intimacy and closeness (Hazan & Shaver, 1987). Once in a geographically-close relationship, people who fear closeness report having lower levels of satisfaction, intimacy, trust, and commitment when they are compared to those who are securely attached (Kirkpatrick & Davis, 1994), as they have difficulties trusting and depending on others (Simpson, 1990). While in a long-distant relationship, those who fear closeness tend to suppress intimacy and attachment through infrequent communication, ignoring their emotions and those of their partner, and prolonging separation (Pistole, Roberts, & Chapman, 2010; Roberts & Pistole, 2009). Therefore, regardless of the type of relationship that they are in, people who fear closeness form only emotionally distant relationships (Roberts & Pistole, 2009; Simpson, 1990).

In contrast, anxiously attached people or those who “fear of abandonment” (Fraley et al., 2000) are characterized by a need to have their partner close to them at all times as they believe that their partners are essential to their self-worth (Pistole, Roberts, & Chapman, 2010). These people desire their partners' reciprocation of emotions so much that they often become obsessive, over-disclose personal information, and experience frequent emotional highs and lows (Hazan & Shaver, 1987; Pistole, Roberts, & Chapman, 2010). Therefore, when in a geographically-close relationship, people who fear abandonment tend to report having more conflicts and uncertainties in their relationships as they are often disappointed by their partner's affections (Kirkpatrick & Davis, 1994;

Pistole, Roberts, & Chapman, 2010; Roberts & Pistole, 2009). While in a LDR, people who fear abandonment experience heightened emotional distresses and seek proximity to their partner at all times (Pistole, Roberts, & Chapman, 2010). This proximity seeking can promote positive affect and increased relationship satisfaction as it may be seen as a sign of commitment by their partner (Gable & Reis, 2001; Roberts & Pistole, 2009).

Overall, even though the chronic security concerns that usually underline LDR affect the amount and forms of maintenance processes that people in LDR can get engaged in, they are still able to maintain relational satisfaction and quality while at a distance (Guldner & Swenson, 1995; Roberts & Pistole, 2009). It has also been proposed that attachment style plays a major role in what a person expects from their relationships and how they behave and experience those relationships (Hazan & Shaver, 1987). Specifically, when in a long-distance relationship, people who fear abandonment experience heightened emotional distress and seek proximity to their partner at all times (Pistole, Roberts, & Chapman, 2010), which may be difficult due to the separation-reunion cycle. Since the underlying argument of this thesis is that situations which have more chronic security concerns will be associated with more security-restorative type maintenance processes, it was expected that people who fear abandonment would engage in more security and fewer growth processes overall. Furthermore, it was predicted that this effect would be heightened when those who fear abandonment were in a LDR.

Method

Participants and Procedure

For this study, 200 undergraduate students (79% female, $M_{age} = 19.35$, $SD_{age} = 1.86$, 69.7% Caucasian) were recruited from a Canadian university's participant pool. At the time of the study, all participants were currently involved in a romantic relationship ($M_{relationship\ length} = 23.2$ months), and to ensure consistency 100 of the participants were in geographically-close relationships, while 100 were in long-distance relationships¹. All of the students that completed the study were enrolled in first or second year Psychology courses. Each student was required to read over and agree to an informed consent before they were able to complete the 125-item self-report survey. This survey consisted of a demographic

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questionnaire as well as nine other surveys that are described below. After the survey was completed, each participant read a written debriefing that outlined the purposes of the study. Once the debriefing had been read, each student was granted a 0.25% credit that was applied toward the class in which they were enrolled.

Measures

Growth Maintenance Processes. Participants were asked to provide ratings for a range of relationship processes that relate to obtaining desired positive outcomes by focusing on development and accomplishments.

Secure Base Characteristics Scale. Secure base refers to the support a person receives from their partner regarding their explorations, personal growth, and pursued goals that occur outside of their relationship. Since this relationship process focuses on the support received during time of exploration and development, it was considered a growth maintenance process for the purpose of this study. The *Secure Base Characteristics Scale* (Feeney & Thrush, 2010) is a 15-item self-report measure that contains three subscales measuring the partner's availability, interference, and encouragement during times of personal growth. For each item, participants were asked to rate how much they agreed with each statement about their partner on a 6-point Likert scale, where 1 = *disagree strongly*, 3 = *neutral/mixed*, and 6 = *agree strongly*. The reliability for this scale was $\alpha = .83$.

Capitalization Scale. The term capitalization refers to the communication of positive, personal events to another person. Since this relationship process focuses on obtaining desired outcomes through communicating personal development and accomplishments, it was considered a growth maintenance process for the purpose of this study. The *Capitalization Scale* (Gable, Reis, Impett & Asher, 2004) is a 12-item self-report measure that assesses how a person feels their partner responds to their positive events or news. Participants rated each item according to how likely their partner would respond in a certain way using a 7-point Likert scale, where 1 = *not at all* and 7 = *very true*. The *Capitalization Scale* has good reliability with $\alpha = .92$.

Engagement in Novel Activities. The novel activities subscale of the *Activities in Close Relationships Scale* developed by Harasymchuk and

Peetz (2013) was used to determine the frequency that participants engaged in novel activities with their partner (growth maintenance process). Participants were asked to rate each of the two items on a 7-point Likert scale, where 1 = *not at all*, 4 = *sometimes*, and 7 = *very often*.

Security Maintenance Processes. Participants were asked to complete numerous scales that measured engagement in relationship processes that emphasize avoiding undesired outcomes but focusing on security and safety.

Safe Haven Scale. Safe haven refers to the tendency of people to seek out their partner in times of distress (Heffernan, Fraley, Vicary, & Brunbaugh, 2012). Since this relationship process focuses on avoiding undesired feelings by focusing on the safety that their partner provides, this measure was deemed a security maintenance process for the purpose of this study. In order to measure this construct, a 3-item self-report survey was developed for this study. Participants were asked to rate each statement according to how often their partner responds to their distress in a certain way using a 7-point Likert scale, where 1 = *never* and 7 = *all the time*. This scale included items such as: "In times of need, my partner is there to support me". The *Safe Haven Scale* has excellent reliability, $\alpha = .96$.

Jealousy Scale. The *Jealousy Scale* developed by Pfeiffer and Wong (1989) was used to measure the jealousy of the participants. Since this relationship process focuses on feelings of relationship insecurity, it was deemed a security maintenance process for the purpose of this study (i.e., low levels indicate relationship security). This 24-item self-report measure ($M = 3.20$, $SD = 0.88$) contains three subscales (i.e., cognitive, emotional, and behavioural jealousy) each consisting of 8-items. The cognitive and behavioural jealousy subscales were measured using a 7-point Likert scale, where 1 = *never* and 7 = *all the time*; while the emotional jealousy subscale was measured using a 7-point Likert scale, where 1 = *very pleased*, 4 = *neutral*, and 7 = *very upset*. The *Jealousy Scale* has excellent reliability with $\alpha = .90$.

Engagement in Familiar Activities. The familiar activities subscale of the *Activities in Close Relationships Scale* developed by Harasymchuk and Peetz (2013) was used to determine the frequency that participants engaged in familiar activities with their partner (security maintenance process).

Participants were asked to rate each of the two items on a 7-point Likert scale, where 1 = *not at all*, 4 = *sometimes*, and 7 = *very often*.

Attachment Styles. *Experiences in Close Relationships-Revised Questionnaire* was used in order to assess adult attachment style (Fraley et al., 2000). This 36-item self-report measure contains two 18-item subscales which each assess a different dimension of attachment. The anxiety subscale measured the participants' tendencies towards anxious attachment while the avoidance subscale measured the participants' tendencies towards avoidant attachment. Participants were presented with statements and asked to rate how much they agreed with each statement using a 7-point Likert scale, where 1 = *strongly disagree* and 7 = *strongly agree*. The *Experiences in Close Relationships-Revised Questionnaire* has excellent reliability with $\alpha = .92$. Furthermore, the questionnaire also included measures assessing relationship satisfaction, conflict resolution, communication practises, and activity engagement.

Before the main analyses were conducted, the *Jealousy Scale* was reversed coded so that high scores in all scales deemed as security maintenance processes (i.e., *Jealousy Scale*, *Safe Haven Scale*, and familiar activity engagement) indicated higher engagement in

security-oriented activities. Subsequently, in order to ensure measurement consistency, all measures were standardized so that means and standard deviations were consistent across all scales. The means and standard deviations for all measures (prior to standardization) are outlined in Table 1. It should be noted that no data was excluded from the analyses as there was no major concerns present within the sample data.

The first hypothesis predicting that individuals in LDR would engage in more security maintenance processes than people in geographically-close relationships was tested with two multivariate analysis of variance (MANOVA). These MANOVAs analyzed the differences between relationship condition (long-distance vs. geographically-close) for engagement in security (i.e., jealousy, safe haven, and engagement in familiar activities) and growth maintenance processes (i.e., secure base, capitalization, and engagement in novel activities).

Before testing the hypothesis that people who fear abandonment would engage in more security processes and fewer growth processes, two relationship process composites were created: one for security and one for growth. These composites were used in order to develop a better understanding of which category of

Table 1
Mean, standard deviation and test statistic for all measures

Measures	Total	LDR	GCR	Min	Max
	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>		
Growth processes	3.79 (0.99)	3.71 (1.10)	3.87 (0.88)		
Secure Base	4.15 (0.51)	4.09 (0.56)	4.20 (0.45)	1	6
Capitalization	2.96 (1.92)	2.69 (2.05)	3.22 (1.76)	1	7
Novel Activities	4.27 (1.39)	4.34 (1.46)	4.20 (1.34)	1	7
Security Processes	5.28 (0.812)	5.14 (0.88)	5.41 (0.73)		
Jealousy (reversed)	4.79 (0.89)	4.72 (1.02)	4.87 (0.73)	1	7
Safe Haven	6.16 (1.14)	5.98 (1.27)	6.33 (0.98)	1	7
Familiar Activities	4.87 (1.50)	4.74 (1.57)	5.00 (1.42)	1	7
Relationship Factors					
Satisfaction	4.11 (0.69)	3.99 (0.75)	4.22 (0.61)	1	5
Relationship Length ^a	23.2 (15.81)	25.24 (16.02)	21.71 (15.59)	3	96
Fear of Closeness	2.6 (1.07)	2.78 (1.06)	2.43 (1.06)	1	7
Fear of Abandonment	3.64 (1.17)	3.73 (1.14)	3.55 (1.19)	1	7

Note. ^a In months; LDR = long-distance relationship, GCR = geographically-close relationship.

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maintenance processes are engaged in most often by each relationship condition. Each was calculated by averaging the means of all security processes measures (i.e., *Jealousy Scale*, *Safe Haven Scale*, and engagement in Familiar Activities), and averaging the means of all growth processes measures (*Secure Base Characteristics Scale*, *Capitalization Scale*, and engagement in novel activities). These composites were used instead of analyzing each measure separately.

Following the development of these composites, a series of Hayes and Preacher (2014) moderation models were conducted. The first of these models was conducted using fear of abandonment scores as the moderator between relationship condition (independent variable) and the security composite score (outcome). The second model was conducted using fear of abandonment scores as the moderator between relationship condition (independent variable) and the growth composite score (outcome).

Results

The present sample engaged in a variety of maintenance processes—both growth and security maintenance processes. Although, based on the direction of the means presented in Table 1, it appears that people in long-distance and geographically-close relationships reported engaging in more security processes than growth processes overall. The correlations between security processes, growth processes, relational satisfaction, relationship length, and the two attachment styles are outlined in Table 2. The correlations between security processes, growth processes, relational satisfaction, relationship length, and the two attachment styles separated by relationship condition are outlined in Table 3.

Table 2

Correlations between security processes, growth processes and relationship factors

	1	2	3	4
1. Security Processes	-			
2. Growth Processes	.72 *	-		
3. Relationship Length	-.09	-.03	-	
4. Fear of Closeness	-.48	-.45 *	-.03	-
5. Fear of Abandonment	.30 *	-.28 *	.02	.21 *

Note. * $p < .01$.

Analysis of Main Hypotheses

Long-Distance Relationships and Maintenance Processes. It was predicted that because of the stress invoked by chronic security concerns, people in LDR would engage in more security maintenance processes than people in geographically-close relationships. Whereas, people in geographically-close relationships would engage in more growth maintenance processes than people in LDR because of the lack of these chronic security concerns. Since security maintenance processes were evaluated with different measures, a MANOVA was conducted to test whether or not security maintenance processes were affected by the type of relationship reported by the participants. Contrary to the predictions, the results of the MANOVA analyses indicated that there was not a significant effect of relationship condition on engagement in security maintenance processes, $F(1, 180) = 1.72, p = .164, \Lambda = .97, \text{partial } \eta^2 = .03$. Specifically, these results indicated that people in LDR are not engaging in more security maintenance processes than people in geographically-close

Table 3

Correlations between security processes, growth processes and relationship factors separated by relationship condition

	1	2	3	4	5
1. Security Processes	-	.71 **	-.72	-.36 **	.38 **
2. Growth Processes	.72 **	-	-.17	-.27 **	-.43 **
3. Relationship Length	.03	.12	-	-.04	-.60
4. Fear of Closeness	-.56 **	-.60 **	-.08	-	.15
5. Fear of Abandonment	-.22 *	-.13	.10	.25 *	-

Note. * $p < .05$; ** $p < .01$; Condition: long-distance relationship in bottom, geographically-close relationship in top.

relationships. Furthermore, there was no significant effect of relationship condition on engagement in growth maintenance processes $F(1, 181) = 1.80, p = .150; \Lambda = .97, \text{partial } \eta^2 = .03$. Specifically, these results indicated that people in geographically-close relationships are not engaging in more growth maintenance processes than people in LDR. Overall, relationship condition was not a significant predictor of engagement in security or growth maintenance processes.

Attachment Fears and Maintenance Processes Engagement. It was predicted that people who fear abandonment would engage in more security processes and fewer growth processes, and that this effect would be amplified while in a LDR. The first moderation model (i.e., fear of abandonment scores as the moderator between relationship condition and the security composite score) conducted indicated that the overall model was significant, $F(3, 180) = 11.46, p < .001$, with 16% of the variance being accounted for by this set of predictors. In terms of predictors, fear of abandonment score, $b = -0.16, t(180) = -1.30, p = .212$, and relationship condition, $b = .31, t(180) = 1.00, p = .318$, were not significant predictors of engagement in security maintenance processes. Furthermore, the interaction of these predictors was not significant, $b = -0.03, t(180) = -0.43, p = .671$. Contrary to the hypothesis, these results indicate that fear of abandonment scores and relationship condition do not predict increased engagement in security maintenance processes.

The second moderation model (i.e., fear of abandonment scores as the moderator between relationship condition and the growth composite score) indicated that the overall model was significant, $F(3, 180) = 4.10, p = .010, R^2 = .06$, with 6.4% of the variance being accounted for by this set of predictors. In terms of predictors, fear of abandonment score, $b = 0.01, t(180) = 0.12, p = .901$, and relationship condition, $b = 0.50, t(180) = 1.34, p = .172$, were not significant predictors of engagement in growth processes. Furthermore, the interaction of these predictors was not significant, $b = -0.11, t(180) = -1.14, p = .257$. Specifically, fear of abandonment scores and relationship condition did not predict engagement in growth maintenance processes. Overall, the results from the two moderation analyses did not support this hypothesis as people who fear abandonment did not report engaging in significantly more security maintenance processes and fewer growth maintenance processes.

Discussion

LDR are unique in that partners are separated from each other, limiting the amount of face-to-face communication, shared free time, and physical intercourse they can engage in with one another. These limitations and the increased separation may cause chronic security concerns. Therefore it was expected that people in LDR might engage in different maintenance processes than people in geographically-close relationships in order to reduce these chronic feelings of insecurity. This was examined by analyzing the differences in relationship maintenance of geographically-close and long-distance relationships using the Gable and Reis (2001) growth-security framework; while also examining the role of attachment style in shaping these processes. The results of this study indicated that relationship condition and attachment style did not predict engagement in either growth or security maintenance processes. As a result, our hypotheses were not supported.

How do People in Long-Distance Relationships Manage their Chronic Security Concerns?

Contrary to the hypothesis, the present study found, while examining the security and growth maintenance processes, that individuals in LDR did not engage in significantly higher or lower security or growth processes when compared to people in geographically-close relationships. Though these results did not support the hypothesis, this pattern of findings could be explained by the average age of the participants. Considering these data were collected from an undergraduate population, it is possible that the novel and stimulating activities (i.e., growth processes) are being engaged in more frequently because this age group prioritizes these kinds of novel processes. Future research should investigate this line of research in more long-term relationships to see if this pattern is true for all relationships, or just newer relationships.

In light of these results, it is possible that the security maintenance processes measured in the current study do not reflect security processes that people in LDR engage in to reduce chronic security concerns. Therefore, future research should investigate other security-seeking processes or behaviours that might be used by people in LDR to reduce chronic security concerns (i.e., comfort and predictability).

How do People who Fear Abandonment Handle Chronic Security Concerns in a Long-Distance Relationship?

Attachment styles play a crucial role in how people experience and behave in their relationships (Hazan & Shaver, 1987). Thus, each attachment style should differ in terms of the degree of relationship involvement, relational satisfaction, self-confidence, reliance on others, and emotional expression that they require while in a romantic relationship. It was hypothesized that people who fear abandonment would engage in more security processes than growth processes overall, and that this effect would be amplified while they were in a LDR. Indeed, when faced with chronic security concerns, individuals who are sensitive to the possibility of negative outcomes—such as those who fear abandonment—attempt to avoid novel situations that may lead to these negative events and approach situations that are positive and familiar in order to emphasize security and safety (Gable & Reis, 2001). Contrary to the hypothesis, the results of the present study suggest that relationship condition and fear of abandonment do not predict engagement in security and growth maintenance processes. However, upon further reflection, it is possible that the selection of security processes included in this study may not adequately represent the types of security restorative processes that people who fear abandonment are engaging in to reduce chronic security concerns within their relationships. For instance, this study did not assess comfort and predictability, which may be primary focuses for individuals who fear abandonment while they are in a LDR.

Strengths, Limitations, and Future Directions

Despite many of the results suggesting findings contrary to the hypotheses, there were numerous strengths in the present study that should be considered when conducting future research with LDR. The first strength of the present study is the sample, as this style of relationship is especially common in first and second year university students. The use of a sample of first-year university students may make these results more applicable to a large proportion of LDR. The collection of even samples of participants from geographically-close and LDR was also a strength of the present study. These even samples minimized interpretation errors within the results. Another strength of the present study was the use of security and growth composites. The use of

these composites allowed a broad understanding of maintenance processes used by each relationship condition. This broad understanding will allow future research to examine each composite in more depth. Furthermore, the present study is one of the first studies to examine growth-maintenance processes within the context of LDR.

However, even though there were numerous strengths, the limitations of the present study should not be overlooked. Despite the sample being collected from an ideal population, there was an overwhelming majority (79%) of female participants in the sample. This most likely occurred because the sample was gathered from only first-year psychology courses where the majority of students are female. Another limitation of the present study was that the results were purely based on self-report surveys, where response biases can occur. This may explain why engagement in maintenance processes that are considered positive (i.e., safe haven) are being reported much more frequently than maintenance process that are considered negative (i.e., jealousy) by this sample.

Fortunately, there are many avenues for improvement and growth within the research area of LDR. Future research should consider other personality factors, such as conscientiousness, extraversion, and neuroticism, which may affect the maintenance processes of people in geographically-close and LDR. Also, other aspects of both types of relationships (i.e., joint assets, cheating behaviours, frequency of visits between long-distance partners) which may play a role in the commitment and relational satisfaction of the people involved may want to be considered. Overall, there are numerous avenues for future research as the maintenance processes and characteristics of people who are in long-distance relationships are not yet well understood.

The present study provides insight into how LDR function in terms of their maintenance behaviours and attachment styles. Although it was expected that people in long-distance and geographically-close relationships would maintain their relationships in very different ways, it appears as though there are more similarities in their maintenance activities than differences.

Notes

¹An independent samples t-test indicated that there was no significant difference of relationships satisfaction, $t(1, 186) = -1.85, p = .066$, between people in geographically-close relationships and people in long-distance relationships. This same analysis revealed no difference in relationship length, $t(1, 114) = 1.01, p = .315$, between the two relationship conditions.

²These results were not maintained when fear of closeness scores were controlled for.

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