

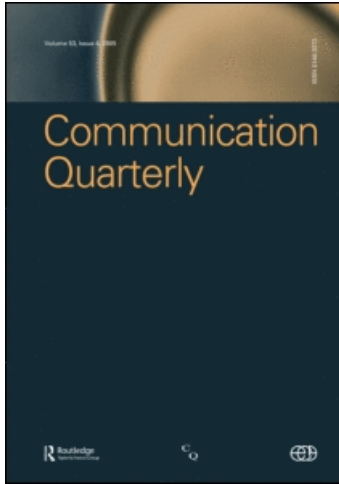
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### Changes in Friendship Commitment: Comparing Geographically Close and Long-Distance Young-Adult Friendships

Amy Janan Johnson <sup>a</sup>; Jennifer A. H. Becker <sup>b</sup>; Elizabeth A. Craig <sup>c</sup>; Eileen S. Gilchrist <sup>d</sup>; Michel M. Haigh <sup>e</sup>

<sup>a</sup> Department of Communication, University of Oklahoma, <sup>b</sup> Communication and Journalism Department, University of Wisconsin-Eau Claire, <sup>c</sup> Department of Communication, North Carolina State University, <sup>d</sup> Department of Communication, University of Wyoming, <sup>e</sup> College of Communications, Pennsylvania State University,

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# Changes in Friendship Commitment: Comparing Geographically Close and Long-Distance Young-Adult Friendships

Amy Janan Johnson, Jennifer A. H. Becker,  
Elizabeth A. Craig, Eileen S. Gilchrist, &  
Michel M. Haigh

*The existence of long-distance (LD) friendships throws into question assumptions that scholars of interpersonal communication often make about commitment to relationships, the development of relationships, and friendships. An analysis of turning points comparing commitment changes in young-adult geographically close and LD same-sex friendships revealed high and fluctuating levels of commitment over the history of the friendships for both types. Over 80% of those having LD friends reported their levels of commitment were currently increasing, rather than decreasing. Women were more likely than men to report nonlinear trajectories for their friendships, more downturns in commitment to their friendships, and more turning points related to changes in commitment to their friendships.*

*Keywords:* Friendship; Long-Distance Relationships; Relational Commitment

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Amy Janan Johnson (PhD, Michigan State University, 1999) is an associate professor in the Department of Communication at the University of Oklahoma. Jennifer A. H. Becker (PhD, University of Oklahoma, 2005) is a lecturer in the Communication and Journalism Department at the University of Wisconsin–Eau Claire. Elizabeth A. Craig (PhD, University of Oklahoma, 2008) is an assistant professor in the Department of Communication at North Carolina State University. Eileen S. Gilchrist (PhD, University of Oklahoma, 2009) is an assistant professor in the Department of Communication at the University of Wyoming. Michel M. Haigh (PhD, University of Oklahoma, 2006) is an assistant professor in the College of Communications at the Pennsylvania State University. A former version of this article was presented to the Interpersonal Communication Division of the International Communication Association for their annual meeting in Dresden, Germany, June, 2006. *Correspondence:* Amy Janan Johnson, Department of Communication, University of Oklahoma, 610 Elm Avenue, Norman, OK 73019; E-mail: amyjj@ou.edu

With many new channels of communication available, the ways individuals engage in interpersonal relationships are changing. Scholars interested in interpersonal communication must consider whether and how such changes affect the way they conceptualize and explore certain relational variables. The long-distance (LD) friendship presents an interesting test case for exploring how individuals manage interpersonal relationships for which there is little face-to-face contact and challenges certain assumptions scholars make about commitment, relational development, and even the very concept of friendship. For example, although traditional conceptualizations of friendship suggest that distance may cause a relationship to deteriorate, if not terminate (Fehr, 1999), many people, particularly college students, report having psychologically close, but geographically LD, friendships (A. J. Johnson, Haigh, Becker, Craig, & Wigley, 2004; Rohlfing, 1995). LD friendships also raise questions concerning linear theories of relational development that portray commitment as rising to a maximum and decreasing levels being predictive of the end of a relationship. Friendships among college-aged adults provide a natural context for exploring how friends deal with transitions, such as an increase in geographic distance. To determine the relationship between proximity and perceived changes in commitment over the history of a friendship, this study incorporated an analysis of turning points in the relationships of geographically close (GC) and LD young-adult friends.

### **The Importance of LD Friendships**

With more possibilities for communication, the limiting effects of geographic distance on the formation and maintenance of relationships with people who live too far away for frequent face-to-face contact (Blieszner & Adams, 1992) are decreasing. Ninety percent of individuals report having at least one close LD friend (Rohlfing, 1995), and 82% of college students report e-mailing a LD friend at least once per week, on average (A. J. Johnson, Haigh et al., 2004).

Despite such trends, research in the area of interpersonal communication focusing on LD relationships remains rare (Stafford, 2005). To examine LD friendships, young adults attending college are convenient, as many make a commitment to “keep in touch” with their high school friends as they move on (and often away) to college (G. M. Johnson, Staton, & Jorgensen-Earp, 1995). For new college students, the transition from high school can leave a sense of disengagement (Jorgensen-Earp & Staton, 1993). LD friendships offer college students a way to experience relational and emotional continuity during a time of change.

The growth of LD friendships also raises questions concerning the accuracy of the traditional conceptualization of them as “fragile” (Wiseman, 1986). Friendships, in general, are described as vulnerable relationships due to their voluntariness, lack of institutional ties, and the availability of alternative friends (Blieszner & Adams, 1992). Ostensibly, friendships are more likely than other relationships to end because of these factors (Cramer, 1998). Transitions, especially a loss of proximity, reportedly are particularly disruptive to friendships (Fehr, 1999).

In light of such views of friendship (Wiseman, 1986), researchers often assume that LD friendships are uncommon and naturally less close than GC friendships (Stafford, 2005), as well as more likely to erode for at least three reasons: (a) One must invest more time and energy in them, (b) one cannot as easily engage in frequent talk, and (c) one cannot as readily provide emotional and instrumental support (Fehr, 1999). However, such views assume the primacy of face-to-face communication in interpersonal relationships, irrespective of the increasingly diverse means of communication open to individuals. Focusing on face-to-face communication as primary, if not indispensable, understandably leads to the prediction that LD friendships will deteriorate in commitment over time, although that suspicion may well be inaccurate.

### Theoretical Models of Commitment and Their Relevance to LD Friendships

The existence of LD friendships poses two challenges to conventional thinking about relational commitment. First, commitment seems to depend on external barriers to ending a relationship (e.g., M. P. Johnson, 1991), but friendships, especially LD ones, are subject to few external pressures to ensure their continuance. Second, commitment presumably depends on “rewards” and “costs” (Fehr, 1999) that surface most easily and function most effectively in face-to-face interactions (Davis, 1973; A. J. Johnson, 2001; Rose, 1984). LD relationships obviously have fewer possibilities for such types of exchange.

Although commitment has been an object of extensive study in romantic relationships, Fehr (1999) felt that commitment in friendship needs further examination. Rusbult and Buunk (1993) described commitment as focusing on a “[l]ong-term orientation, including feelings of attachment to a partner and desire to maintain the relationship, for better or worse” (p. 180). For this study, commitment in friendship refers to the reported motivation to continue a friendship into the future.

Fehr (1999) discussed two models of commitment and their relevance to friendships. First is M. P. Johnson’s (1991), which delineates three types of commitment: personal, moral, and structural. “People continue in relationships because they feel that they want to, ought to, or have to do so” (p. 118). Fehr claimed that only personal commitment is relevant to friendships. Friendships are not as morally regulated as romantic or family relationships—at least, in our society. Structural commitment is less relevant to friendships: In romantic relationships, external forces—such as societal norms, families, and friends—are present to encourage relational continuation; but with friendships, these forces are not as strong, or possibly even relevant. For example, LD friendships may have fewer external pressures in that the parties have less network overlap. LD friendships provide an opportunity, then, to explore commitment in relationships in which few structural restrictions exist.

The second model of commitment relevant to friendships stems from theories of social exchange (Fehr, 1999). Rusbult’s (1980) investment model utilizes a reward–cost ratio, attractiveness of alternatives, and investment to explain why individuals

remain relationally committed. Two primary types of investments include direct—“resources that are put directly into the relationship, such as time, emotional energy/effort, money, or self-disclosures” (Rusbult, 1980, p. 97)—and indirect, which “occur when initially extraneous resources become inextricably connected to the relationship (e.g., mutual friends, shared memories or material possessions, activities/objects/events uniquely associated with the relationship)” (p. 97). Greater investment is predictive of greater commitment, as are higher satisfaction levels and lower value of alternatives (Rusbult, 1980).

Reward-cost ratio, attractiveness of alternatives, and investment (Rusbult, 1980) can seemingly help to illuminate commitment in LD friendships. According to Davis (1973), rewards are exchanged most easily face to face. Geographic distance decreases rewards and increases costs, which can lead friendships to “atrophy.” However, such an exclusive focus on face-to-face contact now seems dated (Stafford, Kline, & Dimmick, 1999) in light of the greater abundance of communication such as cell phones, e-mail, social networks, and instant messaging—all of which offer attractive, relatively non-costly means to maintain LD relationships and, thereby, alter the reward–cost ratio historically characterizing these relationships.

Attractiveness of alternatives is predictive of commitment in dating relationships, but not cross-sex friendships (Lin & Rusbult, 1995). It may not be as relevant to friendship commitment because people can have numerous friends at the same time. However, Rose (1984) reported that individuals choose between LD and GC friends, which often entails ending LD friendships and replacing them with GC ones. Current lower costs of maintaining LD friendships, however, may allow for continuation of both types. A. J. Johnson, Haigh, Craig, and Becker (2005) claimed that GC and LD friends can provide different types of benefits and, thereby, offer incentive to remain committed to both.

The third factor, level of investment, may be particularly relevant for LD friends. Direct investments of time, energy, and disclosure *may* be less in LD friendships. However, indirect investments, such as shared memories, may be more powerful, as the friends involved are possibly important in one’s life history (Rawlins, 1994). Duration is an aspect of an investment (Rusbult, 1980) that A. J. Johnson et al. (2005) observed as being greater among LD friends. Greater duration, in turn, potentially provides more time for investments to accrue. As a consequence of more long-term investment, one may remain committed to a LD friendship even if the costs are relatively high. In summary, changes in ways of assessing levels of commitment to a relationship related to the greater number of communication channels available to friends and the greater ease of continuing LD relationships are relevant to interpersonal communication researchers.

### Previous Research Examining Commitment in LD Relationships

Most research concerning commitment in LD relationships has focused on romantic relationships. Although LD romantic relationships and friendships differ,

because little research has examined LD friendships, the research on commitment in romantic relationships served as the theoretical basis for this study. Dainton and Aylor (2002) noted that face-to-face contact was positively related to commitment in LD romantic relationships. The importance of such contact, however, may diminish in LD friendships, particularly for young adults who have an array of means for communicating. Lydon, Pierce, and O'Regan (1997) detected no significant difference in level of commitment between GC and LD romantic relationships; however, moral commitment was predictive of continuation during the transition to LD, whereas enthusiastic commitment, which related to relational satisfaction, was not. Overall, the evidence seems to suggest that *proximity* positively relates to commitment:

H1: GC friends report a higher level of commitment than LD friends.

As Lydon et al. (1997) discovered, consequently, different types of commitment are relevant to GC and LD romantic relationships. This study incorporated a similar multidimensional approach to examine friendships. Stanley and Markman's (1992) measure of commitment was the index of interest in this study. This measure has two components: personal dedication and constraint. Personal dedication is "the desire of an individual to maintain or improve the quality of his or her relationship for the joint benefit of the participants" (p. 595). Its dimensions include (a) relationship agenda—the desire to continue a relationship, (b) relationship primacy—the relationship's place in one's priorities, (c) couple identity—the perception of two individuals as connected rather than separate, (d) satisfaction with sacrifice—the desire to sacrifice for the other, (e) alternative monitoring—the mere examination of alternative relational partners, and (f) meta-commitment—the perceived value of commitment. The first four subdimensions were measured in this study, as they are the most relevant to friendships.

The other component of commitment, constraint, refers to the "forces that constrain individuals to maintain relationships regardless of their personal dedication to them" (Stanley & Markman, 1992, pp. 595–596). Its dimensions include (a) social pressure—constraints from one's network, (b) availability of partners—the desirability of relational alternatives, (c) structural investments—material barriers to relationship demise, and (d) morality of divorce. Only two dimensions of constraint—social pressure and partner availability—were of interest in this study, as the other two are not as relevant to friendships. The constraint dimension of commitment presumably is less relevant for friendships than romantic relationships, in general, but should be even less so for LD friends than GC friends, as LD friends may have less network overlap. Given the two components of commitment, personal dedication and constraint, one can ask the following:

RQ1: Do GC and LD friends differ in respect to the personal dedication and constraint dimensions of commitment?

### Linear and Nonlinear Models: How Commitment to Friendship Changes

Linear models of relational development have had a strong influence in research and pedagogy relating to interpersonal communication. Social penetration theory (Altman & Taylor, 1973) and Knapp's (1984) model of relational development portray development as a series of stages of deepening intimacy through which dyads progress in an orderly manner. Much research relating to interpersonal communication examines communication strategies we use to develop (e.g., Bell & Daly, 1984), maintain (e.g., Canary & Stafford, 1992), or terminate (e.g., Baxter, 1982) relationships.

LD friendships bring into question theories of interpersonal communication that posit linearity in relational development. A linear model of relational commitment suggests that individuals' relationships gradually increase in commitment to a high level, after which maintenance becomes a major concern. Reductions in commitment tend to be a product of deterioration and point to eventual dissolution. Such models clarify why distance presumably leads to the demise of friendships. Specifically, the lack of face-to-face contact resulting from greater distance has high maintenance costs. Hence, commitment dissipates, and the friendship moves toward its end.

A nonlinear view of relational commitment allows for the possibility that individuals can backtrack to lower levels of commitment and then experience a recovery to higher levels of commitment. This can happen repeatedly in a given relationship. One of the basic tenets of dialectical theory, for instance, is that relational partners are continually fluctuating between stability and change (Altman, Vinsel, & Brown, 1981). Baxter and Montgomery (1996) redefined *relational development* as *relational change process*. Within this frame of reference, even deterioration may provide opportunities for future growth (Altman et al., 1981).

Analysis of turning points in relationships allows for a process view of changes to levels of commitment in friendships. A turning point is "any event or occurrence that is associated with change in a relationship" (Baxter & Bullis, 1986, p. 470). Research involving romantic relationships has revealed nonlinear patterns in commitment changes, which may also be the case in friendships. LD friendships can undergo periods of dormancy (Rawlins, 1994), which should lead to more changes in commitment to the relationship over the trajectory of the friendship and, hence, more *nonlinear* patterns. This leads to another hypothesis:

H2: More LD friends than GC friends report a nonlinear trajectory of changes in levels of commitment.

Consequently, also due to these periods of dormancy, LD friendships especially may be likely to show *downturns* in commitment and recovery:

H3: LD friends report more downturns in levels of commitment than GC friends.

As LD friendships tend to be of relatively long duration (A. J. Johnson et al., 2005), the parties may report a greater *number* of turning points than individuals in more

proximate friendships. On the other hand, periods of dormancy in the friendships may contribute to fewer turning points overall. This led to the following research question:

RQ2: Do LD and GC friends report different numbers of turning points?

The *types* of turning points may also differ for GC and LD friends, as maintenance behavior has proved to differ for these two types of friendships (A. J. Johnson, 2001). This led to another research question:

RQ3: Do LD and GC friends differ in the types of turning points in the relationships they report?

Biological gender is an interesting variable to consider when exploring how LD friendships function. Prior research involving the analysis of turning points has not extensively focused on gender differences (e.g., Baxter & Bullis, 1986; Graham, 1997); however, traditional theories that privilege face-to-face contact would lead one to predict significant differences between women and men in LD friendships. Research focusing on GC friendships has revealed that women are more likely than men to self-disclose to their friends (Dolgin, Meyer, & Schwartz, 1991), whereas activities are apparently more central to developing closeness among men than women (Swain, 1989). Rose (1984) discovered that for women, the most commonly reported reasons for failure to maintain LD friendships related to dating and marriage. For men, the most common reason was physical separation. Therefore, it appears that women can continue their typical pattern of relating at a distance, whereas men cannot as easily. Rohlfsing (1995) even felt that not many men can maintain LD friendships. With more easily accessible means of communication, however, men may continue their friendships over distance more so than in the past, so one would expect less difference currently between men and women in respect to LD friendships.

A. J. Johnson, Wittenberg et al. (2004) suggested that men may be more likely to report a *linear trajectory* for a relationship. Women reportedly monitor their relationships more closely than men, may be more observant of changes within their relationships (Wood & Dindia, 1998), and, hence, would be more apt to report a nonlinear pattern characterized by more downturns and more turning points. In addition, A. J. Johnson, Wittenberg et al. found that female friends were more likely than male friends to report "conflict," which may be further predictive of more downturns in commitment for women across the relational trajectory. Such considerations led to the following hypotheses:

- H4: Compared to female friendships, more male friendships exhibit linear trajectories of perceived friendship changes in commitment.
- H5: Women report more downturns in levels of commitment to friendships than men.
- H6: Women report more turning points related to changes in levels of commitment to friendships than men.



In view of the work of A. J. Johnson, Wittenberg et al. (2004), it is quite possible that men and women would report different *types* of turning points in their friendships. In addition, the *combination* of distance and gender could interact with the variables posed in the preceding hypotheses and research questions. Hence, two final research questions were posed:

RQ4: Does gender relate to the types of turning points reported?

RQ5: Does distance from the friend interact with gender with respect to any of the relationships implicated in the preceding hypotheses and research questions?

## Method

### *Participants*

One hundred students (50 men and 50 women) from a medium-sized Southwestern university participated in this study for course or extra credit. This study was approved by our institutional review board (at the time of the study, we were all affiliated with the University of Oklahoma). Each person provided information relating to one same-sex GC friendship and one same-sex LD friendship. The average age was 20.50 ( $SD = 2.10$ ), with a range of 18 to 29. Seventy-seven participants were Caucasian, 7 were African American, 7 were Asian American, 5 were Native American or Pacific Islander, 2 were Hispanic, 1 reported as “other,” and 1 reported as “unknown.”

### *Procedures*

The study’s interviewing procedures and questionnaires were refined through pilot testing. Amy Janan Johnson trained three interviewers in the Retrospective Interview Technique (RIT), which was utilized in prior studies of turning points (e.g., Baxter & Bullis, 1986). In this study, the RIT was used to generate a graph illustrating a respondent’s perceived changes in commitment to a friendship of interest over time. Each graph illustrated the path a friendship followed to reach the current level of commitment, with commitment charted on the ordinate from 0 to 100 and month and year on the abscissa.

Each participant took part in two interviews, once regarding an LD friend and the other time regarding a GC friend (with the order of interviews randomly assigned). The participants were aware that the interviews would be videotaped and had the option of declining, which 7 did. Prior to the interviews, the participants completed a preliminary questionnaire asking them to list two same-sex close friends—one LD and one GC. They were not to identify individuals with whom they had been or were romantically involved or who were family members. They rated each friend on a 100-point scale, ranging from 0 (*not at all committed to continuing the friendship into the future*) to 100 (*completely committed to continuing the friendship into the future*).

To begin charting the trajectory for each relationship, the participants recalled the first time they met the friends of interest. If they could not, they were to recall the earliest activity involving these individuals. At the beginning of the graph, the level of commitment was zero, as this represented the first time the friends met (or their first remembered interaction). Next, the participants plotted the current level of commitment at the end of the abscissa. The interviewer defined the term *turning point* to each participant as any event associated with a change in level of commitment, either positive or negative. Participants then plotted any turning points between the time they had met and the present. For each one, they recorded the approximate date of the turning point (usually a month and a year) and provided a description. The participants then connected the points with a line and made any changes they thought necessary to reflect as accurately as possible changes in commitment over the life of the friendship.

After each interview, participants completed a questionnaire about that friendship. The respondents provided information concerning demographic variables, duration of the friendship, and geographical distance from the friend. They repeated the process for the other friend (either GC or LD). Each participant required approximately 60 min for completing the interviews and the questionnaires.

### Measures

The questionnaire the participants completed following each interview included several scales. The measure of channels of communication was one developed by Dainton and Aylor (2002) and had seven response options: daily, 5 to 6 days per week, 3 to 4 days per week, 1 to 2 days per week, 1 to 2 times per month, 1 to 2 times per year, and never. The two next-to-last categories were not in the original version. Dainton and Aylor identified the following five channels: face to face, phone, Internet, and letters or cards. We added *text messaging* and divided "Internet" into two categories: e-mail and instant messaging. The Dainton and Aylor scale provides an intuitive means by which to report frequency of channel use, which seems to have good face validity. Moreover, a uses and gratifications perspective assumes that media use is goal-directed to satisfy needs, and is performed by active individuals able to express their needs and motives (Rubin & Rubin, 1985). Extending this perspective to communication channel use, individuals who actively communicate are able to recall and articulate their communication channel use. The college student participants in this study were heavily immersed in communicative activities. The index of commitment was two subscales developed by Stanley and Markman (1992). Stanley and Markman documented the concurrent and construct validity of these subscales. For example, they found high concurrent validity with the commitment measures of M. P. Johnson (1978), Beach and Broderick (1983), and Udry (1981). Construct validity was documented by increased commitment across relationship progression (e.g., dating to engagement and married without children to married with children). However, because the scales were originally designed

to tap commitment to romantic relationships, the items required slight modification for this context (e.g., "I like to think of my friend [rather than romantic partner] in terms of 'us' and 'we' rather than 'me' and 'him/her'."). The participants responded to 29 items, each on a 7-point scale in the Likert format, and ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The five-item "relationship agenda," three-item "couple identity," six-item "relationship primacy," and six-item "satisfaction with sacrifice" subscales served as indexes of the participants' personal dedication to the maintenance of the friendship. The five-item "availability of partners" and four-item "social pressure" subscales tapped forces that respondents saw as constraining them to maintain friendships. One item was deleted from the "availability of partners" measure (i.e., "I believe there are many people who would be happy with me as a friend"), as it was inconsistent with the others. For LD friends, pertinent Cronbach's alphas were as follows: relationship agenda,  $\alpha = .85$ ; couple identity,  $\alpha = .53$ ; relationship primacy,  $\alpha = .75$ ; satisfaction with sacrifice,  $\alpha = .86$ ; availability of partners,  $\alpha = .83$ ; and social pressure,  $\alpha = .78$ . For GC friends, the corresponding coefficients were relationship agenda,  $\alpha = .74$ ; couple identity,  $\alpha = .67$ ; relationship primacy,  $\alpha = .79$ ; satisfaction with sacrifice,  $\alpha = .75$ ; availability of partners,  $\alpha = .79$ ; and social pressure,  $\alpha = .82$ . The estimated reliability for the couple identity subscale was lower than desirable and could reflect the possibility that couple identity may not be as relevant a construct for friendships as it is for romantic relationships.

### Analysis

Two of the co-authors (Craig & Gilchrist) coded the RIT interview graphs. At that time, they were not aware of the research questions and hypotheses. The data of interest were number of turning points, number of downturns in level of commitment, whether the graph ended ascending or descending, and whether the graph illustrated a linear or nonlinear trajectory (*linear* was defined as linear progression to greater commitment and potentially to less commitment without subsequent recovery, and *nonlinear* was defined as at least one downturn in commitment followed by a recovery to higher levels of commitment). For each reported turning point, the coders placed the turning point into a coding scheme used in a previous study of turning points in friendships (A. J. Johnson, Wittenberg et al., 2004; see Appendix for a list of categories) and noted whether the turning point was associated with a positive or negative change in level of commitment. During the training process, slight changes were made to the turning point category scheme based on the data's focus on LD relationships (such as adding subcategories related to the specific channels of face to face, phone, and e-mail to the categories of increase or decrease in contact). Following training, the two coders independently coded 20% of the data. Percentage of agreement and Cohen's (1960) kappas were as follows: number of turning points, 100% agreement,  $\kappa = 1.00$ ; number of downturns in commitment level, 95% agreement,  $\kappa = 0.93$ ; whether the graph ended ascending or descending, 100% agreement,  $\kappa = 1.00$ ; graph trajectory, 95% agreement,  $\kappa = 0.93$ ; placing the

description of the turning point into a category, 70% agreement,  $\kappa = 0.67$ ; and whether the turning point related to positive or negative commitment change, 99.6% agreement,  $\kappa = 0.99$ . Agreement levels were satisfactory. After disagreements were resolved, the coders divided the remainder of the data and independently coded their respective shares.

## Results<sup>1</sup>

### Descriptives

Dependent-sample *t* tests revealed that GC and LD friends did not significantly differ in age,  $t(99) = 0.93$ ,  $p > .05$  ( $\omega^2 = .00$ ); but did in respect to miles between friends,  $t(99) = -6.68$ ,  $p < .001$  ( $\omega^2 = .30$ ) and friendship length in years,  $t(99) = -4.47$ ,  $p < .001$  ( $\omega^2 = .16$ ); with GC friendships being shorter in duration (see Table 1 for means and standard deviations). For channels of contact, the median and mode (in parentheses) for each category for each friendship type were as follows: *face to face*—GC daily (daily) and LD 1 to 2 times per year (1–2 times per year), *phone*—GC 5 to 6 days per week (daily) and LD 1 to 2 times per month (1–2 times per month), *e-mail*—GC 1 to 2 times per year (never) and LD 1 to 2 times per year (never), *text messaging*—GC 1 to 2 days per week (never) and LD 1 to 2 times per month (never), *letters or cards*—GC never (never) and LD never (never), and *instant messaging*—GC never (never) and LD 1 to 2 times per year (never).<sup>2</sup>

One thousand ninety-four turning points were in evidence. The Appendix shows the number of turning points coded in each category for each friendship type, as well as the percentage of time each turning point was positive or associated with an increase in commitment.

**Table 1** Dependent-Sample *t* Tests for GC and LD Friends

Variable	GC		LD		<i>t</i>	$\omega^2$
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Age	20.84	2.27	20.67	2.09	0.93	.00
Miles between friends	4.56	10.70	1,050.00	1,562.80	-0.68***	.30
Duration of friendship	5.15	5.02	8.06	4.32	-4.47***	.16
Levels of commitment	93.77	9.93	90.30	2.07	2.07*	.03
Relationship agenda	5.89	0.80	5.79	1.03	-0.85	.00
Satisfaction with sacrifices	5.45	0.75	5.33	0.97	-1.58	.01
Couple identity	4.55	0.98	4.16	1.18	-3.02**	.08
Relationship primacy	4.76	0.98	4.43	1.03	-2.71**	.06
Availability of another partner	5.01	1.27	4.81	1.37	-1.23	.00
Social pressure	5.22	1.16	4.84	1.25	-2.38*	.04

Note. *df* = 99 for all variables, except for couple identity (*df* = 97). GC = geographically close; LD = long distance. \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

*Hypotheses and Research Questions*

*H1* posited that GC friends would report higher levels of commitment to their friendships than LD friends. Using the scale (0–100) from the preliminary questionnaire, GC friends reported significantly higher levels of commitment than LD friends did,  $t(99) = 2.07$ ,  $p < .05$  ( $\omega^2 = .03$ ), although the effect size was small (see Table 1 for means and standard deviations). Both types of friends reported high levels of commitment, which averaged above 90 on a 100-point scale.

*RQ1* asked whether GC and LD friends differ on the dimensions of personal dedication and constraints on commitment (Stanley & Markman, 1992). For the four subscales relating to personal dedication (see Table 1 for means and standard deviations), dependent-sample *t* tests revealed no significant difference for either relationship agenda,  $t(99) = -0.85$ ,  $p > .05$  ( $\omega^2 = .00$ ); or satisfaction with sacrifices,  $t(99) = -1.58$ ,  $p > .05$  ( $\omega^2 = .01$ ). Significant differences emerged for couple identity,  $t(97) = -3.02$ ,  $p < .01$  ( $\omega^2 = .08$ ); and relationship primacy,  $t(99) = -2.71$ ,  $p < .01$  ( $\omega^2 = .06$ ); with GC friends scoring higher on both. For the two subscales relating to constraint on commitment, there was no significant difference in the case of availability of another partner,  $t(99) = -1.23$ ,  $p > .05$  ( $\omega^2 = .00$ ). GC friends, however, reported significantly higher levels of social pressure,  $t(99) = -2.38$ ,  $p < .05$  ( $\omega^2 = .04$ ).

*H2* and *H4* both pertained to nonlinear trajectories; therefore, we address them in tandem. To begin, *H2* stated LD friends would show more evidence of nonlinear (exhibiting at least one downturn in commitment with subsequent recovery) trajectories than GC friends. Forty-two percent of GC graphs and 40% of LD graphs were linear. Fifty-eight percent of GC and 60% of LD graphs were nonlinear. A chi-square test revealed no significant difference between the two groups,  $\chi^2(1, N = 200) = 0.08$ ,  $p > .05$ . Hence, *H2* was rejected. *H4* stated that men would be more likely to report linear trajectories. Forty-nine percent of the men did, whereas only 33% of women did,  $\chi^2(1, N = 200) = 5.29$ ,  $p < .05$ . There was no evidence that distance from friend and gender interacted in relation to friendship trajectory (*RQ5*), as the overall pattern of men being more likely to report a linear trajectory was consistent for both GC (men, 50% linear; women, 34% linear) and LD friends (men, 48% linear; women, 32% linear).

Although there was no significant differences for LD or GC friends with respect to linearity of reported trajectories, there was a difference in respect to whether respondents described commitment to the friendship as currently rising or falling. LD friends were significantly more likely to report commitment was currently falling (GC, 4% reported commitment currently decreasing; LD, 19% reported commitment currently decreasing),  $\chi^2(1, N = 200) = 11.05$ ,  $p < .001$ . Gender did not moderate this relationship, as both men (GC, 4% descending; LD, 20% descending),  $\chi^2(1, N = 100) = 6.06$ ,  $p = .01$ , and women (GC, 4% descending; LD, 18% descending),  $\chi^2(1, N = 100) = 5.01$ ,  $p = .03$ , exhibited the same pattern. For both GC and LD friends, more than three fourths of men and women stated that their levels of commitment were currently rising.

*H3* and *H5* both pertained to downturns in commitment and, as in the cases of the second and fourth ones, we address them in the same section. To begin, *H3* advanced

**Table 2** Means and Standard Deviations for Downturns and Number of Turning Points

Variable	GC		LD		Men		Women	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Downturns	0.90	0.89	1.12	0.97	0.83	0.80	1.19	1.01
Turning points	5.83	1.99	5.77	1.79	5.36	1.64	6.24	2.02

the view that LD friends would report more downturns in commitment to the friendship than would GC friends. *H5* posited that women would report more downturns than men. A two-way mixed analysis of variance (ANOVA) served as a test of these hypotheses (see Table 2 for means and standard deviations). There was a main effect for distance from friend, with LD friends reporting more downturns, which supports *H3*,  $F(1, 98) = 3.98, p < .05$  ( $\omega^2 = .03$ ). There was also a main effect for gender. Women reported significantly more downturns than men,  $F(1, 98) = 6.14, p = .02$  ( $\omega^2 = .05$ ). This was supportive of *H5*. There was no significant interaction between type of relationship (GC or LD) and gender for number of downturns (*RQ5*),  $F(1, 98) = 0.00, p > .05$  ( $\omega^2 = .00$ ). Women reported more downturns for both GC and LD friendships.

*RQ2* and *H6* both involved the number of turning points reported. *RQ2* concerned whether LD and GC friends differ in the number of turning points they reported. *H6* held that women would report more than men. A two-way mixed ANOVA permitted answering the question and testing the hypothesis (see Table 2 for means and standard deviations). The main effect for type of friendship was not significant,  $F(1, 98) = 0.10, p > .05$  ( $\omega^2 = .00$ ). However, there was a main effect for gender, as women, consistent with *H6*, reported significantly more turning points,  $F(1, 98) = 7.66, p = .001$  ( $\omega^2 = .06$ ). There was no significant interaction between whether the friendship was GC or LD and gender on number of turning points reported (*RQ5*),  $F(1, 98) = 0.10, p > .05$  ( $\omega^2 = .00$ ). Women reported more turning points than men for both GC and LD friends.

*RQ3* and *RQ4* related to whether distance from friend and gender correspond to differences in types of turning points the participant would report. The Appendix shows the number of turning points falling into each category for each type of friend and the percentage of time the turning point was associated with a positive change in commitment to the friendship. For each category, the average proportion of turning points for each person falling into that category was the dependent variable. *Z* tests for the differences between proportions served to reveal whether there was a significant difference between types of friend (GC or LD) or gender (male or female) for the top five most commonly reported turning points for each group. With regard to *RQ3*, the most commonly reported categories for GC friends (information in parentheses represents average proportion of turning points for each person falling into that category and whether each turning point was more often associated with a positive or negative change in commitment) were activity due to circumstance

or situation, such as being in the same youth group (.16, positive); sharing living quarters (.13, positive); activity with purpose of spending time together, such as going to lunch (.10, positive); general talking or hanging out (.10, positive); and increase in distance (.06, negative). The most commonly reported categories for LD friends were activity due to circumstance or situation (.18, positive), increase in distance (.15, negative), activity with purpose of spending time together (.08, positive), general talking or hanging out (.06, positive), and visiting (.06, positive). The only significant differences between friendship types were that GC friends reported sharing living quarters more often ( $z = 3.25, p < .01$ , one-tailed), whereas LD friends more often reported increase in distance ( $z = -2.12, p < .01$ , one-tailed) and visiting ( $z = -1.89, p < .05$ , one-tailed).

For RQ4, which addressed whether biological gender would relate to types of turning points the participants reported, the five most common ones for men were activity due to circumstance or situation (.16, positive), increase in distance (.12, negative), general talking or hanging out (.10, positive), activity with purpose of spending time together (.09, positive), and sharing living quarters (.07, positive). The results for women were similar: activity due to circumstance (.18, positive), increase in distance (.10, negative), activity with purpose of spending time together (.09, positive), sharing living quarters (.07, positive), and supporting one another in a time of crisis (.06, positive). There were no significant differences between men and women concerning types of reported turning points.

To determine whether gender moderated the relationship between distance and types of reported turning points, we divided LD and GC friends by gender. No new patterns of difference emerged. In regard to RQ5, then, there was little evidence that gender and distance interacted to affect any of the relationships. To summarize the findings related to biological gender, women were more likely to report nonlinear trajectories, more downturns, and more turning points than men for both GC and LD friends. Both men and women were more likely to report that their levels of commitment were falling in their LD friendships than in their GC friendships. Men and women reported surprisingly similar types of turning points in GC and LD friendships.

## Discussion

Stafford (2005) observed that LD relationships pose questions concerning two assumptions about interpersonal relationships: (a) "Frequent face-to-face communication is necessary for close personal relationships" (p. 9), and (b) "Geographic proximity is necessary for close relationships" (p. 10). Our examination of commitment in young-adult friendships tested assumptions about three variables of extensive interest in research involving interpersonal communication: relational commitment, relational development, and the interpersonal relationship of friendship.

First, those in LD relationships *were* more likely to exhibit decreasing levels of commitment than GC relationships; however, 81% of the LD friends in this study indicated that their levels of commitment were currently rising, rather than falling.

One would not have expected this on the basis of traditional theories of commitment that have privileged face-to-face communication. Research relating to commitment has focused on two forces that keep relationships stable: internal and external (M. P. Johnson, 1991). External forces have not been perceived as relevant to friendships (Fehr, 1999). However, the results involving the use of Stanley and Markman's (1992) measure of commitment revealed differences between internal and external forces for GC and LD friends. For internal barriers, GC friends reported a higher priority level of this friendship in relation to other life activities (higher relationship primacy) and were more likely to perceive themselves as a team, rather than individuals (higher couple identity). GC friends reportedly perceived more social pressure—that is, disapproval from members of their networks for ending friendships—perhaps due to larger network overlap. In examining friendships, findings of this study suggest that ignoring external factors when examining friendship commitment, at least for young adults, is too simplistic. These differences in internal and external forces may help explain why GC friends reported slightly higher levels of commitment to their friendships than LD friends.

Why would individuals stay committed to LD friendships? Changes in typical patterns of communication may help to explain this phenomenon. In light of lower costs of LD communication, young adults may no longer have to choose between communicating with GC and LD friends. A. J. Johnson et al. (2005) suggested that characteristic benefits of GC and LD relationships encourage maintenance of both types. Whereas closeness in GC friends relates to frequency of face-to-face contact, ease of interaction, and practical support, closeness in LD friends focuses more on acceptance, understanding, trust, keeping in touch, and continuing to influence each other's decisions over a distance. Such indirect investments as shared memories (Rusbult, 1980) and being considered part of one's life history (Rawlins, 1994) illustrate why individuals can remain committed to friendships when they no longer frequently interact face to face. Thus, routine communication between friends may serve to maintain the friendship not only in the present, but indefinitely into the future as well.

Examining LD friendships also continues to reveal the limitations of linear relational development theories, which historically have heavily influenced research in interpersonal communication, as well as our understandings of how people interact. At the base of this study was the expectation that those in LD friendships would be more likely than those in GC relationships to report a nonlinear relational trajectory (as measured by perceived changes in commitment across the relational history), as such friendships may go through alternating periods of dormancy and revival as a result of the greater number of possibilities for communication now available. As it turns out, a majority of *both* GC and LD friends reported an overall nonlinear trajectory; however, LD friends reported more downturns, or points at which levels of commitment changed from increasing to decreasing. This suggests more turbulence than is the case with GC friendships. Increases in distance were the fifth most common type of turning point even for GC friends. In view of such transitions as the move from high school to college and school holidays, a nonlinear view of friendship



commitment appears more appropriate for both GC and LD young-adult friends. Transitions resulting in nonlinear fluctuations of relational commitment are likely to continue to affect communication patterns in such friendships even after college because of increased mobility in our society.

In this study, LD friendships were of longer duration than GC friendships, which was also the case in prior research (A. J. Johnson et al., 2005). One potential explanation for why individuals remain committed to LD relationships is, as Rusbult (1980) noted, that duration is a component of investment. However, there was no evidence that duration correlated with number of turning points. LD relationships may have had periods of dormancy (Rawlins, 1994), during which few turning points occurred.

This study's findings throw into question the traditional conceptualization of friendship as fragile (Wiseman, 1986). The majority of GC and LD friends showed high, currently rising levels of commitment. Conceptualizing friendship as a fragile relationship that is doomed to deterioration and termination by geographic distance, then, does not seem to be appropriate, at least not for this population. A more appropriate metaphor for these friendships is "flexible," adapting to multiple transitions (Becker et al., 2009). This study provided further evidence that proximity and frequent face-to-face contact are not requirements for close interpersonal relationships, as well as that friendship, in particular, is not as vulnerable to a lack of proximity as is often portrayed.

Few prior analyses of turning points have included assessments of gender differences. In this study, women reported more turning points than men. This pattern, moreover, was not significantly affected by geographic distance. Men were also more likely to report a linear relational trajectory. This finding makes sense in light of the observation that women pay more attention to their relationships (Wood & Dindia, 1998), perhaps because of women's traditional roles and obligations (Wright, 1998). Women may also make finer distinctions regarding relational change. There was no evidence of gender differences in the types of turning points reported for either GC or LD friends. This did not comport with A. J. Johnson, Wittenberg et al.'s (2004) discovery of a few gender differences for friendships that had ended. Perhaps these differences were specifically related to why these friendships ended: Women were more likely to report "conflict," whereas men were more likely to mention "common interests" (or lack thereof) (A. J. Johnson, Wittenberg et al., 2004). The overall findings from our study suggest that men and women are similar in how they enact LD friendships, rather than different, with men being less communal (e.g., intimate and expressive) in the way prior research (Canary & Emmers-Sommer, 1997; Rohlfing, 1995; Wright, 1998) had indicated. In his review of past studies on gender differences in friendships, Wright (1988) reported that researchers have commonly found women to be more communal than men, although he emphasized that this and other gender differences in friendship tend to be small.

To summarize, traditional research in interpersonal communication would lead one to predict that LD friendships would be characterized by low levels of commitment, be rare, and differ substantially from GC friendships (Stafford,

2005). This study did not yield such findings. The majority of GC and LD friends showed high, currently rising levels of commitment. Although certain internal and external barriers related to commitment were lower for LD friends, higher levels of investment in such friendships may be required. The prevalence of nonlinear trajectories indicated that rather than proceeding linearly, young adults, over time, may fluctuate considerably in their commitment to any given friendship.

### Limitations

One limitation of this study was the use of a convenience sample—namely, undergraduate students. Similar patterns of relationship development presumably would characterize more mature friendships, except turning points may be separated further in time because of greater commitment to other life roles (Rawlins, 1994). The types of turning points may also differ in more mature friendships.

A second limitation was the use of retrospective accounts. RIT is potentially subject to faulty recall. However, the interviewers noted that participants did not appear to have difficulty when asked to recall turning points. Duck and Miell (1986) perceived retrospective accounts as important and valid, in that one needs to take the relational history into account to understand a person's present perception of the relationship. One's perception of turning points, presumably, plays an important role in one's current commitment level. Moreover, dialectical theorists (e.g., Baxter & Montgomery, 1996) have argued that it is not objective reality but, rather, interactants' subjective *perceptions* of their partners, communications, and relationships that stimulate turning points or intense moments of relational transformation. Consistent with dialectical theory, this study privileges participants' personal understandings and recollections of their friendships.

Interviewing only one of the parties in the friendship was a limitation. The distance between the LD friends ( $Mdn = 658.50$  miles) rendered face-to-face interviewing of both friends infeasible. To keep the two conditions consistent, we chose to interview only one of the parties in the GC friendships, although interviewing both members of the dyad may have been feasible. Although relationship research can include the individual, dyad, or system, we believe that individual-level data are appropriate when the focus is on understanding the individuals' perceptions of changes in commitment. An individual's perception of a turning point presumably affects his or her commitment to a relationship, even if the friend does not share the perception.

In conclusion, this study shows that young adults can and do remain highly committed to LD friendships. Consequently, scholars working in interpersonal communication need to consider whether and how their research should be reconceptualized, if at all. Friendships are primarily enacted through communication. How interpersonal communication scholars conceptualize relational commitment, relational development, and friendship will affect how they choose to study communication in interpersonal relationships. As members of society become increasingly mobile (Blieszner & Adams, 1992), LD friends can provide emotional support. By

studying these friendships, we can better understand and appreciate the nature of such support.

## Notes

- [1] Elsewhere, Becker et al. (2009) reported results for different hypotheses using data collected at the same time as the data used for this study. This other study focused on shifts in *friendship level* (casual, close, and best) and, unlike our study, not on the subdimensions of commitment, how commitment changed across relational trajectories, the number of turning points, and biological gender.
- [2] Participants indicated whether they had ever lived in close proximity to their long-distance (LD) friend—88 said they had, 11 said they had not, and 1 did not respond. Of the 11 LD friends who never lived geographically close (GC), 7 (64%) were men and 4 (36%) were women. Of the 88 who had lived in proximity to their LD friend, the mean length of geographical separation was 40 months ( $SD = 37.86$ ); however, these data were skewed because of extreme scores. The median was 28 months. The top five turning point categories for LD friends who had never lived close (number in parentheses represents the average proportion of turning points reported by each person falling into that category) were as follows: participate in activity due to situation or circumstance (0.13), visit (0.12), take trips together (0.11), increase in geographic distance (0.09), and decrease in contact (not related to distance; 0.08). The top five turning points for LD friends who had once been GC were as follows: participate in activity due to circumstance or situation (0.18), increase in geographical distance (0.16), participate in activity to spend time together (0.09), sharing living quarters (0.06), and visit (0.05). Due to similarity and the small number of LD friends who had never been GC, all LD relationships were collapsed in subsequent analyses.

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## Appendix: Turning Points in Geographically Close (GC) and Long-Distance (LD) Friendships.

- I. Personality trait of friend/self
  - a. Positive (GC, 3, 100%; LD, 3, 100%); Negative (GC, 2, 0%; LD, 0, 0%)
- II. Activities
  - a. Participate in activity to spend time together (GC, 58, 100%; LD, 46, 100%)
  - b. Participate in activity due to circumstance (GC, 98, 98%; LD, 97, 98%)
  - c. Not participating in same activities together (GC, 12, 33%; LD, 5, 0%)
  - d. Spend time together outside of setting where met (GC, 4, 100%; LD, 7, 100%)
  - e. Only polite conversation (GC, 0, 0%; LD, 1, 100%)
- III. Channels
  - a. Letters/e-mail (GC, 0, 0%; LD, 3, 100%)
  - b. Phone (GC, 3, 100%; LD, 8, 88%)
  - c. Visit (GC, 6, 100%; LD, 34, 97%)
  - d. Take trip (GC, 25, 100%; LD, 23, 100%)

- IV. Share living quarters (GC, 71, 92%; LD, 6, 100%)
  - a. Stop living together (GC, 13, 38%; LD, 0, 0%)
- V. General talking/hanging out (GC, 48, 100%; LD, 32, 100%)
  - a. Self-disclose (GC, 11, 100%; LD, 9, 100%)
  - b. Support (GC, 27, 100%; LD, 25, 96%)
  - c. Do favor for friend (GC, 4, 100%; LD, 5, 100%)
- VI. Conflict (GC, 10, 20%; LD, 5, 0%); Solve conflict (GC, 5, 100%; LD, 5, 100%)
- VII. Turning point mentions social network
  - a. Family members (GC, 5, 100%; LD, 13, 92%)
  - b. Romantic partners of self or friend (GC, 9, 44%; LD, 11, 36%)
  - c. Mutual friends (GC, 23, 91%; LD, 19, 95%)
  - d. Different friends (GC, 10, 10%; LD, 10, 10%)
- VIII. Contact change due to geographical distance
  - a. Increase (GC, 41, 29%; LD, 87, 38%); Decrease (GC, 21, 100%; LD, 25, 96%)
- IX. Contact change not due to geographical distance
  - a. Increase in contact (GC, 16, 100%; LD, 18, 94%)
    - 1. Face to face (GC, 1, 100%; LD, 0, 0%)
    - 2. Phone (GC, 5, 10%; LD, 4, 100%)
    - 3. E-mail/Internet (GC, 1, 100%; LD, 5, 100%)
  - b. Decrease in contact (GC, 1, 9%; LD, 28, 0%)
    - 1. Face to face (GC, 0, 0%; LD, 0, 0%)
    - 2. Phone (GC, 0, 0%; LD, 1, 0%)
    - 3. E-mail/Internet (GC, 0, 0%; LD, 1, 0%)
  - c. Graduation (GC, 3, 83%; LD, 5, 100%)
- X. Common interests (GC, 22, 100%; LD, 17, 94%)
  - a. Not many common interests (GC, 4, 0%; LD, 4, 0%)
  - b. One friend changes (GC, 0, 0%; LD, 2, 0%)
- XI. Unidentified turning point
  - a. Positive slope (GC, 6, 100%; LD, 8, 100%)
  - b. Negative slope (GC, 3, 0%; LD, 0, 0%)
- XII. Miscellaneous (GC, 1, 100%; LD, 4, 100%)