Brief article

TIME SPENT TOGETHER AND RELATIONSHIP QUALITY: LONG-DISTANCE RELATIONSHIPS AS A TEST CASE

Gregory T. Guldner & Clifford H. Swensen

Purdue University

ABSTRACT

Although many studies have shown associations between the amount of time spent together and relationship satisfaction, none has established the causal direction of the association. While time spent together may cause increased satisfaction, it is equally likely that greater satisfaction causes couples to spend more time together. Recent research that experimentally increased the amount of time couples spent together found no increase in relationship satisfaction. The present study looks at relationships that spend less time together – long-distance relationships (LDRs) – and examines their relationship quality compared to geographically proximal relationships (PRs). A multivariate analysis of variance compared self-reported levels of relationship satisfaction, intimacy, dyadic trust and the degree of relationship progress, between 194 individuals in premarital LDRs and 190 premarital PRs. The analysis found no significant differences. This suggests that the amount of time a couple spends together does not itself play a central role in relationship maintenance.

KEY WORDS • companionship • long-distance • proximity • relationship satisfaction • shared time

Spending time with one's partner has increasingly been seen as essential to relationship maintenance. Dindia & Baxter (1987), for example, found that spending time together constituted the second most frequently used maintenance strategy for married couples. Therapists, such as Stuart (1980), have even suggested that increasing the amount of time a couple spend together can be a primary therapeutic strategy. Reissman et al. (1993) examined this growing trend toward linking the time a couple

Correspondence concerning this article should be addressed to Gregory T. Guldner, Department of Neurology, Stanford University Medical Center, Stanford, California 94305, USA.

Journal of Social and Personal Relationships © 1995 SAGE (London, Thousand Oaks, CA and New Delhi), Vol. 12(2): 313–320.

from the SAGE Social Science Collections. All Rights Reserved.

spends together with relationship quality and found that 'the main thrust of this thinking seems to be that time spent together makes companionship and communication possible. Companionship and communication have become central elements of the marital role and are thus crucial to satisfaction with that role' (p. 244).

Yet, the evidence that increased time together causes increased relationship satisfaction is empirically very suspect. While several studies have shown a correlation between time spent together and relationship satisfaction, the causal direction of the association remains elusive. It is tempting to believe that spending more time with one's partner could increase one's relationship satisfaction. But the alternative — that one's satisfaction determines the amount of time spent with one's partner — has substantial merit. Of course, both causal directions may coexist.

To study this issue, four methodological possibilities exist: one could manipulate the time a couple spend together, either increasing or decreasing the amount, and measure satisfaction; or manipulate the relationship satisfaction, again either increasing or decreasing the level, and measure the time a couple spend together. Manipulating a couple's relationship satisfaction obviously has many experimental limitations. Manipulating the time a couple spend together, however, represents a more realistic design.

Reissman et al. (1993) experimentally increased the amount of time couples spent together. They randomly assigned 53 married couples to one of three groups: two groups instructed to do either exciting or pleasant activities together, and a wait-listed control group. Their results showed that those couples who reported spending more time together, as instructed, showed no greater increase in marital satisfaction than the control group. They concluded that in their study, 'the direction of causality is not mainly from time spent together to satisfaction' (p. 251).

Experimentally reducing the amount of time couples spend together raises serious ethical questions. However, couples in long-distance relationships (LDRs) naturally spend less time together and thus provide an opportunity for indirect assessment of the impact of deficits in time together on relationship qualities.

Although a majority of both lay people and researchers believe that long-distance relationships (LDRs) usually fail, the available evidence does not support that conclusion. Six-month and one-year longitudinal studies of premarital LDRs by Stephen (1984, 1986), Guldner (1992) and Stafford & Reske (1990) have shown that LDRs have rates of breakup equal to or less than their proximal counterparts, with substantially less time spent together. Govaerts & Dixon (1988) studied 55 commuter marriages and 55 non-commuter marriages and found no differences in their reported martial satisfaction. Similarly, Baxter & Bullis (1986) found no change in relationship commitment following a geographical separation in a sample of 40 college students. While some studies of separated military families have shown increased rates of divorce, Pavalko & Elder (1990) found that divorce was not related to the duration of family separation.

Additionally, Woelfel & Savell (1978) found only a small and non-significant correlation ($r = -.10$) between separation and marital satisfaction in a military sample. Other factors unique to military marriages appear to mediate their increased risk of divorce.

Three studies of LDRs, however, support the notion that less time spent together causes relationship difficulties. Rindfuss & Stephen (1990) used a retrospective review of census data to compare couples that were living together in 1976 to couples who indicated they were married (as opposed to 'separated'), but did not list their spouse as a member of the household (thus, presumed to be LDR). The authors concluded that those in LDRs, compared to normal couples, had a substantially greater chance of being divorced in 1979. Unfortunately, as the authors point out one cannot isolate the effect of separation on the marriage from any pre-separation factors that may have impacted both the decision to physically separate and the later marital dissolution.

The second study, by Holt & Stone (1988), found that those LDRs that visited at least once a month reported greater satisfaction than those visiting one another less often. However, they used categories of 0 to 1 mile, 2 to 249 miles and 250 miles or greater in defining their groups. The middle category certainly will contain many relationships not considered long-distance.

The third study, by Carpenter & Knox (1986), found an association between the frequency of visits and relationship stability for men in LDRs (but not for women). However, they contrasted 'successful' and 'unsuccessful' LDRs by comparing retrospective accounts of LDRs that had dissolved to current accounts of ongoing LDRs. One of the many difficulties with such an approach lies in the assumption that those ongoing LDRs measured by a cross-sectional study are 'successful'. The probability that some of those relationships will eventually dissolve suggests that the ongoing LDR group actually consists of some relationships that will eventually be 'successful' and some relationships that will eventually fail, but have not yet done so at the time of the measurement. Additionally, comparison of retrospective accounts to current assessments of relationships assumes that no distortion of recall exists that could confound the results.

Thus, while LDRs provide a naturally occurring reservoir of couples who spend relatively little time together, serious methodological problems blur any conclusions one could draw from the empirical evidence.

The study presented here uses a large sample, cross-sectional design and multivariate analysis of variance to examine differences in relationship qualities between individuals in premarital LDRs and individuals in premarital non-separated or 'proximal' relationships (PRs). In order to assess the general state of the relationships, we chose standard measurements of variables that researchers typically report as indicators of general relationship functioning: relationship satisfaction, dyadic trust, intimacy, commitment and the degree of relationship progress. We also tested all of the scales for internal reliability and 48-hour test–retest stability. If simply spending time together as a couple is fundamental to a satisfying and stable

relationship, we predict that those individuals in LDRs will report significantly less satisfaction, trust, intimacy, commitment and relationship progress when compared to those in PRs.

Method

Participants included 384 undergraduate students enrolled in an introductory psychology class at a major midwest university. All participants were involved in a premarital romantic relationship. The LDR group consisted of 194 participants (118 women, 68 men, 8 unreported) who agreed with the statement 'My partner lives far enough away from me that it would be very difficult or impossible for me to see him or her every day'. The PR group consisted of 190 participants (113 women, 73 men, 4 unreported) who agreed with the statement 'My partner lives close enough to me that I could see him or her every day if I chose to.'

The median participant in the LDR group was 19 years old, dating a partner who was 19 years old, had dated one another for a total of 14 months, had been separated by 128 miles for 112 days, had dated for approximately 8.5 months prior to being separated, and visited one another once every 23 days. The median participant in the PR group was 19 years old, dating a partner who was 20 years old, and had dated one another for a total of 11.5 months. The LDR and PR groups did not differ significantly on age, partner's age, or relationship duration when compared by student *t* tests.

Participants gathered in groups of 15 to 30 to complete anonymous half-hour self-report questionnaires that included measures of relationship qualities and demographic questions. Individuals in LDRs and those in PRs completed their questionnaires simultaneously but in two separate locations. Additionally, to assess test–retest stability 19 participants in LDRs and 19 in PRs completed the questionnaires a second time 48 hours after the first session. Participants were not informed that they would be completing identical questionnaires until immediately before the retest.

Relationship satisfaction was measured by Hendrick's (1988) Relationship Assessment Scale (RAS), a 7-item Likert-type scale with an alpha of .86 and correlations of .80 with Spanier's (1976) Dyadic Adjustment Scale. Additionally, using a 4-month longitudinal design the RAS accurately predicted 91 percent of college couples who stayed together and 86 percent of those who broke up.

Larzelere & Huston's (1980) 8-item Likert-type Dyadic Trust Scale (DTS) measured the participants' trust in their partner. The DTS shows a unidimensional structure, an alpha of .93 and low correlations with social desirability and generalized trust.

Intimacy was measured by Schaefer & Olson's (1981) 36-item Personal Assessment of Intimacy in Relationships (PAIR) which assesses five types of intimacy described by the authors: (1) *Emotional intimacy*: the experiencing of closeness of feeling; the ability and freedom to share openly, in a non-defensive atmosphere when there is supportiveness and genuine understanding. (2) *Social intimacy*: the experience of having common friends and a similar social network. (3) *Sexual intimacy*: the experience of showing general affection, touching, physical closeness and/or sexual activity. (4) *Intellectual intimacy*: the experience of sharing ideas, talking about events in one's life, or discussing job-related issues, current affairs, etc. (5) *Recreational intimacy*:

shared experiences of interest in pastimes or hobbies; mutual participation in sporting events, mutual involvement in any general recreational or leisure activity.

The scales of the PAIR have alphas greater than .70 and correlate in the expected direction with cohesion, expressiveness, conflict and relationship satisfaction. The PAIR also contains a conventionality scale designed to assess the extent to which the subject is responding in a socially desirable direction. Typically, the PAIR requires the subject to answer the items twice — once for their current perceptions and once for their ideal. Because this practice was designed primarily for clinical intervention we omitted it in the current study; participants indicated only their current perceptions of the relationship.

King and Christensen's (1983) 19-item true/false Relationship Events Scale (RES) measures the relationship's degree of progress toward marriage and provides a more objective measure of the amount of involvement than traditional labels of 'casual', 'serious' and 'exclusive' dating.

Lund's (1985) 9-item Commitment Scale was added half-way through the study and therefore only 190 participants completed this scale. The Commitment Scale demonstrates a Cronbach's alpha of .82, a unidimensional structure, and can discriminate between relationships that break up over 6 months and those that remain together.

Results

Before data analysis, univariate and multivariate outliers were detected and deleted (15 from the LDR group and 12 from the PR group). Within-group scatter plots indicated that none of the dependent variables showed significant curvilinearity with any other variable. Homogeneity of variance was assessed with Box's M and found to be adequate ($M = 37.03, p < 984$). Several of the variables showed significant skewness and were transformed to better approximate a normal distribution. However, the results of the MANOVA using these transformed variables were identical to those using the untransformed variables and thus we will report the original values.

Table 1 shows the internal reliability, estimated with Cronbach's alpha, and the 48-hour test–retest stability estimates for the scales. Internal reliability estimates for the PR group ranged from .69 to .87. Reliability estimates for the LDR group ranged from .60 to .86. All of the scales had good stability with the exception of the social and dyadic trust scales which demonstrated coefficients of .55 and .50 respectively. Thus, one should interpret these scales with caution.

To examine the differences between those in LDRs and those in PRs, a multivariate analysis of variance was performed with the dependent variables of emotional, social, sexual, intellectual and recreational intimacy, conventionality, relationship satisfaction and dyadic trust. Because only half of the participants completed the commitment scale, it was omitted from the MANOVA and commitment was compared separately with a student's t test.

After exclusion of subjects with missing data, 360 participants were included in the MANOVA. The multivariate effect of the MANOVA was not significant ($F(9) = 1.17, p < .314$), nor were any of the univariate F tests (d.f. = 1, 358) significant. Commitment did not differ significantly between those in LDRs and those in PRs ($t(189) = 1.15, p < .352$). Table 2 shows the means and standard deviations of the dependent variables for the LDR and PR groups.

TABLE 1
Internal reliability and 48-hour test–retest stability for relationship quality scales and reported frequency of visits

Scale	PR		LDR	
	Reliability	Stability	Reliability	Stability
Intimacy				
Emotional	.82	.83	.74	.86
Social	.69	.81	.60	.55
Sexual	.75	.95	.64	.93
Intellectual	.77	.82	.74	.81
Recreational	.76	.77	.76	.89
Conventionality	.87	.67	.85	.92
Dyadic trust	.93	.88	.92	.50
Satisfaction	.86	.86	.85	.90
Commitment	.88	.84	.84	.82
Frequency of visits	—	—	—	.71

TABLE 2
Means and standard deviations for relationship qualities by group

Scale	PR		LDR	
	Mean	SD	Mean	SD
Emotional intimacy	73.3	17.3	74.5	15.0
Social intimacy	60.2	13.0	60.9	12.3
Sexual intimacy	76.2	14.6	74.3	14.0
Intellectual intimacy	74.5	15.7	75.5	14.2
Recreational intimacy	77.2	13.0	79.4	12.2
Conventionality	55.6	17.6	56.1	16.0
Dyadic trust	48.1	8.0	47.8	7.8
Satisfaction	41.4	6.7	41.7	6.4
Degree of progress	4.3	1.0	4.3	1.1
Commitment	51.6	10.2	50.2	9.6

Repeating the analysis on only male participants, and again with only female participants, revealed identical results.

Discussion

Individuals in LDRs report levels of relationship satisfaction, intimacy, trust and commitment that are identical to those reported by individuals in PRs, despite seeing one another on average only once every 23 days.

Given the sample size, and the reliability and stability of the scales, the lack of significant differences probably does not represent simply a failure to detect such differences. Conceivably, those in LDRs report levels of relationship qualities higher than they actually feel in an attempt to com-

pensate for social bias against LDRs. However, such an attempt would be unlikely to produce reported levels identical to those of PRs; rather, slightly higher or lower levels should result from such a scheme.

If one assumes that the results accurately represent the relationships, this study suggests that the quantity of time spent with a partner is not central to relationship satisfaction, intimacy, trust or commitment. In fact, some individuals can apparently maintain perfectly satisfying relationships with very little face-to-face contact, at least for periods of 3 to 4 months.

While this study cannot assess the causal direction of the association between time spent together and relationship satisfaction, it does show a dissociation between deficits in time spent together and relationship satisfaction. Conversely, the study by Reissman et al. (1993) showed a dissociation between increases in time spent together and relationship satisfaction. Together, these studies constitute a challenge to the notion that simply the amount of time spent together affects relationship qualities in any significant way. Clearly, relationships require some level of contact and extremely infrequent contact probably does ultimately result in relationship instability. However, that level of infrequent contact does not occur in the vast majority of relationships.

The study by Reissman et al. (1993) suggests that therapeutic interventions designed to simply increase the amount of time a couple spend together may not be justified. The current study suggests that attempts to explain relationship dissatisfaction solely on the basis of too little time spent together also may not be justified.

However, two caveats must accompany these conclusions. First, both studies have examined non-clinical relationships. Researchers have yet to establish the effect of increasing or decreasing the amount of time a dysfunctional couple spend together. Second the present study examined the relationships of premarital college students. The generalizability of these results to marital or non-college relationships is unclear. Perhaps the unique college environment inoculates these relationships against the impact of deficits in time spent together. Investigation into the specific factors that accomplish this task could potentially provide insight into variables that mediate the association between the amount of time spent together and relationship satisfaction.

In conclusion, the current study suggests that, while spending time together as a couple may facilitate relationship satisfaction, it is not the amount of time per se that supports the relationship, but rather some other factor associated with even small amounts of time spent together.

Acknowledgements

These studies were aided by a Purdue University Fellowship to Gregory T. Guldner. This article is based in part on a master's thesis conducted by the first author under the supervision of Clifford H. Swensen. We wish to thank Shannon Corbin, Bryan Gingrich, Julie Major, Darla Scandling, Karen Sigmond

and Jamie Summers for their help in data collection. Gregory T. Guldner is now at the Stanford University School of Medicine in Palo Alto, California.

REFERENCES

Baxter, L.A. & Bullis, C. (1986) 'Turning Points in Developing Romantic Relationships', *Human Communication Research* 12: 469–93.

Carpenter, D. & Knox, D. (1986) 'Relationship Maintenance of College Students Separated During Courtship', *College Student Journal* 28: 86–8.

Dindia, K. & Baxter, L.A. (1987) 'Strategies for Maintaining and Repairing Marital Relationships', *Journal of Social and Personal Relationships* 4: 143–58.

Govaerts, K. & Dixon, D. (1988) '"... Until Careers Do Us Part": Vocational and Marital Satisfaction in the Dual-career Commuter Marriage', *International Journal for the Advancement of Counselling* 11: 265–81.

Guldner, G. (1992) 'Propinquity and Dating Relationships', unpublished Master's thesis, Purdue University, West Lafayette, IN.

Hendrick, S. (1988) 'A Generic Measure of Relationship Satisfaction', *Journal of Marriage and the Family* 50: 93–8.

Holt, P. & Stone, G. (1988) 'Needs, Coping Strategies, and Coping Outcomes Associated with Long-distance Relationships', *Journal of College Student Development* 29: 136–41.

King, C. & Christensen, A. (1983) 'The Relationship Events Scale: A Guttman Scaling of Progress in Courtship', *Journal of Marriage and the Family* 45: 671–8.

Larzelere, R. & Huston, T. (1980) 'The Dyadic Trust Scale: Toward Understanding Interpersonal Trust in Close Relationships', *Journal of Marriage and the Family* 42: 595–603.

Lund, M. (1985) 'The Development of Investment and Commitment Scales for Predicting Continuity of Personal Relationships', *Journal of Social and Personal Relationships* 2: 3–23.

Pavalko, E.K. & Elder, G.H., Jr (1990) 'World War II and Divorce: A Life-course Perspective', *American Journal of Sociology* 95: 1213–34.

Reissman, C., Aron, A. & Bergen, M.R. (1993) 'Shared Activities and Marital Satisfaction: Causal Direction and Self-expansion Versus Boredom', *Journal of Social and Personal Relationships* 10: 243–54.

Rindfuss, R.R. & Stephen, E.H. (1990) 'Marital Noncohabitation: Separation Does Not Make the Heart Grow Fonder', *Journal of Marriage and the Family* 52: 259–70.

Schaefer, M. & Olson, D. (1981) 'Assessing Intimacy: The PAIR Inventory', *Journal of Marriage and Family Therapy* 7: 47–60.

Spanier, G. (1976) 'Measuring Dyadic Adjustment: New Scales for Assessing the Quality of Marriage and Similar Dyads', *Journal of Marriage and the Family* 38: 15–28.

Stafford, L. & Reske, J.R. (1990) 'Idealization and Communication in Long-distance Premarital Relationships', *Family Relations* 39: 274–9.

Stephen, T.D. (1984) 'A Symbolic Exchange Framework for the Development of Intimate Relationships', *Human Relations* 37: 393–408.

Stephen, T.D. (1986) 'Communication and Interdependence in Geographically Separated Relationships', *Human Communications Research* 13: 191–210.

Stuart, R.B. (1980) *Helping Couples Change*. New York: Guilford.

Woelfel, J.C. & Savell, J.M. (1978) 'Marital Satisfaction, Job Satisfaction, and Retention in the Army', in E. Hunter & D. Nice (eds) *Military Families: Adaptation to Change*. New York: Praeger.