A STUDY OF CULTURAL VARIABILITY AND RELATIONAL MAINTENANCE BEHAVIORS FOR INTERNATIONAL AND DOMESTIC PROXIMAL AND LONG DISTANCE INTERPERSONAL RELATIONSHIPS

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This thesis examined 228 college students’ reported use of relational maintenance behaviors and strategies and their reported perception of the degree of relational satisfaction and solidarity with the relational partners they chose to identify. The study gathered extensive data with the intention of primarily investigating the validity and reliability of measurement of relational maintenance behaviors across cultures with some attention to correlations between relationship maintenance behaviors, relationship satisfaction, and interpersonal solidarity. The study focused on refining previous measures of relationship maintenance behaviors in order to develop a comprehensive global measure. The study found that a linear combination of factors or relationship maintenance behaviors are related to relational satisfaction and interpersonal solidarity.
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CHAPTER 1
RESEARCH PROBLEM

Introduction

This chapter introduces the purpose of the study, the definition of the terms used and the significance of the study. In addition, the theoretical base of the study will be discussed. Chapter 2 will consist of a review of literature involved in the research leading finally to the research question and hypothesis. In Chapter 3, the methodology employed in the study will be discussed followed by a report of the results in Chapter 4. Chapter 5 provides a summary of the research findings and an interpretation of the results, as well; possible limitations and implications for future research are addressed.

Purpose Of The Study

The primary purpose of this study is to gather data and to develop a general measure of relationship maintenance behaviors and/or strategies for international and domestic proximal and long-distance interpersonal relationships. With an aim to develop a generalizable global measure, the study will test for cross-cultural variability while investigating relationship maintenance behaviors and the communication of those behaviors or strategies within various interpersonal relationships.

Further, in order to determine the psychometric properties of the generalizable measure to be developed in this study, factorial analysis of an array of relational maintenance behavior items (Ayers, 1983; Canary & Stafford, 1992; Canary & Stafford, 1994; Stafford & Canary, 1991; Stafford, Dainton, & Haas, 2000; Stafford, Hause, & Wallace, 1993), will be analyzed with attention to cultural variability, operationalized
under the dimensions of high-context and low-context communication (Hall, 1983; Hall & Hall, 1987; Gudykunst, 1991; Victor, 1992; Triandis, 1995).

Finally, the study will focus on investigating the linearity of potential factors underlying the hypothesized correlations between relationship maintenance behaviors, relational satisfaction (Norton, 1983), and interpersonal solidarity (Wheeless, 1978). This examination will be with a view to test further the strength of validity and reliability of any such associations across various relationship types and across cultures. Some consideration will also be made to examine the extent to which interpersonal solidarity is distinctively a composite of relational satisfaction. The correlations, validity and reliability of these elements, in the measure generated here, will be examined via the sample populations’ reported use of the relationship maintenance behaviors and strategies, their reported relational satisfaction, and estimates of perceived interpersonal solidarity with their target relational partners.

Definition of Terms

*Culture.* For the purpose of this study, Fitch’s (1998) conceptualization of culture will be adapted. Culture is therefore understood here as representing “a pervasive and generally invisible system of symbolic resources and shared beliefs arising from the shared experience of a group of people,” (p.2). In adapting this perspective, it will be further held in the study that interpersonal relational practices are embedded in cultural practices and norms, hence making it conceivable that relationships cannot be enacted outside of a cultural context. Consequently, culture is therefore created and sustained in the course of particular relationships.
**Low Context and High Context Communication.** Hall (1976) derived the terms low context and high context communication to distinguish respectively between: (1) the communicative tendency to use explicit messages in which meanings are contained and deciphered mainly from the overtly transmitted message(s), and (2) the communicative tendency involving the use of implicit and indirect messages, in which meanings are embedded in the person and/or the socio-cultural context in which the communicative act occurs. Hall (1976) further observed that people in a culture use both low and high context communication, but one style tends to dominate.

The extent to which these distinctions in communicator style affect the maintenance and dynamics of interpersonal relationships has not been the primary focus of much research covering relationship maintenance. The interplay of this pervasive dimension of communication in relationship maintenance is therefore worth examination.

**Individualism and Collectivism.** In an extension of Halls (1976) cultural typology, Ting-Toomey & Korzenny’s (1989) study went a step further and broadly characterized individualism as, “representing a cluster of values that emphasize a pursuit of one’s own personal goals and uniqueness, while collectivism gives priority to harmonious relationships within a group and thereby fosters more of a “we” than “I” identity” (as cited in Gallois, Giles, Jones, Cargile, & Ota, 1995).

Gudykunst et al. (1989) observed that high context cultures are also collectivist. Victor (1992) further elaborated this assertion stating that high context cultures (Japanese, Arabic, Latin American, Thai, Korean, etc.) place great emphasis on personal relationships and oral agreements, whereas low context cultures (German, Swedish, Norwegian, American, etc.) are individualistic, thus placing less emphasis on the subtle
or non-verbal dimension of interpersonal relationships and more emphasis on the written
and/or explicit dimension. These differences in the preferred mode of communication
pre-suppose varying relational maintenance behaviors- a feasible subject of study
envisioned here.

**Relational Maintenance Behaviors.** Interpersonal relationships exist and last
because individuals consciously or subconsciously try to make them work. Consequently,
relationship maintenance behaviors involve that part of the relationship process,
according to DeVito (1995), “in which individuals act to continue (maintaining or
retaining) their interpersonal relationships” (p. 346). In light of this, maintenance
behaviors enacted by individuals can serve to: “(1) Prevent dissolution of a relationship
by keeping the relationship intact and retaining some semblance of a relationship, (2)
Prevent a relationship from moving too far toward either less or greater intimacy by
keeping the relationship at its present stage, and crucial to this study, (3) Maintain an
appropriate balance between rewards and penalties by keeping the relationship

Dependent on the extent to which a culture values and rewards interpersonal
independence or interdependence, it is probable that relational maintenance behaviors
that sustain the preferred mode of interpersonal co-existence will be maintained or
preferred by individuals from either low context or high context cultures- potentially
leading to perceptions of greater relational satisfaction and/or interpersonal solidarity.

**Relational Satisfaction.** Wheeless and Lundquist (1997) noted that relational
maintenance strategies/behaviors can be classified under the various relational resource
categories such as love, status and services. These resources have also been
conceptualized by some researchers as currency exchanged in the maintenance of interpersonal relationships. According to Roloff (1981), resources that are perceived by relational partners as congruent to rewards provide pleasure, satisfaction, and gratification. The exchange of these category of resources may therefore be related to the derived level(s) of relational satisfaction.

As Wheeless and Lundquist (1997) further noted, there may be different relational currencies that best predict relational satisfaction for male and female members of the relationship. It is therefore conceivable by extension of this notion, that the sense of equity derived from the exchange of these resources could further be a by-product of the underlying cultural category/classification in which the relationship(s) in question is embedded as this study has earlier espoused. Hence, the incorporation of a cultural perspective in studying relational satisfaction.

_Interpersonal Solidarity._ Wheeless (1976) conceptualized interpersonal solidarity as a feeling of closeness between people that develops as a result of shared sentiments, similarities, and intimate behaviors. Further analyzed, people who trust, like, and self disclose to one another enact intimate relational maintenance behaviors which may be perceived as an exhibition of some implicit level of relational satisfaction.

This study holds that interpersonal solidarity is a good index of relational satisfaction. To the extent that this deduction is found as valid, via a test of the linearity of a composite of these two relational dimensions, then interpersonal solidarity should predict relational satisfaction.
Significance of the Study

Socialization as a crucial and inevitable process in human life has for many years attracted the attention of behavioral scientists from several disciplines. Arguably, the bulk of both inductive and deductive analysis of this process has been undertaken in the social sciences through the pioneering disciplines of sociology, psychology and anthropology. With the evolution of communication as a bona fide discipline, new perspectives examining the contingent implication(s) of socialization have led to a considerable expansion of the research landscape, while also unearthing intriguing possibilities which remain to be explored and investigated. It is against this backdrop that this study finds its significance.

It is beyond contention that when individuals are socialized, they learn various patterns of interpersonal interaction based on the beliefs, norms, rules, rituals, and values of their resident culture. Keesing (1974) argued that culture provides its members with an implicit theory about how to behave in different situations and consequently how to interpret other’s behavior in similar situations. Accordingly, it is thus plausible to argue that members of cultures learn the implicit theories of their cultures as they grow through the socialization process.

Research focusing purely on the maintenance of relationships (Ayers, 1983; Canary & Stafford, 1994; Dindia & Baxter, 1987; Dainton & Stafford 1993; Guerrero, Eloy, & Wabnik 1993, Rusbult & Buunk, 1993) suggests that relational maintenance behaviors vary among relational types (i.e. romantic relationships, kinships, friendships, and so forth). By extension, categories based on cultural typology are likely to further compound these variations yielding new insights on the communicative dynamics at
work in the maintenance of an array of interpersonal relationships. Hence, while focusing on interpersonal relationships between family and intimates in which a sample population of both international and domestic students are involved, this study will seek to gather extensive real world data with a view of primarily investigating the validity of correlations (if any) between cultural variability and relationship maintenance behaviors. In addition, an attempt will be made to further validate these correlations based on the underlying dimensions of relational satisfaction, and interpersonal solidarity through the use of a global and generalizable measure to be created in this study.

The global measure will be tailored to meet the need and criterion for a comprehensive instrument focusing not only on a variety of relationship types, but also examining long distance relationships LDRs and proximal relationships (PRs) while tapping into the communication dimension termed here as high and low context communication. With this data new perspectives and theoretical insights may be gained to distinguish not only between the nature of relationship types but further between relational maintenance behaviors, relational satisfaction, and interpersonal solidarity as determined by cultural typologies.

Theoretical Foundations

Taking into consideration the above, the theoretical foundations for a cultural perspective in studying the communication component of relational maintenance can be found in the following premise set by three scholars in this field: From a communication standpoint, empirical data gathered in studies investigating cultural variability reveal that patterns of interaction learned during early socialization form the basis for individual’s communication styles (Gudykunst & Matsumoto, 1996). Second, and equally crucial to
the foundation of this study, is a definition of communication styles, which according to Norton (1978) encompasses “the way one verbally and para-verbally interacts to signal how literal meaning should be taken, interpreted, filtered, or understood” (p.99).

Previous research by Dindia (1989), and Stafford & Canary (1991) limited the scope of study of relationship maintenance behaviors and/or strategies to a finite set encompassing only proximal romantic relationships in a sample population widely consisting of individuals with a low context communicator style. Canary & Stafford et al. (1993) maintained a focus on proximal relationships but went a step further and investigated an inductively derived but broader array of maintenance activities. This particular investigation is credited for resulting in a substantially exhaustive taxonomy of relationship maintenance behaviors employed in subsequent studies (Dainton & Stafford, 1993, Stafford et al., 2000). Recalling that the focus of these investigations was maintained at the proximal level of relationships, while the sample population still widely consisted of individuals with a low context communicator style, it can be argued here, that the methodology and results of these studies render them superficial in regard to generalizability at a global level. This inference can be attributed to the lack of focus on LDRs and global cultural variability in these studies.

Canary and Zeller (2000), while reviewing research programs on relational maintenance behaviors covered four lines of research focusing on ongoing, proximal, heterosexual, romantic involvements and arrived at the conclusion that communication can operate as an independent, mediating, or dependent factor in the maintenance of personal relationships. However, there review made no mention of the sprouting line of research targeting factors pertaining to the maintenance of LDRs. The validity of cultural
variability as an independent variable mediating the maintenance of interpersonal relationships was not covered either.

The study proposed here will therefore focus on the need to address the lack of a comprehensive and generalizable communication measure tapping a variety of relationship types, while also targeting cultural variability in the maintenance of domestic and international long distance and proximal interpersonal relationships. Descriptive data on the sample regarding culture, sex, age, relationship type, etc. will be tested, analyzed, and reported.
CHAPTER 2

REVIEW OF LITERATURE

Introduction

This study develops a cultural perspective for studying interpersonal relationships and communication within those relationships. To that end, this review of literature examines research on LDRs and research on relationship maintenance behavior in proximal and LDRs. In addition, the implications of the cultural classifications employed in the study are examined from the point of view of the pioneering researchers who envisioned a cultural approach to studying communication phenomena.

Long distance relationships

Background of Research

The earliest accounts of studies in relationships separated by distance can be found in military clinical psychology dating back to the period between the 1940s and the 1960s. Hill (1949), for instance, studied the military family and noted the effects of temporary family separation on the wife, the children and the family as a unit. Focusing primarily on the absent father, the study underscored the detrimental effects on his well being upon communication of the family’s problems. In addition, Hill looked at the absent father’s morale and work performance away from home and in the face of difficult relational maintenance conditions. The quality and ease of relational maintenance was found to be a significant predictor of morale and valence of work performance.

Researchers have asserted the opinion that the nature of the social environment is a direct influence shaping the military family’s identity, internal culture, style of living and preferred sources of support in maintaining itself as a functioning unit (Blum, 1966;
Based on this assertion, McCubbin, Dahl, & Hunter (1976) reaffirmed the army family’s attempts to cope with stress within the context of its social environment and relationships.

Essentially, the focus of a vast majority of these investigations targeted the crises of war separation, reunion, and family adjustment under the stress of war and other traumatic events. Inferably, these studies came on the heels of WW II, the Korean War and Vietnam, and thus formed the core of pioneering studies focusing on the dynamics surrounding the maintenance of relationships separated by the duration of time apart, or geographical barriers.

Later studies in the 70s also focused on MIAs (Missing in Action) and POWs (Prisoners of War) (McCubbin et al., 1976). Looking at family separation in the army, McCubbin et al. (1976) examined the problems ensuing from the separation while also noting the care taking options available to career army families undergoing military separation. The findings in this study indicated that distance apart and amount of time apart were confounding as well as predictor variables in the fate of relationships faced with separation.

Commuter marriage literature emerged in the 70’s with the work of Gerstel and Gross (1983) who studied LDRs from a symbolic interaction perspective focusing on time/place disjunctions and their consequences. Other researchers whose studies focused on commuter marriages were Groves & Horm-Wingerd (1991), Winfield (1985), Westefeld & Liddel (1982) and, Taylor & Lounsbury (1988), who investigated four factors (employees attitude towards move, arrangement, employee’s sex, and employee’s relationship status with superiors)
predicted to influence executive decision-making concerning geographic transfers when married employees are involved. Taylor & Lounsbury (1988) found that executive’s ratings of geographic transfers were significantly affected by the couple’s attitude toward the move and the presence of commuter marriage. The results were discussed in terms of their implications for companies and for employees considering a commuter marriage.

A body of research related yet parallel to that of commuter marriage begun in the early eighties investigating a special type of couple referred to as the dual-career couple. Characteristics of this couple included: each partner pursuing a career, defined as a job which is highly salient personally, has developmental sequence, and requires a high degree of commitment (Rapoport & Rapoport, 1976). These couples were distinguished from those described as two-earner or dual-earner, in which each partner holds a job not involving such attributes as found in traditional families in which only the husband is employed (Govaerts & Dixon, 1988). Since Rapoport et al’s (1976) conceptualization of the dual-career couple, a large body of research has addressed the characteristics of dual-career couples, and the stresses and rewards inherent in this occasionally quasi long distance relationship (Huser & Grant, 1978; Rice, 1979; St. John-Parsons, 1978; Tolbert & Tyron, 1982). 

In the last 20 years, studies in college premarital LDRs gained prominence owing to the work of amongst others - Holt & Stone (1988), Guldner & Swensen (1995), Helgeson (1994). A few studies have also looked at prison inmates and their relationships as well as other select populations that experience LDRs. Examples of such studies include: Maines (1993) who looked at American demographics on long distance romances, and Van Horn, Amone, Nesbitt, Desilets, Sears, Griffin, & Brudy (1997) who
examined college students’ romantic relationships while focusing on physical distance and interpersonal characteristics.

Quantitatively, studies of LDRs are substantial considering the work done in the military context. However, the communication component in these studies is rather sparse with the bulk of research intermixed with descriptive pieces on separation. If all the research on LDRs is considered, especially including the military context, it gets surprisingly huge. The communication aspect, although growing in considerable leaps, is still relatively small.

Definition of long distance relationships

In the communication discipline arriving at a consensus in defining LDRs has been difficult. Various considerations, premises and perceptions of the distance dimension in LDRs have been applied to specific research objectives resulting in two major dimensions of study: The actual time spent apart and the physical distance separating the participants.

Some studies (Carpenter & Knox, 1986, Stafford & Reske, 1990) set a minimum number of miles for a relationship to be considered long distance ranging from 100 miles to an average of 421 miles. Helgeson (1994) required that the relational partner be outside a particular area, while Stephen (1986) defined long distance as one partner stationed in another part of the state.

In differentiating proximal relationships from LDRs, the following researchers held that time spent apart was also an essential distinguishing variable. In their study, Guldner & Swensen (1995) grouped participants who agreed to 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’ as being in LDRs (p.315). Govaerts & Dixon (1988), and Gerstel & Gross (1983) defined commuter marriages as both maintaining two separate residences and being separated from each other for several times a week to several months a time.

Holt and Stone (1988) used different time and distance variables to categorize couples. In so doing, they avoided characterizing LDRs at the outset of their study. Based on demographic information of the participants, three time apart ranges (zero, less than six months, more than six months), three frequency ranges (visiting more than once a week, once a week to once a month, and less than once a month), and three distances ranges (0-1 miles, 2-294 miles, over 250 miles) were derived to categorize couples. They found that different subtypes of “distance” relationships existed based on combinations of the three variables. In summary, a distinguishing facet in past definitions of LDRs is that communication is limited to either verbal expression via telephone conversations or to some form of written exchange.

The relational nature of long distance relationships

By reason of little time spent together, both lay people and researchers overwhelmingly believe that long-distance relationships usually fail. There is, however, significant evidence to debunk that conclusion. In the following summary of research findings on romantic LDRs, some studies illustrate that the amount of time a couple spends together does not itself play a central role in relationship maintenance.

As will be mostly noted, research on LDRs in general has focused primarily on:

Time together/apart, quality of time spent together, frequency of visits, satisfaction in LDRs vs. proximal relationship, relational quality and a relatively small portion on maintenance strategies.
For obvious and seemingly valid reasons, 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), suggested that increasing the amount of time a couple spends together could be a primary therapeutic strategy. Reissman et al. (1993) examined the growing trend toward linking the time a couple spends together with relationship quality and found that the main thrust of this thinking seemed to be; time spent together makes companionship and communication possible.

While several studies have shown a correlation between time spent together and relationship satisfaction, the causal direction of the association remains elusive (Guldner & Swensen, 1995). These researchers argue that while it is tempting to believe that spending more time with one’s partner could increase one’s relationship satisfaction, the alternative—that one’s satisfaction determines the amount of time spent with one’s partner has substantial merit. However, they concede that both causal directions may coexist.

Couples in LDRs naturally spend less time together. Consequently, they provide an opportunity for indirect assessment of the impact of deficits in time on relationship quality. In a study by Reismann et al (1993), the researchers empirically increased the amount of time couples spent together through a random assignment of 53 married couples to one of three groups: two groups instructed to do either exciting or pleasant activities together, and a control group instructed to wait for instructions on activities. Their results showed that those couples that spent 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).

Stephen (1984, 1986), Guldner (1992) and Stafford & Reske (1990) respectively, conducted six month and one-year longitudinal studies of premarital LDRs. “Their findings revealed that LDRs have rates of breakup equal to or less than their proximal counterparts with substantially less time spent together” (Guldner & Swensen p.314). Govaerts & Dixon (1988) in a study of 55 commuter marriages and 55 non-commuter marriages found no difference in the reported marital satisfaction. Following a geographical separation in a sample of 40 students, Baxter and Bullis (1986) revealed no change in relationship commitment.

In spite of some studies of separated military families indicating increased rates of divorce, Pavalko & Elder (1990) as cited in Guldner and Swensen (1995) found that “divorce was not related to the duration of family separation” (p.314). Woelfel & Savell (1978) found a non-significant correlation (r = -.10) between separation and marital satisfaction in a military sample. They concluded that other factors unique to military marriages appear to mediate the increased risk of divorce in the soldier sample.

Three studies of LDRs however, validate 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 proximal 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,” (Guldner & Swensen, 1995 p. 315).

The second study, by Holt & Stone (1988), found greater satisfaction in those LDRs that visited at least once a month than those visiting less often. However, in their usage of 3 categories; 0-1 mile, 2-249 miles and 250 miles or greater, to define their groups, the middle category would contain many relationships not implicitly long distance.

Carpenter & Knox (1986), in a third study, as cited in Guldner & Swensen, (1995) found an association between the frequency of visits and relationship stability for men in LDRs (but not for women). Their approach involved contrasting ‘successful’ long distance relationships by comparing, retrospective accounts of long distance relationships that had dissolved to current accounts of ongoing LDRs. They noted one of the many difficulties with such an approach as being 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 long distance relationship 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,” (Guldner & Swensen, 1995 p. 315). An additional oversight noted, was the potential presumption that a comparison of retrospective accounts to current assessment of relationships inhibits any distortion of recall that could confound the results.
In a study examining the relationship quality between LDRs and proximal relationships, Guldner & Swensen, (1995) carried, “a multivariate analysis of variance comparing self-reported levels of relationship satisfaction, intimacy, dyadic trust and the degree of relationship progress between 194 individuals in premarital LDRs and 190 premarital proximal relationships,” (p.313). The differences they found were not significant, thus suggesting that time spent together by a couple does not itself play a central role in relationship maintenance.

Long distance relationships, relational maintenance, and relational satisfaction

Focusing primarily on relational satisfaction as an effect of relational maintenance strategies, Holt and Stone (1988) assessed three coping strategies used by couples in LDRs. First, they looked at Gerstel & Gross’s (1992) findings that the frequency of visitations was a significant determiner of relationship stress and satisfaction. The indications in this study revealed that persons who separated for a month or more without visiting thought that they were no longer in touch with their spouse. The frequency of visits was therefore an important LDR maintenance strategy and by extrapolation a predictor of relational satisfaction.

Secondly, acknowledging that some couples are unable to visit as frequently as they would like, or need, to maintain the relationship, they hypothesized two coping strategies from cognitive psychology theory: verbal and imagined communication or daydreaming. They argued that since persons in LDRs are separated from an important emotional stimulus in their lives, the verbal or imaginal communication become crucial in fulfilling this deficit. This hypothesis was consistent with the Gerstel & Gross (1982)
review, which reported that, “the lack of "trivial" everyday talk and the absence of visual
cues while conversing on the telephone were sorely missed,” (p.137).

As cited in Gerstel & Gross, (1992), Richardson (1977), in a study measuring the
differences in habitual modes of processing cognitive events noted that, a distinction
between persons who prefer visual and persons who prefer verbal domains on the
verbalizer-visualizer dimension dates back to studies in 1883 in France when Francis
Galton and Martin Charcot made their observations on imagery types. Richardson,
further argued that modern psychologists have observed that “people demonstrate
preferences for using verbal or visual response modes of cognitive processing” (p.110).

Employing the distinctions made by Richardson, Gerstel & Gross (1992) tested an
interactive coping response hypotheses suggesting that “persons in a LDR who prefer the
verbal mode of processing will report greater frequency and quality of verbal
communication, whereas persons in an LDR who prefer the visual mode of processing
will report a greater use of a positive reactions to imaginal communication,” (p. 137).
The results from their study partially supported theory-based predictions about coping
style for the visualizers. Visualizers were found to engage in more daydreaming than
verbalizers. They however, concede that it is difficult to assess the meaningfulness of the
coping results because a number of alternative communication strategies were not
assessed (e.g., sending and receiving letters). Further more, some of the communication
strategies were not very informative in terms of group differences (e.g. telephone calls).
Of empirical significance was the realization that some coping strategies may negatively
affect academic accomplishment in the student sample and relationship satisfaction.
Hence, the results may therefore indicate a maladaptive use of day dreaming which may signify negative effects on relational satisfaction.

Two other dimensions of LDRs investigated by Gerstel & Gross (1992) included needs and coping outcomes. The needs question focused on the degree of similarity of findings between commuter marriage (Gerstel & Gross, 1982) and LDRs. Gerstel & Gross (1992) reported that, “longer distance and greater time apart were related to reports of dissatisfaction of commuter couples” (p.136). Results on need analyses revealed a significant interaction for distance and time on satisfaction and intimacy measures. Distance and time combined to reduce satisfaction and intimacy when individuals were at least 250 miles apart for more than 6 months. On the other hand, distance and time apart apparently combined in helpful ways for satisfaction and intimacy for those involved in LDRs (more than 250 miles) for a shorter time (less than 6 months).

Coping outcome analyses addressing the effects of frequency in visits yielded two significant interactions on satisfaction. The first interaction involved distance and frequency of visits. Results showed that persons in an LDR of 2-249 miles who visited less than once a month were the least satisfied group and that visiting at least once a month brought satisfaction to approximately the level of proximal relationship group (0-1 mile). The second interaction involved cognition style and frequency of visits. The results indicated that increased visitation had a helpful effect on satisfaction for visualizers and a weak or detrimental effect for the verbalizers (Gerstel et al. 1992).

Hillerbrand, Holt, & Cochran (1986) proposed a typology conceptualizing three types of college student LDRs: (a) those involving a new student separated from his or her high school partner, (b) those involving one or both partners graduating from college,
and (c) those involving students returning to college. Since these groups will tend to
differ in both the age of the persons and the nature of the original relationship,
Hillerbrand et al. (1986) hypothesized that these differences could lead to different types
of issues in a long distance relationship. They found that similar issues may be involved
but will take on different hierarchies of importance across the three types of LDRs.
Consequently, the results suggested that an individual’s rank order of these inherent
confounding issues, accounts for some of the variance in the composite of potential
coping strategies that a student in one of the three typologies will employ.

The extent to which individuals differ cross culturally on the verbalizer-visualizer
dimension may be an intriguing research area that can further help in gauging the extent
to which these findings are indeed generalizable to various populations. Next will be an
examination of literature generally focusing on relational maintenance behaviors.

**Relational Maintenance Behaviors**

Definition of terms

Relational Maintenance Strategies/Routines.

Canary & Stafford (1994) defined relational maintenance strategies (also referred
to as relational maintenance behaviors) as “actions and activities used to sustain desired
relational definitions" (p.6). These actions were conceptualized as encompassing the use
of strategic and routine behaviors which include both verbal and nonverbal
communication. Strategies were further defined as the general approaches that relational
partners take in order to achieve specific relational goals. Conversely, routine behaviors were described as ways in which partners achieve relational goals through a set of regularly displayed behaviors or mannerisms. An important distinction made was that those who use routine behaviors are less mindful or aware that they are in use.

Background of research

Actual research on the communication dimension of relational maintenance behaviors/strategies begun in the early 1980s. Ayres (1983) is on record as one of the first scholars to examine some relational maintenance strategies (avoidance, balance, directness). In an extension Ayres' study, Shea & Pearson (1986) studied relationship type (acquaintance and friend), partner's relationship intent (to deteriorate, stabilize, escalate), participant's sex, and partner's sex. This study found that relationship type (acquaintance and friend) did not affect which relational maintenance strategies were chosen. However, when the relationship intent in the dyad differed, Females were found more likely than males to use direct strategies in voicing their desire to stabilize the relationship. The authors argued that females were more relationally oriented than males. Bell, Daly & Gonzalez (1987), using a typology of twenty-eight affinity-maintenance strategies for married couples, found that wives reported using more of the strategies than they perceived their husbands used. In addition, wives indicated a trend for husbands using physical affection more frequently than their wives did.

Dindia & Baxter (1987) explored how the number and choice of strategies related to a marital enrichment program, length of marriage, and relational satisfaction. They concluded that longer marriages used fewer strategies, but that over time the strategies may become routine and not as readily noticed. However, no relationship was found
between the number of maintenance strategies, the type of maintenance and repair strategies, and marital satisfaction. In a later study, Baxter & Dindia (1990) used a dialectical perspective, to analyze subjects in aggregate groups rather than dyads. They found that husbands and wives responded in similar ways in regard to the importance of perceived maintenance strategies usage by their partners.

Stafford & Canary (1991), while exploring the characteristics of romantic interpersonal relationships in regard to relationship type, gender, and the perceived partner use of five maintenance strategies (by relational partners) i.e. positivity, openness, assurances, social networks and sharing tasks, found that maintenance strategies varied according to the relationship type (married, engaged, seriously dating or dating). Engaged and seriously dating couples reported a greater use of positivity and openness than did married and dating couples. Married, engaged and seriously dating participants were found to perceive a greater use of assurances and sharing tasks than those who had just started to date. The predictor of control mutuality and liking was found to be positivity while sharing tasks was an important means by which to maintain the relationship. Perceptions of partner's assurances best predicted relational satisfaction and commitment. Their hypothesis that females would be perceived as using more relational maintenance strategies than males was not supported.

Canary & Stafford (1991) in an extension of their first study, found that wives indicated a higher utilization of maintenance behaviors than their husbands. Self-reported use of positivity was the best predictor of control mutuality defined as the agreement made between relational partners as to who has the right to influence the other. Perceptions of the partners' use of social networks and positivity were the best predictors
of both husbands and wife liking. For husbands, commitment was best predicted by perceptions of the wife's sharing tasks, assurances and inequity (overbenefitedness). Wives' commitment on the other-hand was best predicted by self-reported assurances and perceptions of partner sharing tasks. Inequity or overbenefitedness did not indicate commitment for wives. A Possible confounding variable from this analysis is that both sexes may be emphasizing what the female does in maintaining the relationship.

Canary, Stafford, Hause and Wallace (1993) included married couples, dating couples, relatives, and friends in their study. Their findings revealed differences among maintenance strategy use according to the type of relationship. Dainton and Stafford (1993), in a critique of this study, concluded that there was little difference in maintenance repertoires noted by dating verses married couples. In their analysis, both types of relationships used a similar repertoire of strategies in maintaining their relationships. In marriages however, females indicated a higher use of positivity, openness, talk, avoidance and antisocial behaviors. Among dating dyads, females in contrast to men reported a higher use of affection as a maintenance behavior.

Guerrero, Eloy and Wabnik (1993) did a longitudinal study where respondents were surveyed once and then contacted eight weeks later. Their study found that while lower uses of maintenance strategies was associated with de-escalation or termination, the five constructive and proactive relational maintenance strategies (Stafford & Canary, 1991) contributed to escalating or sustaining romantic relationships.

established that the secure attachment style was related to a higher use of pro-social maintenance strategies of assurances and romance. Also males were more likely to use the avoidance strategy while females employed assurances and romantic strategies.

Ragsdale (1996) investigated the relationship among relational maintenance strategies usage, communicator style, and romantic relational satisfaction. This study sought to establish if one's style of communicating with others in general may be predictive of one's romantic relational communication. More specifically, the study looked at the predictability of one's romantic relational maintenance strategies on the basis of one's communicator style.

The findings indicated that general style behavior may not be indicative of relational maintenance strategy usage or romantic partners' relational satisfaction. Consistent with Dainton, Stafford, and Canary (1994), tests of sex difference revealed that females' expression of various relational maintenance strategies and style behaviors are associated with male partners' relational satisfaction. Conversely, no results were obtained indicating specific behaviors expressed by males that result in female partners' relational satisfaction.

A similar study, however focusing on the relationships among relational maintenance strategies, sexual communication strategies, and romantic relational satisfaction by Lundquist (1996), again confirmed the findings of Dainton et al. (1994). This study reported insignificant correlations between males' use of relational maintenance strategies and females' reported relational satisfaction. The study primarily sought to investigate male-female differences in the use of relational maintenance
strategies and sexual communication strategies as predictors of romantic partner’s relational satisfaction.

Lundquist & Wheeless (1997) undertook an empirical critique of sexual communication and relationship maintenance strategies in relational satisfaction. In this study, the hypothesis was that there would be relationships among 199 students reported use of relational maintenance strategies, occurrence of sexual communication strategies and partners’ reported relational satisfaction. Secondly, a basic assumption was made that ‘good’ communication expressed through student-participants’ reported use of relational maintenance strategies, and their reports of the occurrence of sexual communication strategies would predict partners’ levels of happiness.

Consistent with Dainton et al (1994), females’ reports of sexual communication strategies were significantly related to males’ relational satisfaction. Conversely, females relational satisfaction was insignificantly predicted by males self reported use of relational maintenance strategies. Assurance as a strategy used by females was confirmed to be significantly related to males’ relational satisfaction.

An insightful result of this research was the finding that the word choice in Norton’s (1983) relational satisfaction measure does not account for extremes in happiness. Consequently, the study found a ceiling effect for relational satisfaction indicated by an absolute midpoint of 25.5 within a potential range of 6-45 in the scale. Accordingly, possible directions in future studies may distinguish between mere happiness, elation or even ecstasy as possible dimensions of the construct ‘happy’. Such a distinction may further clarify the relationship between relational satisfaction and the accounts of strategies reported.
In a most recent study, Stafford, Dainton, and Haas (2000), incorporated routine and strategic maintenance behaviors in an expanded maintenance scale first developed by Stafford and Canary (1991). They sought to determine whether sex or gender role is a stronger predictor of maintenance behaviors. Secondly, they investigated the extent to which maintenance strategies predict the relational characteristics of satisfaction, commitment, liking, and control mutuality. In this study, data from 520 married individuals was factor analyzed yielding seven maintenance items reflecting routine and strategic behaviors. The items were advice, assurances, conflict management, openness, positivity, sharing tasks, and social networks.

Multiple regression tests revealed that the gender role construct of femininity predicted all seven maintenance items. Only two maintenance behaviors were predicted by biological sex which again did not feature in the remaining five regression equations. Hence, biological sex was a weak predictor of both routine and strategic maintenance behaviors. Consistent with previous research, the use of assurances was a strong predictor of satisfaction, commitment, liking, and control mutuality.

A Dialectical Perspective

Adapting a dialectical perspective to study relationship maintenance strategies, Baxter and Simon (1993) based their investigation on the premise that "the natural path for all relationships is one of pressure toward change which results from the dynamic tension of simultaneously opposing forces,” (p. 226). Thus, they conceptualized relationship maintenance as the process of sustaining a relationship’s quality particularly the satisfaction levels of the partners, in the face of emotional contradiction embedded in

Considering this view on the dynamics at work in the maintenance of relationships, the authors adopted a converse view, hence refrained from categorizing their study as "‘maintenance’ or ‘repair’ in the typical sense in which these terms are often employed i.e. preventive and restorative activity, respectively,” (as cited in Baxter & Simon, 1993 p. 226). They conceded, however, that "at one level all relationship efforts can be viewed as problem-oriented repair activity designed to achieve equilibrium between opposing forces in a dynamic and ongoing struggle," (Baxter & Simon, 1993 p.226).

From the view of researchers taking a dialectical perspective, maintenance in the sense of preventative stability is hence self defeating. In this approach, periods of temporary equilibrium are understood basically as interspersed moments in an extended configuration of enduring dialectical tensions. Consequently, the authors hold that to label their study as focused on renovation or repair is tantamount to giving it a false sense of semblance to non-dialectical work that is primarily reinstative and/or renovative.

Hence, "researchers taking a dialectical perspective view problems faced by relationship parties as inherent to relating within the normal boundaries of healthy relational functioning" (Baxter & Simon p.226). The opposite of this perspective takes a repair/clinical approach which views the periodic problems idiosyncratically encountered from one relationship to another as potentially solvable by the couple or relational partners.
Baxter and Simon (1993) note that although much time has been invested in examining relationship maintenance under a variety of relational conditions (e.g. Ayres, 1983; Canary & Stafford 1992, 1993, Rusbult & Buunk 1983), not much consideration has been given to a dialectical approach at analyzing the constant tensions or dialectics that relationships contain. The authors work consequently focused on the following three fundamental contradictions of relating; autonomy-connection, predictability-novelty and openness-closedness.

Their findings suggest that excessive difficulty in managing the autonomy-connection dialectic is apparent in the break up accounts of romantic pairs and married couples. In regard to the dialectic of predictability-novelty, the findings pointed towards a need for relational parties to maintain an optimum degree of uncertainty or novelty in order to sustain a healthy relationship. The research also noted the salience of the contradictory dilemma paused by the dialectic of openness-closedness in expressions of premarital anxieties concerning the likelihood of sustaining close rapport with a potential future partner.

As highlighted under the following literature on relational maintenance strategies, several researchers (Ayres, 1983; Canary & Stafford, 1994; Dindia & Baxter, 1987; Dainton & Stafford, 1993; Guerrero, Eloy, & Wabnik, 1993) are noted for their taxonomies on maintenance strategies.

Dinidia and Baxter (1987) came up with four types of maintenance behaviors namely; **Pro-social behaviors**: being polite, cheerful and friendly; avoiding criticism; compromising even when it involves self-sacrifice and talking of a shared future. **Ceremonial behaviors**: celebrating birthdays and anniversaries, discussing past
pleasurable times and eating at a favorite restaurant. Communication behaviors: calling just to say, “How are you?” talking about the honesty and openness in the relationship, talking about shared feelings and responding constructively in a conflict (Rusubult et al., 1993) Togetherness behaviors: spending time together, visiting mutual friends, doing specific things as a couple, and sometimes just being together with no concern for what is done. In addition to this list they include Rusubult and Buunk’s (1993) controlling extrarelational activities as a type of togetherness behavior.

Canary et al. (1993), Dainton and Stafford (1993) came up with the following list of specific maintenance strategies: Openness: The person engages in direct discussion and listens to the other while self disclosing, giving advice and expressing empathy rather than judgment. Assurances: The person assures the other of the significance of the relationship by comforting the other, putting the partner first and expressing love. Sharing joint activities; the person spends time with the other, going to events together or simply talking. Positivity: The person tries to make interactions pleasant and upbeat—for example holding hands, giving in to make the other happy and doing favors for the other.

Cards, letters, and calls. Avoidance: The person stays away from the other or from the certain issues. Sharing tasks: The person performs various tasks with the other—for example cleaning the house together. Antisocial behavior: The person behaves in unfriendly or coerceive ways, for example, acting moody or being rude. Social networks: The person relies on friends and relatives for support and to help with various problems. In addition, humor, small talk and establishing specific time for talking, affection, sexual intimacy, focus on self (making one self look good).
Taking a dialectical approach to study relational maintenance strategies, Maguire (1997) examined the taxonomies derived in the pioneering studies mentioned above, and investigated their interrelations with maintenance strategies used by undergraduates involved in LDRs. Her study focused on relational satisfaction as an outcome of combinations of various strategies in the dichotomies. The findings indicated that generally, females’ use of relational maintenance strategies were significant predictors of male relational satisfaction. Conversely, in the taxonomies examined, males’ use of maintenance strategies were not significant in determining females’ relational satisfaction.

Subsequently, in studies of LDRs, the crux of the matter may be summarized as follows: (a) Aside from the differences in repertoires of maintenance strategies, all LDRs should not be considered equal (b) subtypes, each facing different issues need to be recognized, and (c) in general terms the most effective coping strategies seem to be frequency of visits and quality of verbal communication (also referred to as ‘trivial’ everyday talk).

From the above it is apparent that communication research on relational maintenance behaviors/strategies has progressed rather fast in the past decade. However, the LDR element is still in its infancy. Consequently, a new generation of studies should promise exciting findings and theoretical refinements with the possibility of breaking new ground and exploring uncharted directions.

Implications of Cultural Categories and Classification

Undoubtedly, the styles individuals use to communicate vary across cultures. Hall (1976) made the landmark distinction between low- and high context communication
heralding a paradigm shift in the way scholars would later study and investigate communication phenomena. He characterized low context communication as the use of explicit messages in which meanings are contained mainly in the transmitted message(s), while high context communication involves the use of explicit and indirect messages in which meanings are embedded in the person or in the soci-cultural context. In addition, Hall (1976) argued that people in a culture use both low- and high- context communication, but one tends to be predominant.

To put the theoretical framework of this study in clearer perspective and further clarify the scope of Hall’s cultural classifications, it is important to take cognizance of two additions to his theory. The first being by Gudykunst & Ting-Toomey (1988) in which they contend that low context communication is used predominantly in individualistic cultures, whereas high-context communication is used predominantly in collectivistic cultures. A second footnote to Hall’s premise comes from Triandis (1988) where the claim is made that individualism involves a focus on the self as a unique entity, and collectivism involves a focus on the self-embedded in group memberships.

In order to compare and contrast the salient distinctions of interpersonal relationships in collectivist and individualist cultures, it is important to understand how the defining attributes of these cultural classifications combine to create different kinds of social behaviors. Such differences are most apparent for instance, when people from a typical collectivist culture such as Japan interact with people from an individualistic culture such as the United States.

Sakamoto (1982) noted what she called six underlying polite fictions that create problems for American-Japanese relationships or interactions: First, whereas Americans
assume that individuals ought to interact from an equal platform, Japanese adopt the view that the other is superior. In other words, Japanese maintain good relationships by showing deference, especially to outsiders. Second, Americans’ assumption of individuals being close friends is mirrored by a Japanese view summarized as “I am in awe of you.” For instance, a Japanese may say, “My wife’s cooking is very poor” (implying that for such an exalted person as you, it is not good enough), and then produce a superb meal (Triandis, p.12). Inferably, in collectivist cultures such as Japan, apologies of this nature play a significant role in lubricating relationships.

Thirdly, the individualistic interpretation that “hanging loose” or relaxing is good for interpersonal relationships is conversely understood as inappropriate since for the collectivist Japanese, one needs to remain alert and attentive to avoid losing face. Interdependence is the fourth crucial distinction of the two cultural constructs. In this case, whereas the American assumes that individuals are independent, the Japanese assumes that “I depend on you.” Further, assuming that people are interdependent, the Japanese does not say no since that may jeopardize the bond between the interactants. Conversely, the American feels comfortable saying no since people are perceived as independent.

Fifth, the American assumes that people are individuals whereas the Japanese interpretation is that people are members of groups. Related to this is the sixth premise in which individual uniqueness is not commonly understood i.e. the American takes the position that “you and I are unique,” while the Japanese presupposes that “you and I feel/think alike.” The consequence here is that a collectivist would tentatively look out for areas of agreement in an argument whereas the individualist would seek original
arguments to convince the collectivist. Hence, the American can be seen as confrontational and the Japanese as weak and indecisive. This is further confounded by the realization that opposite values are attached to silence with the Japanese regard it as strength while it is perceived as cold and negative in the United States.

Having established that patterns represented by the degree of individualism and/or collectivism predispose people to view their worlds through different lenses, it can be further inferred that different patterns of relating would follow. However, in order to comprehend the similarities, differences, and implicit theories that guide relational behavior, it is not enough to simply describe the cultural differences. A thorough investigation ought to endeavor to explain, describe and possibly predict how communication is affected and shaped by culturally specific tendencies.

Simply put, this research perspective is hinged on the premise that there are dimensions on which human communication behavior within cultures can be unique, different, or similar, and that can be used to explain and possibly predict communication across and within those cultures. To the extent that this is possible, new premises for making assessment on culturally specific communication tendencies is thus conceivable.

Employing a cultural perspective to an investigation of relational behavior necessitates an understanding of self-construal, defined as how individuals view themselves (their self concepts) based on their culture of socialization. Hence, recalling that the self-concept that predominates in individualistic cultures is an independent construal of self, while that found in collectivist cultures is interdependent, presupposes different approaches to relational maintenance.
Markus & Kitayama (1991) argued that when an independent construal of self predominates, the perception of uniqueness and individuality of persons creates clear boundaries that separate *self* and *other(s)*. Conversely, when the reverse (interdependent self construal) is the case, *self* is viewed invariably as part of a larger social network encompassing various degrees of relationships i.e. interlinked with *other(s)* as opposed to separate.

Based on this premise, the central prediction here is that different aspects and dimensions of relational maintenance strategies will be perceived differently and possibly employed differently by individuals socialized in high context or collectivist cultures, compared to individuals socialized in individualistic cultures (the traditional population of long distance relational maintenance strategies research). These differences according to Triandis (1995) may be invariably explained by the contrast in values and dynamics attached to relationships of individuals and social environments i.e. the importance of in-group versus out-group affiliation; the importance of face saving; the dynamics found in the development of love and marriage; norms that are widely used by the culture of residence; the valence of self-evaluation, self-affirmation, and helping behavior.

In retrospect, an apparent shortcoming of early research on relational maintenance strategies (Dindia, 1989, and Stafford and Canary, 1991), was the reduction of the strategy typologies to a finite set. As would later be conceded by Canary, Stafford, Hause and Wallace (1993) the typologies identified in the first studies are not exhaustive. Primarily, both initial studies only sampled romantic relationships (i.e. married, engaged, or dating partners). Subsequently, the possibility that different maintenance behaviors are
used or at least emphasized more in non-romantic involvements (i.e. friendships, family relations and co-workers) cannot be entirely discounted.

By the same token, the use of cultural categorization as a point of departure presupposes difference in maintenance strategy use. Ayres (1983) established that maintenance behaviors vary within relationship type. To the extent that this is true, it is probable that variations in maintenance behaviors are further confounded by culturally specific communication tendencies. This prediction/probability forms the crux of this research endeavor.

Subsequently, and as previously established, the primary purpose of this study is to gather data and to develop a global measure of relationship maintenance behaviors and/or strategies for international and domestic proximal and long distance interpersonal relationships. With an aim to develop a generalizable global measure, the study will therefore incorporate a cultural perspective in studying interpersonal relationships and communication within those relationships.

The dimensions of relational maintenance strategies identified for analysis in this study are defined in the literature review and encompass the following strategies or routines: positivity, openness, assurances, supportiveness, social networks, sharing tasks, joint activities, avoidance, anti-social behavior(s), humor, advice seeking or giving, conflict management and/engagement, display of affection, focus on self.

With the foregone illustration of the premise, distinctions, and scope of the cultural perspective taken in this study, the following research question is proposed for investigation:
RQ: What are the psychometric properties of a generalizable measure of relationship maintenance behaviors? I.e. what are the properties of a comprehensive, intercultural measure that applies to proximal as well as long distance relationships and to various types of relationships (Marriage, friendships, family, mentor, guardian, sibling, romantic etc.)?

Previous research involving relational maintenance (Wheeless & Lundquist, 1997; Canary & Stafford, 1992; Stafford & Canary, 1991; Dainton, Stafford, & Canary, 1994) employed a common criterion (marital or relationship satisfaction) to assess the reliability of previously established typologies of relational maintenance behaviors. This study will adopt a similar approach while considering the extent to which interpersonal solidarity is an index of relationship satisfaction. If validated, then solidarity should predict relational satisfaction. Hence, the following hypothesis is offered:

H1: A linear combination of factors of relationship maintenance behaviors is related to relational satisfaction and interpersonal solidarity across high and low context cultures.
CHAPTER 3
METHODOLOGY

This chapter will discuss the procedure(s) employed to obtain the necessary sample population and the measurements used to collect this data. The design for analyses of data for the research question and hypothesis will also be outlined.

Sample and Procedure

Eight hundred and ten undergraduate students enrolled in an introductory communication course at the University of North Texas formed the initial part of the pool of potential respondents for this study.

A printable paper and pencil version of the survey instrument in Microsoft Word format was posted on the course web site for access by the students. The survey instrument posted comprised the following 3 parts:

1. A cover letter explaining the purpose of the study with an official approval stamp from the UNT Human Subjects Review Board (see appendix B).

2. A coupon for 15 points extra credit with instructions on how to proceed, and detailing how and where the students would submit their completed surveys (See Appendix A).

3. The 7-page survey (See Appendix C through D).

Students in the course were notified about the survey through announcements at lecture and on the course web site bulletin board. As an incentive to encourage participation, they were also informed about the opportunity to earn 15 points of extra credit if they printed out the survey and filled out the responses. A two-week period to take part in the research was specified and announced at lecture and in the recitation.
sections. Recitation leaders were advised through a memo from the lead teaching assistant on where to submit the surveys collected in their recitation sections.

After the two-week submission period the researcher collected the submitted stack of surveys and sorted them by age group while inserting chronological ID numbers. Out of the 810 potential respondents enrolled in the course, a response rate of 45% (364 out of 810 potential respondents) was obtained. On the basis of an inclusion criteria established post hoc only data from respondents of age 20 and above (N=135) in the introductory communication course were included in the data analysis. The criteria employed in setting this age limit for analysis was based partly on the need to tap responses from a relatively more mature sample population of student respondents. The study also found it worthwhile to consider a higher age bracket because of the potential for greater stability in relational maintenance behaviors, and self-monitoring.

Five sources/collection points were utilized to obtain participant data from the mainly high-context non-domestic sample population for the study. The first source of participant data was the UNT Intensive English Language Institute (IELI). The IELI was selected for the study because of its heterogeneity, cultural diversity, and high concentration of non-domestic students. The researcher interviewed with the director of the Institute and requested for an opportunity to use the students as a sample population in the study. The researcher described the study to the director and explained its purpose and significance. The institute was notified of the approval letter from the Human Subjects Review Board (see Appendix B). The researcher then obtained an estimate of eligible respondents based on their ability to comprehend college level written and spoken English. Consequently, the respondents sampled were at the highest level of the
IELI program (level 6 and G). Ninety-five paper and pencil surveys were delivered at the institute and collected after two weeks. The response rate from the IELI was 44%.

The second source of participant data targeting non-domestic respondents was a campus based student’s organization (The Pan-African Students Association) representing students primarily from the continent of Africa, or of African decent. This data source was selected due to its heterogeneity in terms of cultural diversity, geo-cultural dispersion and representation, as well as variety in age and gender. The membership in the organization also had the potential of involvement in ongoing or past proximal or long-distance relationships. To obtain participant data from this population, the researcher attended a monthly organizational meeting and solicited for participation from the membership after describing the study and its significance. Ten paper and pencil surveys were administered during the meeting. To further increase the response rate 20 extra surveys were given to members present at the meeting to take to other absent potential respondents who were primarily non-domestic, and socialized in high-context societies. The researcher provided his contact information and arranged to pick up surveys from the respondents. A response rate of 20 % (12 surveys out of 30 distributed) was obtained.

The Indian Students’ Association (The ISA), a campus based student’s organization, was the third source for non-domestic high-context participant data in the study. This data source was selected primarily due to its value in heterogeneity in gender and age, cultural affiliation, and the geo-cultural diversity of the Indian sub-continent. The researcher contacted the president of the association, interviewed with him, and described the purpose and significance of the study. The researcher then solicited for
help/permission to use the membership of the association as respondents. An estimate of attendance at the weekly meetings was obtained after which thirty paper and pencil surveys were delivered to the president to be distributed at the two subsequent meetings. The researcher arranged to collect the surveys after a two-week period.

A response rate of 20% was obtained (6 surveys out of 30 distributed). The dismal response rate for this data source may be attributed to a tragedy (bereavement) that struck in the association during the data-collection period and hence significantly diverted empathy and discouraged response by the membership.

The fourth source for non-domestic participant data was a small and loosely structured network of students from the South American state of Columbia. The researcher was able to gain access to this data source through an acquaintance who accepted to assist in distributing surveys to her network of friends. This data source represented a sample of students primarily socialized in high-context societies of South America, and who had various past and ongoing proximal and LDRs. The sample population was therefore valuable to the study because of the diversity in gender and age, the predominant high-context cultural representation in the network membership, the predominant nature of relationships existing in the network, and the ease of accessibility and willingness to participate. Albeit the small size of the network, a high rate of response (60%) was attained. Ten surveys were distributed to this group.

The final collection point/source for participant data in the study was the UNT Graduate Students Council. This data source represented a potential for a diverse sample of students of fairly advanced age (23 and above), who were both domestic and non-domestic and who had ongoing or past proximal or long-distance relationships. To solicit
for participation from the membership in this organization, the researcher contacted the president and attended a council meeting where he interviewed and made a brief presentation describing the study, and addressing the scope and significance. 30 paper and pencil surveys were distributed to the council officials who accepted to distribute them to their classmates and colleagues. The researcher provided his contact information and arranged to collect the surveys from the president of the council after a two-week period. A response rate of 36% (11 surveys) was obtained from this data source.

Measurement

Demographics

The first part of the questionnaire (see Appendix C) instructed respondents to complete demographic information including; their age, sex, college level classification, country of origin, and country of longest residence. In an attempt to tap the cultural constructs operationalized in this study under low and high context communication, respondents were asked to indicate the country or region of the world from which they perceived their current values, attitudes and beliefs to have primarily originated. The list of countries and regions offered for selection was based on Hofstede’s (1991) tabulation (See Appendix H) of the distribution of countries and regions around the world against a scale indicating respective indices on the degree of Individualism and Uncertainty Avoidance/Collectivism. To facilitate inclusion of unlisted regions, states, or countries in Hofstedes’s (1991) tabulation, the study included an option termed “other” in the list of regions and countries.

In addition to the domestic population of student participants primarily composed of individuals born and socialized in the United States, the study collected data from
student participants representing 25 regions, countries, and cultures, spread across 5 continents. The regions and countries represented included the following: The Far Eastern Asian countries of: Hong Kong, South Korea, Taiwan, Thailand, Indonesia, Malaysia, Singapore, Vietnam, Japan; Arab speaking Middle Eastern and Mediterranean countries of Turkey, Iran, and Kuwait; East African Countries of Ethiopia and Kenya; West African countries of Nigeria, Ghana, Guinea, and Togo; Russia and The Balkan States, Norway, Sweden, Australia, and Canada. Out of these non-domestic regions, countries and cultures, the study obtained a total of 77 respondents of which 69 were coded according to criteria (earlier stated) as primarily representing high-context cultures.

The study collected data from 94 male participants and 134 female participants. The age range for the female participants was 18 to 46 while that of the male participants ranged from 18 to 71. The eighteen-year-old participants were non-domestic student participants whose data was included in the study owing to the relative paucity in non-domestic student participation compared to domestic student participants. Tables one through four present further descriptive statistics of the sample population.

Table 1

*Respondents’ frequencies by sex*

<table>
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<tr>
<th>Sex</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Frequency</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>94</td>
<td>41.23</td>
<td>94</td>
<td>41.23</td>
</tr>
<tr>
<td>Female</td>
<td>134</td>
<td>58.77</td>
<td>228</td>
<td>100.00</td>
</tr>
</tbody>
</table>
Table 2

Respondents’ frequencies by cultural category.

<table>
<thead>
<tr>
<th>Culture</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Frequency</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low context</td>
<td>159</td>
<td>69.74</td>
<td>159</td>
<td>69.74</td>
</tr>
<tr>
<td>High context</td>
<td>69</td>
<td>30.26</td>
<td>228</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Table 3

Frequencies for domestic and non-domestic respondents

<table>
<thead>
<tr>
<th>Respondent’s Origin</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Frequency</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic</td>
<td>149</td>
<td>65.35</td>
<td>149</td>
<td>65.35</td>
</tr>
<tr>
<td>Non-domestic</td>
<td>82</td>
<td>34.65</td>
<td>231</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Table 4

Targets’ frequencies by sex

<table>
<thead>
<tr>
<th>Sex</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Frequency</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>123</td>
<td>53.95</td>
<td>123</td>
<td>53.95</td>
</tr>
<tr>
<td>Female</td>
<td>105</td>
<td>46.05</td>
<td>228</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Types of Relationships

To avoid an *a priori* limit to the scope of targeted relationships, the survey instrument asked respondents to keep in mind one individual with whom they shared an important or significant interpersonal relationship. Then, choosing from a list of eight possible types of relationships generated in this study (See Appendix C), respondents were asked to select one type of relationship, from the list, that best described their relationship with the specific person they had in mind. The list consisted of the following relationship types: (1) Blood relative; (2) Relative; (3) Parent;
(4) Guardian; (5) Sibling; (6) Spouse; (7) Romantic partner; (8) A dear & trusted friend.

For the last category (9), listed as “Other,” respondents were asked to specify or describe what they perceived their relationship with the individual in mind to be. Additional demographic information required respondents to indicate the sex and age of the individual they had in mind.

Table 5

*Frequencies for relationships by type.*

<table>
<thead>
<tr>
<th>Type of relationship with target</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Frequency</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood Relative</td>
<td>31</td>
<td>14.03</td>
<td>31</td>
<td>14.03</td>
</tr>
<tr>
<td>Relative</td>
<td>5</td>
<td>2.26</td>
<td>36</td>
<td>16.29</td>
</tr>
<tr>
<td>Sibling</td>
<td>12</td>
<td>5.43</td>
<td>48</td>
<td>21.72</td>
</tr>
<tr>
<td>Spouse</td>
<td>23</td>
<td>10.41</td>
<td>71</td>
<td>32.13</td>
</tr>
<tr>
<td>Romantic Partner</td>
<td>95</td>
<td>42.99</td>
<td>166</td>
<td>75.11</td>
</tr>
<tr>
<td>Dear and trusted friend</td>
<td>50</td>
<td>22.62</td>
<td>216</td>
<td>97.74</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
<td>2.26</td>
<td>221</td>
<td>100.00</td>
</tr>
</tbody>
</table>

To distinguish proximal relationships from long distance relationship, the survey instrument asked respondents to indicate whether they perceived their relationship with the person in mind to be a long distance relationship, or a proximal relationship. This was done through the use of a question tapping the respondent’s perception of the nature of the relationship they shared with the referent (See appendix C).
Table 6

Frequencies for long-distance relationships and proximal relationships

<table>
<thead>
<tr>
<th>Nature of relationship with target</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Frequency</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long-distance relationships</td>
<td>88</td>
<td>38.77</td>
<td>88</td>
<td>38.77</td>
</tr>
<tr>
<td>Proximal Relationships</td>
<td>139</td>
<td>61.23</td>
<td>227</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Relationship Maintenance Behaviors

The relationship maintenance behaviors identified for investigation were contained in a self-report questionnaire (see Appendix D) consisting of 63 items measured on a 7 point Lickert-type frequency format ranging from: 1 = Never to, 7= Always. The 63 items targeted 11 relationship maintenance behavior factors encompassing: positivity, openness, assurances, social networks, avoidance, sharing tasks, future orientation, other orientation, humor, conflict management, and advice giving.

Of the 63 items forming the 11 potential factors under examination, most were primarily drawn, adapted, and modeled after Ayers (1983), Stafford & Canary (1991), and Canary & Stafford’s (1992) typology of relationship maintenance behaviors and strategies. Included were 3 new additional items namely: “I apologize when I am wrong,” “I listen and try not to judge,” and “I am understanding,” tapping conflict management, and 2 additional new items “I tell my partner what I think s/he should do about his/her problems” and “I give him/her my opinion on things going on in his/her life,” tapping advice giving. These new items formed part of relational maintenance behaviors.
identified by Stafford et al. (2000) after the initial factors—openness and positivity yielded two new factors: advice giving and conflict management upon secondary factor analysis.

Wording specifically targeting romantic relationships on original items was revised to encompass non-romantic relationships as well as same sex relationships. Original items with double negatives were rewritten to enhance clarity.

Previous alpha reliability estimates reported for 7 of the 11 factors by Canary & Stafford et al. (2000) were as follows: Positivity .76; Assurances .92; Openness .87; shared tasks .83; social networks .72; conflict management .81; advice .70. In a previous study, Canary and Stafford’s (1992) typology reported the following reliabilities per subscale: Positivity .89, Openness .86; Assurances .76; Social Networks .82; Sharing Tasks .87.

In a study of sexual satisfaction and relationship maintenance strategies, Lundquist & Wheeless (1997) reported the following alpha coefficients in a sample population of 199 participants: Positivity .82; Openness .84; Assurances .82; Social Networks .80 and sharing tasks .86. Studies by Baxter and Simon (1993); Canary et al. (1993); Dainton & Stafford (1993); Guerrero, et al. (1993) employed a similar typology as used in this study.

Relational Satisfaction

Relational satisfaction measured with a 7-step Likert-type modified version of Norton’s (1983) Quality of Marriage Index was used in the study (See Appendix F). Norton (1983) conceptualized marital satisfaction as “an individual’s evaluation of the goodness of the relationship gestalt” (Rubin et al, 1994). To preclude limiting the scope of possible relationship types to married couples alone, wording in the original 7-item
measure was modified to include various relational types as reflected in the objective of the study. Five items (#86 through #90) were added to Norton’s measure in order to avoid the “ceiling-effect” noted by Wheeless and Lundquist (1997). The items in chronological order were worded as follows: My relationship with this person is extremely unshakable; Our relationship is capable of withstanding considerable hardship; We have an exceptionally good relationship; My relationship with this person makes me unusually joyful and elated; I really feel like we have very similar goals and objectives with this person.

Reliability estimates for Norton’s (1983) Quality Marriage Index have been reported by the following researchers: Simon and Baxter (1993), .92; Dainton et al. (1994), .96; Baxter (1990), .95; Perse, Pavitt, & Burggraf (1990), .96. Stafford and Canary (1991) using a revised version of the Quality Marriage Index reported a reliability of .96 while Baxter & Bullis (1986) reported a reliability coefficient of .88. Van Lear (1991) reported a reliability of .93 and, Wheeless and Lundquist (1997) reported an alpha coefficient of .90 using the same scale.

Interpersonal Solidarity

Wheeless (1976) conceptualized interpersonal solidarity as a feeling of closeness between people that develop as a result of shared sentiments, similarities, and intimate behaviors. Further analyzed, people who trust, like and self disclose to one another reflect strong solidarity feelings. According to Rubin et al (1994), Wheeless (1978) predicted and found a strong relationship between self-disclosure, individualized trust, and interpersonal solidarity. It was further suggested that trustworthiness and self-disclosure might be components of interpersonal solidarity.
This study employed the original Interpersonal Solidarity Scale (See Appendix G) with a view of investigating the extent to which this measure correlates with the other constructs envisioned in the study, namely: high and low context communication styles relationship maintenance behavior factors, and Relational Satisfaction.

The following reliabilities have been reported for the 19-item scale: Wheeless (1978) reported a split half reliability of .96 and .94 (Wheeless, Wheeless, & Baus, 1984) Bell & Healy (1992) reported a reliability alpha of .90 (Rubin et al. 1994)

Data Analysis and Design

Descriptive data on the sample population regarding culture, sex, age, relationship type, LDR Vs Proximal relationship, type of culture represented etc. was reported earlier in this chapter. For the research question, principal factor analysis with iterations and oblique rotations (Promax) were used to determine the factor structure of the items measuring the relational maintenance behaviors identified in the study. The norms and nature of the distributions of the factors (alpha reliabilities, means, standard deviations, range, Skewness, Kurtosis, etc.) were calculated. The test of the second hypothesis was performed with canonical correlations. The .05 level of statistical significance (2-tailed) was required for testing.

Summary

This chapter described the sample and explained the procedure that was used to obtain the data for the study. The measurement and methods of analysis which were employed were also identified. Chapter 4 will now report the results of the study from the research question and the research hypothesis.
CHAPTER 4
RESULTS

Introduction

In the previous chapter the sample and procedures used to collect the data for the study was presented. The methods of analyses for the data were also described and outlined. This chapter will report the results of these analyses.

Relational Maintenance Behaviors

Principal factors analyses with iteration and oblique rotation (Promax) were used to analyze the relational maintenance behaviors items data. Analyses of the responses to the questionnaires required a series of factor analyses. The responses to relational maintenance behaviors were submitted to two separate exploratory factor analyses of 63 items each. The first was used to determine the factor structure. The last was used to exclude unloaded items and determine factor retention according to the following criteria:

a) The scree test dictated initial factor extraction;

b) Each retained factor had to have an eigenvalue of at least 1;

c) Each retained factor extracted had to have at least two items with primary factor loadings of at least .60, or three items on a single unrotated factor at .50 or higher;

d) The remainder of the items retained on multiple oblique factors had to have primary loadings of .40 or higher, (or on a single unrotated factor, .50 or higher);

e) Secondary item-factor loadings in oblique rotations were ignored but interfactor correlations could not exceed .60;
f) The simpler factor structure (fewer factors) was selected over the more complex if the simpler retained as many or more items (therefore, unrotated first factor solutions were also examined).

Application of the criteria for factor extraction to the first factor analysis of the 63 relationship maintenance behavior items resulted in an initial 6-factor solution (see Table 7).

Table 7

*Initial oblique factor structure and factor loadings of items on relationship maintenance behaviors.*

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
<th>Factor 5</th>
<th>Factor 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I attempt to make our interactions very enjoyable.</td>
<td>.29</td>
<td>.68*</td>
<td>.36</td>
<td>.15</td>
<td>.13</td>
<td>.01</td>
</tr>
<tr>
<td>2. I am cooperative in the ways I handle disagreements between us.</td>
<td>.15</td>
<td>.65*</td>
<td>.20</td>
<td>.12</td>
<td>-.12</td>
<td>.16</td>
</tr>
<tr>
<td>3. I try to build up his/her self-esteem,</td>
<td>.36</td>
<td>.60*</td>
<td>.40</td>
<td>.25</td>
<td>.11</td>
<td>.18</td>
</tr>
<tr>
<td>including giving him/her compliments etc</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. I ask how his/her day has gone.</td>
<td>.36</td>
<td>.41</td>
<td>.45*</td>
<td>.30</td>
<td>.12</td>
<td>.00</td>
</tr>
<tr>
<td>5. I am very nice, courteous, and polite when we talk.</td>
<td>.34</td>
<td>.58*</td>
<td>.34</td>
<td>.31</td>
<td>.06</td>
<td>.14</td>
</tr>
<tr>
<td>6. I act cheerful and positive when I am with him/her.</td>
<td>.27</td>
<td>.59*</td>
<td>.28</td>
<td>.25</td>
<td>.01</td>
<td>.07</td>
</tr>
<tr>
<td>7. I do not criticize him/her.</td>
<td>.23</td>
<td>.27</td>
<td>.16</td>
<td>.06</td>
<td>.05</td>
<td>.04</td>
</tr>
<tr>
<td>8. I try to be romantic, fun and interesting with him/her.</td>
<td>.61*</td>
<td>.47</td>
<td>.36</td>
<td>.26</td>
<td>.18</td>
<td>.06</td>
</tr>
<tr>
<td>9. I am patient and forgiving of him/her.</td>
<td>.07</td>
<td>.60*</td>
<td>.30</td>
<td>.23</td>
<td>.06</td>
<td>.22</td>
</tr>
<tr>
<td>10. I present myself as cheerful and optimistic.</td>
<td>.27</td>
<td>.64*</td>
<td>.33</td>
<td>.27</td>
<td>.11</td>
<td>.21</td>
</tr>
<tr>
<td>11. I encourage him/her to disclose thoughts and feelings to me.</td>
<td>.48</td>
<td>.62*</td>
<td>.27</td>
<td>.07</td>
<td>.19</td>
<td>.28</td>
</tr>
<tr>
<td>12. I simply tell him/her how I feel about our relationship.</td>
<td>.68*</td>
<td>.34</td>
<td>.28</td>
<td>.08</td>
<td>.13</td>
<td>.41</td>
</tr>
<tr>
<td>13. I seek to discuss the quality of our relationship.</td>
<td>.78*</td>
<td>.34</td>
<td>.33</td>
<td>.11</td>
<td>.25</td>
<td>.49</td>
</tr>
<tr>
<td>14. I disclose what I need or want from our relationship.</td>
<td>.78*</td>
<td>.31</td>
<td>.29</td>
<td>.18</td>
<td>.15</td>
<td>.32</td>
</tr>
<tr>
<td>15. I remind him/her about relationship decisions we made in the past (for example, to maintain the same level of intimacy.)</td>
<td>.72*</td>
<td>.23</td>
<td>.32</td>
<td>.18</td>
<td>.29</td>
<td>.34</td>
</tr>
</tbody>
</table>

*(Table continues)*
<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>16. I like to have periodic talks about our relationship.</td>
<td>.74*</td>
<td>.22</td>
<td>.35</td>
<td>.22</td>
<td>.25</td>
</tr>
<tr>
<td>17. I stress my commitment to him/her.</td>
<td>.74*</td>
<td>.24</td>
<td>.43</td>
<td>.35</td>
<td>-.01</td>
</tr>
<tr>
<td>18. I imply that our relationship has a future</td>
<td>.70*</td>
<td>.20</td>
<td>.47</td>
<td>.40</td>
<td>.10</td>
</tr>
<tr>
<td>19. I show my love for him/her.</td>
<td>.74*</td>
<td>.38</td>
<td>.51</td>
<td>.38</td>
<td>.19</td>
</tr>
<tr>
<td>20. I show myself to be faithful to him/her.</td>
<td>.75*</td>
<td>.31</td>
<td>.51</td>
<td>.31</td>
<td>.08</td>
</tr>
<tr>
<td>21. I like to spend time with our same friends.</td>
<td>.25</td>
<td>.42</td>
<td>.49*</td>
<td>-.13</td>
<td>.42</td>
</tr>
<tr>
<td>22. I focus on common friends and affiliations.</td>
<td>.25</td>
<td>.30</td>
<td>.46*</td>
<td>-.09</td>
<td>.31</td>
</tr>
<tr>
<td>23. I show that I am willing to do things with his/her friends or family.</td>
<td>.31</td>
<td>.43</td>
<td>.67*</td>
<td>.20</td>
<td>.25</td>
</tr>
<tr>
<td>24. I include our friends or family in our activities.</td>
<td>.21</td>
<td>.34</td>
<td>.51*</td>
<td>-.01</td>
<td>.34</td>
</tr>
<tr>
<td>25. I help equally with tasks that need to be done.</td>
<td>.35</td>
<td>.33</td>
<td>.78*</td>
<td>.30</td>
<td>.06</td>
</tr>
<tr>
<td>26. I share the joint responsibilities that face us.</td>
<td>.49</td>
<td>.35</td>
<td>.78*</td>
<td>.33</td>
<td>-.09</td>
</tr>
<tr>
<td>27. I do my fair share of the work we have to do.</td>
<td>.49</td>
<td>.26</td>
<td>.77*</td>
<td>.29</td>
<td>-.11</td>
</tr>
<tr>
<td>28. I do not shirk my duties.</td>
<td>.13</td>
<td>.15</td>
<td>.25</td>
<td>.11</td>
<td>-.07</td>
</tr>
<tr>
<td>29. I perform my housekeeping responsibilities.</td>
<td>.43</td>
<td>.19</td>
<td>.53*</td>
<td>.26</td>
<td>.00</td>
</tr>
<tr>
<td>30. I tell him/her how much s/he means to me.</td>
<td>.76*</td>
<td>.46</td>
<td>.46</td>
<td>.40</td>
<td>.14</td>
</tr>
<tr>
<td>31. I talk about our plans for the future.</td>
<td>.80*</td>
<td>.22</td>
<td>.50</td>
<td>.37</td>
<td>.21</td>
</tr>
<tr>
<td>32. I show him/her how much he/she means to me.</td>
<td>.81*</td>
<td>.47</td>
<td>.50</td>
<td>.30</td>
<td>.19</td>
</tr>
<tr>
<td>33. I talk about future events (e.g. having children or anniversaries or retirement etc.)</td>
<td>.72*</td>
<td>.07</td>
<td>.32</td>
<td>.33</td>
<td>.13</td>
</tr>
<tr>
<td>34. I encourage him/her to share his/her feelings with me.</td>
<td>.67*</td>
<td>.47</td>
<td>.50</td>
<td>.26</td>
<td>.20</td>
</tr>
<tr>
<td>35. I talk about my fears.</td>
<td>.38</td>
<td>.26</td>
<td>.36</td>
<td>.16</td>
<td>.22</td>
</tr>
<tr>
<td>36. I am open about my feelings.</td>
<td>.46</td>
<td>.31</td>
<td>.37</td>
<td>.17</td>
<td>.20</td>
</tr>
<tr>
<td>37. I talk about where we stand.</td>
<td>.62*</td>
<td>.24</td>
<td>.40</td>
<td>.30</td>
<td>.16</td>
</tr>
<tr>
<td>38. I apologize when I am wrong.</td>
<td>.23</td>
<td>.50*</td>
<td>.28</td>
<td>.32</td>
<td>.00</td>
</tr>
<tr>
<td>39. I listen and try not to judge.</td>
<td>.21</td>
<td>.57*</td>
<td>.39</td>
<td>.28</td>
<td>.05</td>
</tr>
<tr>
<td>40. I am understanding.</td>
<td>.28</td>
<td>.64*</td>
<td>.51</td>
<td>.31</td>
<td>.24</td>
</tr>
<tr>
<td>41. I offer to do things that aren’t “my” responsibility.</td>
<td>.27</td>
<td>.43</td>
<td>.55*</td>
<td>.36</td>
<td>.29</td>
</tr>
<tr>
<td>42. I do my fair share of the work we have to do.</td>
<td>.37</td>
<td>.31</td>
<td>.77*</td>
<td>.42</td>
<td>.01</td>
</tr>
<tr>
<td>43. I try to be upbeat when we are together.</td>
<td>.44</td>
<td>.52</td>
<td>.56*</td>
<td>.41</td>
<td>.21</td>
</tr>
<tr>
<td>44. I tell my partner what I think s/he should do about her/his problems.</td>
<td>.32</td>
<td>.13</td>
<td>.34</td>
<td>.13</td>
<td>.42*</td>
</tr>
<tr>
<td>45. I give him/her my opinion on things going on in his/her life.</td>
<td>.29</td>
<td>.26</td>
<td>.33</td>
<td>.16</td>
<td>.53*</td>
</tr>
<tr>
<td>46. I use humor (jokes/sarcasm) to communicate sensitive information.</td>
<td>.09</td>
<td>.20</td>
<td>.07</td>
<td>.08</td>
<td>.57*</td>
</tr>
<tr>
<td>47. I argue with him/her when s/he does something that angers/bothers me.</td>
<td>.08</td>
<td>-.19</td>
<td>-.01</td>
<td>-.16</td>
<td>.56*</td>
</tr>
<tr>
<td>48. When we have a problem/fight I use our friends and family as mediators.</td>
<td>-.05</td>
<td>-.09</td>
<td>-.12</td>
<td>-.02</td>
<td>.39</td>
</tr>
</tbody>
</table>

(Table continues)
Table 7 (Continued)

<table>
<thead>
<tr>
<th>Question</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
<th>Factor 5</th>
<th>Factor 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>49. When we have a problem/fight I avoid my partner and the topic/issue of disagreement.</td>
<td>-.03</td>
<td>-.17</td>
<td>-.03</td>
<td>.10</td>
<td>.25</td>
<td>-.13</td>
</tr>
<tr>
<td>50. I use negative message behavior (sarcasm, accusations, defensiveness) to relay my disagreement with my partner.</td>
<td>.11</td>
<td>-.33</td>
<td>-.03</td>
<td>.01</td>
<td>.28</td>
<td>-.10</td>
</tr>
<tr>
<td>51. I hold hands, kiss, embrace, and play with my partner to express my affection, fondness and attachment to him/her.</td>
<td>.66*</td>
<td>.30</td>
<td>.47</td>
<td>.44</td>
<td>.11</td>
<td>.20</td>
</tr>
<tr>
<td>52. I often say, “I love you” to him/her.</td>
<td>.71*</td>
<td>.16</td>
<td>.39</td>
<td>.40</td>
<td>.02</td>
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<td>.29</td>
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<td>.39</td>
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<td>.58*</td>
<td>.21</td>
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<td>.06</td>
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<td>59. I plan when we can see one another.</td>
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<td>.41</td>
<td>.31</td>
<td>.59*</td>
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<td>60. I plan when we can next talk with one another.</td>
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<td>.38</td>
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<td>.12</td>
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<td>.45</td>
<td>.43</td>
<td>.08</td>
<td>.37</td>
</tr>
</tbody>
</table>

Of the total variance accounted for, the proportional amount of variance for each factor in the initial factor analysis was as follows: Factor 1, 24%; Factor 2, 15%; Factor 3, 18%; Factor 4, 10%; Factor 5, 4%; and Factor 6, 8%. The unique variance explained by each factor was as follows: Factor 1, 11%; Factor 2, 6%; Factor 3, 5%; Factor 4, 3%; Factor 5, 3%; Factor 6, 3%. The initial inter-factor correlations are reported in Table 8.

Table 8

Initial Inter-factor Correlations.

<table>
<thead>
<tr>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
<th>Factor 5</th>
<th>Factor 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1</td>
<td>1.00</td>
<td>0.35</td>
<td>0.48</td>
<td>0.32</td>
<td>0.19</td>
</tr>
</tbody>
</table>

(Table continues)
After applying criteria for item retention, 6 items (item #s 7, 28, 48, 49, 50, 51) were excluded and a final factor analysis was conducted for the six-factor solution. All remaining 57 items loaded according to item-retention criteria on this six-factor purity run. See Table 9 Below.

**Table 9**

*Final oblique factor structure and factor loadings of items on relationship maintenance behavior.*

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
<th>Factor 5</th>
<th>Factor 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I attempt to make our interactions very enjoyable.</td>
<td>.23</td>
<td>.65*</td>
<td>.38</td>
<td>.24</td>
<td>.08</td>
<td>.46</td>
</tr>
<tr>
<td>2. I am cooperative in the ways I handle disagreements between us.</td>
<td>.16</td>
<td>.65*</td>
<td>.18</td>
<td>.16</td>
<td>.10</td>
<td>.21</td>
</tr>
<tr>
<td>3. I try to build up his/her self-esteem, including giving him/her compliments etc.</td>
<td>.34</td>
<td>.61*</td>
<td>.39</td>
<td>.35</td>
<td>.22</td>
<td>.35</td>
</tr>
<tr>
<td>4. I ask how his/her day has gone.</td>
<td>.28</td>
<td>.39</td>
<td>.49*</td>
<td>.39</td>
<td>.12</td>
<td>.38</td>
</tr>
<tr>
<td>5. I am very nice, courteous, and polite when we talk.</td>
<td>.33</td>
<td>.63*</td>
<td>.38</td>
<td>.35</td>
<td>.12</td>
<td>.17</td>
</tr>
<tr>
<td>6. I act cheerful and positive when I am with him/her.</td>
<td>.24</td>
<td>.62*</td>
<td>.35</td>
<td>.25</td>
<td>.10</td>
<td>.21</td>
</tr>
<tr>
<td>8. I try to be romantic, fun and interesting with him/her.</td>
<td>.55*</td>
<td>.44</td>
<td>.55*</td>
<td>.30</td>
<td>.12</td>
<td>.36</td>
</tr>
<tr>
<td>9. I am patient and forgiving of him/her.</td>
<td>.07</td>
<td>.60*</td>
<td>.23</td>
<td>.25</td>
<td>.27</td>
<td>.26</td>
</tr>
<tr>
<td>10. I present myself as cheerful and optimistic.</td>
<td>.25</td>
<td>.68*</td>
<td>.33</td>
<td>.30</td>
<td>.22</td>
<td>.24</td>
</tr>
</tbody>
</table>

* (Table continues)
Table 9 (Continued)

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>11. I encourage him/her to disclose thoughts and feelings to me.</td>
<td>.47</td>
<td>.58*</td>
<td>.35</td>
<td>.17</td>
<td>.22</td>
<td>.42</td>
</tr>
<tr>
<td>12. I simply tell him/her how I feel about our relationship.</td>
<td>.71*</td>
<td>.31</td>
<td>.35</td>
<td>.26</td>
<td>.25</td>
<td>.26</td>
</tr>
<tr>
<td>13. I seek to discuss the quality of our relationship.</td>
<td>.83*</td>
<td>.34</td>
<td>.37</td>
<td>.32</td>
<td>.33</td>
<td>.27</td>
</tr>
<tr>
<td>14. I disclose what I need or want from our relationship.</td>
<td>.79*</td>
<td>.32</td>
<td>.45</td>
<td>.29</td>
<td>.19</td>
<td>.21</td>
</tr>
<tr>
<td>15. I remind him/her about relationship decisions we made in the past (for example, to maintain the same level of intimacy).</td>
<td>.72*</td>
<td>.22</td>
<td>.42</td>
<td>.31</td>
<td>.30</td>
<td>.24</td>
</tr>
<tr>
<td>16. I like to have periodic talks about our relationship.</td>
<td>.76*</td>
<td>.22</td>
<td>.44</td>
<td>.34</td>
<td>.35</td>
<td>.23</td>
</tr>
<tr>
<td>17. I stress my commitment to him/her.</td>
<td>.72*</td>
<td>.27</td>
<td>.55</td>
<td>.47</td>
<td>.09</td>
<td>.20</td>
</tr>
<tr>
<td>18. I imply that our relationship has a future.</td>
<td>.68*</td>
<td>.25</td>
<td>.55</td>
<td>.53</td>
<td>.19</td>
<td>.13</td>
</tr>
<tr>
<td>19. I show my love for him/her.</td>
<td>.70*</td>
<td>.38</td>
<td>.63</td>
<td>.49</td>
<td>.22</td>
<td>.37</td>
</tr>
<tr>
<td>20. I show myself to be faithful to him/her.</td>
<td>.72*</td>
<td>.31</td>
<td>.57</td>
<td>.49</td>
<td>.14</td>
<td>.35</td>
</tr>
<tr>
<td>21. I like to spend time with our same friends.</td>
<td>.24</td>
<td>.32</td>
<td>.16</td>
<td>.29</td>
<td>.32</td>
<td>.80*</td>
</tr>
<tr>
<td>22. I focus on common friends and affiliations.</td>
<td>.22</td>
<td>.21</td>
<td>.18</td>
<td>.29</td>
<td>.19</td>
<td>.67*</td>
</tr>
<tr>
<td>23. I show that I am willing to do things with his/her friends or family.</td>
<td>.27</td>
<td>.40</td>
<td>.37</td>
<td>.56</td>
<td>.36</td>
<td>.61*</td>
</tr>
<tr>
<td>24. I include our friends or family in our activities.</td>
<td>.22</td>
<td>.30</td>
<td>.15</td>
<td>.39</td>
<td>.37</td>
<td>.55*</td>
</tr>
<tr>
<td>25. I help equally with tasks that need to be done.</td>
<td>.33</td>
<td>.39</td>
<td>.35</td>
<td>.78*</td>
<td>.28</td>
<td>.37</td>
</tr>
<tr>
<td>26. I share in the joint responsibilities that face us.</td>
<td>.48</td>
<td>.41</td>
<td>.41</td>
<td>.82*</td>
<td>.20</td>
<td>.35</td>
</tr>
<tr>
<td>27. I do my fair share of the work we have to do.</td>
<td>.47</td>
<td>.30</td>
<td>.40</td>
<td>.79*</td>
<td>.17</td>
<td>.35</td>
</tr>
<tr>
<td>28. I perform my household responsibilities.</td>
<td>.37</td>
<td>.22</td>
<td>.40</td>
<td>.53*</td>
<td>.08</td>
<td>.23</td>
</tr>
<tr>
<td>29. I talk about our plans for the future.</td>
<td>.71*</td>
<td>.46</td>
<td>.67</td>
<td>.44</td>
<td>.21</td>
<td>.34</td>
</tr>
<tr>
<td>30. I talk about how much s/he means to me.</td>
<td>.79*</td>
<td>.24</td>
<td>.57</td>
<td>.53</td>
<td>.28</td>
<td>.22</td>
</tr>
<tr>
<td>31. I show him/her how much he/she means to me.</td>
<td>.78*</td>
<td>.47</td>
<td>.62</td>
<td>.46</td>
<td>.19</td>
<td>.40</td>
</tr>
<tr>
<td>32. I talk about future events (e.g. having children or anniversaries or retirement).</td>
<td>.73*</td>
<td>.11</td>
<td>.47</td>
<td>.39</td>
<td>.19</td>
<td>.05</td>
</tr>
<tr>
<td>33. I encourage him/her to share his/her feelings with me.</td>
<td>.67*</td>
<td>.47</td>
<td>.50*</td>
<td>.46</td>
<td>.32</td>
<td>.42</td>
</tr>
<tr>
<td>34. I listen and try not to judge.</td>
<td>.46</td>
<td>.27</td>
<td>.18</td>
<td>.34</td>
<td>.34</td>
<td>.57*</td>
</tr>
<tr>
<td>35. I talk about my fears.</td>
<td>.54</td>
<td>.32</td>
<td>.22</td>
<td>.36</td>
<td>.56*</td>
<td>.23</td>
</tr>
<tr>
<td>36. I am open about my feelings.</td>
<td>.67*</td>
<td>.27</td>
<td>.37</td>
<td>.44</td>
<td>.44</td>
<td>.14</td>
</tr>
<tr>
<td>37. I talk about where we stand.</td>
<td>.25</td>
<td>.56*</td>
<td>.28</td>
<td>.30</td>
<td>.26</td>
<td>.09</td>
</tr>
<tr>
<td>38. I apologize when I am wrong.</td>
<td>.27</td>
<td>.66*</td>
<td>.36</td>
<td>.46</td>
<td>.38</td>
<td>.35</td>
</tr>
<tr>
<td>39. I offer to do things that aren’t “my” responsibility.</td>
<td>.34</td>
<td>.38</td>
<td>.42</td>
<td>.81*</td>
<td>.32</td>
<td>.27</td>
</tr>
<tr>
<td>40. I adjust to the needs of my partner.</td>
<td>.38</td>
<td>.54*</td>
<td>.54*</td>
<td>.53</td>
<td>.29</td>
<td>.35</td>
</tr>
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</table>

*(Table continues)*
Table 9 (Continued)

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<th>Factor 4</th>
<th>Factor 5</th>
<th>Factor 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>44. I tell my partner what I think s/he should do about her/his problems.</td>
<td>.31</td>
<td>.10</td>
<td>.24</td>
<td>.29</td>
<td>.42*</td>
<td>.26</td>
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<tr>
<td>45. I give him/her my opinion on things going on in his/her life.</td>
<td>.29</td>
<td>.21</td>
<td>.26</td>
<td>.24</td>
<td>.62*</td>
<td>.30</td>
</tr>
<tr>
<td>46. I use humor (jokes/sarcasm) to communicate sensitive information.</td>
<td>.09</td>
<td>.17</td>
<td>.10</td>
<td>.01</td>
<td>.46*</td>
<td>.13</td>
</tr>
<tr>
<td>47. I argue with him/her when s/he does something that angers/bothers me.</td>
<td>.07</td>
<td>-.27</td>
<td>-.04</td>
<td>-.08</td>
<td>.18</td>
<td>.18</td>
</tr>
<tr>
<td>52. I often say, “I love you” to him/her.</td>
<td>.60</td>
<td>.17</td>
<td>.62*</td>
<td>.42</td>
<td>.07</td>
<td>.21</td>
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<td>.18</td>
<td>.14</td>
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<td>.11</td>
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<td>.58*</td>
<td>.43</td>
<td>.38</td>
<td>.25</td>
</tr>
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<td>.51*</td>
<td>.50</td>
<td>.44</td>
<td>.36</td>
<td>.25</td>
</tr>
</tbody>
</table>

Of the total variance accounted for, the proportional amount of variance for each factor was as follows: Factor 1, 24%; Factor 2, 17%; Factor 3, 22%; Factor 4, 19%; Factor 5, 9%; and Factor 6, 10%. The unique variance explained by each factor was: Factor 1, 8%; Factor 2, 5%; Factor 3, 4%; Factor 4, 4%; Factor 5, 3%; Factor 6, 3%.

The first factor had 15 items (all positively worded) with primary factor loadings ranging from .83 to .55. The items reflected primarily the openness dimension. The second factor retained 13 items (all positively worded) with primary loadings ranging from .68 to .51. The items reflected the positivity dimension.

The third factor had 12 items with primary factor loadings ranging from .82 to .52. This factor structure reflected the assurances dimension. The fourth factor had 7 items with primary factor loadings ranging from .82 to .52. The items reflected sharing...
tasks. The fifth factor had 5 items with primary factor loadings ranging from .57 to .42; these items principally reflected the dimension of Advice. The sixth factor retained 4 items with primary factor loadings ranging from .80 to .55. These items reflected Networks. Table 10 reports the inter-factor correlations after the final factor analysis.

Table 10

*Final Inter-factor Correlations*

<table>
<thead>
<tr>
<th></th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
<th>Factor 5</th>
<th>Factor 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1</td>
<td>1.00</td>
<td>0.33</td>
<td>0.55</td>
<td>-0.44</td>
<td>0.26</td>
<td>0.29</td>
</tr>
<tr>
<td>Factor 2</td>
<td>0.33</td>
<td>1.00</td>
<td>0.44</td>
<td>-0.39</td>
<td>0.31</td>
<td>0.40</td>
</tr>
<tr>
<td>Factor 3</td>
<td>0.55</td>
<td>0.44</td>
<td>1.00</td>
<td>-0.49</td>
<td>0.20</td>
<td>0.28</td>
</tr>
<tr>
<td>Factor 4</td>
<td>0.44</td>
<td>0.39</td>
<td>0.49</td>
<td>1.00</td>
<td>0.36</td>
<td>0.34</td>
</tr>
<tr>
<td>Factor 5</td>
<td>0.26</td>
<td>0.31</td>
<td>0.20</td>
<td>0.36</td>
<td>1.00</td>
<td>0.20</td>
</tr>
<tr>
<td>Factor 6</td>
<td>0.29</td>
<td>0.40</td>
<td>0.28</td>
<td>0.34</td>
<td>0.20</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Norms for the six resulting measures (Σ of items loaded on each separate factor) are reported on Table 11.

Table 11

*Descriptive Statistics for Relational Maintenance Behaviors.*

<table>
<thead>
<tr>
<th>Factor</th>
<th>Mean</th>
<th>SD</th>
<th>Neutral Score</th>
<th>Range</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Openness</td>
<td>85.18</td>
<td>23.29</td>
<td>68</td>
<td>23-119</td>
<td>-0.7392</td>
<td>-0.1662</td>
</tr>
<tr>
<td>Positivity</td>
<td>62.31</td>
<td>8.78</td>
<td>44</td>
<td>36-77</td>
<td>-0.4640</td>
<td>-0.4084</td>
</tr>
</tbody>
</table>

(Table continues)
Table 11 (Continued)

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Assurances</td>
<td>62.71</td>
<td>15.61</td>
<td>48</td>
<td>17-84</td>
<td>-0.8270</td>
<td>-0.1184</td>
</tr>
<tr>
<td>Tasks</td>
<td>54.56</td>
<td>10.79</td>
<td>40</td>
<td>16-70</td>
<td>-0.9020</td>
<td>0.5628</td>
</tr>
<tr>
<td>Advice</td>
<td>25.67</td>
<td>5.23</td>
<td>20</td>
<td>5-35</td>
<td>-0.5844</td>
<td>0.9155</td>
</tr>
<tr>
<td>Networks</td>
<td>19.97</td>
<td>4.84</td>
<td>16</td>
<td>4-28</td>
<td>-0.7301</td>
<td>0.5670</td>
</tr>
</tbody>
</table>

As illustrated in Table 12 Alpha reliabilities (Cronbach’s) ranged from .72 to .95 for variables across the 6 factors representing relational maintenance behaviors.

Table 12

*Cronbach’s Alpha Reliabilities*

<table>
<thead>
<tr>
<th></th>
<th>Standardized</th>
</tr>
</thead>
<tbody>
<tr>
<td>Openness</td>
<td>0.95</td>
</tr>
<tr>
<td>Positivity</td>
<td>0.88</td>
</tr>
<tr>
<td>Assurances</td>
<td>0.94</td>
</tr>
<tr>
<td>Tasks</td>
<td>0.89</td>
</tr>
<tr>
<td>Advice</td>
<td>0.72</td>
</tr>
<tr>
<td>Networks</td>
<td>0.81</td>
</tr>
</tbody>
</table>

Relational Satisfaction and Interpersonal Solidarity

A single factor solution for the modified relational satisfaction scale was obtained. After applying criteria for factor structure and item-retention, all 11 items (5 positively worded and 6 negatively worded) loaded according to criteria on the single factor. The total variance in the correlation matrix accounted for by the factor was 65%.
Table 13

*Oblique Factor Structure and Factor Loadings of items on Relational Satisfaction.*

<table>
<thead>
<tr>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item</td>
</tr>
<tr>
<td>Factor 1</td>
</tr>
<tr>
<td>1. We have a good relationship</td>
</tr>
<tr>
<td>2. My relationship with this person is very stable.</td>
</tr>
<tr>
<td>3. My relationship with this person makes me happy</td>
</tr>
<tr>
<td>4. Our relationship is strong</td>
</tr>
<tr>
<td>5. I really feel like part of a team with this person</td>
</tr>
<tr>
<td>6. My relationship with this person is extremely unshakable</td>
</tr>
<tr>
<td>7. Our relationship is capable of withstanding considerable hardship</td>
</tr>
<tr>
<td>8. We have an exceptionally good relationship</td>
</tr>
<tr>
<td>9. My relationship with this person makes me unusually joyful and elated</td>
</tr>
<tr>
<td>10. My relationship with this person makes me unusually joyful and elated</td>
</tr>
<tr>
<td>11. Please indicate using the scale provided below, your degree of happiness, everything considered in your relationship with this person.</td>
</tr>
<tr>
<td>Very Unhappy</td>
</tr>
</tbody>
</table>

The reliability for the modified relational satisfaction scale (Σ of 11 items) was .95. The reliability of the previously established solidarity scale (Σ of 20 items) was .90.

**Canonical Correlations.**

The canonical correlation between the “predictor” variables of relational maintenance and the “criterion” variables of relational satisfaction and relational solidarity [(Wilks $F_{(12, 440)} = 8.51, p < .0001$) see Table 15] were significant. The linear composite of relational maintenance behaviors with (1) relational satisfaction and (2) interpersonal solidarity was significantly correlated ($R_c = .56$). The relational maintenance behaviors composite had 31% shared variance with the relational satisfaction-interpersonal solidarity composite. See Table 14 for other multivariate statistics.
The strength of the relationship between these variates is further supported by the loadings of predictor and criterion variables on their canonical composites/variates (see Table 15).

### Table 14

**Multivariate Statistics and F Approximations.**

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Value</th>
<th>F</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wilks’s Lambda</td>
<td>0.6587</td>
<td>8.51</td>
<td>12, 440</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Pillai’s Trace</td>
<td>0.3550</td>
<td>7.95</td>
<td>12, 440</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Hotelling-Lawley Trace</td>
<td>0.4972</td>
<td>9.09</td>
<td>12, 440</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Roy’s Greatest Root</td>
<td>0.4509</td>
<td>16.61</td>
<td>6, 440</td>
<td>&lt;.0001</td>
</tr>
</tbody>
</table>

### Table 15

**Loadings and weights for canonical composites of predictor and criterion Variables.**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Loadings</th>
<th>Raw Weights</th>
<th>Standardized weights</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predictor Variables</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Openness</td>
<td>0.8336</td>
<td>0.0348</td>
<td>0.8097</td>
</tr>
<tr>
<td>Positivity</td>
<td>0.7479</td>
<td>0.0421</td>
<td>0.0369</td>
</tr>
<tr>
<td>Assurances</td>
<td>0.7815</td>
<td>-0.0299</td>
<td>-0.4660</td>
</tr>
<tr>
<td>Tasks</td>
<td>0.8476</td>
<td>0.0223</td>
<td>0.2410</td>
</tr>
<tr>
<td>Advice</td>
<td>0.5785</td>
<td>0.0067</td>
<td>0.0352</td>
</tr>
<tr>
<td>Networks</td>
<td>0.6790</td>
<td>0.0573</td>
<td>0.2773</td>
</tr>
</tbody>
</table>

*(Table continues)*

60
Table 15 (Continued)

<table>
<thead>
<tr>
<th>Criterion Variable</th>
<th>Relational Satisfaction</th>
<th>Interpersonal Solidarity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.9652</td>
<td>0.8696</td>
</tr>
<tr>
<td></td>
<td>0.0447</td>
<td>0.0332</td>
</tr>
<tr>
<td></td>
<td>0.7013</td>
<td>0.3716</td>
</tr>
</tbody>
</table>

Redundancy analysis provided further information on the strength of the canonical variates as composites of the variable composing them (see Table 16).

Table 16

Canonical Redundancy Analysis

<table>
<thead>
<tr>
<th>Variable</th>
<th>Standardized variance of the variables explained by</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Their own canonical variate</td>
</tr>
<tr>
<td></td>
<td>Proportion</td>
</tr>
<tr>
<td>Relational Maintenance behaviors</td>
<td>0.5632</td>
</tr>
<tr>
<td>Interpersonal solidarity and Relational satisfaction</td>
<td>0.8439</td>
</tr>
</tbody>
</table>

The magnitudes of the relationships among all the pairs of variables in the study provide additional statistical information. All bivariate correlations of variables in the study were statistically significant (See Table 16).

Summary

Chapter 4 reported the results from the test of the research question and the research hypothesis. The following chapter will summarize the conclusions of the study and discuss the results obtained. In addition the findings will be interpreted jointly with
an examination of the limitations and implications for future research from the findings reported in this chapter.
CHAPTER 5
DISCUSSION

Introduction

The previous chapter reported the results of the hypothesized tests. This chapter presents a summary of both the study and the research findings. The chapter will also offer an interpretation of the results and the conclusions of the study, followed by a discussion of the limitations of the study, and implications for future research.

Summary of the Study

Research focusing purely on the maintenance of relationships suggests that relational maintenance behaviors vary among relational types (i.e. romantic relationships, kinships, friendships, etc.). By extension, relational maintenance behaviors categorized by cultural typology are likely to further compound these variations, or yield new insights on the communicative dynamics at work in the maintenance of an array of interpersonal relationships across cultures. Consequently, while focusing on interpersonal relationships between intimates, family, and various other types of relationships generated from the participants’ data, this study investigated a sample population (N=228) of international and domestic student participants. The study sought to gather extensive data with a view of primarily investigating the validity and reliability of measurement of relational maintenance behaviors across cultures with some attention to correlations between relationship maintenance behaviors, relationship satisfaction, and interpersonal solidarity. The study focused on refining previous measures of relationship maintenance behaviors in-order to develop an exhaustive and comprehensive global measure.
The research question posited in this study sought to examine the psychometric properties of a generalizable measure of relationship maintenance behaviors. Accordingly, the study investigated the properties of a relatively exhaustive, intercultural measure of relationship maintenance behaviors, relational satisfaction, and interpersonal solidarity that applied to past and ongoing proximal and LDRs, as well as to various types of relationships (marriage, friendships, family, sibling, mentor, guardian, romantic, co-worker etc). It was hypothesized that a linear combination of factors of relationship maintenance behaviors is related to relational satisfaction and interpersonal solidarity across low and high context cultures. As well, it included interpersonal solidarity as an index of relational satisfaction.

The study gathered extensive data from 357 student-participants from the University of North Texas. Out of this total, 263 students were enrolled in an introductory communication undergraduate course. According to the criteria earlier stated, 135 students who fitted the required age bracket of 20 and above were included in the data analysis. In this sample population, 17 students selected the non-domestic option in the demographics part of the questionnaire and therefore formed part of the non-domestic/international sample for the data analysis.

To obtain supplementary non-domestic/international participant data, the study solicited for participation from one campus based institute and four student organizations. Consequently, 69 student-participants were categorized as non-domestic /international in the study. Male participants in the study were 94 while female participants were 134.

The survey instrument employed in the study asked respondents to indicate the frequency of their use of relational maintenance behaviors using a 7-point Likert-type
frequency scale format ranging from 1 = Never to, 7 = Always. The 63 items contained in the measure encompassed original [Ayers (1983), Canary (1991), Canary & Stafford (1992), Stafford and Canary (1993)] relationship maintenance behavior factors namely: positivity, openness, assurances, social networks, avoidance, sharing tasks, future orientation, other orientation, humor, conflict management, and advice giving. To measure relational satisfaction the study employed an 11-item modified version of Norton’s (1983) Quality of Marriage Index. Respondents were asked to indicate how well the statements in the instrument described their feelings about their relationship with the target via a 7-step scale ranging from 1= Very Strongly Disagree to, 7 = Very strongly Agree. Additionally, respondents were asked one final question using a 10-point response format. This question tapped respondents’ degree of happiness with their relationship with the target, everything considered. The 10-point scale ranged from 1 = very unhappy to, 10 = very happy. Using Wheeless (1978) 19-Item Interpersonal Solidarity Scale, respondents were also asked to indicate their perception of how they relate to the target using a reverse coded 7-step scale ranging from 1= Strongly Disagree to 7 = Strongly Agree.

Of the 82 international student participants surveyed, the high-context culture part of the study’s sample (30%) consisted of 69 student-participants representing 25 regions, countries, and cultures outside the United States and across 5 continents. The research sample population also included 31 graduate students. Various statistical analyses were then conducted to examine the research question and the hypothesis.
Summary of Research Findings

The research question investigated the psychometric properties of a generalizable measure of relationship maintenance behaviors. By means of a series of factor analyses on the potential 11-factor (63-items) measure of relationship maintenance behaviors, the study found that 5 factors collapsed onto other factors or entirely disappeared when analyzed against a sample population composed of individuals from a relatively broader spectrum of cultures.

Subsequently, the outcome of the study was a 6-factor solution embodied in a leaner measure of relationship maintenance behaviors consisting of 57 items. The six factors found in the study were: Openness (15 items); Positivity (13 items); Assurances (13 items); Tasks (7 items); Advice (5 items); Networks (4 items). Alpha reliabilities (Cronbach’s) for variables across the 6 factors representing relationship maintenance behaviors ranged from .72 to .95. The total variance accounted for by each factor was as follows: Openness, 24%; Positivity, 17%; Assurances, 22%; Tasks, 19%; Advice, 9%; Networks, 10%. The unique variance explained by each factor was: Openness, 8%; Positivity, 5%; Assurances, 4%; Tasks, 4%; Advice, 3%; Networks, 3%. Inter-factor correlations showed that 3 factors (Openness, Positivity, and Assurances) were negatively correlated with factor 4 (Tasks).

At least one factor that emerged in this study revealed a constitution of fractional combinations of older factors from previous studies: Assurances revealed strong indications of an original category split between the factors termed other orientation and future orientation derived originally from Ayres (1983) and Stafford and Canary (1993).
Consistent with previous research, the study found a single factor solution for the modified relational satisfaction scale. After applying criteria for factor structure and item-retention, all 11 items (5 positively worded and 6 negatively worded) loaded according to criteria on the single factor. The total variance in the correlation matrix accounted for by the single factor was 65%. The reliability for the modified relational satisfaction scale ($\Sigma$ of 11 items) was .95. Recall that the reliability of the previously established solidarity scale ($\Sigma$ of 20 items) was .90. As per the methodology established for the study, the interpersonal solidarity scale was tested against the hypothesis.

The study hypothesized that a linear combination of factors of relationship maintenance behaviors was related to relational satisfaction and interpersonal solidarity across high-context and low-context cultures. This hypothesis was supported by results from a canonical correlation between the “predictor” variables of relational maintenance and the “criterion” variables of relational satisfaction and relational solidarity (see Table 15). The study found significant correlations ($R_c = .56$) in the linear composite of relational maintenance behaviors with relational satisfaction and interpersonal solidarity. The relational maintenance behaviors composite had 31% shared variance with the relational satisfaction-interpersonal solidarity composite. See Table 14 for other multivariate statistics. Hence, the null hypothesis was rejected.

Interpretation of Results

The research question ventured into a specific realm of relationship maintenance behavior research that had previously received little if any attention. Past studies (e.g. Stafford & Canary (1991), Dainton, Stafford & Canary (1994)) established that there was a relationship between relational maintenance strategies and relational satisfaction.
Wheeless and Landquist (1997) investigated the relationships among relational maintenance strategies, sexual communication strategies, and romantic relational satisfaction. Norton’s (1983) Marital Quality Index widely employed in previous research, targeted mainly heterogeneous romantic relationships. Moreover, this study came across no literature indicating any testing of this index across cultural typologies. The study therefore modified the index to incorporate both proximal and long distance as well as same and mixed-sex pairs and non-romantic interpersonal relationships across cultures. Relevant items in the relationship maintenance behaviors measure were re-worded to include non-romantic interpersonal relationships.

In retrospect, and as earlier stated in this study, an apparent shortcoming of early research on relational maintenance strategies; Dindia (1989) and Stafford and Canary (1991), was the reduction of the strategy typologies to a finite set. As would later be conceded by Canary, Stafford, Hause and Wallace (1993) the typologies identified in the first studies were not exhaustive. Primarily, both initial studies only sampled romantic relationships (i.e. married, engaged, or dating partners). Subsequently, the possibility that different maintenance behaviors are used or at least emphasized more in non-romantic involvements (i.e. friendships, family relations, mentor, sibling, guardian, co-worker etc.) could not be entirely discounted. Further, previous research did not adequately account for relationship maintenance behaviors encompassing proximal vs. LDRs across cultures. The research question and hypothesis of this study was consequently constructed to allow for generalizability across these relationship types.

This study developed a relatively more inclusive instrument to measure relationship maintenance behaviors, examined the psychometric properties of such a
measure, and found the general hypothesis to hold true that a linear combination of factors was associated to a composite of relationship maintenance behaviors and a composite of relational satisfaction-interpersonal solidarity across cultures. These findings, and the sample population for the study lend considerable credence to the validity and reliability of the measure developed here. Further, given the relative heterogeneity of the research sample compared to previous research, the findings from the dimensions investigated via the instrument developed here are therefore more generalizable.

The research hypothesis results reflected loadings ranging from fair to very good for the canonical composites of predictor variables (relationship maintenance behaviors factors) and criterion variables (relational satisfaction and interpersonal solidarity). The predictor variables had the following loadings:

- **Fair:** Advice, .5785
- **Good:** Networks, .6790; Positivity, .7479
- **High:** Assurances, .7815; Openness, .8336; Tasks, .8476;

The loadings for the criterion variables were all very good at 0.9652 and .8696 respectively for relational satisfaction and interpersonal solidarity (see Table 9). The strengths of the canonical variates as composites of the variable composing them analyzed through redundancy analysis was earlier illustrated in Table 10.

As indicated by their skewness scores, all of the 6 factors were normal with tasks and assurances approaching some negative skewness. However, they all fell within normality (skewness varied from -.9020 to -.4640). The Kurtosis scores amongst the six
factors all fell within normality ranging from 0.9155 for Advice to –0.4084 for Positivity (see Table 11)

From the study, it can be inferred that across cultures, relationship maintenance behaviors are associated and significantly correlated with relational satisfaction and with interpersonal solidarity. Further, these associations can be shown from the study, to generalize across cultures and across various relationship types. As well, the validity of the findings in previous research indicating that interpersonal solidarity and relational satisfaction were meaningfully related was replicated in this study with extensions to different relationship types and cultures.

Other studies done on relationship maintenance behaviors did not have as much variability nor generalizability in the target relationships as analyzed in this study. Further, employing the original (63-item) measure of relationship maintenance behaviors across cultures revealed that not all of the 11 original factors hold-up as indicated by the 6-factor solution in this study. Thus a different factor structure emerged as a better indicator of the various dimensions and aspects considered here. It therefore can be inferred that with the introduction of different or new aspects in the sample population certain factors in the original studies clustered around or completely disintegrated into more common dimensions when tested across cultures and relationship types. Hence, as evident from the study, it is not intrinsically prudent to employ a common measure of primarily romantic relationships to investigate relationship maintenance behaviors across various inter-personal relationship types.

Further, the use of a measure primarily generated within a specific cultural context may not be valid when tested across cultures and across various inter-personal
relationship types. The uniqueness resulting from the contingent cultural and relational
dynamics would necessitate the evolution of specific multiple measures for specific
contexts and dimensions if validity were to be achieved. Anything short of this would be,
as it were, tantamount to comparing apples and oranges.

Evidently, the 11 factors from various previous measures of relationship
maintenance behaviors, when tested principally across different relationship types and
cultures, did not holdup in this study, hence, to the extent that the new measure developed
here facilitates commonality in the comparisons between relationship types, then the
measure proved generalizable across different relationship types. It is noteworthy,
however, that because the study did not incorporate relationship maintenance behavior
items primarily generated from high-context cultures, therefore, the measure may not be
exhaustive since all the relationship maintenance items came from the domestic (low-
context) culture. The measure developed in the study is hence only exhaustive to the
extent that it employed a domestic set of domestic relationship maintenance behaviors.

This study established the psychometric properties of a generalizable measure of
relationship maintenance behaviors and supported the hypothesis that a linear
combination of factors of relationship maintenance behaviors are indeed related to
relational satisfaction and interpersonal solidarity across cultures.

Limitations of the Study

A possible limitation of this study was the relatively limited size of the sample
population tested. As much as the study’s gross sample was somewhat comparable or
even exceeded previous relational maintenance studies, a bigger sample population
especially as far as the percentage of respondents from high-context cultures is
concerned, would have increased the statistical power. This study had 228 participants restricted primarily to college-going young adults, amongst which 69 were from high-context cultures. Landquist (1997) had 199 participants, Canary & Stafford, (1992), and Dainton, Stafford & Canary, (1994) reported 200 participants and did not examine a non-domestic sample. Earlier studies involving the development of a relational maintenance typology relied upon a relatively bigger sample size (e.g., Stafford & Canary (1991) sampled 956 participants).

Further, as stated earlier, the study relied upon a pool of relationship maintenance behavior items generated primarily from the domestic low-context culture, to that extent the measure developed in the study may only be exhaustive to the extent that it drew from a domestic set of relational maintenance behaviors.

Procedural issues surrounding data collection such as the incentive based mode of collection targeting the introductory communication course sample conceivably introduced potential limitations in regards to the authenticity of the responses. This was possible especially as far as the motivation of the student participants was concerned. It is possible that response accuracy could have been influenced by the need to gain credit by turning in quickly filled out surveys. It is however, noteworthy here that the zero-credit purely voluntary nature of part of the respondents from the non-domestic sample could have aided in offsetting such a response predisposition.

Yet again, the requirement for the course based sample population to print out the 7-page survey instrument from the course web-site bulletin board necessitated access to computers and printing paper that may have invariably discouraged response and biased
the sample. The ability to adequately participate in the study was thus far dependent on
the ease for potential participants in the course to access such technology.

The use of a self-report survey instrument may have important limitations in the
findings of the study. This could be the case, when participants’ responses are understood
to represent their perceptions of the dynamics of their inter-personal relationships. It is
possible that certain inaccuracies in perception, as well as fall-off in recall over time
could have introduced errors in the responses. The use of a self-report survey for that
reason lends the study to consider perceptions that may not necessarily reflect reality i.e.
respondents’ thinking so may not necessarily make it so. Others would argue that
perception of the relationship is indeed what it is.

Another possible constraint in the findings of the study distinctive to the
composition of the tested sample was the uniqueness of 30% of the sample population
consisting of participants from high-context cultures. By virtue of their schooling away
from their countries of primary socialization, birth, or origin, and more so by studying in
the United States, this non-domestic sample may not be entirely unbiased representatives
of the samples regions, countries or cultures they selected/indicated. Naturally many
other additional confounding variables may need to be considered in the analysis to
obtain an absolutely accurate estimation of the underlying untapped dimensions unique to
the individual respondents. Additional follow-up qualitative and quantitative questions
addressing such concerns as length of stay in the United States, socio-economic
background in countries/cultures of origin, chronological age, issues unique to gender
roles in the background countries/cultures, individual ease of integration/adaptation to
alternate/new cultures, world travel experience, anchor relational communication preferences, etc. when considered jointly would enhance the precision of the findings.

It may be the case too that the relational maintenance dimensions and the relational satisfaction/relational solidarity items which clustered around the non-domestic respondents may in actual fact have reflected these individuals “acclimatization” to the prevalent relational maintenance behaviors in their domicile culture. Further, for reasons unique to being part of a migrant community during the data collection period, it is possible that certain respondents or potential respondents concealed their true countries/regions of origin or completely avoided responding to the demographic question tapping this aspect as was evident by the missing data during the data cleaning step of the analysis. Hence, the study recognized that the non-domestic sample might in fact have represented an intrinsically unique group of individuals distinct from the general populations from which they were drawn.

Regarding further demographics of the sample population, the average age for the study was 23.74. The average age for male respondents was 24.12 while that of the female respondents was 23.47. Consequently, in this study, the respondent’s average age differed considerably from that of earlier investigations. In Canary and Stafford’s (1992) study they reported an average age of 39.0. Their study targeted married couples. Stafford and Canary (1991) reported an average age of 29.2 in a study that examined various romantic relational types. Simon and Baxter’s (1993) study reported an average age of 41.5 for married respondents and an average age of 22.0 for respondents who were romantically involved. This study’s younger sample may therefore in essence be descriptive of young adults learning the ropes on how to sustain various inter-personal
relationships. It is noteworthy, however, that in this study the average age of the targets was 27.37.

Implications For Future Research

Some of the limitations noted in this study may be addressed in future studies by integrating different procedural and methodological approaches. Foremost, would be the further development and refining of the survey instrument that emerged out of this study. A more refined analysis of relationship maintenance behaviors across cultures would necessitate the use of an instrument generated and tested within specific cultural contexts. Further, in order to tap various relational types, future research should explore the uniqueness resulting from the contingent cultural and relational dynamics in those specific cultures. Therefore, research directed towards the refinement of a common and generalizable measure should consider further exploration in international areas. This can be achieved through research collaboration with communication scholars with access to potential/researchable target sample populations internationally.

Secondly, the external validity of the measure generated in this study can be improved through further testing in high-context cultures. This would then enable a desirable comparison of relationship maintenance behaviors in high context cultures and in low context cultures. Additionally, future studies could examine and compare proximal and long-distance relationships across cultures. This therefore necessitates a study of LDRs within high context cultures. Subsequent research could also examine comparisons of relationship maintenance behaviors between romantic and non-romantic inter-personal relationships across cultures.
Indeed, the research question in the study did not necessitate an analysis of the sample into specific relational types (even though the data was collected), hence whereas some previous studies primarily focused on relational maintenance strategies of married/romantic couples, this was not the primary focus in the study. The results in this study could therefore be indicative of the maturity level of the respondents’ relationships with the targets. For future research, consideration and comparison of specific relational type(s) across cultures may hence yield further insights and assist in refining a more generalizable measure and understanding communication involved in satisfactory and solidary relationships.

In the same vain, an intercultural approach to the study of relationship maintenance behaviors would assist in exploring new topics and follow-up questions such as: Do relationship maintenance behaviors discriminate between high-context and low-context cultures? Secondly, dependent on cultural context, are the use of some of the relationship maintenance behaviors higher, lower, or moderate in frequency? Additionally, an investigation of the magnitude of association between various relationship maintenance behaviors and relational satisfaction in high-context cultures should generate new knowledge in this subject. It may also be interesting to consider gay and lesbian relations across cultures. Finally, the explanatory range of this study could be widened by extending analysis to specific demographic markers. This would be a worthwhile pursuit in future research with a view of generating results specific to predetermined sample subsets.

This study concluded that a linear combination of factors of relationship maintenance behaviors are indeed related to relational satisfaction and interpersonal
solidarity across cultures. The study also resulted in an amended measure of relationship maintenance behaviors composed of 6-factors and 57 items tapping six different dimensions.

Summary

In this chapter, a summary of the study and of the results obtained from the testing of the research question and the research hypothesis was provided. The chapter also presented an interpretation of the results, as well as an analysis of the study’s limitations and potential implications for future study.
Appendix A

Statement of purpose for the research
**Statement of Purpose for the research**

The primary purpose of this study is to gather data and to develop a general measure of relationship maintenance behaviors and strategies for international and domestic, proximal, and long distance inter-personal relationships. With a view to develop a generalizable global measure, the study will incorporate a cultural perspective in studying interpersonal relationships and communication within those relationships.

**Preface to the survey Instrument**

Dear Potential Respondent, HELP! PLEASE!!

We are collecting data for thesis research conducted by an international graduate student to develop a global measure of relationship maintenance behaviors and strategies for international and domestic proximal and long distance relationships. We kindly ask for your permission to include your responses in this study. Your participation is completely voluntary, and your responses will remain confidential. The data obtained will be analyzed in terms of averages/means, reliabilities, correlations, regression, etc. Only one questionnaire (divided into 3 parts) will be employed. **Your participation in this study is greatly appreciated. Thank you most sincerely.** If you choose to participate kindly proceed below.
Appendix B

Human Subjects Review Board Approval Letter
September 24, 2001

Tom J. Kidenda
411 Ponder St., Apt #214
Denton, TX 76201

RE: Human Subjects Application No. 01-203

Dear Mr. Kidenda,

Your proposal titled “A Study of Relational Maintenance Behaviors and Cultural Variability in Various Proximal and Long-distance Interpersonal Relationships” has been approved by the Institutional Review Board and is exempt from further review under 45 CFR 46.101.

Enclosed is the consent document with stamped IRB approval. Please copy and use this form only for your study subjects.

The UNT IRB must review any modification you make in the approved project. Federal policy 21 CFR 56.109(e) stipulates that IRB approval is for one year only.

Please contact me if you wish to make changes or need additional information.

Sincerely,

Peter L. Shillingsburg
Chair
Institutional Review Board

PS: sb
Appendix C

Demographic Information
Demographic Information

Please indicate answers to the following questions concerning you.

Your biological Sex:  (1) Male [___]    (2) Female [___]

Your chronological Age: __ __ years.

Your Classification:  Undergraduate student______ Graduate student____

Your Major/Department: __________________________

In the following options please select or indicate one that best applies to you.

Geographical Region of longest residence:

Please Circle one:  1 U.S.A

(please specify state)

or

2 Outside U.S.A

(please specify country or region)

Where were you born?

(please specify country or region)

After careful consideration, please indicate the degree to which you agree with the following statement by marking the space beside the most applicable region/country.

Currently, my attitudes and beliefs primarily originate from this cultural region:

(a) The United States [___]    (h) Russia and The Balkan states [___]
(b) Canada [___]    (i) Central Asia [___]
(c) Continental Europe [___]    (j) Far East Asia [___]
(d) Australia and NZ [___]    (k) North Africa & The Middle East [___]
(e) The Mediterranean region [___]    (l) Sub-Saharan Africa [___]
(f) Arab-speaking countries [___]    (m) The Caribbean Islands [___]
(g) Eastern Europe [___]    (n) Southern America [___]

(o) Other ___________________________ (please specify)

Please specify your country of origin if different from (ii) above: ________________
The following items concern things people might do to maintain various interpersonal relationships. While answering the following questions please firmly keep in mind one individual with whom you share an important/significant interpersonal relationship. Please keep that one specific individual in mind as you complete the entire questionnaire.

Now, select or indicate the following detail(s) about the person you have in mind.

Please indicate the type of relationship you share with this individual:

Circle: 1 2 3 4 5 6 7
blood relative sibling spouse romantic partner trusted friend
(Please Specify)

Indicate the sex of the individual you have in mind. (1) Male [__] (2) Female [__]

Please indicate their age in years to the nearest 1 yr.: ___ ___

Do you and the person you have in mind live together?

Circle one: 1 2 3
Full-time Part-time No

Do you live far away from the person you have in mind that it would be difficult or impossible for you to see him or her everyday?

Circle one: 1 2
Yes No

Does this individual leave in your home country/State? Circle: 1 2
Yes No

If you answered No (or 2 above) please indicate their home country/state: ____________

Do you perceive that you have a long distance relationship with this individual?

Circle: 1 2
Yes No
Appendix D

Relationship Maintenance Behaviors Scale
Relationship Maintenance Behaviors Scale

Now, keeping this same person firmly in mind, please mark a number in the space provided beside each statement to indicate the degree to which you agree-disagree with each of the following statements. There are no right or wrong answers. Please use the following scale:

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Very infrequently</th>
<th>Occasionally</th>
<th>Frequently</th>
<th>very frequently</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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</tbody>
</table>

1. I attempt to make our interactions very enjoyable. [____]
2. I am cooperative in the ways I handle disagreements between us. [____]
3. I try to build up his/her self-esteem, including giving him/her compliments, etc. [____]
4. I ask how his/her day has gone. [____]
5. I am very nice, courteous, and polite when we talk. [____]
6. I act cheerful and positive when I am with him/her. [____]
7. I do not criticize him/her. [____]
8. I try to be romantic, fun and interesting with him/her. [____]
9. I am patient and forgiving of him/her. [____]
10. I present myself as cheerful and optimistic. [____]
11. I encourage him/her to disclose thoughts and feelings to me. [____]
12. I simply tell him/her how I feel about our relationship. [____]
13. I seek to discuss the quality of our relationship. [____]
14. I disclose what I need or want from our relationship. [____]
15. I remind him/her about relationship decisions we made in the past (for example, to maintain the same level of intimacy). [____]
16. I like to have periodic talks about our relationship. [____]
17. I stress my commitment to him/her. [____]
18. I imply that our relationship has a future. [___]
19. I show my love for him/her. [___]
20. I show myself to be faithful to him/her. [___]
21. I like to spend time with our same friends. [___]
22. I focus on common friends and affiliations. [___]
23. I show that I am willing to do things with his/her friends or family. [___]
24. I include our friends or family in our activities. [___]
25. I help equally with tasks that need to be done. [___]
26. I share in the joint responsibilities that face us. [___]
27. I do my fair share of the work we have to do. [___]
28. I do not shirk my duties. [___]
29. I perform my household responsibilities. [___]
30. I tell him/her how much s/he means to me. [___]
31. I talk about our plans for the future. [___]
32. I show him/her how much he/she means to me. [___]
33. I talk about future events (e.g. having children or anniversaries or retirement etc.)[___]
34. I encourage him/her to share his/her feelings with me. [___]
35. I talk about my fears. [___]
36. I am open about my feelings. [___]
37. I talk about where we stand. [___]
38. I apologize when I am wrong. [___]
39. I listen and try not to judge. [___]
40. I am understanding. [___]
41. I offer to do things that aren’t “my” responsibility. [___]

42. I do my fair share of the work we have to do. [___]

43. I try to be upbeat when we are together. [___]

44. I tell my partner what I think s/he should do about her/his problems. [___]

45. I give him/her my opinion on things going on in his/her life. [___]

46. I use humor (jokes/sarcasm) to communicate sensitive information. [___]

47. I argue with him/her when s/he does something that angers/bothers me. [___]

48. When we have a problem/fight I use our friends and family as mediators. [___]

49. When we have a problem/fight I avoid my partner and the topic/issue of
disagreement. [___]

50. I use negative message behavior (sarcasm, accusations, defensiveness) to relay my
disagreement with my partner. [___]

51. I hold hands, kiss, embrace, and play with my partner to express my affection,
fondness and attachment to him/her. [___]

52. I often say “I love you” to him/her. [___]

53. I make my-self look attractive (dress well, apply make up etc.) to my partner. [___]

54. I stay involved in his/her interests. [___]

55. I do favors for him/her. [___]

56. I buy gifts for him/her. [___]

57. I give priority to his/her feelings over mine. [___]

58. I concentrate on future plans instead of focusing on when we are apart. [___]

59. I plan when we can see one another. [___]

60. I plan when we can next talk with one another. [___]
61. I set aside specific times to interact with him/her. [___]

62. I try to take trips with him/her whenever possible. [___]

63. I discuss values such as honesty, spirituality and respect with him/her. [___]
Appendix E

Relational Satisfaction Scale
Relational Satisfaction Scale

Please identify how well each of these statements describes your feelings about your relationship with the person you have kept in mind. Indicate the degree to which you agree-disagree with each of the following statements by marking a number in the space provided beside each statement. Use the following scale:

<table>
<thead>
<tr>
<th></th>
<th>Very Strongly Disagree</th>
<th>Disagree</th>
<th>Moderately Disagree</th>
<th>Undecided</th>
<th>Moderately Agree</th>
<th>Agree</th>
<th>Very strongly Agree</th>
</tr>
</thead>
<tbody>
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</table>

65. We have a good relationship. [___]
66. My relationship with this person is very stable. [___]
67. Our relationship is strong. [___]
68. My relationship with this person makes me happy. [___]
69. I really feel like part of a team with this person. [___]
70. My relationship with this person is extremely unshakable. [___]
71. Our relationship is capable of withstanding considerable hardship. [___]
72. We have an exceptionally good relationship. [___]
73. My relationship with this person makes me unusually joyful and elated. [___]
74. I really feel like we have very similar goals and objectives with this person. [___]
75. Please indicate using the scale provided below, your degree of happiness, everything considered in your relationship with this person.

Very Unhappy  1  2  3  4  5  6  7  8  9  10  Perfectly happy
Appendix F

Interpersonal Solidarity Scale
Interpersonal Solidarity Scale

Still keeping this person firmly in mind please indicate by indicating a suitable number how you relate to this specific person. Please use the scale provided below

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>6</th>
<th>Moderately Agree</th>
<th>5</th>
<th>Undecided</th>
<th>4</th>
<th>Moderately Disagree</th>
<th>3</th>
<th>Disagree</th>
<th>2</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>76</td>
<td>We are very close to each other. [___]</td>
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<td>77</td>
<td>This person has a great deal of influence over my behavior. [___]</td>
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<tr>
<td>78</td>
<td>I trust this person completely.[___]</td>
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<tr>
<td>79</td>
<td>We feel very different about most things. [___]</td>
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<tr>
<td>80</td>
<td>I willingly disclose a great deal of positive and negative things about myself, honestly, and fully (in depth) to this person. [___]</td>
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<tr>
<td>81</td>
<td>We don’t really understand each other [___].</td>
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<tr>
<td>82</td>
<td>This person willingly discloses a great deal of positive and negative things about him/herself, honestly and fully (in depth) to me. [___]</td>
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<tr>
<td>83</td>
<td>I distrust this person. [___]</td>
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<tr>
<td>84</td>
<td>I like this person much more than most people I know. [___]</td>
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<tr>
<td>85</td>
<td>I seldom interact/communicate with this person. [___]</td>
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<tr>
<td>86</td>
<td>I love this person. [___]</td>
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<tr>
<td>87</td>
<td>I understand this person and who s/he really is. [____]</td>
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<tr>
<td>88</td>
<td>I dislike this person. [___]</td>
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</tr>
<tr>
<td>89</td>
<td>I interact/communicate with this person much more than with most people I know.[_]</td>
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<tr>
<td>90</td>
<td>We are not very close at all. [___]</td>
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<tr>
<td>91</td>
<td>We share a lot in common. [___]</td>
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<tr>
<td>92</td>
<td>We do a lot of helpful things for each other. [___]</td>
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</table>
93. I have little in common with this person. [___]

94. I feel very close to this person. [___]

95. We share some private way(s) of communicating with each other. [___]
Appendix G

The distribution of countries and regions around the world on the degree of Individualism and Uncertainty Avoidance/Collectivism
FIGURE 4.1 The Distribution of Countries on Individualism and on Uncertainty Avoidance (uncertainty avoidance is theoretically related to "tightness").

Individualism 0 - Weak uncertainty avoidance

Collectivist

Strong uncertainty avoidance

Weak uncertainty avoidance

Individualist

[Diagram showing the distribution of countries on the Individualism and Uncertainty Avoidance plane]

Abbreviations for the countries and regions:

ARA Arab-speaking countries
EAF (Ethiopia, Jordan, Lebanon, Libya, Luxembourg, Malta, Monaco, Morocco, Netherland, Norway, Peru, Portugal, Saudi Arabia, Spain, Switzerland, United Arab Emirates, United Kingdom, United States)

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