

CULTURAL VALUES AND SOCIAL EXCHANGE IN
LONG-DISTANCE DATING RELATIONSHIPS

by

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ABSTRACT

The goal of this thesis was to examine how different cultural values influence the use of maintenance behaviors and the fulfillment of comparison level in long-distance dating relationships. Related intercultural studies have found that people in the United States tend to be more individualistic, while people from Asian countries are comparatively more collectivistic (e.g. Hofstede, 2001; Ting-Toomey, 2010). As suggested by social exchange theory (Thibaut & Kelley, 1959), relational satisfaction is determined by the fulfillment of comparison level for the use of maintenance behaviors. However, most empirical studies examined the link between maintenance behaviors and satisfaction, but very little research has connected comparison level with satisfaction. Besides, previous studies have not associated cultural factors with relational maintenance. Thus, by conducting a survey (N=102) on both American and Chinese who are currently in long-distance dating relationships, this thesis fills the gap in interpersonal communication literature by 1) bringing cultural values in the contexts of long-distance dating relationships, and 2) linking comparison level to relational satisfaction. Counter to previous findings, this study found that both American and Chinese participants favored Horizontal Individualism, and there was no significant difference in scores of four types of individualism/collectivism for American and Chinese participants. However, differences still exist in their personal use of maintenance behaviors. American participants reported the maintenance behaviors of assurances and tasks as most frequently used, while Chinese participants reported that of positivity. When participants were asked to report their partners' use of maintenance behaviors, both American and Chinese reported assurances as the most

frequently used strategy, which mostly met their expectations. Besides, the use of each and all of the five maintenance behaviors met the expectations in each and total samples. Regarding the correlation between the fulfillment of comparison level and relational satisfaction, findings of the American sample showed that satisfaction was positively associated with positivity, assurances, and tasks. In the Chinese sample, satisfaction was positively correlated with tasks, but negatively correlated with openness.

Key words: cultural dimensions, individualism, collectivism, social exchange theory, comparison level, maintenance behaviors, and satisfaction.

DEDICATION

This thesis is dedicated to my parents, Ling Li, and Jun Guan, and my grandparents, Jimin Teng, and Fengting Guan. There are no words to express how grateful I am to you all, and how important you all are to me. I love you all so much.

LIST OF ABBREVIATIONS AND SYMBOLS

α	Cronbach's index of internal consistency
CL	Comparison Level
GCR	Geographically close relationship
HC	Horizontal Collectivism
HI	Horizontal Individualism
IRB	Institutional Review Board
LDR	Long distance relationship
M	Sample mean, arithmetic average
n	Sample size; sample of cases
p	Probability associated with the occurrence under the null hypothesis of a value as extreme as or more extreme than the observed value
r	Pearson product-moment correlation
SD	Standard deviation
SET	Social Exchange Theory
t	Computed value of t test
VC	Vertical Collectivism
VI	Vertical Individualism
<	Less than
=	Equal to

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CHAPTER 1

INTRODUCTION

Background Context

Modern technology and transportation have bridged more connections between nations and have brought people from different cultural backgrounds much closer. Globalization has enabled people to pursue their education abroad, especially higher education. According to the Institute of International Education's (2013a) Fall 2013 Snapshot Survey of International Students, of all 380 responding institutions, 72% reported that the total number of international students enrollment increased in fall 2013 compared to previous year. In terms of the total number of international students enrollment, according to the Institute of International Education's (2013b) Open Doors 2013 Report on International Educational Exchange, in the 2012/13 academic year, the number of international students at colleges and universities in the United States increased 7.2% to a record high of 819, 644 students, with a 9.8% increase of newly enrolled international students. Although the top three places of origin of students are China, India, and South Korea, students from China continue to drive most of the growth, with a 10% increase of undergraduate students, and a 4% increase of graduate students. Exchange programs and studying abroad offered college students more opportunities to gain different cultural experiences. We might now discover more diversity on college campus in the United States. However, that people with different cultural backgrounds become closer implies that some of them are being away from home and living in new environments.

Aylor (2003) claimed that long-distance dating relationships among college students have

gained the most attention from interpersonal communication scholars. Research estimated that one third of dating relationships in university settings are long-distance ones (Stafford, Daly, & Reske, 1987), which was consistent with a more recent study (Aylor, 2003). Over 40% of surveyed college students sample reported being involved in long-distance dating relationships (Dellmann-Jenkins, Bernard-Paolucci, & Rushing, 1994). As further support, Stafford (2005) claimed that about 25% to 50% college students are dating someone at a long distance, and almost 75% of them at some point in college have involved in a long-distance dating relationships. Besides, dating at long distance has become a popular topic among international students, as this is a situation that at most of time they cannot avoid and must face (Pang, 2013). Therefore, it is reasonable to assume that nowadays more college students, both domestic and international students, are involved in long-distance dating relationships.

Overview of Past Research and Current Study

Previous research has associated long-distance dating relationships with some positive relational features, such as satisfaction, liking, commitment, and trust (Stafford, 2005), as well as some negative relational features, such as distress, dysfunction, and difficult coping (e.g. Wendel, 1975; Westefeld & Liddell, 1982). Moreover, research has examined long-distance dating relationships in terms of communication patterns (e.g. Dainton & Aylor, 2002; Dellmann-Jenkins et al. 1994; Johnson, Haigh, Becker, Craig, & Wigley, 2008), idealization (e.g. Stafford & Reske, 1990; Stafford & Merolla, 2007), relational uncertainty (e.g. Dainton & Aylor, 2001; Maguire, 2007; Cameron & Ross, 2007; Sahlstein, 2006), and relationship maintenance (e.g. Canary, Stafford, Hause, & Wallace, 1993; Holt & Stone, 1988; Westefeld & Liddell, 1982; Wilmot & Carbaugh, 1986).

Within interpersonal communication literature, relational maintenance has obtained most

of scholars' attention, as people tend to spend more time on maintaining relationships than initiating or terminating them (Duck, 1988). Westefeld and Liddell (1982) reported nine maintenance strategies from the conversations with participants of workshops on romantic distance relationships, including recognizing the prevalence of long-distance relationships, using face-to-face time wisely, being open and honest, etc. Wilmot and Carbaugh (1986) distinguished coping behaviors from maintenance behaviors, and argued that coping behaviors were managed by one partner while maintenance was more interactive between partners. Later, Holt and Stone (1988) argued that frequent visits and visualizing were two effective strategies in maintaining long-distance relationships.

However, extant research on relational maintenance was mostly conducted in the context of the United States (Yum & Canary, 2003), very few studies associated cultural variations with relational maintenance. To take cultural perspectives into consideration, Yum and Canary (2003) summarized different relationship maintenance in Korea and the United States as an example to illustrate that the differences of cultural values, such as Hofstede's (1980) individualism and collectivism, are associated with various communication styles and interaction behaviors in interpersonal relationships. Yum and Canary (1997) compared Koreans and Americans who were involved in romantic relationships, and found that in terms of Canary and Stafford's (1992) five maintenance behaviors, American participants reported the use of all maintenance behaviors more than did their Korean counterparts. Other related research on Korean, Japanese, and Chinese romantic partners has indicated that cultural factors do impact maintenance behaviors and relational characteristics (e.g. Gao & Gudykunst, 1995; Kamo, 1993; Yi & Park, 1991). However, few previous studies have directly linked culture features to relational communication (Yum & Canary, 2003), let alone long-distance dating relationships. Therefore, this study will

fill the gap in interpersonal communication literature by examining the correlation between different cultural values and relational maintenance behaviors among Chinese and American partners in long-distance dating relationships, which will be the first contribution of this study.

Another highlight of this study will be situated at the theoretical framework—social exchange theory, which emphasizes relational satisfaction, expectation, and comparison level (Thibaut & Kelley, 1959). As one of the future research directions on maintaining long-distance relationships, Aylor (2003) pointed out that not enough attention in current research has concentrated on individuals' expectations of relationship partners, although researchers have recognized the importance of relational expectation in relational maintenance in terms of social exchange theory. Besides, academic studies regarding relational maintenance have put more attention on geographically close relationship rather than long-distance ones due to the easier information sources. Aylor (2003) indicated that future studies on long-distance relationships should focus more on the outcomes of individuals' relationships and their expectations in terms of the past experiences. Following this direction, the second contribution of this study is to link social exchange theory to relational maintenance behaviors among long-distance relationship partners with different cultural values.

In summary, the main purpose of the study is to examine the association between cultural values and social exchange in long-distance dating relationships. The next chapter reviewed both intercultural and interpersonal literature that was relevant to current study. First and foremost, the review summarized three approaches of defining long-distance dating relationships and indicated the approach that would be applied in this study. Second, the review specified Hofstede's (1980; 2001) cultural dimensions after explaining Eurocentric bias and Asiancentric views proposed by Miike (2007). Next, the study used social exchange theory as the theoretical

framework to review relational maintenance behaviors covered in past research studies, and relational satisfaction based on comparison level. The third chapter introduced the methodology that was used in current study. Results were offered in the fourth chapter after all the data were collected and analyzed. The last chapter discussed some significant findings, limitations, and contributions of the study.

CHAPTER 2

LITERATURE REVIEW

Major Approaches of Defining LDR

Previous research has used different approaches to define long-distance relationships, or to distinguish long-distance from other relationships types. To sum them up, the following are three primary approaches (Aylor, 2003).

The first approach is to use the number of miles. It means that the minimum number of miles apart is regarded as a standard to specify relating at a distance. For instance, Carpenter and Knox (1986) defined long-distance relationships as ones in which partners were separated at least 100 miles. However, Holt and Stone (1988) categorized long-distance relationship dating partners as ones who were separated by more than 250 miles, which was an arbitrary cut-off point. Stafford and Reske (1990) reported that the recruited participants in a serious dating relationship lived, on average, more than 400 miles away from their partner, but they did not specify how long-distance couples and geographically close couples were distinguished in their study. Moreover, Schwebel, Dunn, Moss, and Renner (1992) took 50 miles as a standard to identify long distance.

The second approach considers geographical boundaries as a criterion of long-distance relationships. Stephen (1986) specified separated couples as one of them living on campus and the other live in a different part of the state. Canary et al. (1993) regarded “not living in the same town” as a sign of long-distance relationship (p. 7). Helgeson (1994) set up the eligibility of participating in her study of long-distance dating relationships as one in which partners did not

live in the same area (Pittsburgh area).

The third one is a self-determined approach, which allows respondents themselves to define if their relationships are implementing at a distance. As Dellmann-Jenkins et al. (1994) argued, self-defined approach is more valid than the criterion of “number of miles separated” since respondents define their own relationships and situations based on their “own sense of reality”. Thus, Dellmann-Jenkins et al. (1994) provided example statements to assist the participants in deciding if their relationships were geographically close or at a long distance: “A geographically-close relationship could be one where partners are able to see each other face-to-face, frequently” while “A long-distance relationship may be one where partners are not able see each other, face-to-face, on a frequent basis” (p. 214). Similarly, Guldner and Swensen (1995) distinguished long-distance relationships and proximal relationships by defining long-distance relationship (LDR) group based on the statement “my partner lives far enough away from me that it would be very difficult or impossible to see him or her every day” and defining proximal relationship (PR) group based on the statement “my partner lives close enough to me that I could see him or her every day if I chose to”(p. 316). Both guiding statements above are consistent with the one of the cultural assumptions relevant to long-distance relationships: “Frequent FtF communication is necessary for close personal relationships” (Stafford, 2005, p.9).

More recent studies on long-distance relationships followed Dellmann-Jenkins et al.’s operationalization. Stafford, Merolla, and Castle (2006) recruited participants by informing the participants that a long-distance relationship is the one in which “you are separated from your partner by a physical distance that prevents you from seeing each other every day, if you wanted to”. Stafford and Merolla (2007) recruited students as well as their serious dating partners to

participate in their study by using the definition that a long-distance dating relationship was the one where they could not see their partner every day if they so desired. Jiang and Hancock (2013) asked their participants to self-define their relationship status by answering question “we are unable to see each other, face to face, on a frequent basis due to geographical separation”. Following the third approach, this study used self-determined method to recruit participants. Participants are eligible to be enrolled in this study if they consider that they are seriously involved in long-distance dating relationships according to their personal understanding.

Eurocentric Bias vs. Asiancentric Views

Although long-distance dating relationships has obtained attention in previous research on interpersonal and relational communication, the existing studies on this topic were mostly based on Eurocentric communication theories. For instance, the majority of the recruited participants were white American, and the core values of researchers and participants’ are pretty much western perspectives. From an Asiatic perspective, Miike (2007) identified some biases in the nature and function of conventional communication theories that were primarily based on Eurocentric perspectives. As he stated, “western theories of communication are increasingly questioned by non-Western experiences and widely tested in non-Western contexts.” (p. 272). One of the biases that could be applied to this study is the *Individuality and Independence Bias*. According to Miike (2007), in Eurocentric theory and western culture, individuality and independence are highly valued during the process of communication, and individuals are free to express uniqueness and difference. Communication in Asian culture, however, attaches more importance to realizing interdependence and interrelatedness to others and to the surroundings, which underlines the fact that individuals could not exist without constant interaction with other people, the nature, and the world.

Cultural Dimensions

Miike's (2007) argument to some extent echoes Hofstede's cultural dimension theory that people think and behave differently according to their cultural values. Hofstede (1991, 2001) identified "individualism versus collectivism" as one of the four cultural dimensions in his large-scale study of a U.S. multinational corporation. On the one end of the spectrum, individualism is defined as "a situation in which people are supposed to look after themselves and their immediate family only" (Hofstede & Bond, 1984, p. 419). On the other end of the spectrum, collectivism is defined as "a situation in which people belong to in-groups or collectivities which are supposed to look after them in exchange for loyalty" (Hofstede & Bond, 1984, p. 419). In other words, individualism focuses more on "self" while collectivism focuses more on "group". Ting-Toomey (2010; Ting-Toomey & Chung, 2011) further explained this dimension. Generally speaking, individualistic culture tends to emphasize "I" identity over "we" identity that individual rights and personal achievements outweigh group interests. In comparison, collectivistic societies stress "we" identity over the "I" identity that group interests and needs exceed individual desires and personal pursuit (Ting-Toomey & Chung, 2011). As cultural patterns, individualism is mostly found in North American and northern and western Europe, whereas collectivism is comparatively more common in Asia, South America, and the Pacific Islands (Ting-Toomey & Chung, 2011).

However, cultural dimensions on the group level cannot include or explain all the value analysis on the individual level (Ting-Toomey, 2010). As the dimensions are summarization and generalization about culture, individual variations within each culture exist due to various influences from personal life experience, family, and society, which should not be overlooked. Triandis and Gelfand (1998) argued that there were many types of individualism and

collectivism and proposed two kinds: horizontal and vertical. Basically, horizontal patterns emphasize equality, while vertical patterns emphasize hierarchy. Triandis and Gelfand (1998) combined the two patterns with individualism and collectivism and generated four types: Horizontal Individualism (HI), Vertical Individualism (VI), Horizontal Collectivism (HC), and Vertical Collectivism (VC). According to Triandis and Gelfand (1998), in HI and VI, people see themselves as distinct and autonomous, but HI has no interest in “becoming distinguished” or in “having high status” (p. 119) while VI accepts hierarchy and competitions. In HC and VC, people see themselves as part of a group with common goals, but HC wants equality while VC accepts inequality and tends to submit to authority. The four types of individualism and collectivism are differently favored in different cultures. Triandis, Chen, and Chan (1998) compared the tendency of individualism and collectivism of students from Illinois and students from Hong Kong. They found that the Illinois sample favors HI the most and HC somewhat; the Hong Kong sample favors HC the most and HI is also favored. The least favored are the VC responses in both samples. Moreover, Kappor, Kinsky, Blue, and Baldwin (2000) found that American sample favored HI>HC>VI>VC, and Chinese sample favored HC>HI>VC>VI. However, the conclusions above were generated more than ten years ago, changes might occur in recent years. Thus, the following research question and hypothesis are proposed.

RQ1: What particular types of individualism/collectivism do American and Chinese students favor respectively?

H 1: American and Chinese participants favor different types of individualism/collectivism.

Social Exchange Theory (SET)

Social exchange theory is a robust explanatory rationale for relationship maintenance

(Canary & Zelley, 2000). As the types of individualism and collectivism vary in different cultures, relational maintenance might accordingly differ as well. Developed by Thibaut and Kelley (1959), social exchange theory contends that individuals make different assessments about relationship satisfaction and make different decisions about relationship commitment based on two values: rewards and costs. Similar to an economic analysis, social exchange theory evaluates relationships based on a relatively rational approach. The theory examines the interplay and balance between the rewards an individual received from a certain relationship and the costs that he or she expended in that relationship.

More than the comparison between rewards and costs, the theory also involves another two levels of comparison: first, the comparison between an individual's expected relationship and the relationship experienced in reality; second, the comparison between an individual's current relationship and some potential or alternative relationships. The former one deals with relational satisfaction while the latter one concerns with relational commitment. Social exchange theory suggests that individuals in certain relationships tend to measure the disparities between what they actually experienced and what they expected to experience, so that they could know if they are satisfied with the relationships, which is the central focus of current study—the balance between rewards and costs, and the comparison level.

SET's First Level and Relational Maintenance

Rewards, Costs, and Outcomes

Social exchange theory argues that the outcome of a particular relationship is assessed by the comparison between the rewards derived from a relationship and the costs incurred in that relationship. According to Thibaut and Kelley (1959), rewards refer to “pleasures, satisfactions, and gratifications the person enjoys” (p. 12) while costs are defined as “any factors that operate

to inhibit or deter the performance of a sequence of behavior” (p. 12). Basically, rewards are positive feelings while costs are negative ones. It suggests that individuals in certain relationships intentionally or unintentionally consider the balance and measure the disparity between rewards and costs, and then consequently regulate their own maintenance behaviors used in that relationship.

From the social exchange perspective, rewards and costs are assessed in an overall rating. The relational outcome value of a particular relationship could be transcribed into a mathematical equation as follows: $\text{outcome} = \text{rewards} - \text{costs}$ (Thibaut & Kelley, 1959), which is why social exchange theory is sometimes compared to the approaches in economics or accounting. More specifically, Dainton and Zelle (2011) specified relational rewards as the perceived pleasant benefits whereas relational costs as the perceived unpleasant drawbacks. Individuals obtain positive outcome value when the rewards outweigh the cost, and negative outcome value when the relationship incurs more drawbacks than benefits (Dainton & Zelle, 2011).

To link social exchange theory to relational maintenance, Canary and Stafford (1992) conceptualized maintenance behaviors as rewards and costs. Based on equity assessment, Canary and Stafford (1992) argued that maintenance behaviors served as both outputs and inputs in a relationship, and found that married couples conduct maintenance behaviors to achieve balance between outputs and inputs. In other word, rewards can be regarded as the outputs from maintenance behaviors conducted by partners, while costs can be considered as the inputs of certain maintenance behaviors conducted by individuals. Furthermore, Rusbult, Drigotas, and Verette (1994) applied their investment model in investigating relation maintenance. Derived from interdependence theory (Thibaut & Kelley, 1959), the investment model examines how

individuals' commitment to a certain relationship is influenced by relational satisfaction, alternative relationship, and the degree of investments in that relationship (Rusbult et al., 1994). In addition, Rusbult and Buunk (1993) suggested that maintenance behaviors could strengthen the relationship and bring rewards to that relationship.

Relational Maintenance

People spend more time on maintaining than initiating or terminating relationships (Duck, 1988). Since relational maintenance exists in all types of on-going relationships (Stafford & Canary, 1991), there is no exception to long-distance dating relationships. Relationship maintenance refers to “actions and activities used to sustain desired relational definitions” (Canary & Stafford, 1994, p.5). In other words, individuals apply different behaviors in different stages of relationships to meet certain goals and expectations. Two assumptions guide this definition. First, a desired level in a particular relationship varies among individuals. Each individual has different views on the conception of “the desired level”. To put it in another way, individuals have different expectations based on different situations. Second, a desired level does not remain at the same level during the relationship over time. It might change as the relationship changes. This definition is corresponded with the comparison level in social exchange theory.

Geographically separation between dating partners could strengthen or destroy a relationship (Carpenter & Knox, 1986), however, what individuals should always do during the separation is to maintain the relationships by using maintenance behaviors. Previous studies have generated some categories of strategies, tactics, and behaviors that individuals use to maintain their relationships or to keep relationships at a desired level. The most frequently used typology is the one firstly developed by Stafford and Canary (1991). Stafford and Canary (1991) identified five categories of maintenance behaviors in romantic relationships: *positivity* (being positive,

cheerful, and optimistic), *openness* (self-disclosure and open discussion of the relationship), *assurances* (showing love, demonstrating faithfulness, and stressing commitment to the relationship), *sharing tasks* (helping solving tasks that face the couple with equal responsibility), and *network* (relying on friends and using affiliations to maintain the relationship). Among the five maintenance strategies, results indicated that perception of the partners' use of positivity was the primary predictor of control mutuality and liking, and the secondary predictor of relational satisfaction; perception of partners' use of assurances was a strong predictor of one's commitment and satisfaction; sharing tasks was an important predictor of all the relational features, including control mutuality, commitment, liking, and satisfaction.

Dainton and Stafford (1993) distinguished the terms "maintenance behaviors" and "maintenance strategies", and argued that the latter one aims to sustain the relationship with conscious intent and strategic planning. However, the term "behavior" encompasses both strategic and routine interaction. In contrast to strategic behaviors, routine behaviors refer to those "taken-for-granted, seemingly mundane, trivial, yet regularly occurring" actions and activities (p. 256). Dainton and Stafford (1993) developed 12 categories and 29 subordinate categories of maintenance behaviors, many of which were corresponded with previous research, such as Stafford and Canary's (1991) five maintenance strategies. In addition, results revealed an important finding that although not frequently mentioned in previous research, sharing tasks was most frequently reported as a maintenance behavior in their study, indicating that sharing tasks was more of a routine behavior, rather than a strategic one.

With improvements in technology, the Internet is more widely involved in everyday life and in dealing with different types of interpersonal relationship, including maintaining long-distance dating relationships. To examine the correlation between communication patterns

and relational maintenance, Dainton and Aylor (2002) found that the use of oral channels (face-to-face and telephone) were positively correlated, the use of written channels (internet and letters) were positively correlated, but the use of oral and written communication channels were negatively correlated. In addition, the use of each communication channel was positively associated with relational maintenance, with telephone use in particular associated with the use of three relational maintenance: assurances, openness, and shared tasks (Dainton & Aylor, 2002). Among more recent studies, Johnson et al. (2008) examined how email was involved in maintaining interpersonal relationships, and found that the three main categories in email to family members and friends were self-disclosure (openness), discussing social networks, and positivity. Besides, the most common categories for romantic partners were assurances, openness, positivity, and discussing social networks (Johnson et al. 2008). Although modern technology has been frequently involved in interpersonal communication, the original five categories of maintenance behaviors still exist in maintaining long-distance dating relationship.

Past research has revealed that maintenance behaviors vary according to different relationship patterns, such as different *relationship types* (e.g. married, engaged, seriously dating, and dating relationships, Stafford & Canary, 1991; romantic partners, relatives, friends and other relational types, Canary et al., 1993; married and dating persons, Dainton & Stafford, 1993; LDRs and GCRs, Dainton & Aylor, 2001); *equity levels* (e.g. underbenefited, overbenefited, and equal, Canary & Stafford, 1992); *relationship phases* (e.g. stability, escalation, de-escalation, and termination, Guerrero, Eloy, & Wabnik, 1993); and *relational goals* (e.g. avoidance, balance, and directness, Ayres, 1983). However, very few previous studies examined how different cultural values were linked to the use of maintenance behaviors. There are some exceptions. For instance, Yum and Canary (1997) compared American and Korean participants in their use of

relational maintenance behaviors and found that American participants reported the use of maintenance strategies significantly more than did Korean participants. In addition, Jin and Oh (2010) examined the social network influence on romantic relationships in terms of cultural differences— individualism (United States) and collectivism (South Korea). They found that although network support for romantic relationships was tightly associated with satisfied relationships, differences existed in American and Korea culture. Compared with Koreans, Americans were more likely to involve social networks (friends and family) in their romantic relationships, attach more importance on social networks, and seek more support from them for their relationships. In a similar vein, this study predicts that individuals with different cultural values—individualism and collectivism—differ in using maintenance behaviors. Accordingly, this study investigated the following research question and related hypothesis:

RQ2a: What maintenance behaviors are reported as the American and Chinese participants' most frequently used ones?

H2a: American and Chinese participants differ in the use of relational maintenance behaviors.

As maintenance behaviors could serve as both outcomes and inputs in equity assessment (Canary & Stafford, 1992), Dainton (2000) argued, “maintenance behaviors engaged in by the partner are rewards, but maintenance behaviors engaged in by the individual are costs” (p.829). In other words, the perceived partner's use of maintenance strategies is rewarding to individuals in relationship. Therefore, Stafford and Canary's (1991) maintenance behaviors conducted by partners could serve as individuals' rewards in particular romantic relationships (Dainton, 2000).

Research also has suggested that individuals' reported partners' behaviors were more directly associated with individuals' relational assessment than were partners' self-reported use

of behaviors (Canary & Cupach, 1988). For instance, research findings indicated that husbands' frequency of using maintenance strategies reported by wives was a stronger predictor of wives' marriage satisfaction than wives' self-reported use of maintenance strategies (Bell, Daly, & Gonzalez, 1987). Given this, the following research question and hypothesis are proposed:

RQ2b: What maintenance behaviors are reported as partners' most frequently used ones according to American and Chinese participants respectively?

H2b: Partners of American and Chinese participants differ in the use of relational maintenance behaviors.

Although relational maintenance behaviors serve as rewards in relationships, they are not the only factor that affects individuals' satisfaction with current relationship or their decisions about whether staying in or getting out of a relationship. Individuals use this invisible measurement—the rewards they have received—in their minds to compare with their expectations (ideal relationships or past experiences) and potential alternatives (possible future relationships). When relational outcome value is established, individuals start to consider their satisfaction, and then decide to maintain or adjust their commitment, which leads to the next level of social exchange.

SET's Comparison Level and Relational Satisfaction

Comparison Level

Social exchange theory defines comparison level (or CL) as “the standard against which the member evaluates the ‘attractiveness’ of the relationship” and “by which the person evaluates the rewards and costs of a given relationship in terms of what he feels he ‘deserves’” (Thibaut & Kelley, 1959, p. 21). To put it simple, CL is the expected relationship status, or the desired level of a relationship. However, the actual relationship might not be as exactly same as the desired

level. Instead, the current relationship might meet, excel, or fall below their desired level, namely, comparison level.

Moreover, according to Thibaut and Kelley (1959), “the location of CL on the person’s scale of outcomes will be influenced by all of the outcomes known to the member, either by direct experience or symbolically” (p. 21). Expectation might be influenced or guided by individuals’ past relationships, the history of individuals’ current relationship, individuals’ imaginary or ideal relationships, individuals’ observations of some current relational experience models of other people, such as friends, relatives or family members, and media representations of relationships (Dainton & Zelle, 2011; Guerrero, Andersen, & Afifi, 2011).

As social exchange theory suggests, individuals compare the relational outcome with comparison level. When the relational outcome meets or excels their CL, individuals tend to regard their relationship as “satisfying” and “attractive”. By contrast, when relational outcome does not reach their CL, then individuals tend to consider their relationship as “unsatisfying” and “unattractive”. Thus, it could explain the situation where individuals feel satisfied with their current relationships even if they perceive more costs than rewards in their relationships—if the contrast between costs and rewards in current relationship is much lower than the one in past relationship, individuals in this case still feel satisfied since their relational outcome value exceeds their CL. Based on the rationale of comparison level, the study proposed the following research question and hypothesis.

RQ3: What particular uses of maintenance behaviors meet, exceed, or fall below American and Chinese participants’ expectation respectively?

Relational Satisfaction

As partners’ use of maintenance behaviors is rewarding to individuals (Dainton, 2000),

reported partners' use of maintenance behaviors could be linked to individuals' satisfaction with his or her relationships. Thus, we could similarly put the situation in a mathematical way: satisfaction = the outcome - the comparison level (Guerrero, Andersen, & Afifi, 2011). Following this assumption, to examine if the relational outcome meets the expectation, it is important to know if the reported partners' use of maintenance behaviors meets the expectation, so that we could know if individuals are satisfied with his or her relationships. Therefore, the next objective of current study is to examine the association between reported partners' use of relational maintenance behaviors in long-distance dating relationships and individuals' satisfaction with the relationships. Although relevant research has suggested that particular maintenance behaviors are associated with the relational characteristics, such as commitment, control mutuality, liking, and satisfaction (Canary & Stafford, 1992; Dainton, Stafford, & Canary, 1994; Stafford & Canary, 1991; Stafford, Dainton, & Haas, 2000), this study only focuses on satisfaction in terms of the social exchange theory.

As a robust predictor for maintaining or terminating certain relationships, satisfaction has widely obtained attention in much of previous research that associates maintenance behaviors with relational satisfaction. Bell, Daly, and Gonzalez (1987) found that perceived husbands' use of maintenance behaviors, such as sensitivity, spirituality, physical affection, self-inclusion, and honesty, accounted for wives' marital satisfaction. Stafford and Canary (1991) found that positivity, assurances, and sharing tasks are comparatively three strong predictors of relational satisfaction in romantic relationships. Dainton, Stafford, and Canary (1994) discovered that assurances and positivity, as two maintenance behaviors, were strongly associated with both husbands and wives' satisfaction. Stafford, Dainton, and Hass (2000) claimed that among married couples, the use of assurances was found as the strongest predictor of relational

satisfaction.

Although previous studies have examined the association between the use of maintenance behaviors and individuals' satisfaction with the relationships, it is worth noting that much of the studies have not related maintenance behaviors to individuals' expectation of those behaviors, namely, comparison level. According to social exchange theory, individuals' satisfaction is not solely influenced by the discrepancies between rewards and costs, but by the contrast between the relational outcomes and the comparison level (Thibaut & Kelley, 1959). To put it simple, individuals' satisfaction is not determined by the disparities between maintenance behaviors conducted by themselves and their partners, but by the contrast between current relationship and their expectation. The concept of comparison level, up to now, has not been directly applied to research on relational maintenance (Dainton, 2000), with two exceptions. One of them, conducted by Ragsdale (1996), compared relational outcomes with one's expectations for those outcomes as comparison level, and found no link between satisfaction and maintenance use. Another one, conducted by Dainton (2000), tested the correlation between the fulfillments of expectation for the use of relational maintenance behaviors by one's partner and one's own relational satisfaction, and supported the correlation. Following Dainton's (2000) rationale, this study proposes the following research question:

RQ4: What is the correlation between the fulfillment of comparison level for partners' use of maintenance behaviors and individuals' own satisfaction in long-distance dating relationships?

CHAPTER 3

METHODOLOGY

Participants

Data were collected through online surveys. A total of 109 participants completed the online survey. After subtracting ineligible subjects and incomplete questionnaires, 102 complete questionnaires remained.

Sampling Procedure

The research used snowball sampling to recruit potential participants. All of the participants should meet the following three requirements: 1) at least 19 years old, 2) currently enrolled in a university in the United States, and 3) currently involved in a long-distance dating relationship. For American participants, the researcher started by asking undergraduate students who are from a large southern university in the United States to participate in the research. For Chinese participants, the researcher used personal contacts to recruit participants who meet the criteria as the same as the American participants. Recruitment flyers were distributed to qualified participants via emails. Both flyers and survey questions were written in English. Notably, the researcher adapted Dellmann-Jenkins et al.'s (1994) approach in order to assist participants with defining whether they were involved in long-distance dating relationships.

Measures

This study examined several variables in the process of maintaining long-distance dating relationships. Unless otherwise indicated, all variables were assessed on a 7-point Likert scale. All variables were derived from theory and from past empirical work.

Cultural Dimensions

In order to assess the tendency of particular types of individualism and collectivism reported by American and Chinese students, this study adapted Triandis and Gelfand's (1998) load scale that they modified from Singelis, Triandis, Bhawuk, and Gelfand's (1995) four dimensions of collectivism and individualism. Singelis et al. (1995) identified four types of cultural dimensions, including Horizontal Individualism (HI), Vertical Individualism (VI), Horizontal Collectivism (HC), and Vertical Collectivism (VC). They had Cronbach's α for HI = .67, VI = .74, HC = .74, and VC = .67. For example, participants were asked to report "I would rather depend on myself than others" (HI), "Winning is everything" (VI), "If a coworker gets a prize, I would feel proud" (HC), and "Parents and children must stay together as much as possible" (VC). The responses ranged from never or definitely no (1) to always or definitely yes (7). The HI items had α = .78, the VI items had α = .80, the HC items had α = .71, and the VC items had α = .78.

Relational Maintenance Behaviors

To investigate the frequency of using maintenance behaviors, this study adapted Stafford and Canary's (1991) scale on maintenance strategies. Their original 24-item scale had Cronbach's α for positivity = .89 (10 items), openness = .84 (6 items), assurances = .84 (4 items), tasks = .71 (2 items), and network = .76 (2 items). For example, some items are: "Attempts to make our interactions very enjoyable" (positivity), "Seeks to discuss the quality of our relationship" (openness), "Show his/her love for me" (assurances), "Likes to spend time with our same friends" (network), and "Helps equally with tasks that need to be done" (tasks). The responses ranged from least frequently used (1) to most frequently used (7). In the survey, participants were firstly asked to report the frequency of their use of the maintenance behaviors.

The positivity items had $\alpha = .85$, the openness items had $\alpha = .87$, the assurances items had $\alpha = .73$, the network items had $\alpha = .89$, and the tasks items had $\alpha = .83$. Next, participants were asked to report the frequency of their partners' use of maintenance behaviors. The positivity items had $\alpha = .90$, the openness items had $\alpha = .85$, the assurances items had $\alpha = .72$, the network items had $\alpha = .92$, and the tasks items had $\alpha = .89$.

Comparison Level

In order to measure the discrepancies between current relationship and comparison level (expected relationship), this study adapted Sabatelli's (1984) approach on assessing marital comparison level. Using the same items from the scale of relational maintenance behaviors, participants were asked to report the extent to which their current relationship meets their expectation level. Their responses ranged from very much below expectation (1) to very much above expectation (7). The α for the comparison level of the five factors were as follows: positivity = .89, openness = .86, assurances = .77, network = .92, and tasks = .89.

Relational Satisfaction

In order to examine individuals' satisfaction with their long-distance dating relationships, this study adapted Norton's (1983) Quality Marital Index (QMI), which was originally designed to measure married relationships. Norton (1983) did not report reliability for the items. Participants were asked to report their agreement with statements, such as "my relationship with my partner is very stable". Their responses ranged from strongly disagree (1) to strongly agree (7). The five items created a scale with $\alpha = .95$. The American sample had $\alpha = .93$, and the Chinese sample had $\alpha = .95$.

CHAPTER 4

RESULTS

Descriptive Statistics

The sample consisted of 102 participants, 44% American participants (N= 45) and 56% Chinese participants (N= 57). The average age of the American participants was 22.6, with a range from 19 to 58 (SD= 6.1). The average age of the Chinese participants was 23.9, with a range from 20 to 35 (SD= 2.0). In terms of gender, there were 15 (33.3%) males and 30 (66.7%) females in the American sample, and 20 (35.1%) males and 37 (64.9%) females in the Chinese sample. In terms of race, most of the American participants were White (N= 42, 93.3%), 2 (4.4%) were Hispanic or Latino, 1 (2.2%) was African American, 1 (2.2%) was Asian, and 1 (2.2%) reported as “other”. All of the Chinese participants identified themselves as Asian. In terms of the year in college, there were 6 (13.3%) Freshmen, 10 (22.2%) Sophomore, 10 (22.2%) Junior, 2 (4.4%) Senior, and 17 (37.8%) Graduate students in the American sample, and 1 (1.8%) Freshman, 1 (1.8%) Sophomore, 1 (1.8%) Junior, 7 (12.3%) Senior, and 47 (82.5%) Graduate students in the Chinese sample. Regarding the length of the long-distance dating relationship, among the American participants, 6 (13.3%) were dating less than 6 months, 13 (28.9%) were dating more than 6 months and less than 1 year, 13 (28.9%) were dating more than 1 year and less than 2 years, 6 (13.3%) were dating more than 2 years and less than 3 years, 1 (2.2%) were dating more than 3 years and less than 4 years, and 6 (13.3%) were dating more than 4 years; while 7 (12.3%) Chinese participants were dating less than 6 months, 16 (28.1%) were dating more than 6 months and less than 1 year, 13 (22.8%) were dating more than 1 year and less than

2 years, 5 (8.8%) were dating more than 2 years and less than 3 years, 5 (8.8%) were dating more than 3 years and less than 4 years, and 11 (19.3%) were dating more than 4 years. Table 1 presents the descriptive statistics for the American participants (N= 45). Table 2 presents the descriptive statistics for the Chinese participants (N= 57).

Table 1

Descriptive statistics of the American participants (N= 45)

Variable	Category	Number	Percentage
Gender	Female	30	66.7%
	Male	15	33.3%
Race	White	42	93.3%
	Hispanic or Latino	2	4.4%
	African American	1	2.2%
	Asian	1	2.2%
	Other	1	2.2%
College year	Freshmen	6	13.3%
	Sophomore	10	22.2%
	Junior	10	22.2%
	Senior	2	4.4%
	Graduate students	17	37.8%
Length of dating	Less than 6 months	6	13.3%
	From 6 months to 1 year	13	28.9%
	From 1 year to 2 years	13	28.9%
	From 2 years to 3 years	6	13.3%
	From 3 years to 4 years	1	2.2%
	More than 4 years	6	13.3%

Table 2

Descriptive statistics of the Chinese participants (N= 57)

Variable	Category	Number	Percentage
Gender	Female	37	64.9%
	Male	20	35.1%
Race	Asian	57	100%
College year	Freshmen	1	1.8%
	Sophomore	1	1.8%
	Junior	1	1.8%
	Senior	7	12.3%
	Graduate students	47	82.5%
Length of dating	Less than 6 months	7	12.3%
	From 6 months to 1 year	16	28.1%
	From 1 year to 2 years	13	22.8%
	From 2 years to 3 years	5	8.8%
	From 3 years to 4 years	5	8.8%
	More than 4 years	11	19.3%

Data Analysis

RQ1 investigates the particular types of individualism and collectivism. Results showed that American participants tend to have higher scores on Horizontal Individualism (HI; M= 5.44, SD= 1.15), and their Chinese counterparts also report higher scores on HI (M= 5.46, SD= 1.04). Both samples have the same rank order of the four cultural dimensions: HI>HC>VC>VI. Table 3 shows the means and standard deviations of the preferences of HI, HC, VC, and VI.

To test Hypothesis 1, multiple independent-samples t-tests were conducted using Bonferroni adjusted p-value levels of .0125 per test (.05/4), in order to compare the scores of HI, VI, HC, and VC for American and Chinese participants. There was no significant difference in

scores of HI ($t(100) = -.06, p = .95$), VI ($t(100) = -.57, p = .57$), HC ($t(100) = -.22, p = .82$), or VC ($t(100) = -1.44, p = .15$). Therefore, Hypothesis 1 was not supported.

Table 3

Means and standard deviations of the preferences of individualism/collectivism types

	HI	VI	HC	VC
American	5.44 (1.15)	4.17 (1.52)	5.17 (1.23)	4.84 (1.14)
Chinese	5.46 (1.04)	4.31 (1.50)	5.21 (1.07)	5.13 (1.24)
Total	5.45 (1.08)	4.25 (1.51)	5.19 (1.12)	5.00 (1.16)

RQ2a aims to uncover the maintenance behaviors that are most frequently used by people who are currently in long-distance dating relationships. The result showed that American participants reported assurances ($M = 5.99, SD = 1.18$) and tasks ($M = 5.99, SD = 1.01$) as the two most frequently used behaviors, which were followed by positivity ($M = 5.90, SD = 1.39$). Chinese participants reported positivity ($M = 5.50, SD = 1.21$) as the most frequently used behavior, which was followed by tasks ($M = 5.47, SD = 1.12$) and assurances ($M = 5.32, SD = 1.47$). The total sample showed that tasks ($M = 5.70, SD = 1.06$) was the most frequently used behavior, while positivity ($M = 5.67, SD = 1.29$) and assurances ($M = 5.62, SD = 1.32$) were also favorable. Table 4 presents the means and standard deviations of the frequency of individual's use of relational maintenance behaviors.

Table 4

Means and standard deviations of the frequency of using relational maintenance behaviors (individual's)

	Positivity	Openness	Assurances	Network	Tasks
American	5.90 (1.39)	5.65 (1.19)	5.99 (1.18)	5.18 (1.12)	5.99 (1.01)
Chinese	5.50 (1.21)	4.99 (1.30)	5.32 (1.47)	4.92 (1.07)	5.47 (1.12)
Total	5.67 (1.29)	5.29 (1.25)	5.62 (1.32)	5.04 (1.09)	5.70 (1.06)

To test Hypothesis 2a, multiple independent-samples t-tests were conducted using Bonferroni adjusted p-value levels of .01 per test (.05/5), in order to compare the scores of maintenance behaviors (positivity, openness, assurances, network, and tasks) for American and Chinese participants. There was significant difference in scores of positivity ($t(100) = 2.76$, $p < .01$) and openness ($t(100) = 2.94$, $p < .01$). Meanwhile, there was no significant difference in scores of assurances ($t(100) = 1.56$, $p = .12$), tasks ($t(100) = 2.38$, $p = .02$), and network ($t(100) = 1.95$, $p = .05$). Therefore, Hypothesis 2a was partly supported.

RQ2b aims to reveal the maintenance behaviors that are most frequently used by partners according to American and Chinese participants. Results indicated that American participants reported assurances ($M = 6.05$, $SD = 1.11$) as the most frequently used behavior, which was followed by positivity ($M = 5.69$, $SD = 1.16$) and tasks ($M = 5.59$, $SD = 1.04$). Chinese participants reported assurances ($M = 5.41$, $SD = 1.26$) as the most frequently used behavior, which was followed by positivity ($M = 5.35$, $SD = 1.13$) and tasks ($M = 5.18$, $SD = 1.09$). The total sample indicated that assurances ($M = 5.69$, $SD = 1.18$) was the most frequently used behavior, while positivity ($M = 5.50$, $SD = 1.14$) and tasks ($M = 5.36$, $SD = 1.07$) were also favorable. Table 5 provides the means and standard deviations of the frequency of partner's use of relational maintenance behaviors.

Table 5

Means and standard deviations of the frequency of using relational maintenance behaviors (partner's)

	Positivity	Openness	Assurances	Network	Tasks
American	5.69 (1.16)	5.20 (1.14)	6.05 (1.11)	5.21 (1.05)	5.59 (1.04)
Chinese	5.35 (1.13)	4.71 (1.27)	5.41 (1.26)	4.51 (1.08)	5.18 (1.09)
Total	5.50 (1.14)	4.93 (1.18)	5.69 (1.18)	4.82 (1.07)	5.36 (1.07)

To test Hypothesis 2b, multiple independent-samples t-tests were conducted using Bonferroni adjusted p-value levels of .01 per test (.05/5), in order to compare the scores of maintenance behaviors (positivity, openness, assurances, network, and tasks) regarding partners of American and Chinese participants. There was no significant difference in scores of assurances ($t(99.72) = 2.73, p = .01$), positivity ($t(100) = 1.90, p = .06$), openness ($t(100) = 2.31, p = .02$), network ($t(100) = 2.26, p = .03$), and tasks ($t(100) = 1.58, p = .15$). Therefore, Hypothesis 2b was not supported.

RQ3 asks if the use of particular maintenance behaviors meet, exceed, or fall below participants' expectations. For American participants, results found that their partners' use of assurances mostly met their expectations ($M = 5.87, SD = 1.08$), which was followed by tasks ($M = 5.62, SD = 1.01$) and positivity ($M = 5.40, SD = 1.15$). Chinese participants also reported that their partners' use of assurances mostly met their expectations ($M = 5.17, SD = 1.21$), which was followed by positivity ($M = 5.13, SD = 1.16$) and tasks ($M = 5.11, SD = 1.05$). The total sample indicated that partners' use of assurances mostly met both American and Chinese participants' expectations ($M = 5.48, SD = 1.13$).

Notably, in terms of partners' use of maintenance behaviors, American participants' answer indicated that the five types of maintenance behaviors all exceeded their expectations (i.e., means are all above 5.00). For Chinese participants, however, two types of maintenance behaviors were lower than 5.00: openness ($M = 4.73, SD = 1.15$) and network ($M = 4.51, SD = 1.04$). Table 6 exhibits the means and standard deviations of the comparison level.

Table 6

Means and standard deviations of the comparison level

	Positivity	Openness	Assurances	Network	Tasks	Total
American	5.40 (1.15)	5.27 (1.14)	5.87 (1.08)	5.01 (1.03)	5.62 (1.01)	5.43 (1.23)
Chinese	5.13 (1.16)	4.73 (1.15)	5.17 (1.21)	4.51 (1.04)	5.11 (1.05)	4.97 (1.24)
Total	5.24 (1.15)	4.96 (1.14)	5.48 (1.13)	4.73 (1.04)	5.34 (1.03)	5.17 (1.22)

RQ4 was designed to examine the correlation between people's satisfaction with the relationship and the fulfillments of comparison level (CL) for partners' use of maintenance behaviors. In the American sample, two-tailed Pearson correlations were conducted using Bonferroni adjusted p-value levels of .01 per test (.05/5). The results indicated that satisfaction was positively associated with the fulfillments of CL for positivity ($r = .47, p < .01$), assurances ($r = .42, p < .01$), and tasks ($r = .52, p < .001$). However, satisfaction was not significantly associated with the fulfillments of CL for network ($r = .27, p = .07$) and openness ($r = .30, p = .05$). Table 7 presents the bivariate correlation matrix of the American sample.

Table 7

Correlations between the fulfillment of comparison level for partners' use of maintenance behaviors and relational satisfaction (American sample)

	Positivity	Openness	Assurances	Network	Tasks	Total
Positivity						
Openness	.56**					
Assurances	.55**	.68**				
Network	.53**	.21	.31			
Tasks	.69**	.56**	.57**	.60**		
Total	.90**	.80**	.78**	.59**	.82**	
Satisfaction	.47*	.30	.42*	.27	.52**	.50*

Note. $p < .01^*$, $p < .001^{**}$

In the Chinese sample, two-tailed Pearson correlations were conducted using Bonferroni adjusted p-value levels of .01 per test (.05/5). The results showed that satisfaction was positively correlated with the fulfillment of CL for tasks ($r = .42, p < .01$), but negatively correlated with the fulfillment of CL for openness ($r = -.08, p = .58$). Besides, satisfaction was not significantly associated with the fulfillments of CL for assurances ($r = .14, p = .31$), positivity ($r = .34, p = .01$), and network ($r = .23, p = .09$). Table 8 presents the bivariate correlation matrix of the Chinese sample.

Table 8

Correlations between the fulfillment of comparison level for partners' use of maintenance behaviors and relational satisfaction (Chinese sample)

	Positivity	Openness	Assurances	Network	Tasks	Total
Positivity						
Openness	.57**					
Assurances	.58**	.48**				
Network	.34	.34*	.47**			
Tasks	.50**	.33	.53**	.47**		
Total	.90**	.76**	.77**	.58**	.65**	
Satisfaction	.34	-.08	.14	.23	.42*	.27

Note. $p < .01^*$, $p < .001^{**}$

CHAPTER 5

DISCUSSION

Discussion of RQ1

Using social exchange theory, the purpose of this research was to examine how different cultural dimensions influence the uses of maintenance behaviors in long-distance dating relationships. Surprisingly, both American and Chinese participants favored Horizontal Individualism (HI) the most, which was inconsistent with the findings of previous studies (e.g., Kappor, Kony, Blue, & Baldwin, 2000; Triandis, Chen, & Chan, 1998) where researchers highlighted that American favored HI while Chinese favored Horizontal Collectivism (HC). It challenged the take-for-granted assumption that American participants are categorized as individualistic people while Asian participants (e.g. Chinese, Korean) are categorized as collectivistic people in recent studies (e.g., Jin & Oh, 2010; Ting-Toomey & Chung, 2011). The finding of the current study might be limited by the sample size which received further explanation in the following paragraph, but it raises the awareness of the changing scenario of cultural dimensions in different contexts.

In this study, the Chinese participants might not well represent Chinese students in general. They are currently enrolled in universities of the U.S., so their personal experiences might be different from their peers in China, who shared a collectivistic orientation and Confucian tradition (Yum, 1988). On one hand, the physical journey from the native country to a foreign country always accompanies a psychological journey of cross-cultural adaptation which is able to change students' way of behaving, thinking and feeling (Chirkova, Vansteenkiste, Tao,

& Lynch, 2007; Yang, Noels, & Saumure, 2006). While studying abroad, Chinese students have to contend with novel social and educational organizations and expectations, experience unexpected cultural shock, and deal with the problems of adjustment common to students (Zhou, Jindal-Snape, Topping, & Todman, 2008). On the other hand, they have the courage and confidence to study and live in a completely new environment. The personalities and personal values for those who desire to study in the U.S. might be different from their peers in China even before they study abroad. Therefore, Chinese students studying in the U.S. might be comparatively more independent and individualistic than their peers in China, which could partly explain why the Chinese participants in this study had higher scores on HI rather than on HC.

Although both American and Chinese participants in this study tend to identify Horizontal Individualism as their cultural values, this research still can compare the two groups' differences and similarities in the use of maintenance behaviors.

Discussion of RQ2a and H2a

When participants were asked to report the frequency of their use of maintenance behaviors, American participants considered assurances as the most frequently used one. They are likely to stress commitment to their partners, show love and faithfulness, and imply that the relationship has a future. Meanwhile, Chinese participants reported positivity as the most frequently used one. They attempt to make the interactions enjoyable and act cheerfully and optimistically. In terms of the difference between American and Chinese participants, they were significantly different in the use of positivity and openness (H2a). Miike's (2007) comparison between Eurocentric and Asiancentric values might explain the differences. Eurocentric culture underscores reason and rationality in communication. Speaking in public with logic and credibility is more cherished than speaking with emotional appeals in western traditions (Garrett, 1993). In view of this

tradition, Americans are more likely to express affirmative statement in their relationships. By contrast, Asian tradition emphasizes favor and face work. Asian people tend to establish interpersonal relationship based on emotional sensitivity and sensibility, rather than rational and reasonable analysis (Tu, 2001). Given this value, Chinese people are more likely to achieve harmony and avoid conflicts.

Discussion of RQ2b and H2b

Significant difference was not found in the use of each maintenance behavior (H2b). In terms of RQ2, when participants were asked to report the frequency of their partners' use of maintenance behaviors, results indicated that both American and Chinese participants considered assurances as the most frequently used approach to maintain their relationships. This finding echoes with several pervious studies. For example, Stafford and Canary (1991) found married, engaged, and seriously dating couples perceived assurances as the most salient relational maintenance behaviors used by their partners. Weigel and Ballard-Reisch (2008) also found that "assurances" is the most frequently used maintenance behavior in married relationships. Obviously, romantic relationships seem to attach importance to the use of assurances, while long-distance dating relationship has its own uniqueness. Previous studies suggested that uncertainty was more likely to occur in long-distance relationships, as physical distance primarily lead to relational uncertainty (Emmers & Canary, 1996; Knobloch & Solomon, 1999). Therefore, it can be implied that long-distance dating couples need more assurances to release uncertainty and strengthen their relationships.

Discussion of RQ3

Both American and Chinese participants reported that their partners' use of assurances mostly met their expectations. However, this study also detected differences between the two

groups. American participants reported that their partners' use of maintenance behaviors all exceeded their expectations (the means of the five types of maintenance behaviors were all above 5.00), while two types of maintenance behaviors (openness and network) were lower than the expectations of Chinese participants on their partners. In terms of openness, Chinese participants might feel their partners encourage themselves less to disclose their thoughts and feelings than their American counterparts; when it comes to network, Chinese participants might find their partners spend less time with their mutual friends compared with their American counterparts.

Direct versus indirect communication styles partly account for Chinese participants' lower score on openness. For direct communication, people tend to apply explicit message to express behavioral intentions, needs, and desires. People using indirect communication often speak in an ambiguous or vague way (Gudykunst, Ting-Toomey, & Chua, 1988). Asian communication patterns differ from those of U.S. because of the Asian emphasis on social relationships (collectivism) as opposed to the U.S. emphasis on individualism (Yum, 1988). In a sense, Chinese participants might choose indirect communication style instead of direct communication style due to different cultural individualism-collectivism, self-construal, and values (Gudykunst, Matsumoto, Ting-Toomey, Nishida, Kim, & Heyman, 1996).

Regarding Chinese participants' lower score on network, the reason remains largely unexplored on the basis of current research. However, this research proposed explanations for it. Gareis (2012) found that international students whose home region is China were lack of intercultural friendships in the United States. This finding is in line with one of the uppermost complaints of international students: being lack of close contact with host nationals (Bochner, McLeod, & Lin, 1977; Furnham & Alibhai, 1985; Kudo & Simkin, 2003; Ward & Masgoret, 2004). Chinese participants therefore might spend less time with the mutual friends along with

their partners since they do not develop enough friendships in U.S., and vice versa. Despite our knowledge of what helps or hinders intercultural friendship formation is still relatively limited, Andrade (2006) found that Chinese students spent more time on surviving from adjustment challenges, such as enhancing language proficiency, developing study habits, and obtaining cultural knowledge. Consequently, Chinese participants might be less involved in sociality and networking which was reflected in this study.

Discussion of RQ4

Much of previous research has examined the association between relational satisfaction and relational maintenance behaviors (e.g. Bell, Daly, & Gonzalez, 1987; Dainton, Stafford, & Canary, 1994; Stafford, Dainton, & Hass, 2000). In this research, satisfaction was positively associated with the fulfillments of CL for assurances, positivity, and tasks in the American sample. For the Chinese sample, satisfaction was positively correlated with the fulfillment of CL for tasks, but negatively correlated with openness. Three salient findings were discussed.

First, the fulfillment of CL for network was not significantly correlated with satisfaction in both samples. It is reasonable to conclude that the physical separation between individuals in long-distance dating relationship, to some extent, keeps them from interacting with their common friends or affiliations. Due to the geographical separation, long-distance dating partners have quite limited face-to-face contacts with one other (Stafford, 2005). In addition, it should be noted that Stafford and Canary's (1991) scale on relational maintenance behaviors was firstly developed from married, engaged, seriously dating, and dating couples. Thus, the unique characteristics of long-distance relationships might not be completely reflected in this scale.

Second, the fulfillment of CL for openness was negatively correlated with satisfaction in Chinese sample. In other words, for Chinese participants, the more one's expectation on his/her

partner's use of openness was met, the smaller one's satisfaction with the relationships. Regardless of the direct/indirect communication styles mentioned above, the direct/indirect approach also accounts for this finding. Direct approach uses precise language, while indirect approach uses imprecise language (Martin & Nakayama, 2012). In Asian traditions, maintaining harmony and morality are highly valued, which has been penetrated in relational communication (Miike, 2007). People who originally come from Asian cultures consider conflicts as destructive to relationships (Martin & Nakayama, 2012). Thus, Chinese participants often tend to choose a more indirect way of tackling with conflicts. If Chinese participants act openly by using direct language and straightforward behaviors, their Chinese partners might feel offended or shocked, which was apparently not beneficial to maintain the relationship or achieve relational satisfaction. This finding incorporated Asian sample into the empirical research, offering a contribution to Stafford and Canary's scale on relationship maintenance strategies that were primarily tested in western contexts.

Third, the findings did not fully support the correlation between the fulfillment of comparison level and individuals' satisfaction with their relationships, as what social exchange theory suggested. According to social exchange theory (Thibaut & Kelley, 1959), when the current relationship meets or excels the comparison level, individuals feel satisfied with the relationships. To the contrary, when the current relationship does not reach the comparison level, then individuals consider their relationship as unsatisfied. The findings of this study, however, challenge this argument. Most American and Chinese participants in this study were satisfied with their current relationships, but not all maintenance behaviors are significantly and positively correlated with satisfaction.

Limitations and Directions for Future Research

Although the findings of this study shed lights on long-distance dating relationships in terms of cultural dimensions, relationship maintaining strategies, and social exchange, some limitations of this study should not be overlooked, which further suggested directions for future research.

To begin with, the snowball sampling technique limited the generalizability of this study. In the survey, participants could have access to the online survey via a hyperlink sent to them by email or social networking sites. Then, they were asked to recruit other qualified individuals to participate in this study. The initial participants tend to ask people that they know very well to complete the survey, such as friends, schoolmates, and relatives. Thus, the initial and subsequent participants are very likely to share similar values, personalities, and experience. As such, the final sample might only be a small portion of the targeted population. In terms of gender, the total number of female participants was almost twice of the total number of male participants. Previous studies found that females and males differed in the use of maintenance behaviors (Stafford & Canary, 1991; Stafford, Dainton, & Hass, 2000). Such imbalance might influence the reliability of the findings. In terms of participants' college year, the number of graduate students far exceeded the number of undergraduate students, especially in the Chinese sample. Different results might be generated if more graduates students participated in this study since graduate and undergraduate students might have different perception of dating relationship due to differences in age, values, commitment, and future plans. Future research should apply a more randomized method that maximizes the representativeness and reduces the generalizability of the recruited participants.

Second, in terms of the Chinese sample, the survey did not specify how long they have

been staying in the United States. The time they have spent in the U.S. might affect their adjustment, values, and satisfactions. In the process of cultural adjustment (acculturation and assimilation), they might be westernized in the host region and simultaneously maintain traditional values gained from the home region (Kagan & Cohen, 1990). The proportion of the newly adjusted behavioral, cognitive, affective and demographic attributes and the maintained traditional ones are potentially influenced by the time they spent in the United States. For some people, they might absorb more new cultures and maintain less traditional ones. For others, the cases are the other way around, or they develop mixed cultural values. Although people have deeply rooted cultural values, they still have the possibility to change their minds and assimilate something new. Cultural values are not static; instead, they are dynamic.

Despite this study examined how long the participants have been involved in long-distance dating relationship, it did not specifically investigate how long the participants and their partners had been dating geographically close before they were separated at long distance. Moreover, the study did not delve into the scenario that they had plans to reunite after a period of separation, or that they had face-to-face contact with one other periodically. This issue might influence the reported use of maintenance behaviors. For example, individuals in long-distance relationships with and without face-to-face contact reported differently in their use of maintenance behaviors (Dainton & Aylor, 2002). In addition, partners in long-distance dating relationships were more likely to terminate their relationship when they became proximally close, and the stability on reunion after long-distance separation was positively associated with frequent face-to-face contact during separation (Stafford & Merolla, 2007). Future research should continue to look at long-distance dating relationships in details to detect other factors that influence the use of maintenance behaviors as well as other relational characteristics.

Furthermore, two aspects regarding the measurement scales used in this study should be further discussed: applicability and interpretation. The measurement scales applied in this study were all developed and tested empirically in western contexts in general and in the U.S. in specific. It is reasonable to question the applicability of the scales when it was applied in non-western contexts. For instance, the original scales might not completely reflect and represent non-westerners' perceptions in general and Chinese in this study. Moreover, due to language proficiency and cultural differences, Chinese participants might have limited understanding on the English-version statements when they were completing the online survey. It is possible that they might choose the answers based on their misinterpretations.

Additionally, maintaining long-distance relationships in recent years might be different from decades ago due to the rapidly changing scope of technology and Internet. It seems easier to maintain long-distance relationships than ever as people could connect higher-speed Internet and access smarter mobile devices easily (Merolla, 2012). Previous research found that mediated communication played a role in relational maintenance (e.g. Gunn & Gunn, 2000; Stafford, Kline, & Dimmick, 1999). Apart from face-to-face communication, Dainton and Aylor (2002) found that individuals in long-distance romantic relationships used Internet, telephone, letters and cards to maintain their relationships. Several recent studies specifically examined how e-mail (Johnson et al., 2008) and Facebook (Stewart, Dainton, & Goodboy, 2014) were utilized in maintaining romantic relationships. Thus, future research should reconsider and retest the relational maintenance strategies that were probably out of date, and decide if any updates should be added to the measurement scales especially when emerging information and communication technology is being ritually integrated into daily life.

Finally, in regard to the theoretical framework, this study only applied the comparison

level in long-distance dating relationships. It focused on individuals' relational satisfaction. Participants evaluated their relationships based on rewards and costs. However, long-distance dating relationships need to be further explored by investigating other relevant variables. For example, future research could apply another perspective of social exchange theory—comparison level of alternatives—to examine individuals' commitment in long-distance dating relationships.

Conclusion

As can be seen from the findings, cultural differences influence the use of maintenance behaviors in long-distance dating relationships. Specifically, American participants preferred assurances and tasks, while Chinese participants favored positivity in their personal use of maintenance behaviors. However, both American and Chinese participants reported assurances as their partners' most frequently used behaviors. Assurances also ranked on the top of the fulfillment of comparison level. These findings enrich the literature of long-distance dating relationship by exploring the differences as well as similarities among different cultural groups.

This study also found that all of the five maintenance behaviors met participants' expectation, and most of the participants felt satisfied with their current relationships. However, satisfaction was not positively correlated with the fulfillment of comparison level for all the five maintenance behaviors. These findings challenge the assumption of social exchange theory that the more one's expectation for partners' uses of maintenance behaviors are met, the greater one's satisfaction with their relationships. Therefore, we cannot reach hasty conclusion that higher fulfillment of comparison level predicts higher relational satisfaction.

Additionally, both American and Chinese participants scored higher on Horizontal Individualism, which is surprisingly inconsistent with previous findings. This inconsistency may

be partly due to the underrepresented sample. However, the study proposed that the assumptions of cultural dimensions are generalization based on cultural level. It encourages future research to continuously focus on cultural values as opposed to merely assume that one specific cultural value is consistently embedded in specific cultural groups.

To conclude, the comparison between the American and Chinese participants provides reference for long-distance dating individuals who share the same cultural values, and individuals who hold different cultural traditions. Counter to what social exchange theory suggested, partners' fulfillment of certain relational maintenance behaviors might not contribute to relational satisfaction. In view of this, individuals who are involved in long-distance dating relationships should be aware of the limitation of the maintenance strategies. Future research should continue to examine this type of relationship by examining other related variables to provide a more complete picture.

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APPENDIX A
INSTITUTIONAL REVIEW BOARD CERTIFICATE

April 22, 2014

Office for Research
Institutional Review Board for the
Protection of Human Subjects

THE UNIVERSITY OF
ALABAMA
R E S E A R C H

Mengfei Guan
Department of Communication Studies
College of Communication & Information Sciences
The University of Alabama

Re: IRB # EX-14-CM-057 "Cultural Values and Social Exchange in
Long-Distance Dating Relationships"

Dear Ms. Guan:

The University of Alabama Institutional Review Board has granted
approval for your proposed research.

Your protocol has been given exempt approval according to 45 CFR part
46.101(b)(2) as outlined below:

(2) Research involving the use of educational tests (cognitive, diagnostic,
aptitude, achievement), survey procedures, interview procedures or
observation of public behavior, unless:
(i) information obtained is recorded in such a manner that human subjects
can be identified, directly or through identifiers linked to the subjects; and
(ii) any disclosure of the human subjects' responses outside the research
could reasonably place the subjects at risk of criminal or civil liability or
be damaging to the subjects' financial standing, employability, or
reputation.

Your application will expire on April 21, 2015. If your research will
continue beyond this date, complete the relevant portions of Continuing
Review and Closure Form. If you wish to modify the application,
complete the Modification of an Approved Protocol Form. When the
study closes, complete the appropriate portions of FORM: Continuing
Review and Closure.

Should you need to submit any further correspondence regarding this
proposal, please include the assigned IRB application number.

Good luck with your research.

Sincerely,



358 Rose Administration Building
Box 870127
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(205) 348-8461
FAX (205) 348-7189
TOLL FREE (877) 820-3066

Carpantato T. Myles, MSM, CIM, CIP
Director & Research Compliance Officer
Office for Research Compliance
The University of Alabama

Q0 Please read the online survey consent form below and click "I agree" before you start the survey.

ONLINE SURVEY CONSENT FORM
AAHRPP DOCUMENT #193
UNIVERSITY OF ALABAMA HUMAN RESEARCH PROTECTION PROGRAM
UNIVERSITY OF ALABAMA

Individual's Consent to be in a Research Study

You are being asked to participate in a research study. This study is being done by Mengfei Guan. She is a graduate student in the College of Communication and Information Sciences at the University of Alabama.

What is this study about?

This study examines how cultural dimensions affect the use of maintenance behaviors in long-distance dating relationships.

Why have I been asked to take part in this study?

You are 1) at least 19 years old, 2) currently enrolled in a university in the United States, and 3) currently involved in a long-distance dating relationship.

How many other people will be in this study?

Approximately 200 participants will be recruited in this study.

What will I be asked to do in this study?

If you agree to participate in this study, you will be asked to complete an online survey regarding long-distance dating relationship. You will be asked to answer a series of questions about your cultural values, your views about maintenance behaviors used in your relationship, and your satisfaction with your current relationship.

How much time will I spend being in this study?

You will spend approximately 15 minutes completing this study.

Will being in this study cost me anything?

There will be no cost to you other than your time.

Will I be compensated for being in this study?

You will not be compensated for being in this study.

UA IRB Approved Document
Approval date: 4-22-14
Expiration date: 4-21-15

What are the risks (problems or dangers) from being this study?

There are no foreseeable risks from participating in this study.

What are the benefits of being in this study?

This study will help us understanding long-distance dating relationships. The findings of this study can provide insights on how long-distance relationship can be maintained, which might be beneficial to you or your partner.

How will my privacy be protected?

All measures will be taken to protect the privacy of the participants. Since the survey is anonymous, participants will not be asked to provide their names when they respond to the survey. You are allowed to participate at your own convenience without informing the investigator. Participants give their answers privately with no one seeing your responses. You can also refuse to answer any question that infringes upon your own privacy. The investigator will protect participant privacy throughout this process. Only the investigator will have access to your information.

How will my confidentiality be protected?

Your response will remain confidential. In any written report or research papers, the identifying information of all the participants will not be disclosed. The data gathered from the survey will be destroyed at the study completion. Every participant who completes a survey at Qualtrics is automatically assigned an internal number called the Respondent ID Number. One important use of this feature is to provide participants with a unique number representing a record of their participation that is disconnected from their identity.

What are my rights as a participant?

Your participation in this study is completely voluntary and you can withdraw at any time. You are free to skip any question that you choose. The University of Alabama Institutional Review Board is a committee that looks out for the ethical treatment of people in research studies. They may review the study records if they wish. This is to be sure that people in research studies are being treated fairly and that the study is being carried out as planned.

Who do I call if I have questions or problems?

If you have questions about this study, please email the investigator Mengfei Guan at mguan@crimson.ua.edu. If you have questions or complaints about your rights as a research

UA IRB Approved Document
Approval date: 4-22-14
Expiration date: 4-21-15

participant, you can call Ms. Tanta Myles, the Research Compliance Officer of the University at 205-348-8461 or toll-free at 1-877-820-3066. You may also ask questions, make a suggestion, or file complaints and concerns through the IRB Outreach Website at http://osp.ua.edu/site/PRCO_Welcome.html. After you participate, you are encouraged to complete the survey for research participants that is online there, or you may ask the researcher for a copy of it. You may also e-mail us at participantoutreach@bama.ua.edu.

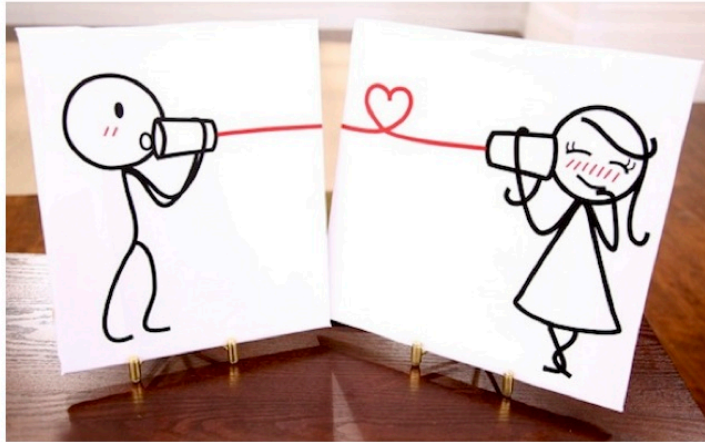
By clicking "I agree" below you are indicating that you are at least 19 years old, have read and understood this consent form and agree to participate in this research study. Please print a copy of this page for your records.

I agree

UA IRB Approved Document
Approval date: 4-22-14
Expiration date: 4-21-15

APPENDIX B
RECRUITMENT FLYER

Are you in a long-distance dating relationship?



If so, we want to invite you to participate in a survey!

- Volunteers must be:
 - 1) at least 19 years old;
 - 2) currently enrolled in a university in the United States;
 - 3) currently involved in a long-distance dating relationship.
- The survey will only take you at most 15 minutes.
- No identity information will be collected.
- No compensation will be provided in exchange for your participation.
- If you are willing to participate, just hit the website below:

https://universityofalabama.az1.qualtrics.com/SE/?SID=SV_9spuE1RAi8FWF1j

If you have any questions about this research, feel free to email Mengfei Guan at mguan@crimson.ua.edu. Thank you so much for your participation!

* The study and the survey have been approved by The University of Alabama Institutional Review Board (IRB)

APPENDIX C

ONLINE QUESTIONNAIRE FOR LONG DISTANCE DATING RELATIONSHIPS

Section 1: Demographic information

1. What is your gender?

(1) Female

(2) Male

2. What is your age? _____

3. Which is your current Class Year?

(1) Freshman

(2) Sophomore

(3) Junior

(4) Senior

(5) Graduate student

4. What is your nationality?

(1) U.S. citizen

(2) Non U.S. citizen

Answer If What is your nationality? U.S. citizen Is Selected

4.1 Are you of Hispanic or Latino origin?

(1) Yes

(2) No

Answer If What is your nationality? U.S. citizen Is Selected

4.2 Please identify your race.

- (1) White
- (2) African American
- (3) Asian
- (4) Other

Answer If What is your nationality? Non U.S. citizen Is Selected

4.3 Please identify your nationality (e.g. Chinese, Korean, Brazilian, German, French, etc.)

_____.

5. How long have you been involved in your current long-distance dating relationship?

- (1) Less than 6 months
- (2) More than 6 months and less than 1 year
- (3) More than 1 year and less than 2 years
- (4) More than 2 years and less than 3 years
- (5) More than 3 years and less than 4 years
- (6) More than 4 years

Section 2: Types of cultural dimensions

Note: 1 = never or absolutely no, and 7 = always or absolutely yes.

- 1. I'd rather depend on myself than others.
- 2. I rely on myself most of the time; I rarely rely on others.
- 3. I often do "my own thing."
- 4. My personal identity, independent of others, is very important to me.

5. It is important that I do my job better than others.
6. Winning is everything.
7. Competition is the law of nature.
8. When another person does better than I do, I get tense and aroused.
9. If a coworker gets a prize, I would feel proud.
10. The well-being of my coworkers is important to me.
11. To me, pleasure is spending time with others.
12. I feel good when I cooperate with others.
13. Parents and children must stay together as much as possible.
14. It is my duty to take care of my family, even when I have to sacrifice what I want.
15. Family members should stick together, no matter what sacrifices are required.
16. It is important to me that I respect the decisions made by my groups.

Section 3: Individual's maintenance behaviors

Note: 1 = least frequently used, and 7 = most frequently used

1. Attempt to make our interactions very enjoyable
2. Am co-operative in the way I handle disagreements between us
3. Try to build up my partner's self-esteem, including giving him/her compliments, etc.
4. Ask how his/her day has gone
5. Am very nice, courteous and polite when we talk
6. Act cheerful and positive when with my partner
7. Do not criticize him/her
8. Try to be romantic, fun and interesting with my partner

9. Am patient and forgiving of my partner
10. Present myself as cheerful and optimistic
11. Encourage my partner to disclose his/her thoughts and feelings to me
12. Simply tell my partner how I feel about our relationship
13. Seek to discuss the quality of our relationship
14. Disclose what I need or want from our relationship
15. Remind my partner about relationship decisions we made in the past (e.g. to maintain the same level of intimacy)
16. Like to have periodic talks about our relationship
17. Stress my commitment to my partner
18. Imply that our relationship has a future
19. Show my love for my partner
20. Show myself to be faithful to my partner
21. Like to spend time with our same friends
22. Focus on common friends and affiliations
23. Help equally with tasks that need to be done
24. Share in the joint responsibilities that face us

Section 4: Partner's maintenance behaviors and comparison level

Note:

Frequency: 1 = least frequently used, and 7 = most frequently used

Comparison level: 1 = very much below expectation, and 7 = very much above expectation

1. Attempts to make our interactions very enjoyable

Comparison level

2. Is co-operative in the way s/he handles disagreements between us

Comparison level

3. Tries to build up my self-esteem, including giving me compliments, etc.

Comparison level

4. Asks how my day has gone

Comparison level

5. Is very nice, courteous and polite when we talk

Comparison level

6. Acts cheerful and positive when with me

Comparison level

7. Does not criticize me

Comparison level

8. Tries to be romantic, fun and interesting with me

Comparison level

9. Is patient and forgiving of me

Comparison level

10. Presents him-/herself as cheerful and optimistic

Comparison level

11. Encourages me to disclose my thoughts and feelings to him/her

Comparison level

12. Simply tells me how s/he feels about our relationship

Comparison level

13. Seeks to discuss the quality of our relationship

Comparison level

14. Discloses what s/he needs or wants from our relationship

Comparison level

15. Reminds me about relationship decisions we made in the past (e.g. to maintain the same level of intimacy)

Comparison level

16. Likes to have periodic talks about our relationship

Comparison level

17. Stresses his/her commitment to me

Comparison level

18. Implies that our relationship has a future

Comparison level

19. Shows his/her love for me

Comparison level

20. Shows him-/herself to be faithful to me

Comparison level

21. Likes to spend time with our same friends

Comparison level

22. Focuses on common friends and affiliations

Comparison level

23. Helps equally with tasks that need to be done

Comparison level

24. Shares in the joint responsibilities that face us

Comparison level

Section 5: Relational satisfaction

Note: 1 = strongly disagree, and 7 = strongly agree

1. We have a good dating relationship.
2. My relationship with my partner is very stable.
3. Our relationship is strong.
4. My relationship with my partner makes me happy.
5. I really feel like part of a team with my partner.