

LONG DISTANCE VERSUS GEOGRAPHICALLY CLOSE ROMANTIC
RELATIONSHIPS: COMPARING SATISFACTION,
COSTS, AND BENEFITS

by

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A thesis submitted to the Graduate Council of
Texas State University in partial fulfillment
of the requirements for the degree of
Master of Arts
with a Major in Psychological Research
May 2020

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DEDICATION

To my family, new and old members, with all my love.

ACKNOWLEDGEMENTS

I wish to acknowledge my biggest thanks to Dr. John Davis, my mentor during this program, who's constant patience and guidance has helped me to grow as a researcher, student, and professional.

A huge thank you to my committee members, Dr. Azucena Mayberry and Dr. Randall Osborne, for always being there to answer my questions and give great ideas.

I would also like to thank Dr. Kelly Haskard-Zolnierrek for all of her guidance in the ins and outs of graduate school.

A sincere thank you to Professor Stephanie Loalada, Dr. Gary Coulton, and Dr. Myunghoon Roh, all of Texas A&M University – San Antonio, and Dr. Roger Biduaka of St. Philip's College, for helping inspire me to pursue graduate studies (and helping write great recommendation letters!).

Finally, I would like to thank my family, especially Kayla and Stas for giving me plenty of excuses to have fun even during finals.

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I. INTRODUCTION

Long Distance versus Geographically Close Romantic Relationships:

Comparing Satisfaction, Costs, and Benefits

Long-distance romantic relationships can be expensive and stressful, at times with little chance for physical contact. While it may not seem like the best way to maintain a relationship, some 40% of college aged students report being in long-distance romances (Anand et al., 2018). Long-distance romantic relationships can have costs and benefits just like geographically close romantic relationships do. However, some of the rewards of in-person relationships are missing (such as physical contact) with the added costs involved with being so far away (such as traveling expenses). This study will explore the differences and similarities between long-distance and geographically close romantic relationships, in the context of social exchange theory, as well as considering other explanations for why these relationships are so prevalent.

Social Exchange Theory

Why do some relationships last for a lifetime, while others quickly end? Social exchange theory in psychology attempts to answer this question based on the costs and benefits of those relationships (Collett, 2010). The theory states that as people interact, they receive both positive benefits and negative costs (Collett, 2010). This theory is related to relationship satisfaction, or the positive emotions that a person feels from a relationship (Collett, 2010). When people assess their satisfaction with a relationship, they tend to examine the benefits that they receive weighed against the costs that they incur from the relationship (Collett, 2010). People have expectations about how relationships are supposed to function, and thus have benefits and costs that they expect

from relationships (Osborn, 2012). If these expectations are not met, relationship satisfaction decreases and people start to look at alternatives to the current partner (Osborn, 2012). By comparing these factors to those perceived in other relationships, either between them and others or other dyads, they also determine whether or not their relationship is satisfactory and should be continued (Collett, 2010). Some benefits, such as feeling appreciated by another person, have been shown to help resolve conflicts and help relationships to last (Gordon et al., 2012). However, if they have attractive alternatives and if the costs of the relationship outweigh the benefits, the relationship will be ended (Osborn, 2012). Of course, the costs and benefits that people tend to consider differ based on person and relationship type (Hand & Furman, 2009).

There are many different types of relationships that can occur between people, and not all of them are created equal. Social exchange theory considers relationships in the context of the costs and benefits that come with said relationships, and such factors seem to differ based on the type of relationship between people (Hand & Furman, 2009). Hand and Furman (2009) considered the different costs and benefits of opposite and same-sex friendships, as well as romantic relationships, between adolescents. Naturally, for benefits they noticed that for romantic relationships there was a stronger tendency to view intimacy as a benefit of the relationship, as opposed to friendships (Hand & Furman, 2009). In addition, support and fellowship was seen as a benefit of romantic relationships compared to friendships (Hand & Furman, 2009). Interestingly, for opposite sex friendships physical attractiveness was a popular perceived benefit, compared to romantic relationships (Hand & Furman, 2009). As for costs, romantic relationships were viewed as more limiting of individualism and risking vulnerability when compared to

friendships (Hand & Furman, 2009). In addition to different perceptions of costs and benefits associated with various relationships, further research has also been done exploring costs and benefits of romantic relationships in varying types of people.

What is important in a relationship depends on who you are. Studies have looked at costs and benefits of a relationship in the context of attachment type, with securely attached people viewing intimacy and affection as a more important benefit than other attachments types, while avoidant individuals viewed fear of rejection as an important cost (Monteoliva, et al., 2016). Gender is another difference among people that has also been studied relating to perceived costs and benefits.

There have been observed differences in costs and benefits depending on the relationship type, but what about depending on gender of the person in a relationship? In a social exchange context, the perceived benefits and costs of a relationship have been observed to differ based on male versus female perceptions (Sedikides, Oliver, & Campbell, 1994). Sedikides et al. (1994) observed these differences between specific perceived costs and benefits in a romantic relationship, as well as their relative importance in three studies using heterosexual young adults currently in romantic relationships. For their first study, participants listed the five most important benefits and the five most serious costs of all romances they had been in (Sedikides et al., 1994). Based on these responses, new participants were then asked to rank order the costs and benefits based on importance, and also to rate the terms on a scale to describe importance (Sedikides et al., 1994). They found that while both sexes felt that companionship was the most important benefit of a romantic relationship, they observed that men tended to place more importance on sexual gratification as a benefit of such a relationship, while

women saw increases in self-esteem as a benefit (Sedikides et al., 1994). For men, common costs in a relationship included loss of freedom and money, while women felt that loss of identity was a common cost (Sedikides et al., 1994). When observing the relative importance of different costs and benefits, females rated loss of self-identity as a more important cost, while males rated monetary loss as more important (Sedikides et al., 1994).

This is not the only study to observe sex differences in costs and benefits of romantic relationships. In a study interviewing college students about past or present instances of cheating, Zandbergen and Brown (2015) observed that women also tended to view emotional cheating as more damaging to a relationship than men, and faced more negative emotions as a result. However, overall males tend to expect more costs to come with a relationship, while females expect more benefits (Osborn, 2012). Kwang, Crockett, Sanchez, and Swann (2013) also considered the effect of different relationship factors based on sex. They studied adults currently in a relationship, half of them married, and asked them questions pertaining to how much they based their self-esteem on their relationship (Kwang et al., 2013). Participants then rated how likely certain costs and benefits would influence their decision to stay in the relationship (Kwang et al., 2013). In this study men were observed to view increased social status and increased self-worth as more important compared to women, and these benefits were found to increase self-esteem for men more than women (Kwang et al., 2013). For women, companionship was more important (Kwang et al., 2013). The studies discussed above helped to illustrate that while men and women share many perceptions on what is important in a romantic

relationship, there are also some key differences (Sedikides et al., 1994; Zandbergen & Brown, 2015; Kwang et al., 2013).

Alternatives to Social Exchange Theory

An alternate theory explaining why people maintain relationships was proposed by Clark and Mills (1979), which detailed communal relationships. This theory divides relationships into exchange types as described above and communal types (Clark & Mills, 1979; Le et al., 2018). Communal relationships are less concerned with immediate costs and benefits and more concerned with the welfare of the partner and with the welfare of the relationship itself (Le et al., 2018). While benefits are gained from such communal relationships, such as knowing you are needed by your partner when you care for them (Le et al., 2018), but these are not the focus of the relationship as in social exchange theory. In contrast to social exchange theory, this reasoning provides an explanation for why people may continue to be in relationships that gives them little benefit and includes a fair amount of self-sacrifice.

Long-distance Versus Geographically Close Romantic Relationships

With the advent of social networking and increased internet use (Pew Research Center, 2018), people are finding new ways to form and maintain relationships. Long-distance relationships are those relationships in which people are living geographically far apart from each other, as opposed to geographically close, and who may only spend time together in person for a few days at a time (Roberts & Pistole, 2009). While long-distance relationships can include all forms of relationships, from family members to friendships and business relationships, this study focuses on long-distance romantic relationships between two people. This is a timely topic, as more than half of college

students report being in a long-distance romantic relationship as opposed to a geographically close relationship (Stafford, 2005; Anand et al., 2018). With the constantly expanding usage of social networking to maintain contact with people (Pew Research Center, 2018), it would be interesting to study just how these long-distance romances compare to more traditional, geographically close romances.

In terms of relationship qualities.

Apart from the obvious variation in distance, are these two relationship types really that different? Several studies have tried to perceive whether or not these two relationship types vary, using factors such as relationship satisfaction and intimacy (Van Horn et al., 1997; Roberts & Pistle, 2009). Roberts and Pistle (2009) compared long-distance and geographically close romantic relationships among college age students along several factors, including attachment style, avoidance and anxiety in relationship, how dependent they were on their partner, and relationship satisfaction. They observed that there were no significant differences in relationship satisfaction between long-distance and geographically-close couples (Roberts & Pistle, 2009).

However, findings about relationship satisfaction differences have been mixed. In an earlier study, that also focused on currently dating young adults, Van Horn et al. (1997) noticed that participants in long-distance romantic relationships reported less relationship satisfaction than their physically close counterparts. Van Horn et al. (1997) also compared these two relationship types on levels of intimacy and closeness. They observed that intimacy factors between the two relationship types did not differ, and neither group was more likely to end the relationship within the three-month follow-up period (Van Horn et al., 1997). However, one key difference between the two

relationship types was that people in long-distance romantic relationships tended to share intimate information more often than geographically close romantic relationships (Van Horn et al., 1997).

Finally, attachment type's effect on satisfaction in long-distance versus geographically close relationships has also been studied (Lee & Pistole, 2012). Lee and Pistole (2012) looked at the differences among level of attachment to partner, level of self-disclosure to partner, how much one idealized the relationship, and relationship satisfaction using college age students in both long-distance and close relationships. Their results indicated that for both relationship types, there was no difference in satisfaction (Lee & Pistole, 2012). However, insecure attachment was related to less satisfaction in both relationship types, but this attachment style affected romantic relationships in different ways: in geographically close relationships, insecure people who self-disclose more idealize their partner more often than those in long-distance relationships (Lee & Pistole, 2012).

While it has also been noted that the added stress of separation can decrease relationship satisfaction (Anand et al., 2018), findings have been decidedly mixed on whether there are any differences in satisfaction between long-distance and close relationships (Van Horn et al., 1997; Roberts & Pistole, 2009; Lee & Pistole, 2012). Older studies tend to find a difference in satisfaction (Van Horn et al., 1997) while more modern studies observed no significant difference (Roberts & Pistole, 2009; Lee & Pistole, 2012). One explanation for these conflicting findings could be explained by increased internet usage to maintain relationships over distances (Pew Research Center, 2018). As technology improves through increasing internet speeds, more options for

video calls, and readily available smart phones, it could simply be easier to have fulfilling romances in the digital world.

In terms of costs and benefits of a relationship.

In regards to considering long distance romantic relationships in a social-exchange context, are there any differences in what benefits and costs people derive from a distant relationship? There have been fewer studies that seek to answer this question compared to those that examine factors like relationship satisfaction, but some researchers have estimated that things such as uncertainty about the relationship and feelings of inequality and jealousy (Maguire & Kinney, 2010) could be stronger costs to a long-distance romance, compared to a close one.

Only a few studies have compared the costs and benefits of long-distance versus geographically close relationships. Anand et al. (2018) studied a sample of married adults in long distance relationships and took measures on marriage satisfaction, how they maintained their relationship, stress in the relationship, and frequency of sexual encounters. They hypothesized that people facing separation from their loved ones have added stressors, such as increased money spent to visit the partner, as well as specific costs including less social support from the partner and time lost as a result of planning certain times to communicate (Anand et al., 2018). In Maguire and Kinney's (2010) study of young adults in long-distance relationships, participants were first sorted into low and high distress groups, and asked to select from a list of stressors which one affected their relationship the most. They found that being apart was the most frequently chosen stressor among all participants in a long-distance relationship (Maguire & Kinney, 2010).

These studies have touched on the idea that there are difference stressors or costs present in long-distance relationships compared to geographically close one. However, to the author's knowledge no studies have tried to explore just which costs and benefits are more important to people based on their relationship type. In addition, based on the social exchange framework (Collett, 2010), it would appear that long-distance romances actually have more costs associated with them, such as time spent physically apart and increased costs of meeting in-person. But contrary to what the theory would predict, people actually pursue and stay in long-distance romances (Anand et al., 2018). One reason for this could be that for the individual person, a long-distance relationship may have more unexpected benefits than a geographically close one. It could be that a long-distance partner is a closer match in terms of personality, beliefs, or culture than any of the potential mate choices in close proximity to a person. Social exchange theory could then be used to explain the prevalence of such relationships in that while there may be more costs associated with long-distance relationships, there are simply no other relationship choices as attractive as the current one nearby. Thus, the relationship will be maintained. The goal of the current study is to explore what, if any, differences there are in relationship satisfaction and perceived costs and benefits among long-distance and geographically close romantic relationships. In doing so it will help to fix the lack of literature examining long-distance relationships in a social exchange framework, as well as try to confirm findings on relationship satisfaction that have been mixed in the past (Van Horn et al., 1997; Anand et al., 2018).

Hypotheses

Five hypotheses have been formulated to explore the link between costs, benefits, and satisfaction of relationships with long-distance and geographically close romances.

Hypothesis 1 - Participants in long distance relationships will have similar relationship satisfaction as participants in geographically close relationships. This is based on past work (Roberts & Pistole, 2009), but there have been conflicting findings (Van Horn et al., 1997; Anand et al., 2018).

Hypothesis 2 - Males in long distance relationships will report less relationship satisfaction than males in geographically close relationships. This is based on findings that men tend to see sexual gratification as a benefit of relationships (Sedikides et al., 1994), and this may be more difficult to achieve in a long-distance context.

Hypothesis 3 - Participants in long distance relationships will rate certain costs (financial loss – less important, stress and worry about relationships – more important) differently than participants in geographically close relationships. This is based on past studies that have observed these costs as common stressors in long-distance relationships (Anand et al., 2018; Maguire & Kinney, 2010).

Hypothesis 4 - Participants in long distance relationships will rate certain benefits (sexual gratification – less important, companionship – more important) differently than participants in geographically close relationships. Because long distance relationships have not been considered in a social exchange context (as far as the author knows), this hypothesis is based on reasoning.

Hypothesis 5 - Males in long distance and geographically close relationships will rate certain costs (loss of money) and benefits (sexual gratification) as more important

than females in their respective relationship type. This is based on past work that observed differences between the two genders (Sedikides et al., 1994).

II. METHOD

Participants

Participants ($n = 384$) were undergraduate students at Texas State University currently in romantic relationships. Participants were recruited using Texas State University's Human Subjects Pool using the SONA system for both the psychology and criminal justice departments. These systems allow introductory psychology and criminal justice students to be involved in research for class credit. As such, the participants were all introduction to psychology and criminal justice students. There were several exclusionary criteria for proposed study: participants needed to be in a romantic relationship to complete the study, participants needed to be at least 18 years old, and participants could only take the study one time (only via the psychology or criminal justice SONA system, but not both). This is because the focus of this study is on adults in a current romantic relationship, and so to avoid having the same person take the survey more than once. Regardless of the exclusionary criteria, eight participants took the survey twice and so their first response was kept while their second response was eliminated from the analysis. In addition, 18 participants were excluded from the data for either not reporting their sex, or reporting it as "other" (final $n = 366$). This is because one factor of this study was sex of the participant and including those who reported "other" would have resulted in very uneven groups.

For the racial and ethnic distribution of participants, please see Table I. The age range of the participants was between 18 and 45 years old, $M = 19.93$, $SD = 3.51$. Gender information (Male = 70, Female = 296, Other = 2) of the participants was also collected. A count of the independent variable of the study, long distance ($n = 158$) versus

geographically close ($n = 208$) romantic relationship, was also taken. As the sex of the participant's partner was also asked, the number of same-sex ($n = 12$) and opposite sex-relationships ($n = 349$) represented in the study was also calculated.

Table 1		
<i>Ethnic distribution of participants</i>		
<u>Ethnicity</u>	<u>Count</u>	<u>%</u>
American Indian/Alaskan Native	3	0.8
Asian	11	3.0
Black or African American	36	9.8
Hispanic or Latino/Latina	157	42.9
Native Hawaiian or Pacific Islander	1	0.3
White	150	41.0
Other	6	1.6
<i>Note.</i> Two participants missing answers, 0.5%		

Design

This study is a 2 x 2 factorial design, in a quasi-experimental format. Factor A is relationship type, and has two levels: long-distance romantic relationship and geographically close romantic relationship. Factor B is sex of the participant, and have two levels: male and female. Both same-sex and opposite-sex couples were included in this study.

There are two different dependent variables for this study. One dependent variable is relationship satisfaction and quality. The second dependent variable is the perceived costs and benefits of the romantic relationship.

Instruments and Measures

Relationship satisfaction and quality.

To measure the dependent variable of relationship satisfaction and quality, two short scales were utilized. These scales were used to compare both relationship types, and to compare males and females.

Scale 1: Relationship Satisfaction Measure (Lemay & Clark, 2008). This is a 3-item scale that uses a 9-point Likert-type scale (1 = strongly disagree, 5 = neither agree nor disagree, 9 = strongly agree) to respond to three statements. This scale measures relationship satisfaction and has a Cronbach's alpha = 0.95 (Lemay & Clark, 2008). One example of a statement on this scale was "this relationship makes me very happy" (Lemay & Clark, 2008). A total satisfaction score was computed using the total of each answer.

Scale 2: Feeling Close and Intimate Scale (Campbell et al., 2006). This is a 5-item scale that presents statements to the participants and uses a 7-point Likert-type scale for responses (1 = not at all, 7 = very much so). It has a Cronbach's alpha = 0.81, and measures feelings of closeness and intimacy (Campbell et al., 2006). One example statement from this scale is "my partner and I share our thoughts, feelings, and aspirations with one another" (Campbell et al., 2006). A total score for relationship satisfaction was computed by adding each response for this scale together.

Costs and benefits.

To measure the dependent variable of perceived costs and benefits of romantic relationships, participants were asked to rate nine costs of their relationship and nine benefits of their relationship on a 7-point Likert-type scale (1 = not important at all, 7 = very important). The cost and benefit terms were created for this study, and based off of past research that included interviewing participants and coding common responses in a male versus female context (Sedikides et al., 1994; Hand & Furman, 2009, Osborn, 2012). Cronbach's alpha for the total costs importance was Cronbach's alpha = 0.66, while for total benefits importance Cronbach's alpha = 0.80.

The benefits terms used in the scale were: having someone to do activities with, sexual gratification, being loved, intimacy, understanding yourself better, increased self-esteem, feeling secure, having someone who supports me emotionally, and happiness (Sedikides et al., 1994; Hand & Furman, 2009, Osborn, 2012). A total score reflecting perceived importance of benefits in a relationship was calculated by adding each benefit item together.

The costs terms used in the scale were: less time spent with friends/family, cannot be in romantic relationships with other people, time and effort to maintain the relationship, decreased self-esteem, stress, fighting, emotionally depending on another, monetary cost of maintaining the relationship, and less privacy (Sedikides et al., 1994; Hand & Furman, 2009, Osborn, 2012). The total perceived importance of costs in the relationship was calculated by adding the nine cost terms together for each participant.

Procedure

This study was administered online using the Qualtrics software. All materials, including the consent form, a descriptive survey, the Relationship Satisfaction Measure (Lemay & Clark, 2008), the Feeling Close and Intimate Scale (Campbell et al., 2006), and the relationship benefits and costs survey, were presented to the participant in this order in the online format. Participants accessed the anonymous link to the survey via the university's SONA system, and after completing the study were awarded a credit point to be used as part of their class grade at the instructor of that class's discretion.

III. RESULTS

Testing Hypotheses 1 and 2

Hypotheses 1 predicted that there would be no difference in relationship satisfaction between the two relationship types, while hypothesis 2 predicted that men in long-distance relationships would be less satisfied than geographically close men. To compare relationship satisfaction, and perceived cost and benefit importance between long distance and geographically close relationships, as well as between sexes, a 2 (long distance, geographically close) x 2 (female, male) MANOVA was used, with relationship satisfaction (measured using two scales), cost importance, and benefit importance as the dependent variables. Cells means for total benefits importance (Table II), total costs importance (Table III), total relationship satisfaction measure (Table IV), and the total feeling close and intimate scale (Table V) can be viewed in the appendix.

Table 2		
<i>Cell means for total benefits importance and number of participants</i>		
	LDR	GC
Female	<i>M</i> = 56.41	<i>M</i> = 56.03
	<i>n</i> = 124	<i>n</i> = 150
Male	<i>M</i> = 52.67	<i>M</i> = 53.32
	<i>n</i> = 24	<i>n</i> = 40
<i>Note.</i> Dependent variable: perceived importance of benefits		

Table 3		
<i>Cell means for total costs importance and number of participants</i>		
	LDR	GC
Female	$M = 37.31$ $n = 124$	$M = 37.95$ $n = 150$
Male	$M = 36.04$ $n = 24$	$M = 36.32$ $n = 40$
<i>Note.</i> Dependent variable: perceived importance of costs		

Table 4		
<i>Cell means for relationship satisfaction measure and number of participants</i>		
	LDR	GC
Female	$M = 22.20$ $n = 124$	$M = 22.67$ $n = 150$
Male	$M = 21.54$ $n = 24$	$M = 21.85$ $n = 40$
<i>Note.</i> Dependent variable: relationship satisfaction measure		

Table 5		
<i>Cell means for feeling close and intimate scale and number of participants</i>		
	LDR	GC
Female	$M = 30.74$	$M = 29.49$
	$n = 124$	$n = 150$
Male	$M = 29.67$	$M = 28.58$
	$n = 24$	$n = 40$
<i>Note.</i> Dependent variable: feeling close and intimate scale		

Both univariate and multivariate data screening was conducted for the dependent variables. The Relationship Satisfaction Measure (Lemay & Clark, 2008) and the total costs scale data did not seriously violate the normality assumptions, with skewness and kurtosis scores between -2 and 2. The feeling Close and Intimate Scale (Campbell, Lackenbauer, & Muise, 2006) had a kurtosis score slightly above this threshold (kurtosis = 2.05), while the total benefits scale was more leptokurtic (kurtosis = 3.58). To check multivariate normality, the bivariate scatterplots of the combinations of dependent variables and each level of the two factors were fairly cloud shaped, indicating normality. For the homogeneity of variance assumption, the Box M test was not significant at the $p < .001$ level ($p = .013$), indicating equality of covariances.

For the results of the initial MANOVA, only the main effect of sex was significant. The main effect of relationship type, Wilks' $\Lambda = 0.98$, $F(4, 331)=1.45$, $p = .216$, as well as the interaction of sex and relationship type, Wilks' $\Lambda = 0.998$, $F(4, 331)=.14$, $p = .967$, were not found to be significant. This indicates that we did not observe any

difference between geographically close and long-distance relationships in terms of relationship satisfaction or importance of costs and benefits. We also did not observe any interaction between relationship type and sex. Sex of the participant was significant at the $p < .05$ level, Wilks' $\Lambda = 0.96$, $F(4, 331) = 3.21$, $p = .013$, multivariate $\eta^2 = .037$, indicating that a difference between males and females on one of the four dependent variables was observed. The effect size for this main effect was moderate.

For the significant main effect of sex, a follow-up ANOVA was run. To check the homogeneity of variance assumption, Levene's test for the two satisfaction measures as well as the total cost measure was not significant, while it was for the total benefits measure ($p = .001$), indicating the variance between groups for this dependent variable was significantly different. The results of the ANOVA indicated the only significant difference between groups was in total perceived benefits, $F(1, 334) = 12.62$, $p < .001$, $\eta^2 = .036$. These results indicate that females ($M = 56.20$, $SD = 5.84$) perceive benefits of the relationship as more important than males ($M = 53.08$, $SD = 8.21$).

Testing Hypotheses 3, 4, and 5

Hypotheses 3, 4, and 5 made predictions about how different groups would rate the costs and benefits of their relationships. Namely, hypothesis 3 predicted differences in how long-distance members rated costs, while hypothesis 4 predicted differences in perceived benefits importance based on relationship type. Hypothesis 5 predicted sex differences in perceived costs and benefits importance. To compare certain perceived cost and benefit importance between the two independent variables in this study, four 2 (long distance, geographically close) x 2 (female, male) factorial ANOVA were used. The dependent variables used were the items "sexual gratification" and "having someone to

do activities with” for benefits, and “monetary cost of maintaining the relationship” and “relationship stress” for costs.

For the variable of sexual gratification, data screening showed no large violations of the normality assumption and no outliers. Levene’s test was not significant indicating homogeneity of variances. There was no significant main effect of sex, $F(1, 360) = .82, p = .367$, or relationship type, $F(1, 360) = .45, p = .504$, observed. In addition, the interaction was not observed to be significant, $F(1, 360) = .63, p = .427$.

The dependent variable of companionship was slightly negatively skewed but still has skewness and kurtosis scores between -2 and 2, as indicated by data screening, and Levene’s test was not significant. No significant main effects (sex, $F(1, 361) = .42, p = .516$, and relationship type, $F(1, 361) = .02, p = .891$) or interaction effect, $F(1, 361) = .00, p = .986$, were observed.

Next is the importance of monetary costs of maintaining the relationship. Levene’s test was not significant, and data was normal as indicated by a histogram and skewness and kurtosis statistics. There was no observed main effect of sex, $F(1, 361) = .25, p = .616$, no observed main effect of relationship type, $F(1, 361) = 1.04, p = .308$, and no observed interaction between the two factors, $F(1, 361) = .76, p = .757$.

Finally, for the cost of relationship stress data screening indicated normal data and Levene’s test was not significant. Again, no main effects of sex, $F(1, 355) = .97, p = .324$, or relationship type, $F(1, 355) = .96, p = .327$, were observed, and no significant interaction effect, $F(1, 355) = .09, p = .769$, was observed.

IV. DISCUSSION

Hypothesis 1 predicted that there would be similar relationship satisfaction ratings among both the long-distance and geographically close relationship types. The results of this study supported this prediction, as those in long-distance and close relationships each rated their bond as equally satisfying. While this contradicts early findings on long-distance versus close romantic relationships (Van Horn et al., 1997), studies that were relatively more recent also found no difference between the two relationship types (Roberts & Pistle, 2009; Lee & Pistle, 2012). One reason for these supposedly conflicting results is that with increased internet use (Pew Research Center, 2018) comes increased access to and use of video and instant messaging technologies that make it easier to stay connected with one another even over great distances. This could help to make long distance relationships in the 21st century more satisfying than in the 20th century, when people had to rely on postal letters or long-distance telephone calls to stay in touch. Thus, no significant difference in relationship satisfaction was observed between relationship types.

The other prediction made about relationship satisfaction was hypothesis 2, which predicted that men in long distance relationships would be less satisfied than men in geographically close relationships. This was based on past findings that sexual contact and gratifications was an important benefit to relationships in men (Sedikides et al., 1994), and that long-distance romantic relationships may be lacking such an asset. However, the results of the MANOVA observed no differences at all between how romantically satisfied men in both relationship types were. It could be that there are more ways to obtain sexual gratification while in a long-distance relationship than the author

predicted, but the limited number of male participants in the study could also make it hard to find any significant differences between men in both relationships due to small sample size.

Hypotheses 3 and 4 made predictions about how members of both relationship types would rate certain costs and benefits of their relationship on level of importance. It was predicted that those in long-distance relationships would view financial loss as a less important cost, while companionship and emotional support would be viewed as more important to long-distance couples than geographically close ones. However, results of the factorial ANOVA's found no significant differences between relationship type on different costs and benefits importance. It is interesting that no significant results were observed, as those in long-distance relationships frequently list more costs when describing their relationship, such as being apart, less social support, and loss of time (Maguire & Kinney, 2010; Anand et al., 2018). These results could be due to possible ambiguity in the way the questions were asked, due to the survey being developed exclusively for this study, but they could also mean there is truly no difference in how the relationship types view costs and benefits of the relationship. These findings also tie into the observance that there was no significant difference in relationship satisfaction between the two groups: if they are all equally satisfied with their romantic relationship, there should generally be no large differences in what they believe they are getting from their relationships.

Hypothesis 5 had the prediction that there would be some differences between how men and woman rated the importance of certain costs and benefits of their romantic relationships. Namely, it predicted that men would rate the loss of money (cost) and

sexual gratification (benefit) and more important than women. For these particular variables, a factorial ANOVA produced no significant differences based on sex. However, the MANOVA that included the sum total of costs and benefits importance did observe a significant difference between men and women. In other words, women thought that the overall benefits gained from the romantic relationship were more important than men did. This effect was small, however ($\eta^2 = .036$).

Overall, no significant differences were observed between long-distance and geographically close romantic relationships. Using social exchange theory to explain these findings it could be that people really see no difference in what benefits they derive from these relationships, and the benefits of being in a relationship are equal no matter the format. These findings could also be viewed through the communal relationship context: perhaps simply being there for one's partner, even if they are miles away, is enough of a benefit to justify maintaining the relationship and people are not counting every cost and benefit they get from being in a loved one's life. Overall, the lack of research on integrating popular theories into a long-distance relationship context should inspire others to continue exploring this increasingly popular relationship type.

Several limitations of this study should be highlighted, in order to take necessary caution when attempting to generalize these findings. One limitation was the lack of diversity in the sample studied. As all participants came from undergraduate-level psychology and criminal justice classes at a university in south Texas, it could be difficult to use these results to predict how older or culturally different populations would view their own long distance or close relationships. Additionally, the majority of participants in this study were female, which further distances the participants in this study from the

actual world population. There were very few same-sex couples represented in the study, and the majority of participants identified as White or Hispanic and Latino, further reducing the diversity of the sample and applicability of the results to the population as a whole.

This study was conducted solely online, and so it was impossible to ensure that each person completed the survey under the exact same conditions, such as time of day, comfort and distraction level, and device used to access the study. This could have introduced some unseen confounds into the study. Another problem with the online format used was that there was no way to ensure that participants were completely focused on the task at hand (answering survey questions), and not also browsing the internet or holding conversations.

Finally, while the two questionnaires used to measure relationship satisfaction had been developed and tested previously (Lemay & Clark, 2008; Campbell et al., 2006), the questionnaire weighing perceived costs and benefits of the relationship had been developed for this study, albeit based on terms used in past work (Sedikides et al., 1994; Hand & Furman, 2009, Osborn, 2012). As such, there could be inherent errors in the way the survey was written that could lead to reliability and validity concerns.

When further exploring this topic, the first thing to be done would be to address the limitations discussed above. Having a more diverse sample in terms of age, race, sexual orientation, and socioeconomic status among other factors would help to understand if there really is no difference in relationship satisfaction between both relationship types in the general population. It would be interesting to merely replicate this study with a more diverse sample of participants to see how (if at all) results differ.

Further testing and refining the costs and benefits scale used could also address the concerns that come with any new psychometric measure.

This study helped to replicate recent work in relationship satisfaction for those in long-distance romantic relationships by observing no difference between long-distance and close couples on this term (Roberts & Pistole, 2009; Lee & Pistole, 2012). It also helped to address a gap in the literature by looking at long-distance versus close romantic relationships in the context of social exchange theory (Sedikides et al., 1994; Hand & Furman, 2009), and did not observe any differences between the two relationship types. While there were some issues with the diversity of the participant sample and the scales used, it only allows for even more work to be done in the future addressing, refining, and expanding on these findings.

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APPENDIX A



Alyssa Kopecki, a graduate student at Texas State University, is conducting a research study to learn more about romantic relationships. You are being asked to complete this survey because you are in a romantic relationship.

Participation is voluntary. The survey will take approximately 15 minutes or less to complete. You must be at least 18 years old to take this survey and you must be in a romantic relationship. Your answers will be linked with your romantic partner's. However, neither you nor your romantic partner will be able to see each other's answers.

This study involves no foreseeable serious risks. We ask that you try to answer all questions; however, if there are any items that make you uncomfortable or that you would prefer to skip, please leave the answer blank. Your responses are confidential.

Possible benefits from this study are learning more about romantic relationships and contributing to scientific knowledge about romantic relationships.

Reasonable efforts will be made to keep the personal information in your research record private and confidential. Any identifiable information obtained in connection with this study will remain confidential and will be disclosed only with your permission or as required by law. The members of the research team and the Texas State University Office of Research Compliance (ORC) may access the data. The ORC monitors research studies to protect the rights and welfare of research participants.

In the event that some of the survey questions make you uncomfortable or upset, you are always free to decline to answer or to stop your participation at any time. Should you feel discomfort after participating and you are a Texas State University student, you may contact the University Health Services for counseling services at 512-245-2161. They are located The Student Health Center on the main campus and at the Nursing Building, room 116, on the Round Rock campus.

Your name will not be used in any written reports or publications which result from this research. Data will be kept for three years (per federal regulations) after the study is completed and then destroyed.

You will not receive any compensation from the researchers for completing this survey.

If you have any questions or concerns feel free to contact Alyssa Kopecki or her faculty advisor:

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This project 6379 was approved by the Texas State IRB on April 11, 2019. Pertinent questions or concerns about the research, research participants' rights, and/or research related

injuries to participants should be directed to the IRB chair, Dr. Denise Gobert 512-716-2652 – (dgobert@txstate.edu) or to Monica Gonzales, IRB Regulatory Manager 512-245-2334 - (meg201@txstate.edu).



If you would prefer not to participate, please select “Disagree” below.

If you consent to participate, please select “Agree” below.

APPENDIX B

Romantic Relationship Description Questionnaire

For this study, please answer these questions based on your current romantic relationship. You will also be asked to provide the email address of your romantic partner, so that they can complete the survey too. Neither you nor your romantic partner will be able to see each other's answers.

Is your current romantic relationship:

☐ Local ☐ Long-distance

I am

☐ Male ☐ Female ☐ Other ☐ Prefer not to say

My romantic partner is

☐ Male ☐ Female ☐ Other ☐ Prefer not to say

My age

My romantic partner's age

Please select the race/ethnicity that you feel best describes you

- ☐ American Indian or Alaska Native
- ☐ Asian
- ☐ Black or African American
- ☐ Hispanic or Latino
- ☐ Native Hawaiian or Pacific Islander
- ☐ White
- ☐ Other

Please describe your relationship with your romantic partner

- ☐ Dating
- ☐ Engaged
- ☐ Married
- ☐ Other (please write)

How long have you been in a relationship with your romantic partner? (report number of months)

Months

The likelihood that you will stay in a relationship with your partner for the next 3 months
very unlikely : : : : : very likely

How often do you get to see your romantic partner in-person?

☐ Daily ☐ Weekly ☐ Monthly ☐ Yearly ☐ Never

When you are not together in-person, how often do you communicate with your romantic partner?

☐ Daily ☐ Weekly ☐ Monthly ☐ Yearly ☐ Never

On average, how many hours do you spend online daily?

☐ 0-2 hours ☐ 2-4 hours ☐ 4-6 hours ☐ 6-8 hours ☐ 8+ hours

On average, how many hours do you spend communicating with your partner daily?

☐ 0-2 hours ☐ 2-4 hours ☐ 4-6 hours ☐ 6-8 hours ☐ 8+ hours

APPENDIX C

Relationship Satisfaction Measure

Please answer these questions based on your current romantic relationship.

This relationship is close to ideal.

Strongly disagree ____:____:____:____:____:____:____:____ Strongly agree

I am satisfied with this relationship.

Strongly disagree ____:____:____:____:____:____:____:____ Strongly agree

This relationship makes me very happy.

Strongly disagree ____:____:____:____:____:____:____:____ Strongly agree

APPENDIX D

Feeling Close and Intimate Scale

Please answer these questions based on your current romantic relationship.

My partner and I are very close and intimate in our relationship.

Not at all ____:____:____:____:____:____:____ Very much so

My partner knows me better than anyone else.

Not at all ____:____:____:____:____:____:____ Very much so

My partner and I share our thoughts, feelings, and aspirations with one another.

Not at all ____:____:____:____:____:____:____ Very much so

My partner often knows what I am thinking or feeling before I say anything.

Not at all ____:____:____:____:____:____:____ Very much so

My partner and I can accurately predict each other's behavior in different situations.

Not at all ____:____:____:____:____:____:____ Very much so

APPENDIX E

Relationship Benefits and Costs Survey

Please rate the importance of each item in your current romantic relationship, with
1 = not important at all, 7 = very important.

Having someone to do activities with

Not important at all ____:____:____:____:____:____:____ Very important

Decreased self-esteem

Not important at all ____:____:____:____:____:____:____ Very important

Relationship stress

Not important at all ____:____:____:____:____:____:____ Very important

Sexual gratification

Not important at all ____:____:____:____:____:____:____ Very important

Being loved

Not important at all ____:____:____:____:____:____:____ Very important

Time and effort to maintain the relationship

Not important at all ____:____:____:____:____:____:____ Very important

Understanding yourself better

Not important at all ____:____:____:____:____:____:____ Very important

Fighting with romantic partner

Not important at all ____:____:____:____:____:____:____ Very important

Emotionally depending on another

Not important at all ____:____:____:____:____:____:____ Very important

Increased self-esteem

Not important at all ____:____:____:____:____:____:____ Very important

Feeling secure

Not important at all ____:____:____:____:____:____:____ Very important

Monetary cost of maintaining the relationship

Not important at all ____:____:____:____:____:____:____ Very important

Having someone who supports me emotionally

Not important at all ____:____:____:____:____:____:____ Very important

Less privacy

Not important at all ____:____:____:____:____:____:____ Very important

Happiness

Not important at all ____:____:____:____:____:____:____ Very important

Less time spent with friends/family

Not important at all ____:____:____:____:____:____:____ Very important

Cannot be in romantic relationships with other people

Not important at all ____:____:____:____:____:____:____ Very important

Intimacy

Not important at all ____:____:____:____:____:____:____ Very important

We thank you for your time spent taking this survey.

Your response has been recorded.

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