The Role of Appreciation in Close Relationships: A Journal Study

Nathaniel M. Lambert
THE ROLE OF APPRECIATION IN CLOSE RELATIONSHIPS: A JOURNAL STUDY

By

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I would like to dedicate this thesis to my beloved wife Olya for her constant love and support for me as I have pursued this higher degree and for her supreme example of expressing appreciation to me—she was inspiration for this topic of study!
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ABSTRACT

The effect of expressing appreciation on positive regard for a friend or roommate and willingness to voice relationship concerns to this person was examined using a journal study format. Participants (n = 75) were randomly assigned to one of four conditions (one being an expression of appreciation condition) and they engaged in their assigned activity twice a week for three weeks. At the end of the three weeks, those assigned to the expression of appreciation in relationships condition reported higher positive regard for their friend/roommate and more comfort in voicing relationship concerns than did those in the other conditions, even when controlling for the baseline scores of these variables and frequency of participation in the intervention. In addition, positive regard mediated the relationship between condition and comfort in voicing relationship concerns.
Philosopher Adam Smith (2000/1759) once said, “We are delighted to find a person who values us as we value ourselves, and distinguishes us from the rest of mankind, with an attention not unlike that with which we distinguish ourselves” (p.138). Psychologist William James (1981/1890) stated that “The deepest principle in human nature is the craving to be appreciated” (p. 313). Clearly the desire or the need to feel appreciated is an important interpersonal phenomenon, but it has received little attention in social science research. Rather, psychologists and sociologists alike have traditionally focused on problems in relationships. For example research (e.g., Feldman, 2000; Kelly & Halford, 2002; Markman, Floyd, Stanley, & Storaasli, 1988) has emphasized the unwelcome outcomes of negative communication. The emergence of positive psychology has shifted attention to health instead of psychopathology and resiliency rather than deviance. In line with this shift in attention, I sought to explore how expressing appreciation builds and enhances close relationships, specifically in relationships with friends and roommates.

**General Importance of Positive Communication for Relationships**

Several studies have emphasized the importance of positive communication for relationship well-being, and appreciation is one form of positive communication. For example, among a sample of 179 newlywed couples (married for the first time within 6 months of the study) 130 (that matched the demographic and racial groups in the Seattle area) were invited back for further testing. Of these 130 couples, only those who reported a ratio of five positive communications for every one negative also reported their marriage as happy (Gottman, Coan, Carrere, & Swanson, 1998). Similarly, Kirby, Baucom, and Peterman (2005) found that among 84 married couples (90% Caucasian, mean age of 51 years, mean education of 15 years, and mean length of marriage of 23 years), higher levels of positive communication were related to greater reported intimacy satisfaction. The intervention Prevention and Relationship Enrichment Program (PREP) largely targets communication, and among a sample of 105 young couples (mean age 23 years for women and 24 years for men, mean education was 15.5 years) brought about higher levels of positive communication, lower levels of negative communication, lower levels of marital violence, and higher relationship satisfaction for up to five years (Markman,
Renick, Floyd, Stanley, & Clements, 1993). These findings indicate that positive and negative communication are important to relationship well-being.

**Gratitude and Appreciation**

The word gratitude is derived from the Latin word *gratia*, which means grace, graciousness, or gratefulness (Emmons, McCullough, & Tsang, 2003). All derivatives from this Latin root “have to do with kindness, generosity, gifts, the beauty of giving and receiving, or getting something for nothing” (Pruyser, 1976, p. 69). Some researchers conceptualize gratitude simply as the recognition that one is the beneficiary of another’s kind act (e.g., Bertocci & Millard 1963). Similarly, Emmons (2004,) defined gratitude as “the recognition and appreciation of an altruistic gift,” (p. 9), and Solomon (1977) as “an estimate of gain coupled with the judgment that someone else is responsible for that gain” (p. 316). Appreciation is conceptually similar to gratitude and has been defined as “acknowledging the value and meaning of something—an event, a person, a behavior, an object—and feeling a positive emotional connection to it” (Adler & Fagley, 2005, p. 81). Appreciation and gratitude have been used interchangeably by researchers; however, appreciation is used more commonly in the context of relationships. Thus, I used the term appreciation and defined it as the act of communicating gratitude for a perceived benefit or acknowledging the value of another’s behaviors or being.

**Appreciation in Romantic Relationships**

Although little work has focused on specific forms of positive communication, the sparse research on appreciation shows that it is viewed as an important element of relationship success. For instance, appreciation was listed as one of the most important factors contributing to a satisfying marriage, according to a sample of 50 long-term (married 25-40 years) Israeli couples (Sharlin, 1996). Newly married couples also benefit from expressing appreciation in their relationships. Schramm, Marshall, Harris, and William (2005) found that showing appreciation for one’s partner was related to higher marital satisfaction and adjustment among 1,010 newlyweds (mean age of men and women was 27 years and 29 years respectively, mean length of marriage was 5 months). Conversely one study of 207 men and 230 women found that unmet emotional needs (e.g., not feeling loved and appreciated, and losing a sense of closeness) was the most frequent reason reported for divorcing (Gigy & Kelly, 1992). These studies indicate that appreciation may be an important element of relationship well-being.
Much of the small literature on appreciation focused on the context of domestic labor, where expression of appreciation is related to reduced friction between romantic partners. Some research shows that expressing appreciation (along with other forms of effective communication about domestic labor such as listening) was the most powerful statistical predictor and discriminator of perceived fairness for 622 dual-earner wives (87% White, 42% college educated) (Hawkins, Marshall, & Allen, 1998). Similarly, among 405 randomly selected women, the appreciation a wife received from her husband was related to her perception that the division of labor was fair (Hawins, Marshall, & Meiners, 1995).

Also, Klumb, Hoppmann, and Staats (2006) found that among 52 dual-earner couples (mean age of 37 years, and 90% had a university degree), the reduction in relationship satisfaction due to unequal division of labor disappeared after accounting for perceived appreciation of individual contributions. Berger and Janoff-Bulman (2006) demonstrated that for 81 college undergraduates (68 female) when costs (such as sacrifices made for a partner) are perceived as appreciated by a partner, greater relationship costs were related to greater relationship satisfaction; however, when costs were not appreciated, they were related to lower relationship satisfaction.

**Appreciation in Other Close Relationships**

Appreciation appears to play a positive role in relationships other than romantic ones, although this literature on this subject is meager. Of numerous family strengths examined by researchers, time spent together and appreciation for each other were highly correlated with family strengths in a study of 40 parents (36-52 years old) and 20 adolescents (mean age of 15.8 years) (Greeff & Le Roux, 1999). Experiencing a grandparent’s appreciation was identified as one variable related to emotional closeness reported by 212 female and 179 male young adult grandchildren (85% Caucasian) (Kennedy, 1991). In another review, appreciation was reported as one of four most important features of family strengths (Billingsley, Lim, Caron, Harris, & Canada, 2005). Beyond family research, feeling appreciated in the workplace also has practical outcomes. For example, among 251 employed Jordanian women with children, one of the primary motivators to continue working was feeling appreciated (Al-Farhan, 1992). Thus, appreciation appears be important in other relationships as well: grandparent-grandchild, employer to employee.
In the current study, I chose to build upon this literature by examine relationships with friends/roommates. One reason to focus on friendships was that seeking to form close personal relationships can be considered a fundamental aspect of human nature (Buss, 1990; Maslow, 1968) and friendships are extraordinarily important to everyday life (cf. Fehr, 1996). In addition, friends fulfill a variety of roles in an individual’s life and may satisfy needs that cannot be met by family or other relationships (Richey & Richey, 1980). Lastly, some research indicates that friendship is related to outcomes important to participants in the current study, such as adjustment to university (Boute, et al., 2007), so enhancing friendship for college students could lead to other desirable outcomes for this age group. Thus, friends and roommates were targeted for this intervention.

The current literature on appreciation emphasizes the benefits of receiving appreciation, (e.g., Hawkins et al., 1995; Berger & Janoff-Bulman, 2006); however, I chose to focus on the personal benefits of expressing appreciation for several reasons. One reason for engaging in this constructive relationship behavior is that it should alter an individual’s perception of his/her relationship partner, which would likely lead to other positive, relationship outcomes. In addition, the purpose of the current study was to inform future intervention and experimental research and expression of appreciation is a more realistic target for an intervention than is receipt of appreciation. For example, in the current sample I had no experimental control over the appreciation expressed by participants’ friends, but I could intervene to increase participants’ expression of appreciation. For these reasons, I chose expression of appreciation, rather than receipt of appreciation as the independent variable of interest.

Also, although the current literature provides some clues that appreciation plays a role in relationships, the data from these studies were open-ended or purely correlational. Therefore, it is unclear whether appreciation is the cause of positive outcomes or if it is simply the byproduct of an already healthy relationship. To clarify the direction of the relationship and to test for causality, an experimental design was needed. I had two primary hypotheses as described below.
Hypotheses

**Hypothesis 1**
I hypothesize that increasing the frequency and regularity of expression of appreciation toward a friend or roommate will be associated with higher positive regard for the friend.

**Hypothesis 2**
I also hypothesized that expressing appreciation should independently increase comfort in voicing relationship concerns. In addition, I expect this relationship to be mediated by the participants’ positive regard for their friends.
CHAPTER 2
METHOD AND RESULTS

Method

The design of this study was experimental all participants were randomly assigned to a condition. This study also contained pretest (completed before random assignment) and posttest scores on all measures for all participants.

Participants

I used the program GPower (Cunningham & McCrum-Gardner, 2007) to calculate the number of participants that I would need for this study. I planned 4 groups, expected a medium to large effect size of .35 (given prior research in this area), and set the alpha level at .05 (two tailed) and the power level at .80. GPower estimated that I would need 96 participants to detect between group differences, given my expected effect size and number of conditions.

Participants were enrolled in an introductory class on families across the life span. This specific class is ideal for recruiting participants, because it is part of the social science courses in general education; thus, students of a variety of majors were enrolled. I accepted anyone who was willing to participate. To recruit participants, I sent an email to all students in the class, informing them that they would receive extra credit for participating in this study. Students used a link to take them to an online consent form, previously approved by the Institutional Review Board. Once students gave their consent, they were to complete the baseline measures for this study. As part of a broader study, participants were asked to target the “single most important interpersonal relationship in your life right now” on which to report for the semester-long study. For the purposes of the current study, only those who chose a friend or roommate were included in the analyses.

Ninety-seven undergraduates completed all relevant measures at Time 1: 23 were assigned to the expression of appreciation condition, 25 were assigned to the appreciative thoughts condition, 22 were assigned to the neutral condition, and 27 were assigned to the expression of positive memory condition. However, the final sample included in the analysis comprised only those 75 undergraduates (60 females and 15 males) who completed all relevant measures at both time points, 19 of which were in the expression of appreciation condition, 20 in
the appreciative thought condition, 17 in the neutral condition, and 19 in the expression of positive memory condition.

Participants ranged in age from 18 to 23 years and their median age was 19. Seventy-three percent reported being White, 8% African American, 12% Latino, and 5% other, and 3% did not self-identify. Fifty-five participants reported about a friend and 20 reported about a roommate, and the average length of the relationship with friend or roommate was 2.45 years (SD = 2.13). More detail about the sample is given below:

Table 1

Sample Characteristics at Time 1 by Condition (N = 75)

<table>
<thead>
<tr>
<th>Variable by Condition</th>
<th>Express Appreciation</th>
<th>Appreciative Thought</th>
<th>Neutral</th>
<th>Positive Memory</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>2</td>
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<tr>
<td>19</td>
<td>11</td>
<td>12</td>
<td>7</td>
<td>10</td>
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<tr>
<td>20</td>
<td>6</td>
<td>1</td>
<td>3</td>
<td>4</td>
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<td>21</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>22</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>23</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Male</td>
<td>3</td>
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<td>4</td>
</tr>
<tr>
<td>Female</td>
<td>16</td>
<td>16</td>
<td>13</td>
<td>15</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>13</td>
<td>15</td>
<td>12</td>
<td>13</td>
</tr>
<tr>
<td>African American</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Latino</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td><strong>Mean Relationship Length</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(in Years)</td>
<td>2.69</td>
<td>3</td>
<td>2.43</td>
<td>1.44</td>
</tr>
</tbody>
</table>
Procedure

Participants were instructed to engage in their assigned activity exclusively with their friend or roommate and to answer all relationship questions with this person in mind. After they had completed the baseline measures, I randomly assigned participants into four groups. Four separate email links were sent out according to assigned condition. After participants completed these relevant measures, they began their assigned journal activity. They completed their assigned activity twice a week and reported on the completion of their assigned activity via an online journal. I sent them a link every Monday and Thursday morning and instructed them to write about the completion of their assigned activity. As previously mentioned, there were four conditions: expression of appreciation, neutral (daily activities), appreciative thought, and an expression of positive memory condition.

Expression of appreciation condition. This condition was the experimental condition and was designed to increase the frequency of participants’ expression of appreciation. Participants assigned to this condition were given the following instructions:

For the next three weeks I would like you to focus on trying to go the extra mile to express appreciation to your friend or roommate. Between now and Thursday, please do something you wouldn't normally do to express this appreciation verbally or through writing (e.g., perhaps write an email, a kind note, tell him/her how much you appreciate something specific that he/she does). Make sure to record or remember what you did so you can report about it on Thursday.

Neutral (daily activities) condition. This control condition was designed to provide a neutral comparison group for the other conditions as well as to rule out the remote possibility that simply engaging in an online journal study could affect any of the dependent variables. Participants were given the following instructions:

For the next three weeks I would like you to focus on trying to go the extra mile to think about your daily activities. Between now and Thursday, please think about something that happened to you and make sure to record or remember what you did so you can report about it on Thursday.
Thoughts of appreciation condition. This control condition was designed to help rule out the alternative hypothesis that simply thinking appreciative thoughts about one’s friend or roommate, rather than the actual behavior of expressing appreciation to him/her, is what drives any posttest differences in the dependent variables. Participants in this condition were given the following instructions:

For the next three weeks I would like you to focus on trying to go the extra mile to think about things that you appreciate about your friend or roommate. Between now and Thursday, please think about something you appreciate about your friend or roommate. Make sure to record or remember what you thought so you can report about it on Thursday.

Expression of positive memory condition. This control condition was designed to help rule out the alternative hypothesis that having a positive interaction with one’s friend or roommate is what causes the posttest differences in the dependent variables. Participants in this condition were given the following instructions:

For the next three weeks I would like you to focus on thinking of positive memories you've had with your friend or roommate. Between now and Thursday, please think about a pleasant memory with this friend or roommate and bring it up with him/her in person, by phone, or by email. Make sure to record or remember what you did so you can report about it on Thursday.

Participants for all conditions were given the opportunity to report their assigned activities twice a week for three weeks in an online journal. After completion of the sixth journal entry, participants completed the baseline measures again.

Measures

The experimental condition functioned as the independent variable. All measures described below are dependent variables that were measured at Time 1 and Time 2. Due to the experimental nature of the design, it is possible to determine whether the condition caused differences in the dependent variables of positive and negative regard and comfort in voicing relationship concerns.

Positive and negative regard. This 20-item measure of interpersonal qualities (Murray, Holmes, & Griffin, 1996) assesses participants’ regard for a friend or roommate. It contains positive and negative attributes from the interpersonal circle, which is a model based on the
primary dimensions of warmth-hostility and dominance-submissiveness. The ten items from the positive dimension included “open and disclosing,” “kind and affectionate,” “patient,” “understanding,” “responsive to my needs,” “tolerant and accepting,” “self-assured,” “sociable or extroverted,” “intelligent,” and “witty.” The items from the 10-item negative dimension included “critical and judgmental,” “lazy,” “controlling and dominant,” “emotional,” “moody,” “childish,” “distant,” “thoughtless,” “complaining,” and “irrational.” Participants rated how well each of these traits described their friend or roommate on a 9-point scale (1 = not at all characteristic, 9 = completely characteristic). In a previous study (Murray, Bellavia, Rose, & Griffin, 2003), the alpha for this measure was .80. Although the original instructions for the measure are to reverse code the negative items and sum them together with the positive items, I maintained them as separate subscales. Maintaining them as separate subscales is also consistent with Fincham and Linfield’s (1997) proposition that positive and negative evaluations of a partner are not unidimensional. In addition, the two subscales demonstrated only a moderate correlation (r = -.47, p < .01) in the current sample, suggesting that they are related, but distinct dimensions. Scores were averaged and coded such that higher scores meant higher positive or negative regard. Coefficient alpha for positive regard in the current sample was .90 at Time 1 and .88 at Time 2. Alpha for negative regard was .86 at Time 1 and .82 at Time 2.

Comfort in voicing relationship concerns. To measure the degree of comfort an individual has in expressing concerns or problems in a relationship, I created a 5-item scale. Items included, “I feel comfortable in making suggestions to my friend or roommate,” “When I am upset about something in our relationship, I feel comfortable telling my friend or roommate,” “I almost never let my friend or roommate know when he/she is doing something I do not like,” “I feel safe voicing my concerns with my friend or roommate,” and “I feel that I can talk to my friend or roommate about almost anything.” Participants rated their comfort in voicing relationship concerns on a 7-point scale (1= strongly disagree, 7= strongly agree). Scores were coded and summed such that higher scores indicate more comfort. The coefficient alpha for the current sample was .93 at Time 1 and .88 at Time 2. Thus, the measure demonstrated high internal consistency.

Seriousness of participation. At the end of the study I informed participants that their credit would not be affected by honest answers and asked them how often they participated in their assigned activity (e.g., doing something extra to express appreciation, thinking appreciative
thoughts, etc.) and they rated themselves on a scale from 1 = never, 2 = rarely, 3 = occasionally, 4 = fairly frequently, 5 = never missed once. I then excluded 8 participants from the analysis that answered that they “never” or “rarely” took their assigned activity seriously.

**Results**

**Attrition**

Twenty-two participants that completed all measures at Time 1 had dropped out by Time 2. Four dropped out from the expression of appreciation condition (leaving 19), five dropped out of the appreciative thoughts condition (leaving 20), five dropped out from the neutral condition (leaving 17), and eight dropped out of the expression of positive memory condition (leaving 19). All but three of the participants that failed to complete Time 2 measures dropped out right after completing the baseline measures, indicating that trouble in completing their assigned activity was not likely the reason for dropping out of the study. However, to ensure that any differential attrition by condition did not bias the study results, I compared the means of those who dropped out by condition on both dependent variables. There were no significant differences on Time 1 positive regard by condition \(F(3,18) = .39, p > .05\), nor were there any difference between groups on Time 1 comfort in voicing relationship concerns by condition \(F(3,18) = .90, p > .05\). In addition, I tested whether there were any differences in Time 1 positive regard and Time 1 comfort in voicing relationship concerns based on completion of the study (i.e., those who dropped out versus those who persisted). Participants who dropped out did not differ on Time 1 positive regard, \(t(95) = .18, p > .05\) or on Time 1 comfort in voicing relationship concerns, \(t(95) = .96, p > .05\). Thus, attrition does not appear to be an alternative explanation for my findings.

**Friend and Roommate Grouping**

It seems probable that most participants that chose to report on a “roommate” as their “most important interpersonal relationship” also considered this person to be a friend. Thus, I did not expect differences between these groups on any of the dependent variables. However, to ensure that this was the case, I compared the groups using independent sample t-tests. There were no differences between those who targeted friends and those who targeted roommates on T1 positive regard \(t(73) = -.56, p > .05\), T2 positive regard \(t(73) = -1.06, p > .05\), T1 comfort in voicing relationship concerns, \(t(73) = -1.14, p > .05\), or T2 comfort in voicing relationship concerns, \(t(73) = -.98, p > .05\).
To further ensure that there were no differences between participants’ whose target relationship was with friend or a roommate, I tested whether relationship status was a moderator in either the relationship between expression of appreciation and positive regard or expression of appreciation and comfort in voicing relationship concerns. Specifically, in the regression analyses, I first entered condition, relationship status (friend versus roommate), and T1 positive regard as Step 1, followed by the product term (relationship status x T1 positive regard) at Step 2. The relationship status-T1 positive regard product term was not significant, \(t(74) = -.35, p > .05\). In a second regression equation, I entered condition, relationship status, and T1 comfort in voicing relationship concerns at step 1, followed by the product term (relationship status x T1 comfort in voicing relationship concerns) at Step 2. Again, the relationship status-T1 comfort in voicing relationship concerns product term was not significant, \(t(73) = -1.22, p > .05\). Given that both the t-tests and the moderation analyses were not significant, I combined these two groups for subsequent analysis.

**Effect of Intervention**

*Positive and negative regard.* Positive and negative regard were analyzed in a 4(condition) x 2(time) analysis of covariance (ANCOVA) in which Time 1 positive regard and frequency of participation served as covariates. This analysis revealed a significant main effect for condition, \(F(3, 68) = 4.91, p = .004\). Planned comparisons revealed higher positive regard for friend among those in the expression of appreciation condition \((M = 5.67, SD = .81)\) than among those in the appreciative thought condition \((M = 5.38, SD = .93)\), \(F(1, 69) = 4.86, p < .05; d = .33\), the neutral condition \((M = 5.36, SD = .67)\), \(F(1,68) = 5.24, p < .05; d = .42\), and the positive interaction condition \((M = 4.87, SD = 1.07)\), \(F(1,68) = 15.57, p < .001; d = .84\). No other contrasts were statistically significant. Also, there was no significant main effect of condition on negative regard \(F(3, 68) = 1.06, p = .37\). To view the descriptives of all variables at Time 1 and 2, see Table 2 on the following page.

*Comfort in voicing relationship concerns.* Analysis of covariance (ANCOVA) revealed a significant main effect for condition, \(F(3, 68) = 4.29, p = .01\), even when controlling for Time 1 comfort in voicing relationship concerns and frequency of participation. Planned comparisons revealed higher comfort in voicing relationship concerns for friend/roommate among those in the expression of appreciation condition \((M = 6.13, SD = .80)\) than among those in the appreciative thought condition \((M = 5.78, SD = 1.14)\), \(F(1,68) = 4.52, p = .05; d = .36\), the neutral condition
\( M = 5.69, SD = .98 \), \( F(1,68) = 5.09, p < .05; d = .49 \), and the positive interaction condition \( (M = 5.13, SD = 1.31), F(1,68) = 12.53, p < .001; d = .92 \). No other contrasts were statistically significant.

Table 2

*Descriptive Statistics of Positive and Negative Regard and Voicing Concerns at Time 1 and Time 2 Controlling for Frequency of Participation (N = 74)*

<table>
<thead>
<tr>
<th>Variable by Condition</th>
<th>Time 1</th>
<th>Time 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( M )</td>
<td>( SD )</td>
</tr>
<tr>
<td><strong>Positive Regard</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appreciation Express</td>
<td>4.76</td>
<td>1.41</td>
</tr>
<tr>
<td>Appreciation Thought</td>
<td>5.14</td>
<td>.80</td>
</tr>
<tr>
<td>Neutral</td>
<td>5.18</td>
<td>.83</td>
</tr>
<tr>
<td>Positive Interaction</td>
<td>4.97</td>
<td>1.02</td>
</tr>
<tr>
<td><strong>Negative Regard</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appreciation Express</td>
<td>2.97</td>
<td>1.19</td>
</tr>
<tr>
<td>Appreciation Thought</td>
<td>3.12</td>
<td>.94</td>
</tr>
<tr>
<td>Neutral</td>
<td>3.01</td>
<td>.77</td>
</tr>
<tr>
<td>Positive Interaction</td>
<td>2.92</td>
<td>1.11</td>
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<tr>
<td><strong>Voicing Concerns</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appreciation Express</td>
<td>5.26</td>
<td>1.50</td>
</tr>
<tr>
<td>Appreciation Thought</td>
<td>5.62</td>
<td>1.24</td>
</tr>
<tr>
<td>Neutral</td>
<td>5.56</td>
<td>.78</td>
</tr>
<tr>
<td>Positive Interaction</td>
<td>5.18</td>
<td>1.41</td>
</tr>
</tbody>
</table>

**Positive Regard as a Mediator**

The independent variable, experimental condition, was significantly related to the mediator, positive regard, \( r = .24, p < .05 \). Also the mediator, positive regard, was significantly correlated to the dependent variable, comfort in voicing relationship concern, \( r = .76, p < .01 \). To test whether manipulated positive regard functioned as a mediator between experimental
condition and comfort in voicing relationship concerns, I used the PRODCLIN program (MacKinnon, Fritz, Williams, & Lockwood, 2007). This program examines the product of the two paths that comprise the indirect effect divided by the pooled estimate of their standard error ($\alpha\beta/\sigma_{\alpha\beta}$) and is less prone to some of the problems, such as an inflated Type I error, that arise in other common methods for testing mediation, such as the Sobel test (Sobel, 1982). A confidence interval for the effect size of the indirect path is generated by this program, and if the values between the upper and lower confidence limit do not include zero, this indicates a statistically significant mediation effect.

The 95% confidence interval for the current analysis of positive regard as a mediator between condition and comfort in voicing relationship concerns was .04 to .97 and did not include zero, indicating statistically significant mediation. In addition, the direct effect from condition to comfort in voicing relationship concerns became nonsignificant when adding positive regard into the equation ($\beta = .07, p > .05$), showing that full mediation occurred.
Consistent with Hypotheses 1, expressing appreciation for a friend or roommate increased participants’ positive regard for that friend or roommate over and above the effect of thinking appreciative thoughts or having other positive interaction. These findings may be explained in part by self-perception theory (Bem, 1967, 1972) insomuch as increasing the frequency and regularity of appreciation expression behavior led to an increased perception of the self as being appreciative of the friend’s interpersonal qualities. Initially developed as an alternate explanation for dissonance theory (Festinger, 1957), self-perception theory can be considered a special case of attribution theory wherein an individual “observes” his or her own behavior and makes attributions about the motivations behind the behavior after the fact. These attributions become the attitudes that the individual endorses (Bem, 1967, 1972). Based on this theory, I suggest that perhaps as participants changed their behavior by more regularly vocalizing how much they valued and appreciated their friend or roommate, their attitudes toward this friend changed to match their altered behavior, in that more appreciative behavior led to more appreciative thoughts regarding their interpersonal qualities (or positive regard). Given the emphasis that self-perception theory places on behavior, it makes some sense that expressing appreciation to a friend or roommate would do more to alter one’s regard for the friend than simply thinking about one’s appreciation for the person.

However, an alternative explanation to self-perception theory is that it could be that more frequent expression of appreciation increased the amount of positive interaction with the friend, which is responsible for the increase in positive regard. Although I tried to account for this possibility by including a positive interaction condition, it may be that expressing appreciation elicited a specific type of positive interaction that is responsible for the increase in positive regard. In a follow-up study, I plan to include measures of positive and negative interaction to test this plausible alternative explanation to self-perception theory.

My second hypothesis was also confirmed as the increased positive regard from expressing appreciation mediated between condition and comfort in voicing a relationship.
concern. This finding may be partially explained by the dependency regulation model, which proposes that individuals in romantic relationships allow themselves to be dependent on their partner only when they feel that they are valued by that partner (Murray, Holmes, & Griffin, 2000; Murray, Holmes, Griffin, Bellavia, & Rose, 2001; Murray, Holmes, MacDonald, & Ellsworth, 1998; Murray, Rose, Bellavia, Holmes, & Garrett Kusche, 2002). Although this model suggests that a certain level of comfort and safety is reached when one feels valued by his/her partner, the findings of the current study indicate that a similar outcome may be achieved when an individual values or has high positive regard for one’s relationship partner. The behavior of expressing appreciation to one’s friend/roommate was an important means by which the comfort level and dependency needed for open disclosure of relationship concerns was achieved, and whether this enhanced positive regard for a relationship partner leads to dependency more generally should be more directly tested by future research. This could be a potentially important extension of the dependency regulation model, because a participant’s behavior toward or perceptions of a partner or friend is more readily manipulated than is the behavior of a one’s friend, especially in the common scenario when a participant only (without his/her friend or partner) is involved in a given study. Given that many relationship interventions involve individuals rather than dyads, this finding is relevant to intervention research.

Negative Regard

The manipulation of expressed appreciation increased positive regard, but did not reduce negative regard. Perhaps one explanation for this is that regard may not necessarily fit a bipolar continuum. Eagly and Chaiken (1993) suggested that “social scientists typically assess people's attitudes by placing them on a bipolar evaluative continuum” (p. 90). In fact attitudes “are largely treated as unidimensional summary statements” even though they are often considered to be multidimensional (Thompson, Zanna, & Griffin, 1995, p. 362). In the realm of relationships, Fincham and Linfield (1997) provided evidence that the common conception of relationship satisfaction as a bipolar construct is incomplete. They used confirmatory factor analysis to demonstrate that separate positive and negative dimensions exist which they then used to define a two dimensional space. The authors then identified ambivalent (high positive and high negative), as well as indifferent (low-positive and low-negative) relationship types. According to Fincham and Linfield, changes in positive and negative evaluations of partner occur relatively
independently. Thus, it seems probable that one’s positive versus negative regard for a friend or roommate may also occur independently, and this could be tested by future research.

**Comfort in Voicing Concerns**

Expressing appreciation increased participants’ comfort in voicing relationship concerns. The findings of the current study indicate that expressing appreciation to a friend/roommate increased participants’ regard for this person, which was then responsible for establishing the comfort necessary to voice relationship concerns. Comfort in voicing concerns is an important and desirable relationship outcome for several reasons indicated by studies of the expression of negative emotion. First, expressing negative emotion provides important information about one’s needs, and this may help a friend/roommate know how to respond in an appropriate and caring manner (Clark & Brissette, 2000; Clark & Finkel, 2004; Clark, Fitness, & Brissett, 2001). Also, expressing negative emotions to a friend/roommate may signal to the friend that he/she is trusted not to take advantage of one’s vulnerabilities (Graham, Huang, Clark, & Helgeson, 2008). Finally, the expression of negative emotion is related to a sense of relationship intimacy within the individual who expressed the emotion (Graham, et al., 2008; Reis & Shaver, 1988), and has also been related to increased received support (Clark, Oulette, Powell, & Milberg; 1987; Graham, et al., 2008). These findings indicate that feeling comfortable in voicing relationship concerns is likely to be a desirable relationship outcome.

**Limitations and Future Directions**

The current study was limited in scope, because it was based on self-report data and self-reported data, which is subject to personal biases and provides only half of the story regarding relationship processes. For example, the current study is not equipped to explore the effect of receiving appreciation. It seems probable that increasing the receipt of appreciation would likely also increase one’s positive regard for a relationship partner, and this could be tested by obtaining dyadic data. This would be a good follow-up to the current study.

Also, the sample was limited to a small, non-representative college student sample, and this fails to reflect the effects of appreciation expression in more mature relationships, or in romantic relationships. Thus, this study ought to be replicated in a variety of age groups and
relationship types. We may learn that appreciation functions differently within these different groups.

The current study did not take different personality or other relationship factors into account. For example, someone with an avoidant attachment type of relationship may have responded differently to the intervention. Or, given that the mean relationship length was only 2.45 year in the current sample, perhaps appreciation may function differently in longer-term friendships. In addition to exploring how personality and relationship factors relate to expression of appreciation, it would also be interesting to test for moderation effects based on the frequency of interaction with a friend.

Another question for future research is whether feeling more positive regard for one’s friend would also lead to more expression of appreciation. Although the current study demonstrated that, in the current sample, expressing appreciation brought about a higher regard for one’s friend, these data do not rule out the possibility for the reverse relationship and this could also be tested by future research.
CONCLUSION

The current study represents the first documented attempt to experimentally test the effect of expressing appreciation on relationship outcomes in friendships. The study extends prior research by using a short-term longitudinal, journal design to alter specific communication behaviors over time. Thus, the study employed both an experimental and longitudinal design to determine the effect of appreciation expression. Even when controlling for baseline levels of positive regard and comfort in voicing relationship concerns, participants randomly assigned to express their appreciation to a friend or roommate over the course of three weeks reported higher positive regard and more comfort in voicing concerns about the relationship than those who thought appreciative thoughts about or had positive interactions with their friend or roommate. Furthermore, the enhanced positive regard for friend mediated the relationship between condition and comfort in voicing concerns. The current findings have important implications for clinicians and for research on interventions.
APPENDIX

INFORMED CONSENT FORM FOR JOURNAL STUDY

Principal Investigators: Nathaniel Lambert, B.S., Frank Fincham, Ph.D., Steven Graham, Ph.D.

I, _______________________________________________, being 18 years of age or older, freely and voluntarily and without undue inducement or any element of force, fraud, deceit, duress, or other form of constraint or coercion, consent to be a participant in the above named research project, to be conducted at the Florida State University. Listed below are the procedures to be followed in this research and their purposes, any risks, discomfort, and benefits associated with participation in this study, and the measures which will be taken to ensure confidentiality of the information obtained.

Purpose of the research: I understand that the purpose of this research project is to better understand daily and longer term aspects of college students’ romantic relationships.

Procedures for the research: I understand that participation in this project involves usual procedures; i.e. signing this informed consent form, filling out questionnaires, and may involve me praying and writing about the experience, writing about my daily activities, recalling things I appreciate about my partner, or writing things about my partner or about my life. I understand that by agreeing to participate in this project, I consent to fill out questionnaires about my background, and about my romantic relationship. The total time commitment for this study will be approximately 20-40 minutes per week for 4 weeks.

Potential risks or discomforts: I understand there is a minimal level of risk involved if I agree to participate in this study. I might experience distress while praying (if asked to do so), writing about my partner (if asked to do so), or answering questions about my romantic relationship. I understand that I am able to stop my participation at any time I wish. In case of distress, I can ask the person conducting the study to offer me referrals for psychological support.

Potential benefits to you or others: I understand there may be societal benefits for participating in this research project such as increasing the scientific community’s
knowledge of behaviors and feelings associated with college students’ well-being.

Confidentiality: All my answers to the questions will be kept confidential and my confidentiality will be protected to the full extent allowed by law. My name or any other identifying information will not appear on any of the results. No individual responses will be reported. Only group findings will be reported. Any identifying information will be kept locked, and only the principle investigator and his adviser will have a key. This data will be destroyed five years after the data collection.

I understand that this consent may be withdrawn at any time without prejudice, penalty or loss of benefits to which I am otherwise entitled. I have been given the right to ask any question I have concerning the study. Questions, if any, have been answered to my satisfaction.

I understand that I may contact Nathaniel Lambert nlambert@fsu.edu (tel: 644-4804) Frank Fincham, ffincham@fsu.edu, (tel; 644-4914), Florida State University, Family Research Institute, for answers to questions about this research or my rights. Group results will be sent to me upon my request.

I understand that if I have any questions about my rights as a participant in this research, or if I feel I have been placed at risk, I can contact the Chair of the Human Subjects Committee, Institutional Review Board, through the Vice President for the Office of Research at (850) 644-8633.

I have read and understand this consent form.

__________________________________________ _________________
(Participant)       (Date)

Office of the Vice President For Research
Human Subjects Committee
Tallahassee, Florida 32306-2742
(850) 644-8673 . FAX (850) 644-4392

APPROVAL MEMORANDUM

Date: 10/8/2007

To: Nathaniel Lambert

Address: 925 E. Magnolia Drive Apt. #C7
Dept.: FAMILY & CHILD SCIENCE

From: Thomas L. Jacobson, Chair

Re: Use of Human Subjects in Research
Journal Study

The application that you submitted to this office in regard to the use of human subjects in the proposal referenced above have been reviewed by the Secretary, the Chair, and two members of the Human Subjects Committee. Your project is determined to be Expedited per 45 CFR § 46.110(7) and has been approved by an expedited review process.

The Human Subjects Committee has not evaluated your proposal for scientific merit, except to weigh the risk to the human participants and the aspects of the proposal related to potential risk and benefit. This approval does not replace any departmental or other approvals, which may be required.

If you submitted a proposed consent form with your application, the approved stamped consent form is attached to this approval notice. Only the stamped version of the consent form may be used in recruiting research subjects.

If the project has not been completed by 9/30/2008 you must request a renewal of approval for continuation of the project. As a courtesy, a renewal notice will be sent to you prior to your expiration date; however, it is your responsibility as the Principal Investigator to timely request renewal of your approval from the Committee.

You are advised that any change in protocol for this project must be reviewed and approved by the Committee prior to implementation of the proposed change in the protocol. A protocol change/amendment form is required to be submitted for approval by the Committee. In addition, federal regulations require that the Principal Investigator promptly report, in writing any unanticipated problems or adverse events involving risks to research subjects or others.

By copy of this memorandum, the Chair of your department and/or your major professor is reminded that he/she is responsible for being informed concerning research projects involving
human subjects in the department, and should review protocols as often as needed to insure that the project is being conducted in compliance with our institution and with DHHS regulations.

This institution has an Assurance on file with the Office for Human Research Protection. The Assurance Number is IRB00000446.

Cc: Frank Fincham, Advisor
HSC No. 2007.696

the project is being conducted in compliance with our institution and with DHHS regulations.

This institution has an Assurance on file with the Office for Human Research Protection. The Assurance Number is IRB00000446.

Cc: Frank Fincham, Advisor
HSC No. 2007.696
REFERENCES


BIOGRAPHICAL SKETCH

Nathaniel M. Lambert

Current Position: Research Assistant
Florida State University

I. EDUCATION

B.S. 2005  Major: Marriage, Family, and Human Development
Brigham Young University, School of Family Life
Major: Russian
Brigham Young University, Department of Germanic and Slavic

II. PROFESSIONAL POSITIONS

2006 – Present  Research Assistant of Dr. Frank Fincham, Family Research Institute,
Florida State University

2005 – 2006  Teaching Assistant, Pennsylvania State University

2004 – 2005  Research Assistant of Dr. Alan Hawkins, School of Family Life

2004 – 2005  Research Assistant of Dr. David Dollahite, School of Family Life,
Brigham Young University

III. AREAS OF PROFESSIONAL INTEREST

- Gratitude and couple relations
- Perceived Meaningfulness in Life
- Religion, prayer, and relationships
- Prevention of Infidelity

IV. PROFESSIONAL PUBLICATIONS

Journal Articles
overcome marital conflict. *Family Relations Interdisciplinary Journal of Applied Family Studies*,
55, 439-449.

promotes marital fidelity in Christian, Jewish and Muslim couples. Review of Religious


**Book Chapters**


**V. PROFESSIONAL PRESENTATIONS AND CONFERENCES**

2008


2007


2006


2005


VI. FUNDING FOR RESEARCH

• Principle Investigator for $1,500 research grant from the Office of Creative Research Activities for a project entitled “Marital Fidelity in Religious Couples” (9/04 – 9/05).

VII. ACADEMIC AWARDS

• Won “Best Paper of the Year” award from the National Council on Family Relations Religion and Family Section.
• James Walters Scholarship from Florida State University
• Graduated as the Valedictorian of Marriage, Family, Human Development department. August 12, Provo, Utah.
• Recipient of the Magna Cum Laude for being in the top five percent of graduating class at Brigham Young University. August 12, Provo, Utah.
• Recipient of Special Award for poster titled “The Effects of Religion on Marital Fidelity,” awarded during a luncheon at the Mary Lou Fulton Mentored Learning Conference. April 13, Provo, Utah.
• A member of the National Dean’s List (2005).
• A member of *Dobro Slovo*, an association for exceptional students of Russian.