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# Predictors of friend approval for romantic relationships

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#### **Abstract**

Three studies (1 correlational and 2 experiments) applied the investment model to explain social network approval for others' romantic relationships. Study 1 supported the prediction that friends' perceived satisfaction and perceived alternatives were predictive of their approval for target relationships, while perceived investments was not a significant predictor. Studies 2 and 3 employed experimental manipulations of perceived satisfaction to test its causal impact on relationship approval, and in these studies, perceived satisfaction was a significant predictor of relationship approval. Taken as a whole, these findings supported the prediction that perceived relationship satisfaction is a causal factor influencing friends' approval of target romantic relationships.

The daily activities of romantic couples take place within larger social networks of friends, family, and acquaintances, and these social networks influence those embedded romantic relationships (Etcheverry & Agnew, 2004; Leslie, Huston, & Johnson, 1986). Much of the extant research on romantic relationships has taken an individualistic or dyadic approach to understand romantic relationship functioning. However, scholars have begun to recognize that to fully understand romantic relationship functioning, it is necessary to consider social network influence (Berscheid, 1999; Sprecher, Felmlee, Orbuch, & Willetts, 2001).

Although many aspects of social networks have been found to be associated with relationship processes, including contact with kin (Burger & Milardo, 1995) and

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network density (Kim & Stiff, 1991), by far the most commonly studied variable is the degree to which social network members approve or disapprove of the romantic relationship (Sprecher et al., 2001). Social network approval is predictive of relationship satisfaction (Sprecher & Felmlee, 1992), commitment (Etcheverry, Le, & Charania, 2008), and the quality and stability of romantic relationships (Le, Dove, Agnew, Korn, & Mutso, 2010; Sprecher et al., 2001).

Despite the importance of social network opinions, little research has examined the factors that lead social network members to approve or disapprove of a romantic relationship. One study found that a change in relationship status (i.e., becoming engaged) may prompt increases in support (Sprecher & Felmlee, 2000). Furthermore, Felmlee (2001) collected open-ended responses for why individuals approve or disapprove of their best friends' relationships and found that approval typically stemmed from the partners' positive personal characteristics and an equitable exchange of rewards. Disapproval was a function of concerns about the friends' well-being in addition to the effect of the relationship on the friendship. However, beyond these two studies, there is no direct research on the genesis of network approval or disapproval.

The lack of research examining the causes of social network approval or disapproval may be due, in part, to the lack of a clear theoretical basis for understanding the process of network approval. To this point, no theory has been developed to explain how social network members develop opinions regarding particular romantic relationships. However, perspectives such as interdependence theory (Kelley & Thibaut, 1978) explain how people make decisions about maintaining or ending their own relationship. We suggest that interdependence theory can be extended to provide insight into the process of network approval.

# Interdependence theory

Although many perspectives have been offered for understanding interpersonal relationships (Clark & Lemay, 2010), interdependence theory (Kelley & Thibaut, 1978) has been particularly effective in explaining how people evaluate the quality of their interpersonal relationships. Interdependence theory assumes that people are motivated to maximize rewards and minimize costs within their interpersonal relationships, including romantic relationships. The theory posits that people consider the level of outcomes in their relationships, defined as rewards minus costs, when evaluating those relationships. These outcomes are compared with the expected level of outcomes for the relationship, known as the comparison level for outcomes, to form a judgment of satisfaction with the relationship (Rusbult, Arriaga, & Agnew, 2001). If relationship outcomes exceed the expected level of outcomes for a relationship, then the person is satisfied with the relationship; if outcomes fall short of the comparison level, dissatisfaction will occur.

Members of relationships also consider the level of rewards and costs available in their best possible alternative relationships. The *comparison level for alternatives* represents the expected level of rewards and costs that could be received in an alternative relationship, which is important in understanding the extent to which one relies on a chosen relationship over an alternative for the fulfillment of relationship needs.

#### Rusbult's investment model

Designed as an addition to interdependence theory, the investment model adds two constructs: relationship investments and relationship commitment to understand relationships. Investments are those resources put into the relationship that would be lost if the relationship ends, including the loss of rewards that come from those investments and the costs associated with replacing those investments with new relationships (Rusbult, 1980). In the investment model, commitment to a romantic relationship refers to a psychological attachment to the relationship and an intention to maintain the relationship (Arriaga & Agnew, 2001). Commitment is argued to be a function of higher levels of satisfaction, lower quality of alternatives, and higher investments (Le & Agnew, 2003), and has been found to predict cognition and behavior within relationships (Rusbult & Agnew, 2010).

# Interdependence theory, the investment model, and social network approval

The key interdependence theory variables described above, satisfaction and alternatives, as well as the investment model variables, investment and commitment, point to the possible rewards and costs of remaining in or leaving a relationship. It is possible that social network members are concerned with the rewards and costs of a target person remaining in or leaving a relationship. Therefore, network members use their perceptions of the key interdependence theory and investment model variables to inform their approval or disapproval for the target person's relationship. To this point, no research has explicitly tested whether a social network member's perception of a person's satisfaction, alternatives, and investments predicts approval or disapproval of the relationship.

# Determinants of friend relationship approval

A basic assumption of social exchange theories in relationships is that people are

motivated to maximize the rewards and minimize costs received from relationships. However, it is not explicitly clear that social network members should be concerned with the rewards and costs of a target person's romantic relationship as the social network member does not directly gain these rewards and costs for themselves. The characteristics of social networks can provide an insight here as most social network members are friends or family members of at least one member of a romantic couple (Milardo, 1982, 1988). These social network members presumably care for the target person and desire the highest rewards and lowest costs for their friend or family member. Friendships that are commonly based on mutual concern and care (Van Lear, Koerner, & Allen, 2006) should be very likely to lead to friends desiring high rewards and low costs for a target person's relationship.

The little past research on friend approval for romantic relationships (Felmlee, 2001) indicates that relationship approval is based on partner characteristics and fair rewards within the relationship. Friend disapproval for a romantic relationship was partly based on the friends' well-being and the negative aspects of the relationship. This prior study supports the assumption that friends will be concerned with the rewards and costs of a target romantic relationship. Therefore, the current research focuses on friends as a source of relationship approval for a target romantic relationship. If, as expected, friends use relationship outcomes (rewards and costs) when evaluating a target romantic relationship, this supports the relevance of interdependence theory and investment model variables.

For a young adult sample involved primarily in dating relationships, friend approval is likely to be of particular importance. Given the amount of time friends spend together at this age, they are potentially an important source of influence on relationships. Prior research on a college-aged sample supports this as friend approval was a significant predictor of a person's own relationship commitment, even when controlling for parent and sibling approval (Etcheverry & Agnew, 2004).

Satisfaction is partly based on the relationship outcomes (rewards minus costs) that are received from a relationship. For social network members, perceiving higher outcomes in a target relationship should lead to higher perceived satisfaction for that relationship and greater approval for that relationship. Perceived alternatives are relevant to approval or disapproval as they indicate the extent of relationship outcomes available in an alternative relationship. If few alternatives are perceived, network members may approve more because there are no other viable relationships available. If many alternatives are perceived, approval for a current relationship may be lower because alternatives are seen as appealing. From the investment model, perceived investments in a relationship are relevant to relationship approval because the loss of investments is associated with lost rewards and increased costs. Thus, network members perceiving high investments may support that relationship to avoid the loss of those investments.

It is less clear how the investment model construct of commitment is related to friend relationship approval. In the investment model, commitment is a product of satisfaction, alternatives, and investments. However, unlike these variables, commitment does not directly provide information about the level of rewards and costs in a target relationship. If friends are primarily concerned with relationship outcomes in a target relationship, then perceived commitment may not provide useful information over and above the other three variables. This suggests that perceived commitment may not add to the prediction of relationship approval.

An alternative possibility is that friends will consider the degree of commitment they perceive a target person feels for his or her relationship as a measure of the target's desire to maintain the relationship. Little research has examined this issue, however, Sprecher and Felmlee (2000) report that when couples became engaged, they perceived more support from friends. This result may indicate that the increase in commitment associated with becoming engaged is used by friends to adjust relationship approval. Friends may choose to

take into account the target's preferences, in which case if the friend perceives high target commitment, romantic relationship approval should increase, while low target commitment should lead to low relationship approval.

# Developing network perceptions

Applying interdependence theory and the investment model to social network approval assumes that network members can effectively develop perceptions of the characteristics of the target romantic relationship. Previous research including both experimental and survey research has supported the ability of social network members, including friends, to develop perceptions of a target romantic relationship. In an experimental study, Rusbult (1980) created hypothetical scenarios depicting a romantic relationship characterized by either high or low costs, either high or low quality of relationship alternatives, and differing levels of investments in the current relationship. Participants rated hypothetical relationships with lower costs as higher in satisfaction, while lower levels of alternatives and higher investments in the scenarios led to perceptions of greater commitment. These results suggest that social network members are able to observe and develop evaluations of romantic relationships.

In several cross-sectional studies, social network members have been found to develop perceptions of the characteristics of target relationships (Agnew, Loving, & Drigotas, 2001; Loving, 2006; MacDonald & Ross, 1999). In all three of these studies, friends of people involved in romantic relationships were able to develop perceptions of commitment, satisfaction, and investments in the target relationship. The perceptions were found to correlate with the measures of these variables collected from the romantic relationship participants. In addition, these perceptions were then found to be predictive of relationship persistence (Loving, 2006). This information may come directly from members of the relationship, observing the couple interact with each other, or discussing the relationship with other social network members (Agnew et al., 2001). Although social network members may not be entirely accurate, they can develop perceptions of commitment to, satisfaction with, alternatives to, and investments in the romantic relationship. Unlike the current research, none of these previous studies tested how these perceptions are related to friend's approval or disapproval for continuing a romantic relationship.

Applying an interdependence theory approach leads to the first two hypotheses:

- H1: Perceiving a friend is satisfied with his or her relationship will be positively associated with a social network member's approval of that romantic relationship.
- H2: Perceiving a friend has high quality of alternatives to a romantic relationship will be negatively associated with a social network member's approval of that romantic relationship.

The next hypothesis is based on the investment model's inclusion of investments as a predictor of commitment.

H3: Perceiving a friend has invested in a romantic relationship will be positively associated with a social network member's approval of that romantic relationship.

The investment model construct of commitment has a less clear relationship with friend approval. It is possible that friends may use the commitment level of the target person when constructing their own approval or disapproval of the relationship. Another possibility is that friends are primarily concerned with the relationship outcomes that the target person receives from the relationship. The lack of prior research makes it difficult to develop a clear prediction regarding commitment; this leads to the following research question regarding commitment:

RQ1: This research question will explore the association between friend

perceived commitment and relationship approval.

Consistent with past findings on the structure of the investment model (Le & Agnew, 2003), perceived satisfaction in a romantic relationship is expected to be the strongest predictor of approval for that relationship, which fits with the theorized basis of satisfaction as the most direct evaluation of relationship outcomes. Perceived alternatives and investments should also be predictive of social network approval of a relationship as these variables also involve a consideration of current and alternative relationship rewards and costs.

# Study 1

The first study employs data collected from a mass-testing session to test the above hypotheses. In this study, participants answered questions about their perceptions of a target friend's romantic relationship. These questions included perceptions of the friend's satisfaction, alternatives, investment, and commitment.

#### Method

# Participants and procedure

Data were collected from undergraduate students completing a questionnaire as partial fulfillment of research requirements in psychology classes. A total of 1,274 (mean age = 19 years, SD = 2.1; 54.9% female) people participated in the study. The majority of participants reported being single (67.4%) and the remaining were in committed relationships (25.7%; 2.0% married, 2.0% living with a partner, 1.3% single with children, 0.1% divorced or separated, and 1.3% other), and most participants self-reported their ethnicity as Caucasian (87.1%; 4.3% Asian American or Pacific Islander, 4.3% African American or Black, 1.8% Latino, 1.6% international student, 1.0% multiracial, 0.3% native American, and 0.4% other). Participants were asked to answer questions about a friend's romantic relationship, thus being put in the role of the friend providing their perceptions of a romantic relationship embedded in that network.

Participants were asked to choose a male or female friend who was involved in a romantic relationship based on the participant's birth date. If the participants' birthday fell on an odd day (the first, third, fifth, etc.), they were instructed to answer questions about a male friend; participants with birthdays on an even day (the second, fourth, sixth, etc.) were instructed to answer about a female friend. Of the 1,274 participants, 28.3% were females reporting about female friends, 26.6% were females reporting about male friends, 20.9% were males reporting about female friends, and 24.2% were males reporting about male friends. Thus, we were able to make comparisons based on gender of the participants and friends.

The target relationships participants answered questions about were primarily exclusive dating relationships (77%; 7.5% nonexclusive dating, 7.5% cohabiting, 3.7% engaged but not cohabiting, 2.2% engaged and cohabiting, and 2.3% married). Approximately 40% of the target relationships had existed for less than 1 year (31% were involved for 1–2 years; 28% were involved for more than 2 years), and the majority of target friends were involved in heterosexual relationships (96.7%).

#### Measures

Perceived satisfaction. Participants first answered three questions regarding their perceptions of the friend's satisfaction with his or her romantic relationship. The items used were based on the Investment Model Scale (IMS; Rusbult, Martz, & Agnew, 1998) and included "My friend is satisfied with his/her relationship," "My friend's relationship is much better than others' relationships," and "My friend's relationship is close to ideal" (1–9 scale;  $\alpha = .88$ ).

Perceived alternatives. Participants answered three questions regarding their perceptions of the friend's alternatives to his or her current relationship. The items used were based on the IMS (Rusbult et al., 1998) and included "My friend's alternatives to his/her relationship are close to ideal (dating another, spending time

with friends or on own, etc.)," "If they weren't dating, my friend would do fine—he/she would find another appealing person to date," and "My friend's alternatives are attractive (dating another, spending time with friends or on own, etc.)"  $(1-9 \text{ scale}; \alpha = .68)$ .

Perceived investments. Participants responded to three questions about their perceptions of how much their friend had invested in the relationship. The items used were based on the IMS (Rusbult et al., 1998) and included "My friend has put a great deal into his/her relationship that he/she would lose if the relationship were to end," "My friend is very involved in the relationship—he/she has put a great deal into it," and "Compared to other people I know, my friend has invested a great deal in the relationship with his/her partner"  $(1-9 \text{ scale}; \alpha = .90)$ .

Perceived commitment. Participants responded to three questions, based on the IMS (Rusbult et al., 1998), about their perceptions of the friend's commitment. The items used included "My friend wants his/her relationship to last a very long time," "My friend is committed to maintaining his/her romantic relationship," and "My friend wants his/her relationship to last forever" (1–9 scale;  $\alpha = .68$ ).

Approval or disapproval of friend's romantic relationship. Participants answered four questions measuring their approval or disapproval of their friend's romantic relationship. These items included "I think my friend ... Should Not/Should ... continue in his or her current romantic relationship," "I think my friend ... Does Not Have/Has ... a current romantic relationship worth keeping," "I think that this ... Is Not/Is ... a good current romantic relationship for my friend," and "I am ... Not Supportive/Supportive ... of my friend's current romantic relationship." These items were reworded based on items originally designed to measure a member of a romantic relationships perceptions of social network member's approval or disapproval (Etcheverry & Agnew, 2004; Normative Beliefs Scale;  $\alpha = .94$ ).

#### Control variables

Along with the above predictors, control variables of participant gender (0 = female, 1 = male) and length of target relationship were included in the analyses. Length of relationship was coded such that  $1 \le 1$  month, 2 = 1-2 months, 3 = 2-6 months, 4 = 6-12 months, 5 = 1-2 years, 6 = 2-4 years, and 6 = 4+ years.

# Results

An initial analysis of variance (ANOVA) examined the interaction and main effects of participant and target gender on relationship approval, perceived satisfaction, perceived alternatives, and perceived investments. Only the effect of participant gender on perceived investments was significant, F(1, 1273) = 6.86, p < .01, with female participants perceiving higher investments (M = 6.70, SD = 0.07) than male participants (M = 6.42, SD = 0.08).

To test Hypotheses 1, 2, and 3 and Research Question 1, a multiple regression was run with perceived satisfaction, perceived alternatives, perceived investments, and perceived commitment predicting participant approval of the target romantic relationship (Table 1). Perceived satisfaction and alternatives were significantly associated with approval; however, perceived investments were not. Perceived commitment did not add to the prediction of relationship approval when assessed with the other hypothesized predictors.

Although both perceived satisfaction and alternatives were significant, perceived satisfaction was by far the stronger predictor, accounting for 52% of the variance in relationship approval, while perceived alternatives explained less than 1% of the variance. These results highlight perceived satisfaction as the most prominent predictor of relationship approval.

Although no hypotheses were proposed regarding gender, gender differences were deemed to be of general interest. Therefore, analyses were conducted examining both the gender of the participant and the gender of the target friend interacting with

				2			-
Model	β	T	<i>p</i> <	$R^2$	F	df	<i>p</i> <
				529	375.76	61,264	.001
Participant gender	018	0.25	.81				
Length of relationship	.034	1.27	.21				
Perceived satisfaction	.725	28.14	.00				
Perceived alternatives	039	1.96	.05				
Perceived investments	.036	1.25	.21				
Perceived commitment	045	-0.82	.41				

**Table 1.** Study 1 perceived investment model variables predicting romantic relationship approval

the investment model variables predicting relationship approval. Perceived commitment was not directly hypothesized nor was it a significant predictor in the previous model and therefore was not included in this analysis.

In these analyses, perceived satisfaction, perceived alternatives, perceived investments, participants' gender, and gender of the friend were entered into a multiple regression analysis predicting relationship approval. In addition, each of the perceived investment model variables was included in two-way interactions with participant's gender and friend's gender, respectively. Finally, three-way interaction terms were created for each of the investment model variables interacting with both participant's gender and friend's gender.

This multiple regression indicated a significant interaction between perceived satisfaction and participant gender. Examinations of the simple slopes for perceived satisfaction indicated that perceived satisfaction was a significant predictor of relationship approval for female participants ( $\beta = .762$ , t = 19.41, p < .01) and male participants ( $\beta = .605, t =$ 10.40, p < .01) but satisfaction was a significantly stronger predictor for female as compared to male participants (t = -2.24, p < .05). The interaction of perceived investments and participant gender was also significant (t = -2.59, p < .01), with investments being a significant predictor for female participants ( $\beta = .127$ , t = 2.29, p < .05) but not for male participants ( $\beta = -.098$ , t = -1.27, p = .21). None of the other two-way or threeway interactions was significant.

## Discussion

The results of Study 1 indicate that interdependence theory variables contribute to the prediction of friend relationship approval in that both perceived satisfaction and alternatives were significantly associated with approval. As anticipated, perceived satisfaction was a strong positive predictor of approval (vs. disapproval) of the friend's relationship. Similarly, perceived alternatives were a negative predictor of approval of the friend's romantic relationship. Although both perceived satisfaction and alternatives were significant predictors of relationship approval, perceived satisfaction explained a substantially larger proportion of the variance.

In contrast, the investment model additions of investment and commitment were both nonsignificant predictors of friend relationship approval for the entire sample. However, investments were a small but significant predictor of relationship approval for female but not male participants. For female participants, investments were a significant predictor regardless of whether the target person's gender was male or female. This result suggests that women may be more concerned with what a friend has put into a relationship that is lost if the relationship ends. Male friends appear not as concerned with investments in others' relationships. Even for female participants, investments explained a substantially smaller amount of variance than perceived satisfaction. Given that participants were college-aged and so were most of the target relationship members, it is possible that for this age group, investments are not valued in terms of determining relationship approval. For older participants with different priorities, investments such as shared property and children may have a stronger impact on approval. Another possibility is that different types of investments are differentially influential on relationship approval. Prior research has argued that there are many different types of investments (Goodfriend & Agnew, 2008), including tangible and intangible investments. It is possible that more tangible investments that are more easily observed by the friend will be more predictive than intangible investments; however, the current measure of investments failed to make this distinction.

An important result of Study 1 is that perceived commitment was not significantly associated with perceived approval. The correlations between perceived commitment and relationship approval (Table 2) indicate that commitment and relationship approval are positively associated. However, after controlling for perceived satisfaction and alternatives, perceived commitment is no longer a significant predictor of relationship approval. This finding supports the possibility that although network members can develop perceptions of a target person's commitment, it is the relationship outcomes of the current relationship and potential alternatives that are most relevant to the participant's relationship approval.

The results of Study 1 indicate that perceived satisfaction is the strongest predictor of social network members' approval of romantic relationship. The contribution of perceived alternatives, while significant, was very small suggesting that this variable has a much smaller impact on relationship approval. Although investments were a significant predictor of approval for female participants, it also explained much less variance than satisfaction. Therefore, the following two studies focus on developing a better understanding of the association of perceived satisfaction with relationship approval.

Despite the strong association between perceived satisfaction and approval in Study 1, the correlational design precludes making causal inferences. It is possible that when a social network member approves of a friend's relationship, they then assume that the friend is satisfied in the relationship. In addition, other variables could be causing both perceived satisfaction and approval. For this reason, Studies 2 and 3 experimentally manipulate perceived relationship satisfaction to confirm its causal impact on approval for the romantic relationship.

H4: Participants in the high perceived satisfaction experimental condition will report more approval for a target romantic relationship than participants in the low perceived satisfaction experimental condition.

Studies 2 and 3 each employs distinct manipulations of perceived satisfaction to

<b>Table 2.</b> Correlation	ons of multire	gression model	variables	for Study	v 1
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	1	2	3	4	5	6
1. Perceived satisfaction	_					
2. Perceived alternatives	0.19**	_				
3. Perceived investments	0.55**	0.16**				
4. Perceived commitment	0.63**	0.06*	0.70**			
5. Relationship approval	0.73**	0.10**	0.42**	0.46**	_	
6. Participant gender	-0.02	-0.04	-0.08	0.12**	-0.02	_
7. Length of relationship	0.20**	0.01	0.37**	0.32**	0.17	0.01
M	5.93	6.11	6.57	7.08	0.45	4.64
SD	2.01	1.64	1.89	1.99	0.50	1.42

p < .05. \*p < .01.

create independent tests of the ability of perceived satisfaction to influence relationship approval. Using two separate manipulations decreases the likelihood of any one confound providing a reasonable alternative explanation of both results. Therefore, Studies 2 and 3 use unique manipulations but the same measures of relationship approval and perceived satisfaction.

# Study 2

The second study manipulates social network members' perceived satisfaction by having participants assimilate or contrast their perceptions of the friends' relationships with an ideal romantic relationship based on principles of the feature-matching model (Tyversky, 1977). A similar technique was used by Broemer and Diehl (2003) to manipulate participants' satisfaction with their own relationships, and in the current study, we used this approach to manipulate friends' perception of relationship satisfaction.

In the Broemer and Diehl (2003) study, participants were asked to compare their own romantic relationship with the characteristics of the ideal romantic relationship. The featurematching model indicates that when being asked how Object A is similar to Object B, Object A is the target of comparison and Object B acts as the referent for comparison (Holyoak & Gordon, 1983). Prior research on the feature-matching model has found that when people are more familiar with an object, they are better able to identify unique characteristics of that object. The more unique an object is, the more dissimilar it will be considered from another object. However, the feature-matching model argues that the effects of the unique characteristics of an object on perceptions of dissimilarity are nonsymmetrical such that uniqueness will have a stronger impact on dissimilarity when that object is the target of comparison than when it is the referent for comparison (Holyoak & Gordon, 1983). Broemer and Diehl used this nonsymmetrical characteristic of comparisons by asking participants to compare their relationship with the ideal relationship, where for some participants, the romantic relationship

was the target of comparison, and for some participants, the romantic relationship was the referent. Specifically, Broemer and Diehl instructed half of the participants to consider how their own romantic relationship was similar to the ideal romantic relationship, which leads to perceive less similarity between the two objects or a contrasting effect. The other half of participants were instructed to compare how the ideal romantic relationship was similar to their own romantic relationship, which leads to perceive more similarity between the two objects or an assimilation effect. As expected, participants in the contrastive condition reported lower levels of relationship satisfaction as compared to participants in the assimilative condition.

Study 2 applies a similar approach but instead changes whether the target romantic relationship is the target of comparison or the referent. For Study 2, participants were asked to indicate how similar the friend's romantic relationship was to the ideal romantic relationship (contrast condition) or how an ideal romantic relationship was similar to their friend's romantic relationship (assimilation condition). These manipulations were intended to create high perceived satisfaction (assimilation condition) and low perceived satisfaction (contrastive condition) groups.

# Method

# **Participants**

Undergraduate students participated in this research in partial fulfillment of the research requirement in a psychology course. Participants took the perspective of social network members and were asked to think of a friend who is involved in a romantic relationship. Participants were randomly assigned to answer about either a male or female friend. A total of 48 participants (25 females; 85% Caucasian, 8% African American, 7% other) were randomly assigned to either the assimilation or contrast condition.

#### Procedure and measures

Participants provided open-response answers to the following questions designed to promote

thinking about the ideal relationship: "What is ideal romantic love?" "What are ideal romantic behaviors?" "What attributes does an ideal partner possess?" "What are everyday activities for individuals in ideal romantic relationships?" and "What are traditional feelings and emotions of those in ideal romantic relationships?" All participants completed this task.

After answering these questions about ideal relationships, participants were asked to think about a male or female friend who is involved in a romantic relationship. Participants were instructed to either compare the friend's relationship with the ideal romantic relationship (assimilation condition) or to compare the ideal romantic relationship with the friend's romantic relationship (contrast condition). Participants were given 5 min to write their thoughts regarding these comparisons and afterward were asked to indicate their approval of the friend's romantic relationship using the same four items from Study 1 ( $\alpha = .97$ ). Finally, participants completed a modified version of the entire IMS (Rusbult et al., 1998) reframed to be answered about the friend's romantic relationship, including measures of perceived relationship satisfaction ( $\alpha = .94$ ), perceived alternatives ( $\alpha =$ .88), perceived investments ( $\alpha = .83$ ), and perceived commitment ( $\alpha = .94$ ). Some of the items in the IMS were measured on different metrics so responses were transformed into z-scores before being averaged across items.

# Results

A manipulation check investigated if the experimental conditions (two levels: assimilation to ideal and contrast from ideal) differed in perceived relationship satisfaction. The manipulation check indicated that the conditions differed significantly, F(1, 44) = 4.46, p < .05, with the assimilation condition having significantly higher levels of perceived satisfaction (M = 0.30, SD = 0.70) than the contrast condition (M = -0.19, SD = 0.81). Importantly, the manipulation did not cause a significant change in perceived alternatives, F(1, 44) = 1.87, p = .18; perceived investments, F(1, 44) = 0.00, p = .96; or perceived commitment, F(1, 40) = 0.00, P = .96; or perceived commitment, P(1, 40) = 0.00.

44) = 0.04, p = .84. Examination of the responses provided indicated that all participants completed the comparison with the ideal relationship and that the length of the responses was similar across conditions.

In the second set of analyses, the assimilation/contrast manipulation significantly affected participants' approval or disapproval of friends' relationships in the predicted direction, F(1, 40) = 4.67, p < .05,  $R^2 = .10$ , with the assimilation condition having higher levels of approval for the friend's relationship than the contrast condition (5.88 vs. 4.55, SDs = 1.77 and 2.17, respectively). Thus, changes in perceived satisfaction caused a corresponding change in relationship approval.

To further test that the change in relationship approval was due to change in relationship satisfaction, bootstrapping mediational analyses were conducted (Preacher & Hayes, 2008). The results of these analyses indicated that there was a significant indirect effect through perceived satisfaction (indirect effect = 1.16, SE = 0.52, 95% CI [0.21, 2.15]). Once the indirect mediational effect of satisfaction was taken into account, the direct effect of assimilation/contrast manipulation on relationship approval was not significant  $(\beta = .17, t = 0.57, p = .57)$ . The sample size of Study 2 was chosen to test the causal effect of satisfaction based on the effect size determined in Study 1. Tests for interactions with participant gender were not conducted as the sample size for the current study would not provide enough power to test interactive effects.

# Study 3

Study 3 used a manipulation based on the availability heuristic that was used by Broemer (2001) in a prior study to manipulate interpersonal closeness. The availability heuristic refers to a cognitive shortcut that people use when attempting to judge the prevalence or uniqueness of an event or object in the environment (Tyversky & Kahneman, 1973). The availability heuristic refers to the common tendency that when asked to indicate how prevalent some object or event is, people often use the ease of recall or how easy it is

to think of instances of that object or event as a guide for how prevalent the object or event is. Researchers have found that by turning this heuristic around and systematically manipulating the ease of recall or availability of an object or event, it is possible to experimentally change participant's judgments of how common or uncommon the object or event is (e.g., Schwarz et al., 1991). Applying this to relationships, Broemer employed the availability heuristic by asking participants to list either 5 (easy recall condition) or 10 (hard recall condition) end-states or events in their romantic relationship. When asked to list fewer end-states or events, participants viewed these events to be more common than those asked to list more end-states or events. This research found that by manipulating how common or uncommon these relationship endstates were perceived to be, participants felt that closeness to a romantic partner could be manipulated.

In Study 3, we sought to replicate the results of Study 2 using the availability heuristic to manipulate perceived satisfaction in the friend's romantic relationship. Consistent with past work (Broemer, 2001), participants were randomly assigned to list few (easy recall condition) or many (hard recall condition) reasons why their friend is satisfied with the friend's current romantic relationship.

#### Method

# Participants and procedure

As in the previous studies, participants were randomly assigned to think of either a female or male friend who was currently involved in a romantic relationship. In total, 44 participants (22 women; 84% Caucasian, 4% African American, 4% Asian American) were randomly assigned to either the easy or hard recall condition and asked to provide reasons why their friend is satisfied with their current romantic relationship. Participants in the easy recall condition were asked to list three reasons their friend is satisfied, while participants in the hard recall condition were asked to list eight reasons. All participants in the easy recall/list three conditions listed three reasons.

Seventy percent of participants in the hard recall/list eight listed eight reasons. Participants who listed fewer than eight reasons in the hard recall condition were retained in analyses as not listing all eight asked for reasons was viewed as evidence of the difficulty of the task in this condition, which is consistent with the rationale underlying this manipulation.

#### Measures

Following the recall task, participants completed two questions regarding how hard it was to recall the reasons why their friend was satisfied. These items were "I found it very easy/hard to come up with three reasons why my friend is satisfied" and "I could easily generate more than the three reasons why my friend is satisfied" (reverse coded). These two items were measured on a 1-7 scale with higher numbers indicating a greater subjective difficulty of recall (correlation between items r=.77) and were averaged to create a measure of difficulty of recall.

Next, participants completed the same measures of participant approval ( $\alpha = .98$ ) of the friend's romantic relationship as used in Studies 1 and 2. Finally, we administered the modified IMS (used in Study 2; Rusbult et al., 1998) to assess perceived relationship satisfaction ( $\alpha = .92$ ), perceived alternatives ( $\alpha = .75$ ), perceived investments ( $\alpha = .84$ ), and perceived commitment ( $\alpha = .94$ ). Similar to the previous study, IMS items were transformed to z scores.

#### Results

An initial analysis of the difficulty of recall measure indicates that participants asked to list three reasons why their friend was satisfied reported the task was significantly easier than participants asked to list eight reasons (Ms = 3.40 vs. 5.24, SDs = 1.67 and 1.43, respectively), F(1, 43) = 14.94, p < .001. A second manipulation check was run to confirm that participants in the "list three" condition reported significantly higher levels of perceived friend satisfaction than in the "list eight" condition (Ms = 0.26 vs. -0.38, SDs = 0.91 and 1.02, respectively),

F(1, 43) = 5.17, p < .05. Additional analyses showed that the condition variable was not a significant predictor of perceived alternatives, F(1, 43) = 1.93, p = .18, or perceived investments, F(1, 43) = 2.43, p = .13, but was a significant predictor of perceived commitment, F(1, 43) = 4.90, p < .05.

An ANOVA was conducted to determine if participants' relationship approval varied by condition. The analysis indicated that those in the "list three" condition reported significantly higher levels of approval for their friends' relationship compared to participants in the "list eight" condition (Ms = 6.16 vs. 5.17, SDs = 1.27 and 1.95, respectively), F(1, 43) = 4.29, p < .05.

Mediational analyses were conducted using the Preacher and Hayes (2008) bootstrapping method to examine if perceived satisfaction mediated the effect of the manipulation in predicting relationship approval. Perceived commitment was significantly predicted by condition; therefore, commitment was included as an additional mediator along with perceived satisfaction. The results of this bootstrapping mediation analysis indicated that there was a significant indirect effect through perceived satisfaction (indirect effect = 0.20, SE =0.10, 95% CI [0.03, 0.43]). However, the indirect effect of condition through commitment was not significant (indirect effect = 0.02, SE = 0.04, 95% CI [-0.02, 0.15]). Once the indirect mediational effect of satisfaction and commitment was taken into account, the direct effect of three/eight listing condition on relationship approval was not significant ( $\beta = .02$ , t = 0.40, p = .69). As with Study 2, the sample size for the current study lacked power to test for interactions with participant gender to predict relationship approval.

#### Studies 2 and 3 discussion

Studies 2 and 3 complement the results of Study 1 and provide further support for the role of perceived satisfaction in social network approval. Using different manipulations, these two studies provide strong evidence for the causal association between perceived satisfaction and approval for a friend's romantic relationship.

#### **General Discussion**

The three studies provide strong evidence for the role of perceived satisfaction in predicting social network approval for a romantic relationship. The results of Study 1 indicate that perceived satisfaction is the strongest contributor of the investment model variables to friend approval for a romantic relationship. Studies 2 and 3 support the results of Study 1 by demonstrating perceived satisfaction's causal association with relationship approval. Perceived alternatives were a significant predictor in Study 1, and investments were a significant predictor for female participants, although the amount of variance in relationship approval explained by these variables was small when compared to perceived satisfaction. Perceived commitment was a nonsignificant predictor of approval for a romantic relationship.

These results suggest that friends, such as members of the romantic relationship, are concerned with the level or rewards and costs or outcomes in a relationship. Therefore, perceived satisfaction, as the best indicator of relationship outcomes, is a predominate predictor of relationship approval. This finding fits with interdependence theories' focus on relationship outcomes as a primary tool for evaluating the quality of relationships. Assuming that friends evaluate relationships in a similar manner as the people in those relationships, it makes sense for satisfaction to guide relationship approval.

It could be argued when examining the manipulations used in Studies 2 and 3 that these manipulations affected perceived satisfaction, not the underlying rewards and costs argued to be important in interdependence theory (Kelley & Thibaut, 1978). Although the current research supports the importance of perceived satisfaction, additional research is needed to confirm that friends are concerned with rewards and costs in a target relationship, not just the general happiness level of a target person.

It is worth noting that the measures used in this study are only *perceived* relationship satisfaction, alternatives, and investments. It is unclear how accurate friend members are regarding these variables. However, it is assumed that whether they are inaccurate or accurate, it is these perceptions of relationship variables that determine friend approval for a romantic relationship.

# Alternative bases for relationship approval

The current research indicates the importance of the interdependence theory variables, especially perceived satisfaction in predicting relationship approval. The current results do not leave out the possibility that other factors might predict relationship approval. For example, in Felmlee's (2001) research, some participants indicated disapproval of a romantic relationship because the romance is seen as disrupting the friendship with the social network member. Social comparison processes (Buunk & Oldersma, 2001) might also matter, with friends using a target relationship as either an inspirational target for upward social comparison or a source of positive feelings as a target for downward social comparison. Jealousy may also be an important variable, especially if the friend wishes to date one of the target relationship members.

The current research was not designed to test these alternative predictors of relationship approval, leaving open the possibility that these other variables matter. However, it might also be worth considering that social comparison processes, jealousy, and other factors might actually influence perceived satisfaction and alternatives, which then predict relationship approval. These unanswered questions suggest that predictors of social network approval for a relationship is an important topic for relationship research to study.

#### Future directions and conclusions

Very little research has examined the determinants of social network approval. Therefore, the current research is only an initial attempt to understand what is likely a complex aspect of social network influence on romantic relationships. However, the current research does suggest the importance of perceived satisfaction and underlying assumptions of social exchange models (i.e., interdependence theory) in guiding future research in this area.

Several key areas needing future research are identified. First, it will be important to replicate these results with older and more diverse samples, other types of social network members such as parents and family members, and more diverse types of relationships (e.g., marriages). Assuming that parents, family members, and other social network members also desire the best outcomes for the target romantic relationship member, we might expect an interdependence theory approach to predict that relationship approval will be effective. However, it is likely for parents and family members that other factors are associated with relationship approval, such as the long-term viability of a relationship. Future research should explore these possibilities. In addition, future work should explore potential moderators of the association of interdependence theory and investment model variables with relationship approval. Several possible moderators include the nature of the target romantic relationship (dating, cohabitating, and married) and the degree of closeness between the friend and the member of the target relationship.

These studies can be used to test if perceived satisfaction remains such a strong predictor, if perceived investments remain a significant predictor for women only, and if perceived alternatives ever explain more of the variance in relationship approval. In addition, it will be important to examine situations where the assumption that social network members approve more of romantic relationships with high rewards and low costs may be violated.

# Conclusion

The findings from the three studies, one correlational and two experimental, support the relevance of interdependence theory to understand the factors that contribute to friend approval for a target romantic relationship. Friend-perceived satisfaction was a particularly strong predictor of relationship approval. This research represents an initial step toward developing a broader understanding of the factors that contribute to friend and social network approval of romantic relationships.

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