

Affective and Interpersonal Correlates of Relationship Satisfaction

Lara K. Ault, Ashley Lee
Saint Leo University

Healthy relationships are important to functioning in daily life and across the life-span (e.g., Burman and Margolin 1992). Personality factors could predict relationship satisfaction through the influence of individuals' relationship schemas (Fiske and Taylor 1991) and perceptions of their partners (Simpson and Rholes 1998). Given the potential importance of attachment styles to relationship mechanisms and the well-established relationship between attachment and interpersonal behavior (Bartholomew and Horowitz 1992; Hazan and Shaver 1987), interpersonal traits may influence relationship satisfaction directly. According to Leary's (1957) interpersonal reflex theory, any interpersonal act elicits responses from the other person that verify, validate, or otherwise reinforce the actor's own self-image and self-presentation, and thus increase the probability that the actor will emit similar interpersonal acts in future interactions. The Impact Message Inventory (IMI) attempts to measure individuals' perceptions of how others impact them by evoking interpersonal acts such as dominance and affiliation. This study examined the influence of perceived partner-evoked behavior and individuals' own interpersonal styles on relationship satisfaction. This study used IMI measures of evoked Dominance and Affiliation as well as revised Liking and Loving measures to predict relationship satisfaction using three different satisfaction outcome measures. The final analyses included 291 participants (134 men and 157 women) who completed a scantron survey. Partner impact, or the interpersonal behaviors, evoked from the individual during interaction, predicted relationship satisfaction well. Evoked affiliation was the most consistently strong predictor of satisfaction across all three outcome measures. Liking (distinct here from affiliation) is a stronger predictor of relationship satisfaction than is loving (distinct here from passion), and it is significant across all three outcome measures. The liking measure appears to reflect a relatively high level of reward in the relationship and intrinsic enjoyment of the partner's company without the comparative cost of loving. Future research should examine interactions between couples, moving beyond intrapsychic self-reports of perceived experiences and feelings, although these are important in their own right.

Keywords: relationship satisfaction, interpersonal circumplex, liking, companionate love

1. Introduction

Concerns with marital satisfaction and relationship quality are somewhat new phenomena for couples in close relationships (Levinger 1997). The expectation of being "in love" with a partner before one marries is a relatively modern cultural tendency (Simpson Campbell and Berscheid 1986). Given that little else obliges

Lara K. Ault, Ph.D., associate professor of Psychology and assistant chair of Social Sciences, Saint Leo University, USA; main research field: Social Psychology.

Ashley Lee, B.A., Department of Psychology, Saint Leo University, USA; main research field: Forensic.

people to remain in these relationships (other than investment of time and resources, Rusbult 1983), it may not be surprising that divorce occurs in more than one-half of American marriages (Brehm 1994).

Healthy relationships are important to functioning in daily life and across the life-span (e.g., Burman and Margolin 1992). They are central to well-being (Hazan and Shaver 1987), and have been posited to be one of humans' most fundamental needs (Baumeister and Leary 1995). Therefore, most people enter into some type of close relationship at some point in their lives. Any light shed on variables or dynamics that may underlie some of the causes of relationship satisfaction and longevity should, therefore, be both practically and theoretically beneficial.

Given recent interest in relationship satisfaction, numerous studies have focused on different predictors of relationship satisfaction. The present study focused on two primary predictors of satisfaction, namely, (1) how the relationship partner makes the individual in question think and behave in response to the partner's interpersonal style ("interpersonal impact") and (2) how the individual feels about the relationship partner (how much does the individual like and love the partner?).

This study also compared the effects of the above variables to the effect on satisfaction of individuals' own interpersonal styles. Personality factors could predict relationship satisfaction through the influence of individuals' relationship schemas (Fiske and Taylor 1991) and perceptions of their partners (Simpson and Rholes 1998). Given the potential importance of attachment styles to relationship mechanisms and the well-established relationship between attachment and interpersonal behavior (Bartholomew and Horowitz 1992; Hazan and Shaver 1987), interpersonal traits may influence relationship satisfaction directly.

2. Interpersonal Impact and Relationship Satisfaction

Interpersonal Personality theory (IP theory, Kiesler 1996; Leary 1957) focuses on the dimensions of Dominance and Affiliation, and the combinations of these dimensions within individuals. IP theory proposes a structural, circumplex model of personality traits in which two bipolar factors, Dominance-Submissiveness and Affiliation-Hostility, are arranged orthogonally, with Dominance on the vertical axis and Affiliation on the horizontal. Gradations between these factors create a circular continuum of traits, typically referred to as octants, which include (clockwise around the circumplex): Dominant, Friendly-Dominant, Friendly, Friendly-Submissive, Submissive, Hostile-Submissive, Hostile, and Hostile-Dominant (Kiesler 1983). The structural implications of the circumplex further suggest that since Dominance and Affiliation are orthogonal to one another, then the aspects of personality close to either axis will be highly positively correlated with that axis, and with adjacent personality traits, or octants, but less so with those farther away. Personality structures, or traits, that are negatively correlated with one another, line up on opposing sides of the circumplex.

Perhaps the most unique aspect of IP theory is its clear propositions about the dynamics of interpersonal behavior. IP theory proposes that individuals' personalities develop and are continually embedded within a larger social context (Sullivan 1953; Leary 1957). Of particular interest in the present study is the dyadic context, or the influence of close relationship partners on each other. According to Leary's (1957) interpersonal reflex theory, any interpersonal act elicits responses from the other person that verify, validate, or otherwise reinforce the actor's own self-image and self-presentation, and thus increase the probability that the actor will emit similar interpersonal acts in future interactions. In Leary's (1957) interpersonal reflex, later termed complementarity (e.g., Kiesler 1983), control-related behaviors operate reciprocally, in that these behaviors evoke, or pull, from another individual the opposite interpersonal behavior. Individuals who behave dominantly,

therefore, evoke submissiveness from those with whom they interact, and submissiveness “pulls” dominant behaviors. Affiliation behaviors operate on the correspondence principle, such that more warmth and closeness displayed by a partner increases the likelihood that the individual with whom he or she is interacting will reciprocate with warmth and closeness. Likewise, hostility tends to be met with hostility.

In order to investigate more fully the role of complementarity in interpersonal interactions, Keisler (1983) created the Impact Message Inventory (IMI) which attempts to measure individuals’ perceptions of how others impact them. The IMI measures primarily behavioral responses to another’s behavior (e.g., “When I am with my partner, he/she makes me feel that I want to get away from him/her”), as well as cognitive responses (e.g., “when I am with my partner, it appears to me that he/she sees me as superior”). The IMI is used in this study to measure interpersonal impact, or how we are affected by our partners’ dominance/submissiveness and affiliation/hostility. It is proposed that evoked affiliation (partner affiliation) will contribute positively to relationship satisfaction while evoked submissiveness (partner dominance) will be negatively related to relationship satisfaction.

While the behavioral and cognitive impact of the relationship partner may be important to relationship satisfaction, the present research suggests that the individual’s affective reaction to the partner is also an important predictor of relationship satisfaction. Historically however, most studies have only contemplated one aspect of the individual’s affective reaction to the partner, namely “loving” (e.g., Berscheid and Walster 1978; Hendrick and Hendrick 1988). The present study examined another important affective predictor of relationship satisfaction, “liking.” We defer a precise definition of liking until later, because it can perhaps be better understood by contrasting it with the more extensively researched affective response of loving.

3. Loving and Liking as Predictors of Relationship Satisfaction

For the purposes of this study, we define love as intimacy and care, which is consistent with the construct of companionate, but not passionate, love (Berscheid and Walster 1978). We focus on the more enduring aspects of closeness and care because passionate love is fleeting compared to companionate love (Berscheid and Walster 1978). The measure of loving used in the present study is therefore based on Rubin’s (1970) love scale, but removes many of the passionate/dependent “need” items based on arousal (e.g., “If I could never be with my partner, I would be miserable.”) that we feel are less relevant to the enduring aspects of love in which we are most interested. A more detailed description of the love measure is provided in the methods section.

3.1. Loving as a Predictor of Satisfaction

According to research by the Hendricks (e.g., Hendrick and Hendrick 1988), love is one of the most important predictors of relationship satisfaction. Its loss also contributes to relationship dissolution, which has obvious links to diminished relationship satisfaction. The direct effects of love on relationship satisfaction have been indicated by a number of studies. For example, the connection between love and satisfaction includes the strong desire to be with the beloved, and the experience of distress when unable to be with him or her (E. N. Aron and Aron 1997). Gonzaga, Keltner, Lohdahl, and Smith (2001) demonstrated that love serves as a possible reinforcer to increase pleasure and approach (measured by self-reported desire and sympathy during the interactions) rather than to reduce distress or avoidance (measured by disgust during the interactions). Walster, Walster, and Traumpman (1978) found that reward level predicted relationship satisfaction better than equity or equality. Love can easily be viewed as a rewarding experience, given its correlations with happiness (Gonzaga et al., 2001) and the associated feelings of comfort.

Although passionate love is clearly an important predictor of relationship satisfaction at early stages of relationships (Berscheid and Walster 1978), it is less relevant to long-term success of relationships than is companionate love. Partners may remain highly attracted to one another over time, but such relationships are not considered “passionate.” Passionate love is fleeting by definition, as it is too intense to continue for very long, and the truths revealed by intimacy eventually erode passion. Therefore, passionate love will not be included in the measure of love for the present study, which is interested in longer-term relationship satisfaction.

3.2. Liking as a Predictor of Relationship Satisfaction

To our knowledge, liking has not been thoroughly examined as a predictor of relationship satisfaction. Instead, it has served as an indicator of attraction, a general relationship measure (Berg and McQuinn 1986), or as a component present in satisfying relationships (Burlinson and Denton 1997). Rubin (1970) has argued that liking is distinct from loving and has defined liking as similarity, respect, and admiration. He developed a liking scale in order to test discriminant validity for his loving scale, which was his primary interest.

We agree that liking and loving are distinct, and we propose that they affect relationship satisfaction differently. We perceive, however, several potential problems with Rubin’s (1970) conceptualization of liking. First, interpersonal theorists would point to a distinction between similarity and complementarity in relationship dynamics. Similarity leads to liking when the other person is similar in demographic characteristics and shared attitudes (Byrne 1971), but it has been shown to cause dissatisfaction in interactions when partners have similar levels of interpersonal dominance-submissiveness (Dryer and Horowitz 1997; Norwicki and Manheim 1991). Similarity as a measure of liking, therefore, confounds the measure of affective liking with the interpersonal dynamics of similarity and complementarity. Second, Rubin’s respect and admiration components of liking would appear to be related to the interpersonal dimensions of dominance and status (e.g., “I would recommend my partner for a highly responsible job.”). Since the present study examined the interpersonal predictors of relationship satisfaction, Rubin’s approach would not allow an unconfounded measure of the putative affective response, liking. Finally, Rubin’s liking items tend to be lacking in affective tone and tend instead to be more cognitively focused. None of the items, for example, include such things as “I like my partner” or “I enjoy spending time with my partner.” Therefore, we created a modified version of Rubin’s liking scale in order to use a measure of liking that does not overlap with the interpersonal variables of interest, and that serves as a more focused and affective measure of the components of liking.

We consider liking to be defined as feelings of reward with relatively little cost compared to love. We consider liking between people to occur when they enjoy each other’s company and generally find pleasure interacting together. Liking, unlike love, involves relatively little investment, intimacy, or interdependence. If liking primarily involves reward, then the extent to which partners like one another may be an especially powerful predictor of relationship satisfaction, especially compared to love which involves comparatively larger costs (e.g., broken heart, more investment, loss of passion over time, aversive romantic feelings such as jealousy). Liking, then, may be a relatively overlooked variable that plays an important role in the prediction of relationship satisfaction.

4. Satisfaction as a Relationship Outcome

Measures of satisfaction and stability are most often used as indicators of relationship quality, especially in

marital relationships (Karney and Bradbury 1995; Rusbult et al. 1998). While satisfaction is one of several possible indicators of relationship success (Rusbult 1983; 1998), its measurement has been problematic due to disagreement about the construct itself and the resulting use of diverse measurement scales across studies (Braiker and Kelley 1979; Locke and Wallace 1959; Roach Frazier and Bowden 1981; Snyder 1979).

Bradbury and Fincham (1988), for example, suggest that the most theoretically meaningful and clinically useful approach to measuring marital satisfaction involved focusing on a global evaluation of one's relationship as successful or happy. They suggest that the level of specific emotions is not as relevant to relationship stability as global assessments of relational success.

Others argue that greater emotional specificity is needed in order to assess couples' relationship satisfaction. Fincham and Linfield (1997), for example, suggest that "an overall index of the spouse's sentiment toward the marriage may not capture the reality of everyday life" (490). They go on to demonstrate that spouses can simultaneously feel both positively and negatively toward each other. Roach et al. (1981) criticize the Dyadic Adjustment Scale (DAS; Spanier 1976) for focusing on cognitive "estimates of frequency and degrees of difference" (539) that do not measure affect or attitudes about the relationship. Spanier's (1976) measure attempts a more thorough assessment of the behavioral, cognitive, and some affective aspects of satisfaction. His measure is therefore potentially more useful for researchers who want to examine more specific aspects of relationship satisfaction in addition to obtaining an overall evaluation. We favor the DAS because it offers a more complex and comprehensive measure of satisfaction than do many other measures.

Problems relying on satisfaction as the only indicator of relationship quality are not limited to issues of globality versus specificity, and which psychological components constitute satisfaction. Even the affective component of relationship satisfaction can be conceptualized or assessed in different manners. On one hand, for example, the Locke-Wallace (1959) Marital Adjustment Test (MAT) weighs the single item "happiness" at almost a quarter of the scale. On the other hand, many studies use scales that measure the level of distress in a relationship (Bradbury and Fincham 1988; 1991), rather than the level of happiness, and therefore draw conclusions about distressed versus nondistressed, rather than happy, couples.

In an attempt to circumvent some of these problems, this study adopted a multi-method measurement strategy for relationship satisfaction. In particular, we gauged both global and specific affective, behavioral, and cognitive aspects of self-reported satisfaction by using two measures of relationship satisfaction. Ultimately, the model was tested on three outcome measures, as the DAS contains a satisfaction sub-scale that tends to focus more on affective than cognitive and behavioral aspects of relationships. Thus, the DAS (Spanier 1976), the DAS sub-scale, and Rusbult et al.'s (1998) sub-scale were used as outcome measures.

5. Predictions

H1: Individuals' own trait dominance and affiliation will positively predict their own relationship satisfaction. That is to say, higher dominance and higher affiliation will be associated with greater relationship satisfaction. Hostility and submissiveness, by contrast, will be associated with lower relationship satisfaction.

H2a: A partner's evoking submissiveness from the individual (IMI dominance) will negatively affect relationship satisfaction for individuals.

H2b: A partner's evoking affiliation from the individual (IMI affiliation) will positively affect relationship satisfaction for individuals.

H3: Liking and loving one's partner will positively predict relationship satisfaction for individuals.

6. Method

6.1. Participants

Three hundred individuals (138 men and 162 women) were convenience sampled from a variety of locations, including introductory and upper-level psychology courses at the University of Louisville as partial fulfillment of a course requirement or extra credit, from an introductory psychology course at Indiana University Southeast in New Albany, IN, for extra credit, from several other samples around Louisville, KY, and in Gainesville, FL. The sample was predominantly comprised of heterosexuals and dating individuals, although individuals of all backgrounds were encouraged to participate. Data were deleted from analyses for eight participants who did not follow instructions and for a ninth participant whose relationship length was greater than two standard deviations from the mean. The final analyses included 291 participants (134 men and 157 women).

6.2. Measures

Participants responded to several types of measures, all of which had scantron bubbles formatted to the right of each item.

6.2.1. Demographic Questions

Several initial questions were asked to assess participants' age, gender, sexual orientation, whether responses referred to a current or a most recent past relationship (if responding about a past relationship, participants were asked how long ago the relationship ended), the gender of the partner about whom participants were responding, the length of the relationship about which they are responding, participants' current relationship status (dating casually, dating seriously, married, etc.), the importance of the relationship to the participant, and whether or not the individual had children. Questions about the nature of the relationship were used to test for differences based on relationship type and length.

6.2.2. Satisfaction Measures

The Dyadic Adjustment Scale (Spanier 1976) is a 32-item measure of Consensus, Satisfaction, Cohesion, and Affectional Expression in marital and dating relationships. The entire DAS was one of two separate satisfaction outcome measures employed in this study ($\alpha=.76$ for the present sample). The satisfaction sub-scale of the DAS was also utilized as an outcome measure. Rusbult, Martz, and Agnew's (1998) Satisfaction Scale is one of four subscales assessing rewards, costs, comparison level for alternatives, investment in close relationships, and a five-item subscale measuring commitment. We used only the 10-item satisfaction scale ($\alpha=.82$ for the present sample).

6.2.3. Interpersonal Measures

The Interpersonal Adjective Scale (IAS-R, Wiggins 1991) is a 64-item self-trait measure completed by the target individual that measures individuals' own levels of dominance and affiliation. The two primary variables (Affiliation $\alpha=.73$ and Dominance $\alpha=.75$) were used in analyses for the model.

6.2.4. Liking and Love Scales

The new love scale for the present study has 16 items (in the present study, $\alpha=.88$). This scale is based on Rubin's (1970) original 13 love items, which measure feelings of care, need, and trust. For the purposes of the present study, most of the need items (akin to passionate love items) were deleted from the primary measure of love. The measure of love developed in this study thus included Rubin's care and intimacy items, as well as

other items written by the authors to capture affective components of loving.

The new seven-item liking scale for the present study ($\alpha=.87$ in the present study) was based on Rubin's liking scale which measures feeling of respect, admiration, and similarity. The present study revised Rubin's scale by using only a few items intended to measure respect and admiration and deleting the similarity items. Items involving feelings of liking and of high reward in the relationship were also added to the new scale. These new items, written by the authors, captured the affective and hedonic, or reinforcing aspect of liking, but were separate from respect. The final seven-item scale is shown in Table 2.

6.2.5. Partner-Evoked Dominance and Affiliation: Impact Message Inventory (IMI; Kiesler 1983)

This is a 56-item self-trait measure of interpersonal complementarity that measures the interpersonal styles evoked by a dyadic partner (or other individual). We used this scale to measure individuals' reports of their partners' Dominance and Affiliation, as those interpersonal characteristics affected them. Evoked Dominance and Affiliation (IMI) scores were used as two separate variables of the partner's impact on the individual, each of which was used to predict the individual's relationship satisfaction. Reliability coefficients for partner-evoked Dominance and Affiliation were $\alpha=.84$ and $\alpha=.82$ respectively.

6.3. Procedure

Participants were recruited from several samples. Most participants were recruited from either upper division or introductory psychology classes at the University of Louisville (U of L). Participants responded to a self-report paper and pencil questionnaire (including the measures mentioned above) by bubbling in their responses in scantron spaces available on the questionnaire itself. The questionnaire took participants approximately 40 minutes to complete. Upon completion of the questionnaire, U of L students were given experimental participation or extra course credit and were debriefed as to the nature of the study. Thirty-three participants (13 men and 20 women) were recruited from an introductory psychology class at Indiana University Southeast (IUS). The procedure was the same for IUS students as for U of L students.

In cases of recruiting off-campus, participation was voluntary, for no remuneration. A description of the study identical to the description offered to the U of L sample was provided, followed by informed consent forms. After agreeing to participate, participants signed the consent forms and placed them in an envelope separate from the questionnaires, to ensure anonymity. Upon completion of the questionnaires, participants were debriefed and their questionnaires were placed in an envelope marked with the data-collection site. Out-of-state questionnaires and consent forms were mailed to the experimenter in separate envelopes by the off-site collaborators, with the recruiting site indicated on the envelopes.

7. Results

7.1. Preliminary Analyses: Sample Characteristics

Men had a significantly higher mean age in the overall sample than women, $F(1, 284)=5.02, p=.03$ (mean age for men=30.44; mean age for women=23.92). This was due primarily to the greater number of non-college men ($N=39$) in the study compared to the number of non-college women ($N=2$). Probably related to differences in mean age, men and women differed significantly in their mean relationship lengths, with men having a mean relationship length of 66.42 months ($SD=89.58$) and women having a mean relationship length of 38.57 months ($SD=54.19$), $F(1, 280)=9.26, p=.003$. Most participants were either dating one person exclusively ($N=120$) or married ($N=73$). Relationship status (i.e., married, single, divorced, etc.) did not differ significantly for men and

women in the overall sample, $\chi^2(6)=9.62, p=.14$. The percentage of participants who responded about current versus past relationships (total $N = 68$) did not differ significantly by gender ($N=26$ for men, $N=42$ for women, $\chi^2(1)=1.74, p=.19$). Finally, the percentage of men and women who had children did not differ significantly across the entire sample, $\chi^2(1)=2.48, p=.115$, with 29 women and 35 men reporting that they had at least one child. Table 1 shows the percentages of participants with different relationship statuses and demographics by sample.

Table 1

Numbers and Percentages of Participants with Children, Responding about Whether Current or Past Relationships, and Each Relationship Status across the Different Samples for Men and Women

	U of L Students		Louisville Non-students		Gainesville Student Participants		Gainesville, Non-students		IUS Students	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
Participants with Children	12 (17.6%)	24 (18.6)	6 (54.5%)	0 (0%)	2 (12.5%)	1 (14.2%)	15 (53.6)	0 (0%)	0 (0%)	4 (23.5%)
Responding about Current	54 (79.4%)	91 (70.5%)	9 (81.8%)	0 (0%)	11 (68.8%)	6 (85.7%)	25 (89.3%)	2 (100%)	5 (71.4%)	14 (82.4%)
Responding about Past	14 (20.6%)	38 (29.5%)	2 (18.2%)	0 (0%)	5 (31.3%)	1 (14.3%)	3 (10.7%)	0 (0%)	2 (28.6%)	3 (17.6%)
Relationship Status										
Single	11 (5.6%)	26 (13.2%)	1 (9.1%)	0 (0%)	5 (21.7%)	1 (4.3%)	1 (3.3%)	0 (0%)	1 (4.2%)	4 (16.7%)
(1) Dating Casually	8 (4.1%)	16 (8.1)	0 (0%)	0 (0%)	1 (4.3%)	0 (0%)	1 (3.3%)	0 (0%)	1 (4.2%)	2 (8.3%)
(2) Dating Exclusively	31 (15.7%)	58 (29.4%)	2 (18.2%)	0 (0%)	5 (21.7%)	1 (4.3%)	6 (20.0%)	1 (3.3%)	5 (20.8%)	7 (29.2%)
(3) Engaged	4 (2.0%)	6 (3.0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (4.2%)
(4) Married	13 (6.6%)	20 (10.2%)	7 (63.6%)	0 (0%)	5 (21.7%)	5 (21.7%)	19 (63.3%)	1 (3.3%)	0 (0%)	3 (12.5%)
(5) Divorced	1 (0.5%)	3 (1.5%)	1 (9.1%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
(6) Widowed	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (3.3%)	0 (0%)	0 (0%)	0 (0%)
Total N and % per sample	68 (100%)	129 (100%)	11 (100%)	0 (0%)	16 (100%)	7 (100%)	28 (100%)	2 (100%)	7 (100%)	17 (100%)

7.2. Preliminary Analyses: Liking and Loving Factor Analysis

Liking and Loving factors were formed using Principle Components Analyses (PCA) with oblique rotation, as the factors were assumed to be correlated rather than orthogonal. We anticipated forming two factors, one for liking and one for loving. First, all 26 liking and loving items were subjected to PCA with oblique rotation, and factors with eigenvalues greater than one were extracted. An initial solution yielded four factors, with two strong factors (eigenvalues=11.59 and 1.73), a two-item factor, and a single-item factor (eigenvalues both<1.03). After removing the weak factors, three double-loading items that either decreased internal consistency or increased the correlation between the liking and loving factors were removed. A two-factor solution emerged, with eigenvalues of 11.24 and 1.70, accounting for a total of 61.62% of the variance. These were used as the final measures of liking and loving. Each contained seven items, and had reliabilities of .87 and .88, respectively. See Table 2 for factor loadings, final items, and reliabilities for each factor.

Table 2
Principal Components Analysis of Liking and Loving Items

Items	Component loadings	
	1	2
Factor		
Liking items (= .88)		
23. I think that my partner is one of those people who others instantly like.	.96	-.25
25. My partner is one of the most likable people I know.	.91	
21. Most people would react very favorably to my partner after a brief acquaintance.	.88	.15
26. My partner is the sort of person whom I myself would like to be.	.72	
2. I feel I can confide in my partner about virtually anything.	.64	.13
3. I find it easy to ignore my partner's faults.	.59	
8. I would forgive my partner for practically anything.	.55	
Loving items (= .87)		
14. I love my partner.		.84
5. I am in love with my partner.		.83
9. I care deeply for my partner.	.13	.77
6. If I were lonely, my first thought would be to seek out my partner.	.24	.70
16. If I could never be with my partner, I would really miss him/her.	.30	.67
11. It would be hard for me to get along without my partner.	.33	.45
7. I feel concerned for my partner's well-being.	.53	.61

Note. Factor loadings that are in bold face are those that were included in the final creation of each factor.

We further developed the liking and loving scales by examining convergent and discriminant validity of the new scales with each other and with other relevant constructs. Table 3 shows the zero-order correlation matrix for all the variables in this study, including the three different relationship satisfaction outcome measures. The liking scale is more highly correlated with evoked affiliation than evoked dominance, which distinguishes the present liking scale from Rubin's liking scale that appeared to be linked to dominance and respect more than to positive affect.

Table 3
Correlation Matrix among All Predictor and Outcome Variables in the Present Study

	Loving	Liking	IAS Dom.	IAS Aff.	IMI Dom.	IMI Aff.	Rel. Length	Age	DAS Total	DAS Sat.	Rusbult Sat.
Loving	---										
Liking	.65**	---									
IAS Dom.	-.01	.00	---								
IAS Aff.	.17**	.17**	.02	---							
IMI Dom.	-.09	-.14*	-.07	.22**	---						
IMI Aff.	.45**	.62**	.11	.21**	.06	---					
Rel. Length	.12*	.06	-.06	.10	.03	-.06	---				
Age	-.02	-.11	-.09	.01	-.01	-.19**	.69**	---			
DAS Total	.48**	.68**	.08	.21**	-.10	.70**	-.08	.17**	---		
DAS Sat.	.57**	.69**	.06	.14*	-.17*	.68**	-.00	-.09	.87**	---	
Rusbult Sat.	.58**	.69**	.05	.09	-.12*	.69**	-.05	-.16**	.78**	.85**	---

Note. Variables significant at the $p=.05$ level are indicated by *, variables significant at the $p=.01$ level are indicated by **, and variables significant at $p=.001$ are indicated by ***.

7.3. Model Testing: Multiple Regression Analyses

In order to test the hypotheses involving the prediction of relationship satisfaction from individual interpersonal style, partner impact, and liking and loving, we performed three hierarchical multiple regression analyses. Predictors were entered in blocks, with the most proximal variables entered first, followed by the most distal, followed by gender. The same analysis was performed using three different satisfaction measures as outcome variables.

7.3.1. Overall DAS Score as the Outcome Measure

In the first regression analysis, predictors were entered hierarchically (as described above), followed by gender, participant age, and relationship length. Model one used the total score from the Dyadic Adjustment Scale (DAS) as the outcome variable. Hypothesis 1 predicted that individuals' own trait Dominance and Affiliation would significantly positively predict relationship satisfaction. Hypothesis 2 predicted that evoked submissiveness (or perceived partner dominance) would negatively predict relationship satisfaction, while evoked affiliation would positively predict relationship satisfaction. Hypothesis 3 predicted that liking and loving would both positively predict relationship satisfaction. Table 4 shows adjusted R^2 s, s , and ps for all three outcome measures.

Table 4

Standardized Regression Coefficients, Significance Levels, and Variance Accounted for by the Regression Models Based on Outcome Variable across the Entire Sample

Predictor	DAS Total	DAS satisfaction sub-scale	Rusbult Satisfaction sub-scale
Step 1			
Adjusted R^2	.03**	.01†	-.00
R^2 change	.04	.02†	.01
Dominance (IAS) (b)	.02	.01	-.01
Affiliation (IAS) (b)	.06	.02	-.07†
Step 2			
Adjusted R^2	.52***	.51***	.52***
R^2 change	.48***	.50***	.52***
Dominance (IMI)	-.08†	-.13**	-.07
Affiliation (IMI)	.44***	.43***	.45***
Step 3			
Adjusted R^2	.61***	.64***	.65***
R^2 change	.10***	.13***	.13***
Loving (b)	.00	.15**	.19***
Liking (b)	.40***	.32***	.31***
Step 4			
Adjusted R^2	.61***	.64***	.66***
R^2 change	.00	.02	.01
Gender (b)	-.04	-.11**	-.05
Relationship Length (b)	-.02	-.06	.01
Participant Age (b)	.02	.02	.02

Note. Variables significant at the $p=.05$ level are indicated by *, variables significant at the $p=.01$ level are indicated by **, variables significant at $p=.001$ are indicated by ***, and variables that show a significant trend at or below $p=.10$ are indicated by †.

When the DAS total score was the outcome, the trait Dominance and Affiliation variables accounted for a small but significant proportion of variance (3%, adjusted R^2) in relationship satisfaction, $F(2, 246)=5.25$,

$p=.006$. Counter to Hypothesis 1, individuals' own interpersonal style did not significantly predict relationship satisfaction as measured by the DAS total scale score (see Table 4).

Hypothesis 2 was tested by entering partner impact, or evoked interpersonal style variables in the second regression block in order to examine the effects of partner impact above the variance explained by self-traits. Hypothesis 2 was partially supported in that evoked affiliation was a significant predictor of relationship satisfaction, while evoked submissiveness (perceived partner dominance) was not significant. The addition of the partner impact variables, particularly evoked affiliation, significantly improved the variance accounted for by the model, such that the adjusted $R^2=.52$, $F(4, 245)=67.16$, $p<.001$.

Hypothesis 3 was also partially supported. Liking and loving were entered on the third regression step. Surprisingly, loving one's partner was not a significant predictor of relationship satisfaction measured by the DAS total score. Liking one's partner was a significant predictor of the DAS total score, suggesting that these affective mechanisms operate somewhat differently from one another. Adding the affective variables and liking in particular, significantly increased the proportion of variance accounted for in relationship satisfaction, with adjusted $R^2=.64$, $F(6, 242)=66.28$, $p<.001$. Age, relationship length, and gender were non-significant factors for all three analyses.

The hierarchical regression analysis was performed two additional times in the manner described above, with the DAS satisfaction subscale as an outcome variable and with Rusbult's satisfaction subscale of relationship rewards as a separate outcome variable.

7.3.2. DAS Satisfaction Sub-scale as the Outcome Measure

Identical analyses to those above were performed using the more affectively focused relationship satisfaction sub-scale of the DAS as the outcome measure. These results also appear in Table 4. Trait Dominance and Affiliation were entered in the first block, and Hypothesis 1 was again not supported. Individuals' own interpersonal styles did not predict relationship satisfaction significantly, adjusted $R^2=.01$, $F(2, 247)=2.55$, $p=.08$.

Partner impact variables were entered on step two of the regression analysis, and their addition to the model explained a significantly greater proportion of variance than the trait variables alone, adjusted $R^2=.51$, $F(4, 245)=65.91$, $p<.001$. Hypothesis 2 was supported when the satisfaction sub-scale was used rather than the entire DAS: Both partner impact variables, evoked Submissiveness (IMI Dominance) and IMI Affiliation, significantly predicted relationship satisfaction when the DAS sub-scale was the outcome.

Hypothesis 3 was also supported using the DAS sub-scale as opposed to the entire DAS. Liking and loving were entered on step three, and they explained significantly more variance in the DAS relationship satisfaction sub-scale than the interpersonal variables alone, adjusted $R^2=.64$, $F(6, 243)=73.11$, $p<.001$. Loving one's partner became a significant predictor of relationship satisfaction. Liking remained significant, but weakened slightly with this different outcome variable.

7.3.3. Rusbult's Satisfaction Sub-scale as the Outcome Measure

Finally, the hierarchical regression analysis was performed on Rusbult's (1998) relationship rewards satisfaction sub-scale. Trait Dominance and Affiliation were entered on step one. Again, Hypothesis 1 was not supported, with trait Dominance and trait Affiliation remaining nonsignificant predictors. Trait interpersonal style did not explain significant variance in the Rusbult satisfaction measure, with adjusted $R^2=-.00$, $F(2, 247)=0.94$, $p=.393$.

Hypothesis 2 was partially supported when Rusbult's measure was used as the outcome variable. Partner impact variables entered on step two significantly increased the variance accounted for in relationship satisfaction, adjusted $R^2=.52$, $F(4, 245)=68.87$, $p<.001$. IMI Dominance (evoked submissiveness) was not significant, but was in the expected direction. As before, evoked Affiliation remained a strong positive predictor of relationship satisfaction for individuals,

Finally, hypothesis 3 was supported using Rusbult's scale as an outcome measure. Liking and loving entered on step three significantly increased the variance explained in Rusbult's satisfaction measure, such that adjusted $R^2=.65$, $F(6, 243)=79.25$, $p<.001$. Liking one's partner remained a significant predictor, although it weakened slightly compared to the overall DAS scale score. As with the DAS satisfaction sub-scale, loving one's partner was a significant predictor of relationship satisfaction, but was not as strong as liking.

8. Discussion

8.1. Factor Analysis

Liking and loving emerged as two distinct but related factors that appear to consist of reward, or hedonism, and care. The loving scale we developed does not (and did not intend to) measure passion, which may need to be a separate variable examined along with care as a predictor of satisfaction in future studies. Not only do these two factors appear to have internal reliability, but they also demonstrated discriminant validity (by virtue of their non-overlap with the related interpersonal constructs) and convergent validity (by virtue of their relationship to relevantly similar partner impact variables). These scales are a first step in an attempt to develop and discriminate liking and companionate loving scales through empirical means. Although correlated, liking and loving behaved differently as predictors of relationship satisfaction. Liking consistently and strongly predicted relationship satisfaction, regardless of the outcome measure used. The loving factor predicted relationship satisfaction more weakly than did liking, and did not significantly predict a more global measure of satisfaction like the DAS total score, which combines affective, behavioral, and cognitive features.

We can conclude, then, that liking and loving differ in ways that need to be explored in future research. It appears that loving is not merely an extreme form of liking or, conversely, that liking is not merely a weaker version of loving, as is often assumed. Perhaps counter-intuitively, love may involve feelings about the partner that enhance relationship commitment more than satisfaction. That is, intimate and caring love may involve more investment and work than a purely hedonically rewarding relationship found in liking. It is likely that the most satisfying and enduring relationships are those that involve both intimate caring, which may involve sacrifice and even pain (loving), and hedonic enjoyment (liking).

8.2. Hypothesis Testing

8.2.1. Interpersonal Style: Trait Dominance and Affiliation

Based on prior findings involving attachment style (Bartholomew and Horowitz 1991), we proposed that individuals' own dominance and affiliation would influence their relationship satisfaction. Hypothesis 1 stated that, based on the self-other model of attachment (Bartholomew and Horowitz 1991), one's own dominance and affiliation, like secure attachment, should be positively associated with one's own relationship satisfaction. Submissiveness and hostility, conversely, should be negatively associated with one's own relationship satisfaction. Contrary to our hypotheses, individuals' interpersonal styles were not related to their relationship satisfaction. Surprisingly, no relationship between interpersonal style and satisfaction emerged, regardless of

the outcome measure used. It is possible that individual personality traits are less relevant to satisfaction in dyadic relationships in the absence of a context of dyadic interaction. Perhaps individual personality traits do not predict outcomes that emerge from interactive contexts. Thus, it may be that the level of measurement is not appropriate for the outcome.

Alternatively, or perhaps additionally, the lack of personality traits' predictive ability suggests that individuals' relationship satisfaction may be more influenced by their own responses to their partners' behaviors (i.e., the behaviors their partners evoke from them), than by their own interpersonal orientations. If individuals' own interpersonal style does not directly affect individuals' relationship satisfaction, perhaps it is implicated earlier on, in the initial selection stage of a relationship. If interpersonal style influences the type of partner one chooses, individuals whose styles cause them to be attracted to, or to attract, individuals who are not affiliative, then interpersonal style is indirectly influencing relationship satisfaction. This is in line with the attachment hypothesis—that relationship schemas set up expectations for relationship which are later either not fulfilled, are met, or are exceeded, which contributes to relationship satisfaction.

8.2.2. Partner Impact: Evoked Dominance and Affiliation

Partner impact, or the interpersonal behaviors the partner evokes from the individual during interaction, generally predicted relationship satisfaction well. Evoked affiliation was the most consistently strong predictor of satisfaction across all three outcome measures. The more the individuals felt that their partners were warm and disclosing, and the more the partners evoked those characteristics from the individuals, the more satisfied the individuals were with their relationships. Partner dominance (evoked submissiveness) was negatively associated with all three relationship satisfaction measures, as predicted, but it was significant only when the more affective DAS satisfaction sub-scale was used as the outcome measure. To the extent that the individual feels dominated by the partner, he or she experiences less relationship satisfaction. Although it is unclear why this particular finding emerged with only this outcome measure, it is possible that the comparatively narrow affective focus of the DAS satisfaction sub-scale allowed the affective consequences of feeling dominated to become apparent. This finding underscores the importance of using multiple measures of outcomes when prior research has uncovered conflicting results.

8.2.3. Affective Predictors: Liking and Loving

Loving was not a significant predictor of relationship satisfaction for the overall DAS measure; however, it was a significant predictor when more affectively focused measures were used as outcomes. Intimate caring love appears to be a better indicator of an individual's assessment of the affective quality of the relationship (DAS satisfaction sub-scale), rather than how well the individual deals with relationship problems or the frequency with which he or she engages in day-to-day tasks with the partner (overall DAS).

Liking was a stronger predictor of relationship satisfaction than was loving, and it was significant across all three outcome measures. The liking measure appears to reflect a relatively high level of reward in the relationship and intrinsic enjoyment of the partner's company. Although very different from passionate love, liking may be more related to longer-term relationship satisfaction than caring and intimate (companionate-type) love. In other words, companionate love may involve more investment and work than liking, and therefore be less predictive of relationship satisfaction at any given time. Individuals' liking for their partners, compared to companionate-type loving, may be more variable and thus more indicative of the level of enjoyment in the relationship.

It is notable that the more affective satisfaction measures tend to be more influenced by the affective measure of loving. The affective measures tend to be more influenced by most of the predictors examined in this study. This finding demonstrates the potential sensitivity of more focused satisfaction measures to different types of predictors. Researchers should avoid artificially inflating the strength of a relationship by using outcome measures that are highly similar to the variables they are using to predict them. On the other hand, researchers should be careful to choose an appropriate measure that reflects the level of specificity or generality in which they are most interested.

8.3. Limitations and Future Research

This study has several limitations. Most obviously, this research is correlational, so no causal relationships can be determined. Although correlational research is common in psychology, an experimental approach would strengthen the findings of the current study considerably. Future research should manipulate aspects of close relationship partners' interactions in order to bring out complementary or non-complementary responses.

This study also used a self-report method, which has a number of limitations. Self-report methods are prone to problems of random and socially desirable responding, among others. In addition, self-report is entirely intrapsychic, and cannot validate the accuracy of the perceptions of the individuals who are reporting their experiences. Individuals' experiences of their partners' behaviors are important in and of themselves, and accuracy is of questionable importance because the reality of the experience to the individual is what predicts outcomes. However, retrospective self-report prevents the examination of the impact of actual behavioral intensity and frequency on individuals' relationship satisfaction, which some researchers would interpret as a limitation. The questions posed in the present study lend themselves to self-report and are not confounded by individuals' inaccuracies because the experiences are real to the participants regardless of whether or not their perceptions match reality. Other types of measurement are, however, desirable and should be pursued in future research. Research of this nature could involve couple members' rating their affective responses to their partners' behavior during an interaction that was intended to bring out both dominance and affiliation. Partners could rate the extent to which they felt liking and loving towards each other during various interaction sequences.

Finally, the samples in this study were not homogeneous. Although this has strengths, in that generalizability is more justifiable across age groups and non-college populations, men and women were sampled from slightly different populations. Most women in this study were from college populations, although the age ranges for women in the college sample were less restricted than the age ranges for men. This may be due to a greater number of female than male non-traditional students. Apart from a difference in relationship satisfaction based on age, very few differences emerged based on sample location, age, or length of relationship. Ideally, however, this research would include a random stratified sample of individuals from a number of areas, representing a number of relationship types and lengths.

One of the strengths of this study is that it examined different outcome measures and involved both married and dating individuals, which is a step towards clarifying where the disparity in the marital and dating findings lies. Understanding the meaning of liking and loving, and the influences of interpersonal and affective mechanisms on relationship satisfaction for men and women has potentially important implications for relationship research, and for application in the form of relationship counseling. It is hoped that this study contributed meaningfully to that endeavor.

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