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SELF-DISCLOSURE IN INTIMATE RELATIONSHIPS: ASSOCIATIONS WITH INDIVIDUAL AND RELATIONSHIP CHARACTERISTICS OVER TIME

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Self-disclosure is an act of intimacy and serves as a maintenance strategy, and yet very little prior research has examined self-disclosure within relationships with data collected multiple times over an extended period of time and from both partners. With longitudinal data collected from both partners in young adult dating couples, we examined how self-disclosure is associated with both individual characteristics (e.g., responsiveness, self-esteem) and relationship characteristics (satisfaction, love, commitment). Overall, men and women indicated a similar high level of self-disclosure. As hypothesized, positive associations were found between self-disclosure and the individual characteristics of self-esteem, relationship esteem (confidence as an intimate partner), and responsiveness (as indicated by data collected at Time 1). Self-disclosure also was positively associated with relationship quality (satisfaction, love, and commitment). Similar positive associations were typically found at the follow-up waves, although in many cases the correlations were not significant and were more modest in magnitude. Level of self-disclosure was generally not predictive of whether the couple stayed together or broke up over time, although the more that women perceived their partner disclosed at Time 1, the less likely the couple was to break up by Time 2. It is speculated that the generally high level of self-disclosure at Time 1 for the entire sample limited the degree to which self-disclosure could predict which relationships

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stayed together and which broke up over time. In an analysis that involved the subsample of couples who stayed together throughout the study (many of whom married by Time 5), no significant change was found in levels of self-disclosure.

Self-disclosure, or the process of revealing personal information about oneself to another, is an important aspect of communication in most close relationships, including dating and marital relationships (e.g., Derlega, Metts, Petronio, & Margulis, 1993). In prior research, self-disclosure has been treated both as a characteristic of the individual and as a characteristic of the relationship (Berg & Derlega, 1987; Hinde, 1997). Corresponding to these two approaches, in this study we examine how self-disclosure is related to certain individual variables (e.g., responsiveness, self-esteem) and to certain relationship characteristics (e.g., love, satisfaction).

The data analyzed for this study come from a longitudinal sample of romantic couples, all of whom were dating the first time they were surveyed. Although several studies have focused on self-disclosure in romantic couples (e.g., Finkenauer & Hazam, 2000; Meeks, Hendrick, & Hendrick, 1998; Murstein & Adler, 1995), rarely has self-disclosure been investigated in a study that involves a sample of couples who completed a battery of measures several times over several years. Hence, this study contributes to our understanding of self-disclosure through the investigation of issues that require consideration of both partners' self-disclosure levels at multiple times in their relationship.

More specifically, in examining how self-disclosure is related to relationship and individual characteristics, including love, satisfaction, and gender, we consider the individuals reports of their own self-disclosure as well as their reports of how much they believe the partner disclosed to them. In addition, for each individual, we have data on how much their partner reported self-disclosing. All of these measures were obtained multiple times over several years. Hence, in our examination of how self-disclosure is associated with individual and relationship factors, we consider multiple indicators of self-disclosure and how selected associations may change over time.

SELF-DISCLOSURE AS A PROCESS

Self-disclosure is the process of telling another about one's intimate feelings, attitudes, and experiences. It has been described as progressing in a relatively systematic fashion, beginning with breadth of disclosure and moving toward greater depth of disclosure (Altman & Taylor, 1973). The cyclical nature of self-disclosure (Altman, Vinsel, & Brown, 1981) has

been noted, as well as the dialectical nature of openness/closedness in relationships (Altman et al., 1981; Baxter & Montgomery, 1996). Dialectics refers here to the need for openness and connection at one point in a relationship and the complementary (rather than opposing) need for closedness and privacy at another point in the relationship. Thus, self-disclosure is not viewed as a static characteristic of relationships but rather as a "*life-long/relationship-long process*, a process that changes as individuals and relationships change" (Dindia, 1997, p. 411; italics in original). Hence, it is important to study self-disclosure in methodological designs that consider process and change (as well as stability) over time.

SELF-DISCLOSURE AND INDIVIDUAL DIFFERENCE FACTORS

As noted earlier, one approach in research and theory on self-disclosure is to identify the individual characteristics that might relate to disclosure. One individual difference variable examined frequently in prior self-disclosure research is gender. Women are typically thought to disclose more than men, and indeed female friends seem to disclose more to each other than male friends do (Derlega et al., 1993). Yet considerable research shows few if any substantive gender differences in disclosure, particularly in heterosexual, romantic relationships (Burleson, Kunkel, Samter, & Werking, 1996; Dindia & Allen, 1992; Rubin, Hill, Peplau, & Dunkel-Schetter, 1980).

However, self-disclosure may be related to other individual difference variables, including personality variables. For example, prior research has indicated that high levels of private self-consciousness and low levels of social anxiety are related to the tendency to self-disclose (e.g., Cheek & Buss, 1981; Reno & Kenny, 1992). Yet very little research, to our knowledge, has linked self-disclosure with general self-esteem or esteem experienced more specifically within a relational context (e.g., Snell & Finney, 1993). We would expect that those who have high self-esteem or relationship-specific esteem (i.e., confidence as an intimate partner) would feel more comfortable revealing aspects of themselves to another. Furthermore, the reverse causal direction is also likely to occur: One's self-esteem is likely to be enhanced as a result of receiving disclosures from another.

Another personality characteristic likely to be associated with self-disclosure is *responsiveness* or the ability to elicit disclosure in another. Miller, Berg, and Archer (1983) created an Opener scale to measure this ability and found evidence that high openers were disclosed to more than low openers in get-acquainted contexts. We also would expect that this personality variable would be linked to greater satisfaction

in the intimate context of a long-term relationship, and indeed previous research has found links between responsiveness and satisfaction, for women (Hendrick, Hendrick, & Adler, 1988).

SELF-DISCLOSURE IN A RELATIONAL CONTEXT

The relational perspective on disclosure research has examined reciprocity in disclosure (e.g., Rubin et al., 1980; Sprecher, 1987), and differences in disclosure patterns for different types of couples (e.g., Fitzpatrick, 1987). Also important is how self-disclosure may relate to positive relationship qualities. For example, self-disclosure has been shown to be positively related to love (S. Hendrick & Hendrick, 1987; Rubin et al., 1980; Sprecher, 1987), relationship satisfaction (Meeks et al., 1998), and relationship stability (Sprecher, 1987).

One reason that self-disclosure may be associated with the quality and stability of the relationship is because it can serve as an act of relationship maintenance. Relationship maintenance is the process that occurs after a relationship begins and until a relationship ends, and it can be described as all the behaviors that keep relational partners satisfied and that contribute to relationship continuation. Openness/disclosure is one of five maintenance strategies proposed by Stafford and Canary (1991), and self-disclosure is one component of the verbal and nonverbal communication that forms the basis for the "shared meaning system" (Duck, 1994) that characterizes relationship maintenance. Another reason that self-disclosure may be important is that it contributes to a sense of intimacy in relationships, which is fundamental to relationship success (e.g., Prager, 2000; Reis & Shaver, 1988).

PURPOSES OF THIS INVESTIGATION

Although self-disclosure has been shown to be correlated with a number of individual-level and relational-level variables and has been hypothesized to ebb and flow over the course of a relationship, no extensive literature concerns self-disclosure in ongoing relationships over time. Thus, the current research attempts to provide information about this understudied area. On the basis of the literature cited above, we first propose two hypotheses. However, in extending prior research, we examine these associations at multiple times in the relationship.

Hypothesis 1: Self-disclosure will be associated positively and significantly with the individual variables of (1a) responsiveness, (1b) self-esteem, and (1c) relationship self-esteem, but (1d) will be unrelated to gender.

Hypothesis 2: Self-disclosure will be associated positively and significantly with the relational variables of (2a) satisfaction, (2b) love, (2c) commitment, and (2d) actual stability of the relationship.

Second, we raise the following two research questions, which refer specifically to the role of self-disclosure in change over time in the relationship.

Research Question 1: Does the degree of self-disclosure at Time 1 predict a change (i.e., an increase) in satisfaction, love, and commitment by a later time period?

Research Question 2: Does self-disclosure change (i.e., increase) over time in ongoing relationships?

METHOD

OVERVIEW TO THE DATA

The data are from a multipurpose longitudinal study conducted at a large midwestern university with a sample of romantic couples. (Several other papers have been written from these data, although none on the topic of self-disclosure.) The original sample consisted of both partners of 101 dating couples who completed a self-administered questionnaire in the fall of 1988. Follow-ups were conducted in the spring and summer of 1989, 1990, 1991, and 1992. The sample size decreased with each wave, primarily because of attrition due to breakups (when couples broke up, they completed one last questionnaire and did not participate again in the study). Forty-one couples (41%) remained together throughout the study, and most of these couples participated at every wave of the study. Some of the analyses reported here are based on the full sample at Time 1. Other analyses are based on the subsamples of those who also participated at one or more of the follow-ups.

PARTICIPANTS

The sample at Time 1 consisted of 101 dating couples (202 individuals), most of whom were university students. Participants were volunteers who were recruited through announcements in classes, advertisements in the student newspaper, and posters placed around campus. The mean age of the participants at Time 1 was 20 years (by Time 5, it was 24–25 years). Most were white (97.5%) and middle or upper-middle class (86.6%). The mean number of months the couples had been dating at Time 1 was 18.7; the range was 1 month to 55 months.

PROCEDURE

After responding to an announcement of the study, the participants at Time 1 came to a university office to complete a self-administered questionnaire. Partners usually were scheduled at the same time, although they completed the questionnaire independently. At each of the four follow-ups (Times 2–5), participants who were still attending the university or living nearby came to the researcher's office to complete the follow-up questionnaire (partners from couples who broke up came in at different times). Participants who had moved away were mailed the questionnaire and a stamped, self-addressed return envelope. Participants were paid a small token amount for their participation at each wave of the study. There was very little attrition or nonresponse among the couples who remained in their relationship throughout the study.¹ Thirty-eight women and 36 men (of the 41 couples) participated at all five waves of the study.

MEASUREMENT

All participants at Time 1 and all participants in the follow-ups whose relationship was intact completed a lengthy questionnaire about various aspects of their relationship. The variables analyzed in this study were measured as described below. In each case, the total score was represented by the mean of the items in the respective scale.

Self-Disclosure. Self-disclosure was measured by the Miller et al. (1983) Self-Disclosure Index, which assesses the extent of disclosure in 10 topic areas. This measure is psychometrically sound and has been related to both individual-level and relational-level variables in other research (e.g., S. Hendrick & Hendrick, 1987). Participants completed the scale items (on a 5-point Likert format) in regard to how much they disclosed to the partner (own self-disclosure) and again in regard to how much they thought their partner disclosed to them (perception of partner's self-disclosure). Topic areas included such things as: "My personal habits" and "My deepest feelings." For own disclosure, Cronbach's alpha at Time 1 was .87 for men and .85 for women, and ranged from .86 to .92 at the follow-ups. For perceptions of partner's self-disclosure, alpha at Time 1 was .88 for men and .90 for women, and ranged from .88 to .94 at the follow-ups.

Relationship Quality Measures. The Hendrick (1988; Hendrick, Dicke, & Hendrick, 1998) Relationship Assessment Scale was used to assess

1. Six participants from five different relationships could not participate in one of the waves and one couple (two participants) were missing at two waves.

general *satisfaction* in the relationship. Sample items of this seven-item, five-response Likert scale are: "In general, how satisfied are you with your relationship?" and "To what extent has your relationship met your original expectations?" Alpha at Time 1 was .81 for men and .75 for women, and ranged from .65 to .87 at the follow-ups.

The Braiker and Kelley (1979) love scale was included to measure *love*. The 10-item, seven-response Likert scale assesses feelings of belonging, closeness, and attachment. A sample item is: "To what extent do you love ___ at this stage?" Alpha at Time 1 was .88 for men and .82 for women, and ranged from .75 to .94 at the follow-ups.

Five items were included to measure personal *commitment* to the relationship. Four of these items were from the Lund (1985) commitment scale and were scored on a 1–7 basis. A sample item was: "How likely is it that your relationship will be permanent?" Alpha at Time 1 was .89 for men and .78 for women, and ranged from .52 to .97 at the follow-ups.

Individual Difference Variables. Responsiveness, or the ability to elicit self-disclosure in others (being an *opener*), was measured by the Miller et al. (1983) Opener Scale. This 10-item scale is scored on a five-response Likert basis. A sample item is: "I've been told that I'm a good listener." Alpha at Time 1 was .88 for men and .85 for women, and ranged from .86 to .90 at the follow-ups.

Self-esteem was measured by the Rosenberg (1965) self-esteem scale. This widely used 10-item scale, scored on a six-response Likert basis, has items such as: "I feel that I have a number of good qualities" and "All in all, I am inclined to feel that I'm a failure" (reverse scored). Alpha at Time 1 was .81 for men and .85 for women, and ranged from .86 to .90 at the follow-ups.

Relationship esteem was measured by the relationship esteem portion of the Snell and Finney (1993) Relationship Assessment Questionnaire.² This seven-item scale was scored on a five-response basis. A sample item is: "I am a good partner in an intimate relationship." Alpha at Time 1 was .83 for men and .82 for women, and ranged from .78 to .92 at the follow-ups.

RESULTS

OVERVIEW TO THE ANALYSES

Because data were collected from both partners of couples and therefore are not independent, analyses were conducted separately for men and

2. A preliminary form of this measure was used. The final form is found in Snell and Finney (1993), who provide evidence for its internal reliability and convergent validity.

women. The analyses are first conducted for the full sample at Time 1, which is the sample/wave with the greatest generalizability (because it included the entire sample and greater diversity in couples, both those who stayed together and those who broke up). However, in many cases, analyses were conducted at the follow-ups with participants whose relationships were intact.

PRELIMINARY ANALYSES

Overall, the participants reported considerable self-disclosure in their relationship. For example, at Time 1, the mean response to the Miller et al. (1983) Self-Disclosure Index, for own disclosure to the partner, was approximately 4.0 (5 was the highest possible score) for both men and women. In addition, men and women perceived that their partner disclosed a great deal. The first column of Table 1 presents the mean response to scores on own self-disclosure and perceptions of partner's self-disclosure for men and women at each wave of the study. Table 1 also reports the correlations between various measures of self-disclosure at each wave. The correlations between the self-disclosure measures were positive and significant, indicating evidence for: *perceived reciprocity in self-disclosure* (correlations between own self-disclosure and perceptions of partner's self-disclosure ranged from .63 to .90), *actual reciprocity* (correlations between the partners' scores on own self-disclosure ranged from .24 to .34, and correlations between the partners' perceptions of their partner's self-disclosure ranged from .23 to .39), and *accuracy in estimates of partner's disclosure* (correlations between perceptions of partner's disclosure and partner's report of own disclosure ranged from .28 to .48). Although respondents reported that their own self-disclosure level was similar to that of their partner, own self-disclosure was slightly higher than perceived partner disclosure (difference was significant for women at all waves and significant for men at Times 2 and 3).

ASSOCIATIONS BETWEEN DISCLOSURE AND INDIVIDUAL CHARACTERISTICS: TESTS OF HYPOTHESIS 1 AT TIME 1

To examine how self-disclosure is associated with responsiveness, self-esteem, and relationship esteem (Hypothesis 1a-c), we correlated each personality variable with the scores from the three measures of self-disclosure: own self-disclosure, perceived partner disclosure, and partner-reported disclosure (obtained from the partner's data). These correlations at Time 1, for men and women separately, are reported in Table 2.

TABLE 1. Means, Standard Deviations, and Correlations of the Self-Disclosure Measures Over Time

	Mean (<i>sd</i>)	Partner's Responses		
		Perception of Partner's Disclosure	Perception of Partner's Disclosure	Own Self-Disclosure
Men				
Time 1				
Own Self-Disclosure	4.09 (.68)	.66***	.31**	.27**
Perception of P's Disclosure	4.02 (.74)		.23*	
Time 2				
Own Self-Disclosure	4.20 (.72)	.70***	.41***	.24*
Perception of P's Disclosure	4.05 (.76)		.25*	
Time 3				
Own Self-Disclosure	4.10 (.65)	.74***	.39**	.30*
Perception of P's Disclosure	3.95 (.82)		.39**	
Time 4				
Own Self-Disclosure	4.05 (.71)	.63***	.28	.30*
Perception of P's Disclosure	3.97 (.73)		.34*	
Time 5				
Own Self-Disclosure	4.17 (.70)	.90***	.45**	.34*
Perception of P's Disclosure	4.10 (.79)		.38*	
Women				
Time 1				
Own Self-Disclosure	4.17 (.62)	.78***	.39***	.27**
Perception of P's Disclosure	3.98 (.76)		.23*	
Time 2				
Own Self-Disclosure	4.24 (.59)	.81***	.35**	.24*
Perception of P's Disclosure	4.11 (.69)		.25*	
Time 3				
Own Self-Disclosure	4.34 (.59)	.83***	.48***	.30*
Perception of P's Disclosure	4.16 (.64)		.39**	
Time 4				
Own Self-Disclosure	4.16 (.62)	.87***	.38**	.30*
Perception of P's Disclosure	4.03 (.66)		.34*	
Time 5				
Own Self-Disclosure	4.26 (.60)	.89***	.32*	.34*
Perception of P's Disclosure	4.08 (.66)		.38*	

Note. * $p < .05$; ** $p < .01$; *** $p < .001$.

TABLE 2. Correlations of Three Measures of Self-Disclosure with Responsiveness, Self-Esteem, and Relationship Esteem, Time 1

	Responsiveness	Self-Esteem	Relationship-Esteem
Men			
Own Disclosure	.39***	.21*	.29**
Perceived Partner's Disclosure	.28**	.23*	.16
Partner's Reported Disclosure	.20*	-.08	-.10
Women			
Own Disclosure	.31**	.00	.24*
Perceived Partner's Disclosure	.39***	.11	.21*
Partner's Reported Disclosure	.07	-.04	.00

Note. * $p < .05$; ** $p < .01$; *** $p < .001$.

In support of H1a, scores on the responsiveness (opener) scale were associated positively with scores on own disclosure and perceived partner disclosure, for both men and women. These positive correlations indicate that individuals who believe they are good at eliciting self-disclosure in others also tend to report that they have a high self-disclosure level and that their partner does as well. Men's scores on responsiveness also were associated positively with their partner's report of self-disclosure.

H1b was supported only for men. Self-esteem was generally associated positively with men's report of own self-disclosure and with the degree to which they perceived that their partner self-disclosed (although not with their partner's report of self-disclosure). For women, however, self-esteem was not associated with any measure of self-disclosure.

As predicted in H1c, relationship esteem was associated positively and significantly with own and perceived partner disclosure for both genders (although the correlations for perceived partner disclosure did not reach significance for men). Relationship esteem was not associated, however, with partner's actual report of disclosure.

In H1d, we predicted that there would be no gender differences in self-disclosure. In support of this prediction, paired t -tests indicated there were no significant gender (partner) differences on the total self-disclosure scores for either own disclosure or partner-perceived disclosure at Time 1.

TESTS OF HYPOTHESIS 1 IN FOLLOW-UP WAVES

Appendix A contains the correlations of the various measures of self-disclosure with responsiveness, self-esteem, and relationship esteem at each of the follow-up waves (Times 2–5) for men and women. At most of the follow-ups, participants' responsiveness and relationship esteem continued to be associated positively with their own self-disclosure and with the degree of self-disclosure assumed to be engaged in by the partner, but were generally unrelated to the partner's reported self-disclosure (with the exception of a positive correlation between responsiveness and partner's reported self-disclosure at Time 2 for men). Self-esteem was associated positively with men's own self-disclosure at Time 2 and with men's perceived partner's disclosure at Times 2 and 4. Thus, some support was found for Hypothesis 1 (a–c) at the follow-ups, although overall the support for this hypothesis was stronger at Time 1.

In addition, our prediction of no gender difference in self-disclosure was supported at the follow-up waves. At none of the follow-up waves was there a significant difference between men and women in either own or perceived partner self-disclosure.

ASSOCIATIONS BETWEEN DISCLOSURE AND RELATIONSHIP QUALITY: TESTS OF HYPOTHESIS 2 (A–C) AT TIME 1

Table 3 reports the correlations of the various measures of self-disclosure with three measures of relationship quality—satisfaction, love, and commitment—for the sample at Time 1. These results are presented separately for men and women. Satisfaction, love, and commitment were positively and significantly associated with all three measures of self-disclosure: respondents' own self-disclosure, respondents' perceptions of partner's self-disclosure, and partner's reported self-disclosure (obtained from the partner). The only exception was that, for men, satisfaction was not associated with partner's self-disclosure. Overall, then, strong support was found for Hypothesis 2 (a–c), with Time 1 data.

TESTS OF HYPOTHESES 2 (A–C) WITH FOLLOW-UP DATA

Appendix B contains the correlations of the various measures of self-disclosure with the three measures of relationship quality at the follow-up waves for each gender. Although several of the correlations were positive and significant (e.g., particularly at Time 2 for men), a

TABLE 3. Correlations of Three Measures of Self-Disclosure with Satisfaction, Love, and Commitment, Time 1

	Satisfaction	Love	Commitment
Men			
Own Disclosure	.25*	.51***	.33**
Perceived Partner's Disclosure	.29**	.45***	.36***
Partner's Reported Disclosure	-.02	.19*	.22*
Women			
Own Disclosure	.26**	.39***	.29**
Perceived Partner's Disclosure	.33**	.34**	.30**
Partner's Reported Disclosure	.21*	.25*	.21*

Note. * $p < .05$; ** $p < .01$; *** $p < .001$.

number of the correlations were small and nonsignificant. Thus, only slight support was found for Hypothesis 2 (a-c) at the follow-up waves.

TEST OF HYPOTHESIS 2D: SELF-DISCLOSURE AS A PREDICTOR OF DISSOLUTION

Hypothesis 2 also predicted that self-disclosure would be associated positively with relationship stability; that is, couples who remained together over the course of the study were predicted to report higher levels of self-disclosure than couples who broke up. To first test this hypothesis, those who were still together at the end of the study were compared to those who had broken up on the male partner's and the female partner's self-disclosure scores. These results are presented in Table 4. No significant differences were found between the stable couples and the unstable couples on the Time 1 self-disclosure scores.

However, we also examined whether Time 1 self-disclosure scores would differentiate between couples who were still together versus couples who had broken up by Time 2, which was 6 months after the original assessment (rather than several years). In this case, there was one significant difference. Women in couples who broke up by Time 2 had significantly lower scores on perceived partner's self-disclosure than women in couples who stayed together. Thus, slight support was found for Hypothesis 2d when examining self-disclosure as a predictor of stability versus termination over a 6-month period.

TABLE 4. Comparisons of Self-Disclosure Scores for Couples Who Stayed Together versus Couples Who Broke Up

	Relationship Status at the End of the Study		Relationship Status at Time 2	
	Together (<i>n</i> = 41)	Broken Up (<i>n</i> = 60)	Together (<i>n</i> = 84)	Broken Up (<i>n</i> = 17)
Men's Self-Disclosure at Time 1				
Own Disclosure	4.01	4.13	4.13	3.85
Perceived Partner's Disclosure	3.87	4.13	4.03	3.96
Women's Self-Disclosure at Time 1				
Own Disclosure	4.10	4.23	4.20	4.04
Perceived Partner's Disclosure	4.00	3.97	4.06	3.61*

Note. * $p < .05$.

RESEARCH QUESTION 1: SELF-DISCLOSURE AND CHANGE IN RELATIONSHIP QUALITY

To explore Research Question 1, we examined (for men and women separately) whether self-disclosure contributed to a *change* in relationship quality over time. We limited these analyses to data collected at Times 1 and 2 (because of the larger *N* sizes at these waves) Because participants' reports of own disclosure and of perceived partner disclosure were highly correlated, the mean of the two versions of the self-disclosure scale was used as a total index of disclosure. For each gender, we regressed the Time 2 relationship quality score (satisfaction, love, or commitment) on the Time 1 self-disclosure index, controlling for the Time 1 relationship quality score. A significant beta for self-disclosure would indicate that self-disclosure is significantly associated with a change in relationship quality over time. However, in no case did the index for self-disclosure significantly predict the relationship quality measure at Time 2, controlling for the relationship quality measure at Time 1. In these regressions, the relationship quality measure at Time 1 was the only significant predictor of the relationship quality measure at Time 2.

We also explored the reverse causal direction. For each gender, we regressed Time 2 self-disclosure on Time 1 relationship quality (satisfaction, commitment, and love; each in separate regressions), controlling for Time 1 self-disclosure. A significant beta for the relationship quality measure would indicate that relationship quality is associated with change in self-disclosure over time. For women, commitment at Time 1 was found to be associated with an increase in reported disclosure from

Time 1 to Time 2 ($\beta = .18, p < .05$). However, this was the only relationship quality measure to reach significance. In each regression, Time 1 self-disclosure was significantly associated with Time 2 self-disclosure. Overall, Research Question 1 was answered in the negative: Self-disclosure did not predict change in relationship qualities.

RESEARCH QUESTION 2: SELF-DISCLOSURE OVER TIME FOR PARTICIPANTS IN STABLE COUPLES

At all five waves of the study the couples had high self-disclosure levels. However, to explore Research Question 2 and examine whether there was any significant change over time in self-disclosure, we conducted a repeated measures analysis with the subsample of participants in the most stable couples, those who remained in their relationship over the entire study and participated at every wave (35 men and 38 women). Overall, there were no significant changes over time in levels of self-disclosure for either men or women. For example, on tests of within-subjects contrasts, neither the linear nor the quadratic trend was significant in any of the analyses. Thus, Research Question 2 was also answered in the negative: Self-disclosure did not change over time.

To examine the level of consistency over time in self-disclosure, we correlated self-disclosure scores (own and perceived partner) over time (Time 1 scores with scores at all subsequent waves; Time 2 scores with scores at all subsequent waves, etc.). The correlations were very strong, even between nonconsecutive waves and when years separated the measures. They ranged from .39 to .79, with a mean correlation of .65. These results provide evidence of consistency in self-disclosure over time and underscore the reliability of the Miller et al. (1983) Self-Disclosure Index.

DISCUSSION

We initiated this research to explore the role of self-disclosure in ongoing and relationships on the basis of previous research, we had a number of expected findings. First, in preliminary analyses, we found relatively high levels of self-disclosure for the sample of couples, all of whom were dating at Time 1. Other research conducted with dating couples also indicates a high level of openness, by both men and women (e.g., Rubin et al., 1980; Sprecher, 1987). Unlike most prior research on self-disclosure (for exceptions, see Rubin et al., 1980; Sprecher, 1987), we measured not only own self-disclosure but also self-disclosure perceived to be offered by the partner (or received from the partner). Own disclosure and perceived partner disclosure were highly correlated (i.e., there was high

perceived reciprocity), but in addition there was a tendency for own self-disclosure to be perceived as higher than partner's disclosure, especially by women. Similar results were obtained by Rubin et al. (1980) with the Boston Dating Couples Study. This difference may reflect a salience bias in the participants' responses. People are aware of the extent to which they self-disclose to another, but they are not as aware of how fully another discloses in return.

As part of Hypothesis 1, we predicted significant associations between the several measures of self-disclosure and the individual variables of responsiveness, self-esteem, and relationship esteem. Some support was found for this prediction at Time 1 for both men and women. Identifying oneself as a high opener (highly responsive to others) was associated with reports of greater own self-disclosure, perceived partner disclosure, and actual partner disclosure for men, and with greater own and perceived partner disclosure for women. High self-esteem was associated with high scores on own and perceived partner self-disclosure for men, whereas high relationship esteem was associated with high own and perceived partner self-disclosure for women. These results provide support for Jourard's (1971) statement from many years ago: Self-disclosure is associated with well-being.

We had predicted in Hypothesis 1 that there would be no gender differences in total self-disclosure. Support was found for this prediction. Other past research also suggests that in the specific context of a romantic, heterosexual relationship, men and women do not differ significantly in overall self-disclosure (Dindia & Allen, 1992; Rubin et al., 1980). The contribution of this study is the finding that the lack of gender difference in self-disclosure does not change over time in the courtship process for heterosexual couples.

As part of Hypothesis 2, we expected positive, significant correlations between the several measures of self-disclosure and the relational variables of love, satisfaction, and commitment. Strong support was found for these predictions at Time 1. Love, commitment, and satisfaction were not only associated positively with the reports of own self-disclosure to partner and the beliefs about how much the partner disclosed, but also generally were associated with how much the partner reported disclosing. These results suggest that self-disclosure can serve as an act of maintenance and intimacy. The processes of giving and receiving self-disclosure are likely to generate positive feelings in the relationship and promote the desire to continue the relationship because of the investments of disclosures. However, self-disclosure generally did not predict which couples stayed together and which did not (we discuss this general result further below). One exception was that

the more that women perceived the partner had disclosed at Time 1, the less likely the relationship was to break up by Time 2. The importance of perceived partner disclosure in these results, and also as a correlate of individual and relational characteristics, is consistent with research on positive illusions in romantic relationships (e.g., Murray & Holmes, 1997), which has found that such illusions predict positivity in relationships.

We also proposed two research questions concerned with the role of self-disclosure in relationships over time. We employed regression analyses using disclosure variables to predict the various aspects of relationship quality (love, satisfaction, commitment) across time periods 1 and 2. However, self-disclosure did not predict relationship variables over time, nor did the relationship quality variables predict disclosure over time. We also explored the consistency of self-disclosure over time in stable couples and found that, indeed, there were no significant changes over time in self-disclosure levels for women and men who continued in their relationships.

Thus, self-disclosure is clearly an important relational variable, exhibiting solid correlations with relationship quality constructs such as love, satisfaction, and commitment. Moreover, it is important to both women and men. Yet it does not appear to be a strong predictor of changes in relationship quality over time and does not strongly separate out couples who stay together from those who break up. Why might this be so?

WHAT SELF-DISCLOSURE IS AND WHAT IT IS NOT

There are likely a number of reasons why self-disclosure might have shown these differential results. First, self-disclosure levels were quite high, both for the total sample at Time 1 and for the smaller samples at the later time points, and the standard deviations were quite low. Self-disclosure was also stable over time for those persons who remained in their relationships. Lack of variability may thus have depressed the correlations between self-disclosure and other variables. What this relative stability may also mean is that self-disclosure, or at least the willingness to disclose, may have aspects of a personality construct. Also bolstering this idea are the positive (albeit modest) correlations between the several measures of responsiveness (and to a limited extent self-esteem and relationship esteem) at Time 1 of the study.

Yet there was not consistency in the patterns of correlations between self-disclosure and other variables. So although it may have some aspects of a personality construct, it is affected by varying con-

ditions (which could be relational or environmental). Self-disclosure is extremely important in relationships, but it may be differentially important at different times (Altman et al., 1981). It may relate to individual characteristics such as responsiveness and relational characteristics such as love very strongly in the beginning of a relationship and then only selectively at other points in a relationship. Self-disclosure is subject to dialectical tensions in a relationship (e.g., openness-closedness; intimacy/privacy) (Baxter & Montgomery, 1996), and has been referred to as a "process" (Dindia, 1997), and, as such, it can be expected to ebb and flow in importance over time.

Self-disclosure in and of itself did not generally predict relational quality or stability. Although disclosure is an important relational behavior, it may be that self-disclosure acts in concert with other variables to influence relationship continuation or termination. In Prager's (2000) model of intimacy, self-disclosure is one of three important dimensions of intimacy (the other two are positive affect and partner listening/understanding). In extensive research exploring this model, Prager and Buhrmester (1998) found that the three components were important for need fulfillment in a relationship and that fulfillment was greater when all the components were present. In other words, "intimacy's contribution to need fulfillment is greater than the sum of the contributions of its component parts" (p. 455). Thus, self-disclosure may need to be combined with other constructs in order to be a strong predictor of relationship quality.

Prior research has established the importance of self-disclosure for intimate relationships. However, rarely has self-disclosure been measured at multiple times over the course of romantic relationships. The current longitudinal study has confirmed the role of self-disclosure in relationships that continue over time and should lead to future work that more fully documents how self-disclosure, alone and in combination with related constructs, contributes to relational quality and stability. It may be that an observational measure of self-disclosure rather than a self-report measure would offer better prediction of couple stability. In addition, future work might include interviews of couples regarding the role of disclosure in their progress toward relational commitment and further explore willingness to disclose as an aspect of personality.

APPENDIX A. Correlations of Three Measures of Self-Disclosure with Responsiveness, Self-Esteem, and Relationship Esteem, Follow-Up Waves

	Responsiveness	Self-Esteem	Relationship Esteem
Men			
Time 2			
Own Disclosure	.26*	.33**	.35*
Perceived Partner's Disclosure	.30*	.42***	.26*
Partner's Reported Disclosure	.22*	.07	.02
Time 3			
Own Disclosure	.38**	.20	.31*
Perceived Partner's Disclosure	.30*	.24	.29*
Partner's Reported Disclosure	.03	-.08	-.09
Time 4			
Own Disclosure	.33*	.19	.36*
Perceived Partner's Disclosure	.19	.36*	.31*
Partner's Reported Disclosure	.07	-.03	-.01
Time 5			
Own Disclosure	.41**	.05	.38*
Perceived Partner's Disclosure	.30	.08	.35*
Partner's Reported Disclosure	.06	-.04	.01
Women			
Time 2			
Own Disclosure	.09	-.09	.28*
Perceived Partner's Disclosure	.12	.07	.35**
Partner's Reported Disclosure	.17	.09	.12
Time 3			
Own Disclosure	.33**	.13	.23
Perceived Partner's Disclosure	.33**	.19	.32*
Partner's Reported Disclosure	.08	.03	-.16
Time 4			
Own Disclosure	.33*	.26	.20
Perceived Partner's Disclosure	.24	.15	.15
Partner's Reported Disclosure	-.02	.16	.03
Time 5			
Own Disclosure	.38*	.16	.10
Perceived Partner's Disclosure	.32*	.06	.16
Partner's Reported Disclosure	.25	.09	.33*

Note. * $p < .05$; ** $p < .01$; *** $p < .001$.

APPENDIX B. Correlations of Three Measures of Self-Disclosure with Satisfaction, Love, and Commitment, Follow-Up Waves

	Satisfaction	Love	Commitment
Men			
Time 2			
Own Disclosure	.28*	.44***	.31**
Perceived Partner's Disclosure	.31**	.39***	.26*
Partner's Reported Disclosure	.08	.15	.14
Time 3			
Own Disclosure	.17	.23	.27*
Perceived Partner's Disclosure	.30*	.24	.17
Partner's Reported Disclosure	.12	.11	.02
Time 4			
Own Disclosure	.07	.19	.05
Perceived Partner's Disclosure	.41**	.38**	.32*
Partner's Reported Disclosure	-.10	.04	.05
Time 5			
Own Disclosure	.11	.06	-.07
Perceived Partner's Disclosure	.20	.12	-.01
Partner's Reported Disclosure	-.19	-.05	-.05
Women			
Time 2			
Own Disclosure	.12	.30**	.03
Perceived Partner's Disclosure	.18	.25*	.03
Partner's Reported Disclosure	.11	.16	-.03
Time 3			
Own Disclosure	.19	.09	-.07
Perceived Partner's Disclosure	.33**	.20	.14
Partner's Reported Disclosure	-.06	-.10	-.11
Time 4			
Own Disclosure	.21	.12	.12
Perceived Partner's Disclosure	.09	.08	.10
Partner's Reported Disclosure	.30*	-.03	.12
Time 5			
Own Disclosure	.24	.51***	.51***
Perceived Partner's Disclosure	.28	.44**	.50***
Partner's Reported Disclosure	.29	.32*	.10

Note. * $p < .05$; ** $p < .01$; *** $p < .001$.

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