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Depression and Everyday Social Interaction

John B. Nezlek, Mark Imbrie, and Glenn D. Shean

The present study examined the relationships between depressive symptoms and everyday social interaction in a nonclinical population. Depressive symptoms were measured using the Center for Epidemiological Studies Depression Scale, and social interaction was measured using a variant of the Rochester Interaction Record. People who were classified as at risk for depression had less rewarding interactions than people who were not at risk. Depressive symptoms and interaction quantity and quality were negatively correlated for participants above the cutpoint, whereas they were uncorrelated for those below the at-risk cutpoint. The results also suggested that, compared with nondepressed people, depressed people derive more rewards from interactions with their closest opposite-sex friends, relative to the rewards they derive from interactions with other opposite-sex friends.

Depression is a pervasive, important, and intriguing problem, and although much is known about depression and its associated behaviors, relatively little is known about the relationship between depression and people's everyday social interactions. The present study was designed to expand our understanding of depression by examining the relationships between patterns of everyday social interaction and depressive symptomatology in a nonclinical population. In the present study, everyday social interaction was measured using a social interaction diary modeled after the Rochester Interaction Record (RIR; Wheeler & Nezlek, 1977). The RIR was used because of its ability to provide detailed descriptions of various aspects of social interaction.

Although the existing research on depression and social behavior is informative, and there is considerable consistency among the results of these studies, there are important limitations to this body of research, many of which are primarily methodological in nature. Specifically, few studies have examined the relationship between depression and naturally occurring social interaction, particularly in nonclinical populations. Many studies have used controlled or contrived laboratory situations or they have compared clinical samples with nonclinical controls. Some researchers have noted that because of this, the existing research does not provide a clear indication of how different variables of interest exert their influence within the context of people's actual, ongoing lives (Coyne, Kahn, & Gotlib, 1987; Hokanson, Loewenstein, Hedeen, & Howes, 1986). For example, depressed people may not be as socially skilled as nondepressed people in laboratory exercises but within the context of normal everyday interactions they may be, or the differences that are found in the laboratory may not be meaningful in the "real" world.

Coyne and others have suggested that using a diary method might provide valuable information about depression as it exists in situ (Coyne & DeLongis, 1986; Coyne et al., 1987), and some researchers have used diary methods to study the relationships between social interaction and depression. For example, in the study conducted by Hokanson et al. (1986), students maintained a diary that described the activities in which they were engaged and whether they were alone, with their roommates, or with acquaintances. The subjective quality of their social interactions was assessed through a weekly questionnaire, and the quality of interactions with roommates and others was extrapolated from these weekly questionnaires. Hokanson et al. found that depressed students had less rewarding relationships with their roommates than nondepressed students did. Although the convergence of the results of the Hokanson et al. study with other research is encouraging, different types of diary methods may be able to expand our understanding of depression even further. Diaries updated on a more frequent basis might provide different information than the information obtained through the weekly reports of interaction quality used in the Hokanson et al. study. For example, depressed people might recall events selectively in a fashion consistent with their negative affect. (See Wheeler & Reis, 1991, for a discussion of the advantages and disadvantages of different types of self-recording techniques.)

The diary method used in the present study was a variant of the RIR, initially described by Wheeler and Nezlek (1977). The RIR is a self-report technique with which people provide detailed and quantified descriptions of their social interactions. A few times each day diary keepers use a standardized form to describe each interaction they have. These diaries have been found to provide valid and useful measures of individuals' affective reactions to their interactions and of the quantity and distribution of their interactions. Variants of the RIR have been used to investigate the relationships between social interaction and a variety of measures, including loneliness (Wheeler, Reis, & Nezlek, 1983), health (Reis, Wheeler, Kernis, Spiegel, & Nezlek, 1985), social support (Cutrona, 1986), and academic suc-

John B. Nezlek, Mark Imbrie, and Glenn D. Shean, Department of Psychology, College of William & Mary.

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Correspondence concerning this article should be addressed to John B. Nezlek, Applied Social Psychology Research Institute, Department of Psychology, College of William & Mary, Williamsburg, Virginia 23187. Electronic mail may be sent via Bitnet to WPSPJBN@WMMVS.

cess (Nezlek, Wheeler, & Reis, 1990). (For summaries of research using the RIR, see Nezlek, Wheeler, & Reis, 1983, and Reis & Wheeler, 1991).

A wide variety of explanations and theories have been offered to account for depression and its causes and concomitant behaviors, and although there are differences among these explanations, two themes seem to run through them. First, virtually all posit that depression is characterized by some type of interpersonal distress, dissatisfaction, dysfunction, or all three (Barnett & Gotlib, 1988). Second, research following the learned helplessness model (Abramson, Seligman, & Teasdale, 1978) suggests that people may become depressed if they believe that they cannot control outcomes in their lives. Accordingly, the present study gathered data describing both the socioemotional and socioinstrumental aspects of social interaction as well as data describing the quantity of interaction.

The present study was guided by three primary hypotheses. First, it was hypothesized that people reporting symptom levels above an established cutpoint used to indicate risk for depression (depressed people) would have, on average, less rewarding (in terms of both socioemotional and socioinstrumental concerns) and less active social lives than people reporting symptom levels above such a cutpoint (nondepressed people).[1] Second, it was hypothesized that among the nondepressed, social interaction quality and quantity would not be related to depressive symptoms, whereas among the depressed, symptom levels would be negatively correlated with interaction quality and quantity. The present study also tested a third hypothesis that depressed people would rely more on their close friends (relative to other friends) for socioemotional rewards in interaction than would nondepressed people.

The first hypothesis of mean differences in the quantity and quality of social interaction as a function of depression is based on the considerable research suggesting that interpersonal distress and low social integration are involved in the etiology and maintenance of depression. For example, compared with nondepressed controls, depressed patients have been found to be involved more frequently in relationships characterized by blame, criticism, poor communication, domination, struggles for interpersonal control, reduced affective involvement, and lack of intimacy (Coyne & DeLongis, 1986; House, Umberson, & Landis, 1988). Other research has found that social isolation, low levels of social support, and unsatisfactory marital relationships tend to be associated with clinical depression (e.g., Brown & Harris, 1978; Cole, Lazarick, & Howard, 1987; Youngren & Lewinsohn, 1980). The related prediction that depressed people would experience less influence and control in their social interactions than nondepressed people follows from research on the learned helplessness model of Abramson et al. (1978) and other, similar approaches. Most of this research has suggested that depression is associated (in one way or another) with a perceived loss of control over one's environment.

The second hypothesis, that depressive symptoms would not be related to interaction quantity and quality for nondepressed people, but would be negatively related for depressed people, stems from a position that typically has been labeled as the *discontinuity* hypothesis. The term discontinuity refers to the fact that, at some point, there is a qualitative shift in the nature of an individual's problems. When the severity of an individual's problems is below such a point, that individual is able to deal with these problems in a way that does not compromise his or her day-to-day functioning (or result in a diagnosis). However, once the severity of an individual's problems exceeds this point, day-to-day functioning is impaired, and the further beyond this point the person goes, the worse off he or she becomes. For example, clinical depression represents more than an intensification of the sadness people experience on a day-to-day basis; it is a qualitatively different experience. (For a presentation of this position, see Eysenck, 1986).

A discontinuity approach is implicit in the design and use of some measures of psychopathology, including the Center for Epidemiological Studies Depression Scale (CES-D; Radloff, 1977). The CES-D was designed to distinguish people who are at risk for an episode of depression from those who are not and then to evaluate the degree of risk for those who are classified as at risk. Much less, if any, importance is assigned to differences among those who score below the at-risk (or caseness) cutpoint. (For an example of an application of this strategy see Husaini, Neff, Harrington, Hughes, & Stone, 1980).

The preceding two hypotheses were intended to apply to interactions of all kinds. However, previous research suggests that the relationships between social interaction and other constructs can vary as a function of whether same- or opposite-sex interaction is being considered and as a function of whether interactions occur with close friends (Nezlek et al., 1990; Wheeler et al., 1983). Therefore, because the RIR provides detailed descriptions of various types of social interactions, it was possible to examine specifically the relationships between depression and interactions with close friends.

Existing theory and research both suggest that depressed persons have less rewarding intimate relationships, a suggestion consistent with the first hypothesis of this study. Coyne (1976) suggested that individuals who are prone to depression may make excessive demands on their (possibly already problematic) closer relationships. Partners may find such demands to be aversive, and the demands may become part of an escalating process in which depressed persons alienate their closest partners, contributing to the onset and maintenance of depression. The results of Hokanson et al. (1986) and Hokanson, Rupert, Welker, Hollander, and Hedeen (1989) were consistent with this suggestion. Roommates in these instances served as a representative close relationship.

Although much of existing theory and research does not deal explicitly with the roles depression may play in the relative dependence people place on intimates, implicit in some of this work is the possibility that depressed people, compared with nondepressed people, rely or depend more on their close friends than they do on other friends. That is, they may "put more of their (perhaps fewer) eggs in one basket." For example, Hokanson et al. (1986) found that depressed students were more dependent on their roommates than nondepressed students, de-

[1] For purposes of this discussion, those who scored above the CES-D cutpoint will be referred to as *depressed,* and those who scored below the cutpoint will be referred to as *nondepressed.* These terms are used only to simplify the discussion. They are not meant to imply that participants who scored above the cutpoint had been diagnosed as clinically depressed.

spite the fact that depressed students found these relationships to be less rewarding than nondepressed students. Accordingly, a hypothesis of the present study was that depressed people would rely more on their close friends (relative to other friends) than would nondepressed people.

Method

Participants

Participants were first- and third-year students attending the College of William & Mary. The freshmen were introductory psychology students who had indicated that they were interested in participating in a study on social interaction. The juniors had been participants in previous studies on social interaction who had been recruited initially from introductory psychology classes in a similar fashion. A total of 181 students began the study; 7 were not included in the analyses because they did not follow instructions for maintaining the diary properly, and 2 did not complete the CES-D Scale. Of the remaining 172 students, 102 were women and 70 were men. All were paid $20 for participating, and no other incentives were provided.

Measures

Depression was measured using the CES-D Scale (Radloff, 1977). The mean score for the sample was 10.9, and the standard deviation was 9.4. In the present study, participants who had CES-D scores above 16 were classified as depressed. This cutpoint was based on epidemiological research using the CES-D, which has suggested that individuals who score above 16 are at risk for an episode of depression. The more a person's score exceeds this cutpoint, the greater the risk for a depressive episode. (See Ensel, 1986, for a discussion of setting caseness cutpoints for the CES-D). This procedure classified 33 participants (21 women and 12 men) as depressed, that is, approximately 20% of the total sample, a proportion similar to that found in much research (Coyne, 1985). The mean CES-D score for the nondepressed group was 7.4 (SD = 4.6), and the mean for the depressed group was 25.9 (SD = 9.5).

Social interaction was measured using a variant of the RIR (Wheeler & Nezlek, 1977), a self-report diary that people can use to describe their social interactions. Similar to most studies using the RIR, participants described the social interactions they had by indicating who their cointeractants were (using unique initials for each cointeractant) and the sex of each cointeractant, for up to three different cointeractants. For interactions with more than three others, they did not record individual initials; they indicated how many men and women were present. The length of each interaction also was reported, and participants rated each interaction on five qualitative dimensions: (a) closeness and intimacy, (b) enjoyment, (c) other's responsiveness, (d) confidence, and (e) influence. The intimacy, enjoyment, and responsiveness ratings measured the socioemotional dimensions of interaction, whereas the influence and confidence ratings measured the socioinstrumental dimensions of interaction. These five ratings were made using 9-point scales, with the following labels: 1 = *not*, 3 = *slightly*, 5 = *somewhat*, 7 = *quite*, and 9 = *very*, labels that were chosen to represent roughly equal intervals according to research on the relative strength of modifiers (Cliff, 1959).

Instructions to Participants

During an introductory meeting, the importance of understanding social interaction was explained, and the participants' role as collaborators in this naturalistic research was emphasized. Participants were told that the study concerned people's patterns of social interaction and that they would use a structured diary form to describe their social interactions. The instructions given to participants were modeled closely after those used by Wheeler and Nezlek (1977). Participants were told to use the RIR to record every social interaction they had that lasted 10 min or longer. An interaction was defined as any encounter with another person (or people) in which the participants attended to one another and adjusted their behavior in response to one another, a definition similar to Goffman's (1971) definition of a "social with." Examples were provided to clarify what was an interaction (e.g., a conversation or dancing) and what was not an interaction (e.g., simply sitting next to someone in a lecture).

The various response categories on the RIR were discussed until participants understood their definitions and felt comfortable with the forms and the procedure. Closeness (a term that also included intimacy) was defined as "how interpersonally close" an individual felt to his or her cointeractants, with specific mention that "intimacy did not have to include a sexual component." Enjoyment was defined as "how pleasurable or satisfying" the participant found each interaction to be. Responsiveness was defined as "how responsive to your needs and feelings you felt the people in the interaction were . . . the extent to which other people changed their behavior to accommodate your particular needs and feelings." Influence was defined in terms of the extent to which the participant felt that he or she "controlled the interaction (e.g., initiation, determining what was to be done, where to go, etc.)," and confidence was defined as "how self-assured you were and how competent you felt." These definitions are similar to operationalizations used in previous RIR studies.

To facilitate accurate recording, participants were encouraged to complete the records at least once a day at a uniform time, such as before going to sleep. Days that were forgotten or missed were to be skipped. Participants were given a bound pad of interaction forms sufficient for the duration of the study (17 days), and they were given an instruction booklet that repeated the instructions provided during the meeting. After 3 days, a research assistant contacted participants to see if they were having any problems maintaining the diary; none were reported. Throughout the study, a collaborative, nondeceptive atmosphere was maintained, and the confidentiality of the records was emphasized and closely guarded.

At the conclusion of the record-keeping period, participants were interviewed individually about the difficulties, ambiguities, and potential sources of inaccuracy in their data. Participants were encouraged to be straightforward when describing how they maintained the diary, and they were told that they would be paid regardless of what they said about how they had maintained their diaries. On the basis of these interviews, the data of the 7 previously mentioned participants were discarded. The remaining participants maintained their diaries an average of 16.7 days, and they reported updating their diaries an average of 1.8 times per day and spending an average of 15.4 min per day doing this. Participants' answers to other questions about how they maintained the diary were very similar to those given by participants in other RIR studies (cf. Nezlek et al., 1983), and they strongly suggested that participants maintained the diary in accordance with instructions and that the diaries were accurate representations of their social lives. In the interest of brevity, these data are not presented.

Following the interviews, participants completed additional questionnaires, including the CES-D Scale. On completion of these questionnaires, participants were paid, and any further questions they had about the study were answered. (For a detailed description of the methods used in RIR studies, see Nezlek & Wheeler, 1984).

Results

Measures of Social Interaction

Participants' social interaction diaries were quantified by calculating summary measures that described their affective reac-

tions to their interactions and the quantity of their interactions. The level of analysis used to summarize the interaction diaries was the individual participant, because the hypotheses of the study concerned relationships between individuals' social interactions and their degree of depression. Summary measures were calculated using a version of the Rochester Interaction Record Analysis Package (Nezlek & Wheeler, 1984), a set of programs written specifically to summarize data generated by the RIR. (See Wheeler & Nezlek, 1977, and Nezlek & Wheeler, 1984, for a detailed discussion of the analytic framework used as the basis for these procedures.)

Participants' social interactions were described by three separate sets of summary measures representing different aggregation strategies. The first set (*overall*) described all of a participant's interactions. The second set (*composition*) distinguished interactions on the basis of the sex of the cointeractants. In this second set, separate summary measures described each participant's same-sex interactions (those in which all cointeractants were the same sex as the participant), their opposite-sex interactions (those in which all cointeractants were the opposite sex of the participant), and mixed-sex interactions (those involving both male and female cointeractants). A third set of variables (*close friends*) described interactions with participants' friends. Separate summary variables were calculated to describe interactions with same-sex friends and interactions with opposite-sex friends.

Within each of these three levels of aggregation, affective reactions to interaction were measured by computing means for the five ratings: intimacy, enjoyment, responsiveness, confidence, and influence. Interaction quantity was measured by calculating (a) the mean number of interactions per day, (b) the time per day spent in interaction (in minutes), (c) the mean length of interactions, and (d) the percentage of all interactions that were of specific types (e.g., percentage of interactions involving same-sex best friend). In addition, the size of each participant's social network was measured by calculating the number of different individuals with whom the participant interacted during the study (separately for same- and opposite-sex others), adjusted for the number of days the participant maintained the diary.

Overview of Analyses

Two different types of analysis were conducted to test the primary hypotheses of the study. To examine mean differences between depressed and nondepressed participants, participants were divided into two groups, depressed and nondepressed, and the differences in social interactions between these two groups were examined using analyses of variance (ANOVAs). To examine differences in the relationships between interaction quality and quantity and depression, social interaction measures were regressed onto CES-D scores separately for depressed and nondepressed participants, and the resulting multiple correlations were compared with each other. Measures of interaction quantity and ratings of interactions at each of the three levels of aggregation were subjected to each type of analysis. Although no specific hypotheses were formed regarding sex differences, because of the fact that gender differences have been found consistently in research on social interaction, participant gender was included in the analyses when practical.

Table 1
Affective Reactions to All Interactions: Means and Univariate Tests

Participants and statistics	ENJ	INT	RES	INF	CON
Nondepressed	6.8	6.4	6.6	6.6	7.2
Depressed	6.4	5.7	6.2	6.0	6.5
Univariate *F*	7.2	10.6	6.1	10.4	14.2
p	.01	.01	.01	.01	.01

Note. Degrees of freedom for all univariate tests were 1, 168. In these analyses, there were 139 participants in the nondepressed group and 33 in the depressed group. ENJ = enjoyment; INT = intimacy; RES = responsiveness; INF = influence; CON = confidence.

Because of the relatively small number of depressed participants, it was not possible to include simultaneously academic year and gender as independent variables in all analyses, because this resulted in individual cell sizes that were inappropriately small. However, the results of analyses that included academic year (e.g., Depression × Academic Year multivariate analyses of variance [MANOVAs]) produced effects for depression that were virtually identical to the results presented below and produced virtually no effects for academic year. This similarity suggests that the present results apply to new entrants to an environment as well as they do to those more familiar with it.

Differences in General Social Interaction Between Depressed and Nondepressed Participants

The first set of variables analyzed were those that described general patterns of interactions, that is, variables representing interactions aggregated across all interactions (overall measures). Differences between the social interactions of depressed and nondepressed participants were analyzed with a 2 (sex) × 2 (depressed vs. nondepressed) MANOVA followed by univariate ANOVAs. The MANOVA of the five ratings of interaction produced a significant main effect for depression, $F(5, 164) = 3.4$, $p < .01$. Follow-up univariate ANOVAs of all five of the individual ratings also produced significant main effects for depression. These analyses clearly confirmed one of the primary hypotheses of the study. Across all interactions, compared with nondepressed people, depressed people felt that their interactions were less rewarding, and they felt less instrumental in these interactions. The relevant means are presented in Table 1.

Quantity of interaction, defined as measures of interactions per day, time per day spent in interaction, length of interaction, and size of social networks, was analyzed with a set of analyses similar to that used to analyze affective reactions to interactions. In contrast with the consistent differences found between depressed and nondepressed participants in the analyses of affective reactions to interactions, analyses of quantity of interaction revealed virtually no meaningful differences between these two groups. The MANOVA produced a marginally sig-

Table 2
Quantity of All Interactions: Means and Univariate Tests

Participants and statistics	PDAY	TIME	LEN	S-NET	O-NET
Nondepressed	5.8	358	63	1.0	.65
Depressed	5.4	349	68	1.0	.63
Univariate *F*	1.9	0.2	3.4	0.3	0.2
p	*ns*	*ns*	.07	*ns*	*ns*

Note. Degrees of freedom for all univariate tests were 1, 168. In these analyses, there were 139 participants in the nondepressed group and 33 in the depressed group. PDAY = mean number of interactions per day; TIME = time per day spent in interaction (in minutes); LEN = mean length of interactions (in minutes); S-NET = size of same-sex social network; O-NET = size of opposite-sex social network.

nificant effect for depression, $F(5, 164) = 1.9$, $p = .10$, and only one of the univariate ANOVAs (length) produced a near significant effect for depression ($p = .07$). The means for quantity of interaction are presented in Table 2.

By design, the overall measures analyzed in the previous section aggregated across all types of interactions, and they provided a broad view of mean differences between depressed and nondepressed people in the quality and quantity of their social interactions. However, the analyses of overall measures did not take into account the gender composition of interactions. To determine whether the differences between depressed and nondepressed participants in their social interactions were consistent across different types of interactions, additional analyses were conducted that included the gender similarity (sex composition) of an interaction (same-, opposite-, and mixed-sex) as a within-subjects variable. There were no significant interactions involving depression in these analyses. The differences found in the analysis of the overall measures applied equally well to same-, opposite-, and mixed-sex interactions, and in the interests of brevity, the results of these analyses are not presented.

Differences Between Depressed and Nondepressed Participants in Interactions With Close Friends

To determine whether the differences described above also characterized interactions with close friends, summary measures of interactions with close friends were analyzed with a set of analyses similar to that used in the analyses of the overall measures. These analyses were done separately for same- and opposite-sex best friends. As part of their poststudy interview, participants indicated who their same-sex best friend was, and measures were calculated to describe interactions with this person. For the 20 participants who indicated that their same-sex best friend was not a student at William & Mary and for the 3 who did not specify a particular same-sex best friend, measures describing interactions with the most frequently mentioned same-sex cointeractant were used as same-sex best friend measures. During the interview, participants also indicated whether they were involved in a "steady, ongoing romantic relationship of 6 weeks or more," and if they were, they indicated who their romantic partner was. For participants who had a steady, romantic partner, measures that described interactions with these romantic partners were used as opposite-sex best friend measures. For participants who did not indicate that they were involved in a steady, romantic relationship, measures describing interactions with the most frequently mentioned opposite-sex cointeractant were used as opposite-sex best friend measures.[2] The use of frequency of contact as an indicator of closeness for both same- and opposite-sex cointeractants (particularly in the absence of designations of specific others as friends) is a convention in keeping with previous research using the RIR and with research by Hays (1989).

The MANOVAs of measures describing interactions with same-sex best friends produced a near-significant effect for depression in the analysis of the five ratings of interaction, $F(5, 164) = 1.9$, $p = .10$, and three of the univariate ANOVAs produced a significant effect for depression. Compared with nondepressed participants, depressed participants felt less confident and influential and less intimate in interactions with their best same-sex friend. The means and the results of the univariate tests for these analyses are presented in Table 3. In addition, the MANOVA of the measures of interaction quantity produced a significant effect for depression, $F(4, 165) = 2.7$, $p < .05$, although this was due solely to differences in length of interaction. On average, depressed participants had longer interactions ($M = 76$ min) with their best same-sex friends than nondepressed participants ($M = 56$ min), $F(1, 168) = 5.7$, $p < .05$.

Measures describing interactions with close opposite-sex friends were analyzed with a series of 2 (sex) × 2 (depressed vs. nondepressed) × 2 (relationship status: romantic vs. nonromantic) MANOVAs. These analyses produced no significant effects for depression in the analyses of quantity of interaction; however, a significant main effect for depression was found in the analyses of the five ratings of interaction, $F(5, 160) = 3.0$, $p = .01$. Follow-up univariate tests produced significant main effects for depression for enjoyment, responsiveness, influence, and confidence, and a near-significant ($p = .09$) effect for inti-

Table 3
Affective Reactions to Interactions With Same-Sex Best Friends: Means and Univariate Tests

Participants and statistics	ENJ	INT	RES	INF	CON
Nondepressed	6.7	6.7	6.6	6.6	7.2
Depressed	6.5	6.1	6.3	6.2	6.7
Univariate *F*	0.7	5.1	2.4	3.2	6.4
p	*ns*	.05	*ns*	.08	.01

Note. Degrees of freedom for all univariate tests were 1, 168. In these analyses, there were 139 participants in the nondepressed group and 33 in the depressed group. ENJ = enjoyment; INT = intimacy; RES = responsiveness; INF = influence; CON = confidence.

[2] Although no participant indicated that he or she did not have a heterosexual orientation or that he or she had a same-sex romantic partner, and although campus surveys have indicated consistently that less than 10% of students are not heterosexual, it is possible that some participants were not heterosexuals. Therefore, it is possible that these analyses confounded sexual orientation, gender relationship, and nature of relationship for some participants.

Table 4
Affective Reactions to Interactions With Most Frequent Opposite-Sex Cointeractant: Means and Univariate Tests

Participants and statistics	ENJ	INT	RES	INF	CON
Women					
Nondepressed					
Romantic partner	7.4	7.7	7.3	7.2	7.4
Nonromantic partner	7.0	6.5	7.0	6.8	7.2
Depressed					
Romantic partner	7.6	7.9	7.3	7.2	7.6
Nonromantic partner	5.7	5.3	5.5	5.4	5.9
Men					
Nondepressed					
Romantic partner	7.2	7.4	7.1	7.0	7.4
Nonromantic partner	7.3	7.0	7.1	7.0	7.6
Depressed					
Romantic partner	6.5	6.7	6.5	6.0	6.0
Nonromantic partner	6.7	6.9	7.1	7.1	7.3
Statistics					
Main effect for depression					
Univariate F	8.9	2.8	5.2	7.0	11.7
p	.01	.09	.05	.01	.01
Interaction of sex, depression, and type of relationship					
Univariate F	3.5	3.5	5.1	10.3	10.0
p	.06	.06	.05	.01	.01

Note. Degrees of freedom for all univariate tests were 1, 164. Sample sizes were as follows. Women: nondepressed and romantic, 42; nondepressed and nonromantic, 39; depressed and romantic, 11; depressed and nonromantic, 10. Men: nondepressed and romantic, 30; nondepressed and nonromantic, 28; depressed and romantic, 8; depressed and nonromantic, 4. ENJ = enjoyment; INT = intimacy; RES = responsiveness; INF = influence; CON = confidence.

macy. Compared with nondepressed participants, depressed participants found interactions with their opposite-sex best friend to be less rich socioemotionally, and they felt less instrumental in these interactions.

This main effect was qualified by a significant triple interaction of sex, depression, and relationship status, $F(5, 160) = 2.6$, $p < .05$. Follow-up univariate analyses of influence, confidence, and responsiveness produced the same significant interaction, whereas the univariate analyses of enjoyment and intimacy produced near-significant interactions (ps = .06). The means and the results of the univariate tests for these analyses are presented in Table 4.

The triple interaction was consistent across the five measures. For women, a follow-up simple effects MANOVA produced a significant interaction of depression and romantic involvement, $F(5, 160) = 2.4$, $p < .05$. Interactions with romantic partners were rated more positively than interactions with nonromantic friends, and this difference was larger for depressed than for nondepressed participants. For men, a different pattern emerged. A follow-up simple effects MANOVA produced only a significant main effect for depression, $F(5, 160) = 2.2$, $p = .06$, similar to the results found in other analyses. Although the pattern of means suggested that romantic involvement made little or no difference in nondepressed men's interactions with their opposite-sex friends, for depressed men, romantic involvement was associated with relatively lower ratings of interactions, the small cell sizes may have made it difficult to detect interactions between depression and relationship status.

Reliance on Close Friends

The third hypothesis of the study was that depressed people would rely (or depend) more heavily on their best friends (relative to other friends) than nondepressed people would rely on their best friends. Within the present context, reliance was operationalized as differences in the ratings and quantity of interactions among cointeractants that were seen more and less frequently, and greater reliance was defined as larger declines in these measures from the most to the second to the third most frequent cointeractant.[3]

To test this hypothesis, measures describing interactions among the three most frequently mentioned opposite-sex cointeractants were analyzed with a series of 2 (sex) × 2 (depressed vs. nondepressed) × 3 (relative frequency within subjects: first vs. second vs. third most frequent) MANOVAs. The analysis of the five ratings of interactions produced a significant interaction of depression and the linear trend of frequency, $F(5, 162) = 2.5$, $p < .05$. This interaction was due to the fact that the linear trend for depressed people was more negative than for nondepressed people.

Univariate ANOVAs of the individual ratings produced significant Depression × Linear Trend interactions in the analyses of intimacy, influence, and confidence; however, a follow-up analysis that treated the five ratings as a repeated measure did not produce a significant Depression × Linear Trend × Ratings interaction ($p > .35$). Taken together, these follow-up analyses suggest that the Depression × Linear Trend interaction obtained in the MANOVA was due primarily to trends in influence, confidence, and intimacy, although the trends for responsiveness and enjoyment contributed to this effect. The means and the results of the univariate tests for these analyses are presented in Table 5. In contrast with these differences in affective reactions to interactions, analyses of quantity of interaction (interactions per day, time per day, length, and percentage of interactions) within the three most frequent opposite-sex cointeractants did not produce any effects for depression.

Corresponding analyses of ratings of interactions with partic-

[3] The most frequently mentioned same-sex cointeractant was the designated best friend of 106 of the 149 participants who indicated that they had interacted with their same-sex best friend during the course of the study. The most frequently mentioned opposite-sex cointeractant was the romantic partner of 79 of the 88 participants who indicated that they were involved in a romantic relationship with someone they saw over the course of the study. The analyses of interactions with the three most frequent same-sex cointeractants were repeated with status of most frequent cointeractant (designated as best or not) as a between-subjects factor, and the analyses of the three most frequent opposite-sex cointeractants were repeated with status of most frequent opposite-sex cointeractant (romantic partner or not) as a between-subjects factor. The results of these analyses were similar to those presented in this article.

ipants' three most frequently mentioned same-sex cointeractants produced a nonsignificant interaction of depression and the frequency linear trend. Analyses of the quantity of interaction with frequent same-sex cointeractants also did not produce any effects involving depression.

The analyses of interactions with participants' close friends suggest that depressed people, compared with nondepressed people, have less rewarding interactions with their close same- and opposite-sex friends. In addition, depressed people relied more on their closer opposite-sex friends (relative to other opposite-sex friends) for psychological rewards, although no such trend was found for differences in reliance among same-sex friends. Moreover, there were no differences between depressed and nondepressed people in terms of their behavioral reliance on close same- or opposite-sex friends.

Degree of Depression and Social Interaction

The second hypothesis of the study was that depressive symptoms would not be related to the quality or quantity of interaction for nondepressed people, whereas symptoms and interaction measures would be negatively related for depressed people. That is, once people become depressed, the more depressed they are the more their social lives deteriorate; however, if they are not depressed, then there is no relationship between the nature of their social lives and how "nondepressed" they are.

This hypothesis was tested by correlating CES-D scores with the five ratings of interaction and measures of the quantity of social interaction, separately for people above the depression cutpoint and for those below the cutpoint.[4] Measures of interaction were regressed onto CES-D scores, separately for the depressed and nondepressed groups, and the equality of the multiple *R*s produced by these regression analyses were compared.[5] Similar to the previous analyses of mean differences, the five ratings of interactions and the measures of interaction quantity were analyzed separately.

Table 5
Linear Component (LC) From Trend Analyses of Affective Reactions to Interactions With Three Most Frequent Opposite-Sex Cointeractants: Means and Univariate Tests

	Univariate			*M* for cointeractant			
Reaction	*F*	*p*	Group	1	2	3	LC
ENJ	1.3	.26	Nondepressed	7.2	6.8	6.8	0.4
			Depressed	6.6	6.0	5.8	0.8
INT	4.5	.05	Nondepressed	7.2	6.4	6.5	0.7
			Depressed	6.7	5.6	5.2	1.5
RES	1.5	.22	Nondepressed	7.1	6.9	6.7	0.4
			Depressed	6.7	6.2	5.9	1.8
INF	7.1	.01	Nondepressed	7.0	6.7	6.9	0.1
			Depressed	6.5	6.2	5.7	0.8
CON	7.3	.01	Nondepressed	7.4	7.2	7.2	0.2
			Depressed	6.8	6.4	6.0	0.8

Note. Degrees of freedom for all univariate tests were 1, 166. In these analyses, there were 137 participants in the nondepressed group and 33 in the depressed group. ENJ = enjoyment; INT = intimacy; RES = responsiveness; INF = influence; CON = confidence.

Table 6
Correlations Between Depressive Symptoms (CES-D Scores) and Measures of All Interactions

Measure	Nondepressed	Depressed
Affective reactions to interactions		
ENJ	.00	−.48**
INT	−.03	−.19
RES	.08	−.29*
INF	.04	−.58**
CON	−.10	−.38**
Quantity of interaction		
PDAY	.04	−.44**
TIME	−.04	−.20
LEN	−.08	.38**
S-NET	.05	−.32*
O-NET	.09	−.26

Note. In these analyses, there were 139 participants in the nondepressed group and 33 in the depressed group. CES-D = Center for Epidemiological Studies Depression Scale; ENJ = enjoyment; INT = intimacy; RES = responsiveness; INF = influence; CON = confidence; PDAY = mean number of interactions per day; TIME = time per day spent in interaction (in minutes); LEN = mean length of interactions (in minutes); S-NET = size of same-sex social network; O-NET = size of opposite-sex social network.
* $p = .10$. * $p \geq .05$.

The first set of regression analyses, involving ratings of interactions aggregated at the overall level, confirmed the second major hypothesis of the study. Measures of reactions to all interactions were significantly related to CES-D scores for the depressed group, $F(5, 27) = 4.1$, $p < .01$, $R = .66$, whereas they were only marginally related to CES-D scores for the nondepressed group, $F(5, 133) = 1.9$, $p = .09$, $R = .26$. More important, a test of the equality of the *R*s for the two groups indicated that the *R* for the depressed group was larger than that for the nondepressed group, $F(5, 160) = 6.4$, $p < .01$. The hypothesis was supported also by the zero-order correlations between CES-D scores and individual ratings, which are presented in Table 6. These correlations suggest that for depressed people, the more depressed they were the less enjoyable they found their interactions to be and the less influential and confident they felt in interaction, whereas there was no relationship between depressive symptoms and ratings of interaction for the nondepressed.

To determine whether depressive symptoms and quantity of interaction were related differently for those above and below

[4] To obtain the largest sample (to provide the most reliable estimate of effects) and to minimize the number of statistical tests, correlations are reported describing depressed and nondepressed participants without dividing these groups by gender. Correlations describing male and female subgroups within each of these larger groups were very similar to those presented in this article.

[5] The regression equations were compared by conducting an analysis of covariance using depressed versus nondepressed status as a grouping variable, depressive symptoms as the dependent measure, and measures of social interaction as covariates. Within such an analysis, the test of the equality of the slopes of the covariates (taken as a group) is a test of the equality between the two groups of the multiple *R*s produced by regressing the covariates onto the dependent measure.

Table 7
Correlations Between Depressive Symptoms (CES-D Scores) and Measures of Interactions With Same-Sex Best Friends

Measure	Nondepressed	Depressed
Affective reactions to interactions		
ENJ	−.01	−.08
INT	.00	−.09
RES	.08	−.14
INF	.03	−.42**
CON	−.10	−.15
Quantity of interaction		
PDAY	.08	−.43**
TIME	.02	−.45**
LEN	−.12	.10
PCT	.07	−.37**

Note. In these analyses, there were 133 participants in the nondepressed group and 33 in the depressed group. CES-D = Center for Epidemiological Studies Depression Scale; ENJ = enjoyment; INT = intimacy; RES = responsiveness; INF = influence; CON = confidence; PDAY = mean number of interactions per day; TIME = time per day spent in interaction (in minutes); LEN = mean length of interactions (in minutes); PCT = percentage of all interactions that were of specific types.
** $p \geq .05$.

the CES-D cutpoint, measures of overall interaction quantity, mean number of interactions per day, time per day spent in interaction, mean length of interactions, and sizes of same- and opposite-sex social networks were regressed onto depressive symptoms. These analyses provided some support for this hypothesis. Depressive symptoms and quantity of interaction were not related for the nondepressed group, $F(5, 133) < 1$, $R = .12$. A similar regression conducted for the depressed group produced a marginally significant relationship, $F(5, 27) = 2.0$, $p = .10$, $R = .52$, and two of the individual variables, interactions per day and mean length, were correlated significantly with CES-D scores. A comparison of the equality of the *R*s for the two groups indicated that the *R* for the depressed group was significantly larger than that for the nondepressed group, $F(5, 160) = 3.8$, $p < .01$. The hypothesis was supported also by the zero-order correlations between CES-D scores and measures of interaction quantity, which are presented in Table 7. These correlations suggest that for depressed people, the more depressed they were the fewer interactions they had and the longer their interactions lasted. Similar sets of regression analyses of interaction measures aggregated at the composition level (same- vs. opposite- vs. mixed-sex interaction) produced results that were very similar to those presented in Table 6, and they are not presented.

Regression analyses of interactions with same-sex best friends provided some support for the hypothesis that CES-D scores would be related to interaction for depressed participants and not related for nondepressed participants. When ratings of interactions with same-sex best friends were regressed onto CES-D scores, CES-D scores were found to be unrelated to ratings in the nondepressed group, $F(5, 133) = 1.6$, $p > .10$, $R = .24$, although they were marginally related for the depressed group, $F(5, 27) = 2.1$, $p = .09$, $R = .53$. Moreover, a comparison of these two *R*s indicated that the *R* for the depressed group was significantly larger than the *R* for the nondepressed group, $F(5, 160) = 4.1$, $p < .01$. This difference in *R*s was due to the difference between the groups in the correlation between CES-D scores and influence. For depressed people, the more depressed they were the less influence they felt they had in interactions with their same-sex best friends. The zero-order correlations are presented in Table 7.

Analyses of the relationships between CES-D scores and quantity of interaction with same-sex best friends also supported this hypothesis. When measures of the quantity of interaction with same-sex best friends (number per day, time per day, length, and percentage) were regressed onto CES-D scores, CES-D scores were found to be unrelated for the nondepressed group, $F(4, 133) < 1$, $R = .14$, whereas they were significantly related for the depressed group, $F(4, 28) = 2.9$, $p < .05$, $R = .54$. Moreover, a comparison of these two *R*s indicated that the *R* for the depressed group was significantly larger than the *R* for the nondepressed group, $F(4, 162) = 6.8$, $p < .01$. For depressed people, the more depressed they were the less contact they had with their same-sex best friends. The zero-order correlations are presented in Table 7.

Similar regression analyses of measures of interactions with opposite-sex best friends did not produce any meaningful relationships between CES-D scores and ratings of interactions or between CES-D scores and measures of interaction quantity, nor did these analyses find any differences in these relationships between depressed and nondepressed participants.[6]

The final analyses examined the relationships between degree of depression and reliance on close friends. The prior analyses of variance of ratings of interactions with the three closest opposite-sex friends indicated that depressed participants tended to rely more (relative to other opposite-sex friends) on their best opposite-sex friend than nondepressed participants did. To determine whether this reliance increased as depression increased, the linear components from these analyses (see Table 5) were regressed onto CES-D scores, and these analyses indicated that as depression increased reliance increased. For the nondepressed group, CES-D scores were unrelated to the linear components of the five ratings, $F(5, 131) < 1$, $R = .20$, whereas they were significantly related for the depressed group, $F(5, 27) = 2.4$, $p = .06$, $R = .56$. Moreover, a comparison of these two *R*s indicated that the *R* for the depressed group was significantly larger than the *R* for the nondepressed group, $F(5, 158) = 3.9$, $p < .01$. For depressed people, the more depressed they were the more negative the linear trend was for ratings of interactions with these three friends. That is, for depressed people, the more depressed they become, the more they rely on their best opposite-sex friends relative to other opposite-sex friends for affective rewards in social interaction. The zero-order correlations are presented in Table 8.

[6] Although the previous analyses found that affective reactions to interactions with opposite-sex friends varied as a joint function of depression, participant sex, and relationship status, because of the small cell sizes that occurred when participants were classified using all three of these variables, it was not possible to conduct regression analyses for each cell.

Table 8
Correlations Between Depressive Symptoms (CES-D Scores) and the Linear Component From the Trend Analyses of Affective Reactions With the Three Most Frequent Opposite-Sex Cointeractants

Participants	ENJ	INT	RES	INF	CON
Nondepressed	−.05	−.02	−.06	−.02	−.17
Depressed	.40**	.31*	.28	.50**	.29*

Note. In these analyses, there were 137 participants in the nondepressed group and 33 in the depressed group. CES-D = Center for Epidemiological Studies Depression Scale; ENJ = enjoyment; INT = intimacy; RES = responsiveness; INF = influence; CON = confidence.
* $p = .10$. ** $p \geq .05$.

Discussion

The results supported the primary hypotheses of the study, and they are similar to the results of much previous research. Compared with people who scored below the cutpoint, participants who scored above the at-risk cutpoint on the CES-D Scale had less rewarding social interactions. Dysphoria and disturbed interpersonal relationships are hallmarks of depression, and the differences in interaction quality (enjoyment, intimacy, and responsiveness) between depressed and nondepressed participants are similar to the differences found in a variety of other studies. Depressed participants also felt less confident and influential in their interactions, a finding that is consistent with theories that emphasize the importance in the onset and maintenance of depression of individuals' perceptions of control over their environments.

Interestingly, and unlike much previous research on depression, in the present study, depressed and nondepressed participants had the same amount of social contact. Often, null results are difficult to interpret because they can be due to unreliable measurement or a lack of power. However, the measures produced by the RIR have been shown to be highly reliable (coefficients between .8 and .9; Nezlek, 1993; Reis & Wheeler, 1991), and given the present sample sizes, the power to detect a difference of 0.5 standard deviations was approximately .85. Therefore, it is difficult to attribute the null results in the analyses of amount of contact to either the unreliability of the measures or a lack of power.

The failure to find significant differences between depressed and nondepressed participants in amount of social contact may have been due to the fact that most of the depressed participants in the present study were not clinically or chronically depressed. The nature of their depression may have been such that it affected their personal reactions to interactions, but it did not alter how active they were. That is, their depression may not have affected their ability to start and maintain interactions, or it may not have been severe enough to make others avoid them. Moreover, the fact that the quantity of interaction of the depressed and the nondepressed did not differ is similar to the results of studies on loneliness. Taken as a group, these studies suggest that loneliness is related primarily to the quality of an individual's social contacts, not the amount of contacts (Marangoni & Ickes, 1989).

The present results also supported a discontinuity approach to defining depression. For participants below a caseness cutpoint, depressive symptomatology and interaction quality and quantity were unrelated; whereas for those above the cutpoint, both interaction quantity and quality were negatively related to depressive symptomatology. This finding can be considered within two complementary perspectives. Within an interactional model, such as that proposed by Coyne (1976), the lack of relationships for those below the cutpoint may reflect the fact that participants' cointeractants were not sensitive to different symptom levels, perhaps because it was difficult to notice symptoms at low levels. Once symptom levels exceeded the cutpoint, they became salient, and the more symptoms exceeded the cutpoint, the more salient they became and the more influence they had on cointeractants and, consequently, on participants' interactions. Alternatively, the lack of relationships for those below the cutpoint may have reflected the fact that participants' distress was not sufficient to affect their behavior. Symptom levels that increasingly exceeded the cutpoint represented increasing internal distress, and this was associated with increased disturbance in social interaction.

The present study permitted separate and simultaneous examination (on identical measures) of general interaction and of interactions within close relationships. Similar to the analyses of general social interaction, depressed participants, compared with nondepressed participants, found interactions with their same-sex best friends to be less rewarding, and they felt less instrumental in these interactions, although there were no differences between the two groups in the quantity of interaction they had with same-sex best friends. However, it is important to note that depressed–nondepressed differences in reactions to interactions with same-sex best friends tended to be less pronounced than differences in general interaction. This may have been due to the fact that depressive symptoms were not as salient to best friends as they were to others or that best friends were not as affected by their friends' depressive symptoms as were other people. In addition, best friends may not elicit the same reactions within a depressed person as others elicit.

Two other findings regarding interactions with same-sex best friends merit discussion. Unlike the pattern found for general interaction, for depressed participants, degree of depression was not related to four of the five affective reactions to interactions with best friends. However, for depressed participants, degree of depression was negatively related to quantity of interaction with same-sex friends. As people's depression deepens they may have fewer interactions with their close same-sex friends, although the affective quality of these interactions may not decline. The exact mechanism responsible for this effect is not clear, although it may be that depressed people derive rewards from social interaction in a fashion that alienates their friends. As people's depression deepens this tendency becomes more powerful, resulting in fewer interactions with these friends. (See Coyne, 1976, for a similar argument.)

A much more complex picture involving gender and relationship status emerged when close opposite-sex relationships were examined. Depressed and nondepressed women found interactions with romantic partners to be equally (and highly) rewarding. In contrast, for women who were not romantically involved, depressed women found interactions with their best op-

posite-sex friend to be particularly unsatisfying (relative to all other combinations of sex, depression, and relationship status) in terms of both socioemotional and socioinstrumental concerns. For men, affective responses to interactions with opposite-sex friends varied only as a function of depression; romantic status did not interact with depression.

Because of the small number of participants in some of the categories in the analyses of close opposite-sex friends (e.g., there were only 4 men in the depressed–nonromantic cell), it is difficult to draw firm conclusions about differences between the sexes in the relationships between romantic status and depression. It should be noted also that, for depressed participants, there were no differences in depressive symptoms as a function of whether they were involved in a romantic relationship or not. Nonetheless, these data suggest that, for women, opposite-sex relationships that are not romantic relationships provide contexts within which the effects of depression are more pronounced. This may occur because men are more likely to notice the depressive symptoms of female nonromantic partners than romantic partners or because they react to the symptoms of nonromantic partners in a fashion that diminishes women's affective rewards from interactions. Another possibility is that some characteristic of the depression of depressed women who are not in romantic relationships makes it difficult for them to establish romantic relationships, and the nonromantic relationships that they do maintain are not rewarding.

The present study examined interactions with all the members of participants' social networks. The results indicated that depression was not related to differences in interactions among participant's three most frequent same-sex cointeractants. Both depressed and nondepressed participants did not derive greater rewards from interactions with their most frequent same-sex cointeractant (usually a best friend) than they did from interactions with other same-sex friends. In contrast, interactions with most frequent opposite-sex cointeractants (romantic partners or not) differed from interactions with other frequent opposite-sex cointeractants more for depressed participants than they did for the nondepressed. It appears that depressed participants may have been "putting (or finding) all, or more, of their eggs in one basket." Moreover, for depressed participants, this differentiation among opposite-sex friends was positively correlated with depressive symptoms.

The obtained differences in reactions to interactions with opposite-sex friends are consistent with descriptions of depression that emphasize the overreliance that depressed people may have on intimate acquaintances. Compared with nondepressed people, depressed people may have more limited social skills (Youngren & Lewinsohn, 1980), and it may be more difficult for them to interact satisfactorily with numerous opposite-sex others. Interestingly, there were no differences between depressed and nondepressed participants in the amount of contact they had with their opposite- or same-sex friends.

One implication of the present results is that researchers need to be careful how they operationalize social contact when they are examining relationships between depression and social activity, and they need to be cognizant of the differences that may occur as a function of the relational context they study. Within the present study, the statistical relationships between depression and social interaction varied as a function of the characteristic of interaction being considered (quantitative vs. qualitative) and the type of interpersonal relationship within which interactions occurred. Clearly, more research is needed to understand how depression is related to different characteristics of interaction within different relational contexts.

The present study also has important implications for how depression is defined and how to examine relationships between depression and other constructs. The present results clearly supported a discontinuity or critical threshold definition of depression. Symptom levels below a cutpoint were unrelated to a wide variety of indexes of social interaction, whereas symptom levels above this cutpoint were correlated negatively with these indexes.

Many studies use samples composed of participants having a wide range of depressive symptoms (or other scores). Often, the analyses of such samples are predicated on the assumption that the differences in scores on a measure of depression are equally meaningful regardless of where on the scale these differences occur. For example, the difference between 3 and 9 on the CES-D is assumed to be the same as that between 13 and 19 or 19 and 25; they are all 6 units. However, the difference between 3 and 9 represents variability in the nondepressed range, the difference between 13 and 19 represents a difference between nondepressed and depressed status, and the difference between 19 and 25 represents a difference in degree of depression.

By calling into question the validity of a continuity approach to defining depression, the present results also raise questions about the validity of analyses that assume continuity models of depression and (by implication) other constructs. In the present study, analyzing the data assuming a continuity model of depression would have entailed correlating depressive symptoms and interaction measures for all participants together. The correlations between the five ratings of interaction and depressive symptoms produced by following this procedure were between .2 and .3, and those between symptoms and quantity of interaction were not significant.

As the data in Table 6 indicate, dividing the participants into depressed and nondepressed groups revealed relationships between interaction quantity and symptoms that combined correlations obscured, and it revealed that the correlations between interaction quality and symptoms found in the combined analyses were due primarily to correlations within the depressed group only. Of course, the present analytic strategy was based on considerable epidemiological work on the CES-D, and it may not be as easy to determine cutpoints for other measures that have not received as much attention. Nonetheless, the present results suggest that researchers should remain sensitive to the possibility that relationships they find when using samples of participants whose scores span the range of an instrument may represent a blending of different relationships that exist in subgroups of participants (Jaccard, Turrisi, & Wan, 1990).

The static design of the present study did not permit examination of the causal relationships between depression and social interaction. Given the present results, all that can be said with any certainty is that the social interactions of depressed and nondepressed people differed in certain ways. It is possible that certain patterns of interaction cause people to become depressed, and it is possible that depression leads to certain patterns of interaction. Moreover, both causal relationships may

exist simultaneously (Barnett & Gotlib, 1988). A good way to investigate such issues of causality is to examine changes in depressive symptoms and interaction patterns over time, and future research will need to do this.

Although informative, the present study had important limitations. The first are those inherent in any single study using college students as participants. That is, it is not clear that the same results would occur with a different sample, such as adults. For example, the collegiate environment may provide so many opportunities for social interaction that whatever relationship depression has with quantity of contact was unable to emerge. Also, the study possesses important limitations regarding the type of depression that was studied. Participants in the present study who were classified as depressed were not diagnosed as depressed, and it is possible that many of them were not chronically or clinically depressed. If the depressed group consisted of chronically or clinically diagnosed depressed people, a different set of results may have occurred. Furthermore, the diary provided only one person's perceptions of interactions. Much contemporary theorizing about depression relies on interactional models that describe the give-and-take that occurs between people. To examine such models accurately, the perceptions of both a target person and his or her interactional partners need to be measured. Nonetheless, the present study demonstrated that using a social interaction to study depression is informative, and it demonstrated the utility of considering depression as a discontinuous construct.

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