

# Five Domains of Interpersonal Competence in Peer Relationships

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In three studies we investigated the utility of distinguishing among different domains of interpersonal competence in college students' peer relationships. In Study 1 we developed a questionnaire to assess five dimensions of competence: initiating relationships, self-disclosure, asserting displeasure with others' actions, providing emotional support, and managing interpersonal conflicts. Initial validation evidence was gathered. We found that self-perceptions of competence varied as a function of sex of subject, sex of interaction partner, and competence domain. In Study 2 we found moderate levels of agreement between ratings of competence by subjects and their roommates. Interpersonal competence scores were also related in predictable ways to subject and roommate reports of masculinity and femininity, social self-esteem, loneliness, and social desirability. In Study 3 we obtained ratings of subjects' competence from their close friends and new acquaintances. Relationship satisfaction among new acquaintances was predicted best by initiation competence, whereas satisfaction in friendships was most strongly related to emotional support competence. The findings provide strong evidence of the usefulness of distinguishing among domains of interpersonal competence.

Social scientists and mental health professionals alike have long been interested in interpersonal competence and the specific components involved in effective interaction (i.e., social skills). Researchers studying various forms of interpersonal relationships have recognized the importance of interpersonal competence in children's peer group popularity (Asher, 1983), adolescents' success in dating (Twentyman, Boland, & McFall, 1981), and adults' marital satisfaction (Gottman, 1979). Recent studies of social support suggest that people who are interpersonally competent are more likely to build and use networks of relationships that provide support in the face of stressful life events (Cohen, Sherrod, & Clark, 1986; Gottlieb, 1985; Hansson, Jones, & Carpenter, 1984; Sarason, Sarason, Hacker, & Basham, 1985). Similarly, chronically lonely people have been judged to be less interpersonally competent than people who are not lonely (Jones, Hobbs, & Hockenbury, 1982; Spitzberg & Canary, 1985).

Although it is commonly recognized that interpersonal competence is multifaceted, such a recognition is not always apparent in how it is studied. Most investigators have relied on global unidimensional measures of social competence such as the So-

cial Anxiety and Distress Scale (Watson & Friend, 1969) or the Survey of Heterosexual Interactions (Twentyman & McFall, 1975). Even when multidimensional self-report measures (e.g., Curran, Corriveau, Monti, & Hagerman's, 1980, Social Anxiety Inventory) or role-playing measures (e.g., Curran's, 1982, Simulated Social Interaction Test) have been used, the most common practice has been to sum scores across dimensions to create a total competence score, thus defeating the purpose of multidimensional assessment. Although in some instances it is useful to treat competence as a global construct, in many other cases there are clear advantages in distinguishing among different types of competence (Hersen & Bellack, 1984). For example, it is a common yet seldom tested assumption among relationship theorists that different competencies are required in different types of relationships and at different stages of relationship development (Lipton & Nelson, 1980). To examine these and other possibilities, greater attention needs to be given to the different facets of interpersonal competence.

Two approaches have been taken in distinguishing components of competence. One approach involves partitioning competence according to types of *interpersonal task domains* (e.g., initiating conversations and refusing unreasonable demands), whereas the other approach attempts to identify the *behavioral skills* that determine effective interaction, such as the abilities required to decode nonverbal communication (Rosenthal, Hall, DiMatteo, Rogers, & Archer, 1979) and social expressivity (Riggio, 1986). Both approaches are valuable, but the current research focuses on identifying task domains of competence. This approach was chosen because behavioral skills may vary across task domains (Dodge & Murphy, 1984; Goldfried & D'Zurilla, 1969; McFall, 1982). Thus, it is necessary to identify different domains before studying the skills that are responsible for effective performance in each domain.

Several assessment procedures have been developed to assess

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multiple task domains of competence. For example, several factor-analytically derived questionnaires examine multiple dimensions of social anxiety (Richardson & Tasto, 1976; Watson & Friend, 1969) and assertiveness (Galassi & Galassi, 1980; Gambrill & Richey, 1975). Similarly, role-playing procedures have been devised to assess multiple interaction situations (Curran, 1982; Fisher-Beckfield & McFall, 1982). However, little empirical work has evaluated the validity and utility of distinguishing among the domains of competence that these measures assess (see Levenson & Gottman, 1978, for a notable exception). Although there has been considerable research examining the specific skills and behavioral processes associated with certain domains of competence (e.g., initiating interactions), less work has examined correlations with personal variables such as masculinity-femininity and loneliness. What is needed is research demonstrating that scores for different competence domains are related differentially to various aspects of social functioning. Such research would both explicate the nature of different domains of interpersonal competence and clarify the roles that these domains of competence play in various arenas of psychosocial functioning.

We began by identifying five domains of competence that are known to have theoretical relevance to psychosocial functioning. The first of three studies was intended to establish that the five domains are empirically separable and are useful in examining sex and sex-of-partner differences in interpersonal competence. In the second study, we compared self-perceptions and roommate perceptions of interpersonal competence. In addition, self- and roommate ratings of subjects' personalities were collected in order to examine whether each domain of competence is differentially related to various features of social functioning. Finally, in the third study we investigated the roles played by various domains of competence in two types of relationships: a new acquaintanceship and a stable friendship.

### Study 1

We drew on existing theoretical and empirical literature to identify several domains of interpersonal competence. Three considerations guided our search. First, we were interested in domains that were reasonably broad and comprehensive. Second, the domains of behavior needed to have theoretical relevance to important psychological phenomena. This dictated that we broadly survey the clinical, social, and developmental psychology literatures to identify conceptually significant interpersonal tasks. Finally, each domain needed to be conceptually and empirically distinguishable from the other domains. In practice this meant that the existing literature needed to indicate that there was good reason to expect that competence in a task domain be only moderately correlated with competence in other domains.

On the basis of these criteria, we identified five domains of interpersonal tasks: (a) initiation of interactions and relationships, (b) assertion of personal rights and displeasure with others, (c) self-disclosure of personal information, (d) emotional support of others, and (e) management of interpersonal conflicts that arise in close relationships. The first two domains, initiation of interactions and assertion, have commonly been studied in the behavioral research on assertiveness (Galassi &

Galassi, 1980; Lipton & Nelson, 1980; Rathus, 1973; Schroeder, Rakos, & Moe, 1983). The third domain, disclosure of personal information, has been emphasized as important by communication researchers (Dickson-Markman, 1986), social psychologists (Chelune, Sulton, & Williams, 1980; Jourard, 1971), and marital researchers (Gottman, 1979; Tolstedt & Stokes, 1984). The fourth domain, emotional support, refers to providing comfort to others when they are experiencing problems or distress (Barker & Lemle, 1984; Gottlieb, 1985). Finally, management of interpersonal conflicts has been emphasized as critical in the behavioral marital literature (Convey & Dengerink, 1984; Gottman, 1979). Although alternative lists could be generated, we believe that the present one provides relatively comprehensive coverage of important interpersonal domains.

Next, we constructed a measure to assess interpersonal competence in these five domains. The long-range goal was to have a psychometrically sound questionnaire to evaluate interactional competence from several perspectives, including self-ratings, ratings by interaction partners, and ratings by trained judges. We began by developing a self-report version of the measure. The measure was constructed by adapting items used in several existing measures (Galassi, Delo, Galassi, & Bastien, 1974; Levenson & Gottman, 1978; Richardson & Tasto, 1976) and by writing original items where needed. In the first study we investigated whether this questionnaire assessed five empirically distinguishable domains of competence and whether scale scores for these domains were satisfactorily reliable. Also, several conceptually related variables were assessed to examine the construct validity of the new questionnaire.

In addition to the psychometric validation of the measure, a second goal of the research was to investigate self-perceptions of interpersonal competence in their own right. Such self-perceptions may be important determinants of self-efficacy, which in turn may determine whether a person attempts to undertake a behavior (Bandura, 1986). Similarly, lack of perceived competence may elicit anxiety and undermine a person's ability to interact appropriately. Therefore, we sought to determine how self-perceptions of competence varied as a function of social context.

We investigated three interrelated substantive issues. The first concerned the degree of generalizability of perceived competence across task domains. Past factor-analytic studies have found that the dimensions underlying questionnaires are uncorrelated (Curran et al., 1980; Galassi & Galassi, 1980; Gambrill & Richey, 1975). These results, however, may in part be an artifact of orthogonal factor rotation procedures that mathematically required uncorrelated dimensions. The few role-playing studies that have reported the correlations among competence scores for different task domains have found moderate levels of generalizability (Farrell, Curran, Zwick, & Monti, 1983; Wallander, Conger, Cohen, & Conger, 1985). On the basis of these findings, we expected that ratings of the five domains would be moderately intercorrelated.

A related issue concerned the comparison of perceived competence levels across different types of relationship partners. Some investigators have found that the level of competence varies, depending on the sex and familiarity of the interaction partner (Eisler, Hersen, Miller, & Blanchard, 1975), with cross-sex

interactions with new acquaintances being particularly problematic. We tendered no specific hypotheses but suspected that the levels of competence in interactions with same-sex versus cross-sex partners would vary with the domain of competence.

The final issue concerned sex differences in interpersonal competence. The results from past studies have been mixed, with most investigators reporting no sex differences (Gormally, 1982; Snodgrass, 1985), others finding men more competent than women (Hollandsworth & Walls, 1977), and still others finding women more competent than men (Lipton & Nelson, 1980; Pitcher & Meikle, 1980; Reis et al., 1982). We expected that sex differences would vary as a function of task domain. Specifically, men should show greater competence in domains that call for instrumental forms of behavior (relationship initiation and negative assertion), whereas women should report greater competence in domains that call for expressive forms of behavior (self-disclosure and emotional support). No a priori prediction was made concerning sex differences in conflict management competence.

## Method

### Subjects

Three samples of subjects participated. Sample 1 consisted of 123 male and 97 female undergraduates enrolled in introductory psychology at the University of Denver. Sample 2 consisted of 83 male and 119 female undergraduates enrolled in introductory psychology at the University of California, Los Angeles. Sample 3 consisted of 13 male and 18 female undergraduates enrolled in an advanced psychology course at the University of California, Los Angeles. Sample 3 was used only to gather 4-week test-retest reliability data on the Interpersonal Competence Questionnaire. All participants received course credit for taking part.

### Procedure and Measures

Participants in Sample 1 were given a packet of questionnaires that they were instructed to complete and return to the experimenter. The packet took approximately 1 hr to complete. Several other questionnaires were included as part of another study and are not discussed here. The questionnaires relevant to the current study included the following:

*Interpersonal Competence Questionnaire (ICQ).* This 40-item questionnaire was designed to assess five domains of interpersonal competence: (a) initiating relationships, (b) disclosing personal information, (c) asserting displeasure with others, (d) providing emotional support and advice, and (e) managing interpersonal conflict. In a preliminary study 10 items were written to assess each of the five hypothesized domains. This 50-item scale was administered to a pilot sample of 121 college undergraduates. Factor analysis revealed five factors corresponding to the hypothesized domains of competence. The current 40-item questionnaire was constructed by selecting the 8 items that loaded highest on each of the five factors.

Each item of the ICQ briefly describes a common interpersonal situation. (See Table 1 for a listing of items.) Respondents were instructed to use Levenson and Gottman's (1978) 5-point rating scale to indicate their level of competence and comfort in handling each type of situation (1 = "I'm poor at this; I'd feel so uncomfortable and unable to handle this situation, I'd avoid it if possible"; 2 = "I'm only fair at this; I'd feel uncomfortable and would have lots of difficulty handling this situation"; 3 = "I'm OK at this; I'd feel somewhat uncomfortable and have some difficulty handling this situation"; 4 = "I'm good at this; I'd feel quite comfortable and able to handle this situation"; 5 = "I'm EX-

TREMELY good at this; I'd feel very comfortable and could handle this situation very well"). Subjects made two ratings per item. In one column, they indicated how they would react with a same-sex friend, and in the second column they rated their response with an opposite-sex date or romantic partner.

*Dating and Assertiveness Questionnaire (DAQ; Levenson & Gottman, 1978).* This 18-item self-report questionnaire assessed two social skills: dating skill (e.g., conversation and initiation skills) and assertiveness. Subjects responded on a 5-point scale indicating the degree of comfort felt and the ability to handle each situation. This questionnaire was included to examine the concurrent validity of the Initiation and Negative Assertion scales of the ICQ.

*Interpersonal activities.* Subjects were asked to rate their frequency of dating and their frequency of initiating dates. Each rating was a single item on a 5-point scale.

*Emotional experiences.* A modified version of the mood checklist developed by Lebo and Nesselroade (1978) was used to assess two broad dimensions of emotional experience: depression-anxiety and well-being-energy. Subjects rated how often they experienced different emotions on 5-point scales (0 = *never* to 4 = *very frequently or always*). The reliabilities (Cronbach alphas) of the two 30-item scales were satisfactory: .89 for Depression-Anxiety and .91 for Well-being-Energy. Also administered was a 10-item version of the UCLA Loneliness Scale (Russell, Peplau, & Cutrona, 1980), which had adequate reliability, .82.

Participants in Sample 2 also completed the ICQ. In addition, they filled out the following measures:

*Social Skills Inventory (SSI; Riggio, 1986).* This is a self-report measure designed to assess nonverbal and verbal social communication skills. The 105-item questionnaire yields seven scales: Emotional Expressivity, Emotional Sensitivity, Emotional Control, Social Expressivity, Social Sensitivity, Social Control, and Social Manipulation. A series of validation studies have demonstrated the reliability and the convergent and discriminant validity of the measure for use with college populations. The response scale for each item is a 9-point scale (ranging from -4 = *not at all true* to +4 = *very true of me*). This measure was included to investigate concurrent validity of the ICQ scales and to determine the extent to which different communication skills are associated with particular ICQ competence domains.

*Social Reticence Scale (SRS; Jones & Russell, 1982).* This is a 22-item measure of shyness that has demonstrated reliability and validity. It was included in the study primarily to investigate the concurrent validity of the initiation subscale of the ICQ.

## Results

### Distinctiveness and Generalizability of Competence Domains

To determine whether interpersonal competence ratings fell into five distinguishable domains, a confirmatory factor analysis was conducted on the 40 items of the ICQ by using Bentler's (1985) EQS structural equation program. We tested a five-factor simple-structure model in which each ICQ item was restricted to load on its one designated factor. Ratings for same-sex peers and opposite-sex peers were analyzed separately. Item loadings and error variances were free to vary, whereas latent factor variances were set to 1.0 and factors were allowed to covary. There were marked differences between generalized least squares (GLS) and maximum likelihood (ML) solutions. GLS solutions yielded  $\chi^2(730) = 1,247.94, p < .001$ , for same-sex ratings, and  $\chi^2(730) = 1,237.26, p < .001$ , for opposite-sex ratings, with Bentler-Bonett (1980) fit indexes of .96 and .97, respectively. Table 1 contains the factor coefficients for the GLS

Table 1  
*Factor Model Coefficients of the Interpersonal Competence Questionnaire (ICQ)*

Items grouped by ICQ scale	ICQ model (factor) coefficients									
	Same-sex ratings					Opposite-sex ratings				
	I	II	III	IV	V	I	II	III	IV	V
<b>Initiation</b>										
1. Asking or suggesting to someone new that you get together and do something, e.g., go out together.					66					69
6. Finding and suggesting things to do with new people whom you find interesting and attractive.					72					67
11. Carrying on conversations with someone new whom you think you might like to get to know.					69					66
16. Being an interesting and enjoyable person to be with when first getting to know people.					68					58
21. Introducing yourself to someone you might like to get to know (or date).					72					75
26. Calling (on the phone) a new date/acquaintance to set up a time to get together and do something.					64					58
32. Presenting good first impressions to people you might like to become friends with (or date).					65					60
36. Going to parties or gatherings where you don't know people well in order to start up new relationships.					62					58
<b>Negative Assertion</b>										
2. Telling a companion you don't like a certain way he or she has been treating you.					61					71
7. Saying "no" when a date/acquaintance asks you to do something you don't want to do.					52					38
12. Turning down a request by a companion that is unreasonable.					58					57
17. Standing up for your rights when a companion is neglecting you or being inconsiderate.					59					62
22. Telling a date/acquaintance that he or she is doing something that embarrasses you.					69					60
27. Confronting your close companion when he or she has broken a promise.					62					67
32. Telling a companion that he or she has done something to hurt your feelings.					69					77
37. Telling a date/acquaintance that he or she has done something that made you angry.					75					65
<b>Disclosure</b>										
3. Revealing something intimate about yourself while talking with someone you're just getting to know.						60				72
8. Confiding in a new friend/date and letting him or her see your softer, more sensitive side.						70				77
13. Telling a close companion things about yourself that you're ashamed of.						53				53
18. Letting a new companion get to know the "real you."						64				65
23. Letting down your protective "outer shell" and trusting a close companion.						67				60
28. Telling a close companion about the things that secretly make you feel anxious or afraid.						61				53
33. Telling a close companion how much you appreciate and care for him or her.						56				51
38. Knowing how to move a conversation with a date/acquaintance beyond superficial talk to really get to know each other.						57				44
<b>Emotional Support</b>										
4. Helping a close companion work through his or her thoughts and feelings about a major life decision, e.g., a career choice.						52				53
9. Being able to patiently and sensitively listen to a companion "let off steam" about outside problems s/he is having.						51				50
14. Helping a close companion get to the heart of a problem s/he is experiencing.						64				52
19. Helping a close companion cope with family or roommate problems.						67				67
24. Being a good and sensitive listener for a companion who is upset.						57				50
29. Being able to say and do things to support a close companion when s/he is feeling down.						52				54
34. Being able to show genuine empathetic concern even when a companion's problem is uninteresting to you.						65				63
39. When a close companion needs help and support, being able to give advice in ways that are well received.						50				54

Table 1 (continued)

Items grouped by ICQ scale	ICQ model (factor) coefficients									
	Same-sex ratings					Opposite-sex ratings				
	I	II	III	IV	V	I	II	III	IV	V
<b>Conflict Management</b>										
5. Being able to admit that you might be wrong when a disagreement with a close companion begins to build into a serious fight.					60					50
10. Being able to put begrudging (resentful) feelings aside when having a fight with a close companion.					68					62
15. When having a conflict with a close companion, really listening to his or her complaints and not trying to "read" his/her mind.					65					60
20. Being able to take a companion's perspective in a fight and really understand his or her point of view.					64					69
25. Refraining from saying things that might cause a disagreement to build into a big fight.					77					78
30. Being able to work through a specific problem with a companion without resorting to global accusations ("you always do that").					65					58
35. When angry with a companion, being able to accept that s/he has a valid point of view even if you don't agree with that view.					70					71
40. Not exploding at a close companion (even when it is justified) in order to avoid a damaging conflict.					67					64

Note. Values listed in Columns I-V are standardized path coefficients (factor loadings) from Bentler's (1985) EQS structural equation program generalized least squares confirmatory structural model. Coefficients from maximum likelihood model were very similar to those presented in the table.

solution. Although the overall chi-square goodness-of-fit tests for these models do not satisfy strict statistical significance tests, this is typical of models that involve a large number of variables and subjects. As Bentler and Bonett (1980) noted, "In very large samples virtually all models that one might consider would have to be rejected as statistically untenable" (p. 591). Therefore, the Bentler-Bonett index is the more appropriate coefficient for evaluating the current models because it is sensitive to variables such as sample size and number of parameters. Because fit indexes of .90 or greater represent satisfactory degrees of fit (Bentler & Bonett, 1980), the current GLS models appear to fit the data very well. The ML solutions, however, did not fit nearly as well, yielding  $\chi^2(730) = 1,687.60, p < .001$ , for same-sex ratings, and  $\chi^2(730) = 1,817.99, p < .001$ , for opposite-sex ratings,

with poor Bentler-Bonett fit indexes of .74 and .73, respectively. The pattern of ML factor coefficients, however, was very similar to that of the GLS solution.

Often, such large discrepancies in fit across GLS and ML solutions occur when data do not meet the conditions of multivariate normality. Examination of the multivariate kurtosis estimates revealed that, in fact, the data deviated from multivariate normality. Under these conditions Bentler (1985) suggested that it is more appropriate to evaluate the models by using arbitrary distribution theory. Unfortunately, existing computer programs cannot accommodate models that involve as many as 40 observed variables (25 is the largest number that can be accommodated). To adapt to these constraints, the total number of observed variables was reduced to 20 by averaging pairs of ICQ

Table 2  
Correlations Among Self-Reported Interpersonal Competence Questionnaire (ICQ) Ratings of Interactions With Friends and Romantic Partners

ICQ scale	1	2	3	4	5	6	7	8	9	10
1. Initiation with friend	(86)									
2. Assertion with friend	47	(85)								
3. Disclosure with friend	52	41	(82)							
4. Support with friend	34	31	49	(86)						
5. Conflict with friend	27	25	39	46	(77)					
6. Initiation with date	77	33	36	14	14	(85)				
7. Assertion with date	38	75	30	28	21	42	(86)			
8. Disclosure with date	35	26	63	27	19	50	41	(82)		
9. Support with date	30	28	39	84	35	24	36	45	(87)	
10. Conflict with date	25	25	30	34	78	22	20	30	44	(77)

Note. Numbers in parentheses are Cronbach alpha internal consistency coefficients. All correlation coefficients are significant at  $p < .01$ .

items that were intended to assess the same domain of competence. A five-factor simple-structure model with four indicators per factor was tested by using the arbitrary distribution theory (AGLS) procedure in Bentler's EQS program. The analyses yielded  $\chi^2(160) = 510.75$ ,  $p < .001$ , for same-sex ratings, and  $\chi^2(160) = 506.16$ ,  $p < .001$ , for opposite-sex ratings, with fit indexes of .90 and .91, respectively. These fit indexes meet minimal levels of goodness of fit, indicating that the confirmatory factor analyses support the five-factor simple-structure model hypothesized to underlie the items of the ICQ.

Next, we examined the generalizability of the factor structure across same-sex ratings and opposite-sex ratings. Whereas it would have been desirable to use structural modeling techniques to directly evaluate the equivalence of loadings across the two types of ratings, in practice this proved beyond the means of our computing facility, owing to the large number of variables involved. Instead, a more traditional approach to evaluating concordance of factor loadings was adopted (Wrigley & Neuhaus, 1955). The coefficients for corresponding ML factors were high (range = .92–.98,  $M = .96$ ), indicating that the factor models were very similar.

Scores for each of the five dimensions were derived by averaging the eight items representing each factor. As shown in Table 2, internal consistency reliabilities (Cronbach alphas) were satisfactory, ranging from .77 to .87, with a mean of .83. Table 2 also contains intercorrelations among the 10 competence measures. Scale scores were moderately correlated across the five competence domains, ranging from  $r = .26$  to  $r = .54$ , mean  $r = .42$ , indicating moderate levels of generalizability across the five domains of self-reported competence. These correlations were very similar to those found among the latent factors in the ML models, which ranged from  $r = .29$  to  $r = .63$ , mean  $r = .44$ . Correlations between corresponding dimensions of the friend and romantic partner ratings were high, ranging from  $r = .68$  to  $r = .84$ , indicating that individual differences were quite stable across ratings of these two types of interaction partners. Because they were highly correlated, ratings of competence with friends and romantic partners were averaged to create five overall competence scores. These composite scores were used in all subsequent correlational analyses. The Cronbach alpha coefficients for these 16-item composite scales were high, ranging from .86 to .91.

Four-week test–retest reliability correlations for each of the five scales were high: Initiation,  $r = .89$ ; Negative Assertion,  $r = .79$ ; Disclosure,  $r = .75$ ; Emotional Support,  $r = .76$ ; and Conflict Management,  $r = .69$ .

### Effects of Sex and Sex of Interaction Partners

We conducted analyses of variance (ANOVAs) to investigate the extent to which levels of perceived competence varied with subjects' sex, partners' sex, and competence domain. A Sex  $\times$  Sex of Partner (friends vs. romance)  $\times$  Sample (Sample 1 vs. Sample 2) repeated measures multivariate analysis of variance was conducted with ICQ scale scores treated as multiple dependent measures. We found significant effects for sex,  $F(5, 413) = 7.70$ ,  $p < .01$ ; sex of partner,  $F(5, 413) = 103.49$ ,  $p < .01$ ; and the Sex  $\times$  Sex of Partner interaction,  $F(5, 413) = 19.44$ ,  $p < .01$ . Follow-up tests were conducted using univariate repeated

Table 3  
Means and Standard Deviations of Interpersonal Competence Questionnaire (ICQ) Ratings of Interactions With Friends and Romantic Partners

ICQ scale	Romantic partner		Friend	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Initiation				
Men	3.20	0.79	3.56	0.66
Women	3.03	0.70	3.63	0.66
Negative Assertion				
Men	3.22	0.68	3.46	0.67
Women	3.34	0.77	3.43	0.68
Disclosure				
Men	3.25	0.70	3.20	0.62
Women	3.17	0.70	3.41	0.67
Emotional Support				
Men	4.00	0.61	3.99	0.59
Women	4.23	0.58	4.31	0.53
Conflict Management				
Men	3.50	0.56	3.49	0.57
Women	3.41	0.62	3.55	0.56

Note. Scores could range from 1 to 5.

measures ANOVAs. We used Bonferroni procedures to control for chance effects; specifically, we set significance levels at .003 to ensure an experimentwise error rate of  $p < .05$ . There were main effects of sex of partner for all scales except Emotional Support. Participants reported greater negative assertion competence,  $F(1, 417) = 47.18$ ,  $p < .001$ ; initiation competence,  $F(1, 417) = 439.27$ ,  $p < .001$ ; disclosure competence,  $F(1, 417) = 11.42$ ,  $p < .001$ ; and conflict management competence,  $F(1, 417) = 11.46$ ,  $p < .001$ , when interacting with same-sex friends as opposed to a romantic partner (see Table 3).

Consistent with predictions, a main effect of sex was found for emotional support competence,  $F(1, 417) = 25.75$ ,  $p < .001$ , with women reporting greater competence than men ( $M_s = 4.27$  and 4.00, respectively). The expected sex differences were not found for ratings of disclosure, initiation, and negative assertion competence. However, subjects' sex interacted with the sex of partner for all scales except Emotional Support (see Table 3). In partial support of predictions, men reported greater initiation competence than women when interacting with romantic partners, but there were no sex differences in initiation with friends,  $F(1, 417) = 28.38$ ,  $p < .001$ . (All post hoc comparisons of means were made using the Newman–Kuels procedure; significance levels were set at .01 to ensure a post hoc comparison error rate of  $p < .05$ .) Somewhat surprisingly, women reported greater negative assertion competence than men in romantic relationships,  $F(1, 417) = 9.22$ ,  $p < .003$ , whereas there were no sex differences in negative assertion with friends. Again in partial support of predictions, women reported greater disclosure competence than men with friends,  $F(1, 417) = 28.60$ ,  $p < .001$ , but there were no sex differences in ratings of competence with romantic partners. Examination of the means revealed that women reported greater competence at disclosing

Table 4  
*Correlations Between Self-Rated Interpersonal Competence and Measures of Social Adjustment*

Measure of social adjustment	Self-rated interpersonal competence					R
	Initiation	Negative Assertion	Disclosure	Emotional Support	Conflict Management	
<b>Social activities</b>						
Dating frequency						
<i>r</i>	.31**	.18**	.20**	.18**	.18**	
<i>sr</i> <sup>2</sup>	.05**	.00	.00	.01	.01	.31**
Initiation of dates						
<i>r</i>	.33**	.15*	.23**	.11	.04	
<i>sr</i> <sup>2</sup>	.06**	.00	.00	.00	.01	.35**
Popularity						
<i>r</i>	.41**	.19**	.24**	.29**	.15*	
<i>sr</i> <sup>2</sup>	.11**	.00	.00	.03**	.00	.46**
<b>Emotional experiences</b>						
Depression-anxiety						
<i>r</i>	-.29**	-.23**	-.19**	-.12	-.20**	
<i>sr</i> <sup>2</sup>	.03**	.00	.00	.00	.00	.32**
Well-being-energy						
<i>r</i>	.49**	.35**	.34**	.23**	.22**	
<i>sr</i> <sup>2</sup>	.11**	.02	.00	.00	.00	.55**
Loneliness						
<i>r</i>	-.28**	-.26**	-.30**	-.25	-.25	
<i>sr</i> <sup>2</sup>	.02	.00	.05**	.00	.06**	.50**
<b>Levenson &amp; Gottman (1978)</b>						
Dating skill						
<i>r</i>	.58**	.44**	.44**	.19*	.09	
<i>sr</i> <sup>2</sup>	.19**	.04**	.03**	.00	.00	.68**
Assertion						
<i>r</i>	.33**	.58**	.25**	.09	.13	
<i>sr</i> <sup>2</sup>	.05**	.26**	.00	.00	.00	.64**
<b>Jones &amp; Russell (1982)</b>						
Social reticence						
<i>r</i>	-.69**	-.32**	-.41**	-.31**	-.05	
<i>sr</i> <sup>2</sup>	.28**	.00	.00	.01**	.01	.71**

Note. *sr*<sup>2</sup> = squared semipartial correlation.

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

with same-sex friends than with romantic partners, whereas men reported being equally competent in both types of relationships. Finally, women reported greater conflict management competence when interacting with friends than with romantic partners,  $F(1, 417) = 17.44, p < .001$ , whereas men's ratings did not differ for friends and romantic partners.

#### *Correlates of the Five Domains*

Table 4 contains correlations between the five ICQ scales and the various measures of social functioning. In addition, we carried out regression analyses in which ICQ scale scores were used as independent variables to predict each social functioning measure. In each case the five ICQ domains scores were regressed on the dependent variables by using a simultaneous entry procedure.

Perceptions of interpersonal competence were significantly related to reported frequency of dates, initiation of dates, and perceived popularity. Thirteen of 15 correlations were significant. The ICQ Initiation Competence scale related most consistently with these measures. ICQ ratings were also significantly related to ratings of emotional experiences. The strongest predictors were initiation and negative assertion competence scores, which were moderately related to well-being-energy and modestly related to depression-anxiety. Loneliness scores were significantly related to all five ICQ scores.

Correlations with Levenson and Gottman's (1978) DAQ and Jones and Russell's (1982) SRS provided evidence of the concurrent and discriminant validity of two of the ICQ scales (see Table 4). As expected, dating skill scores were more strongly related to ICQ initiation competence ratings ( $r = .58, p < .01$ ) than to disclosure competence ratings ( $r = .44, p < .01$ ) and to

negative assertion competence ratings ( $r = .44, p < .01$ ; all  $r$ -to- $z$  differences,  $ps < .05$ ). Conversely, DAQ assertion scores correlated higher with ICQ assertion competence ratings ( $r = .58$ ) than with initiation competence ratings ( $r = .33$ ) and disclosure competence ratings ( $r = .25$ ; differences significant at  $p < .01$ ). Finally, social reticence scores were strongly and negatively related to initiation competence scores ( $r = -.69$ ) but only moderately related to the other four ICQ scales (differences greater than  $p < .05$ ).

Finally, Table 5 contains the correlations between Riggio's (1986) SSI and the ICQ. We also conducted regression analyses to determine the extent to which competence in ICQ domains could be accounted for by particular SSI social skill scores. ICQ scores served as dependent variables, and the seven SSI scales served as predictors. Initiation competence was strongly related to the SSI scales,  $R(7, 190) = .70$ , with social expressivity and social control being most strongly correlated. Interestingly, social sensitivity was negatively related to initiation competence. The other four ICQ domains were more moderately predicted by SSI scores. Assertion competence was positively related to social control and emotional sensitivity, but negatively related to social sensitivity. Disclosure competence was positively related to emotional sensitivity, social expressivity, social control, and emotional expressivity. Emotional support competence was most strongly related to emotional sensitivity and more modestly related to social control and social expressivity. Interestingly, conflict management competence was negatively related to both emotional expressivity and social manipulation, but positively related to emotional sensitivity.

As a more formal test of the discriminant validity of the ICQ, structural modeling techniques were used to test whether pairs of ICQ scale scores yielded significantly different patterns of associations with the seven SSI scores. This involved first estimating, for each pair of ICQ scales (total of 10 pairs), parallel regression-type models in which two ICQ scores were treated as separate dependent variables, each predicted by its own equation including the seven SSI scores. Regression coefficients were paths to be estimated, and the correlations among predictor variables were free to vary. These unconstrained models fitted the data extremely well because they included all except one parameter of the covariance matrix. For the 10 models, the average  $\chi^2(1) = .01, p > .98$ . Next, the same models were estimated with the added constraint that the regression coefficients for any SSI scores be equal in the two equations. This was essentially a multivariate test of whether the regression coefficients were equivalent for pairs of equations. In all 10 cases the chi-square difference test revealed that unconstrained models fitted the data significantly better than the constrained models, average  $\chi^2(7) = 39.00, p < .01$ , indicating that each ICQ scale has a pattern of associations with the SSI that is distinct from the other four ICQ scales.

### Discussion

Consistent with our hypotheses, the confirmatory factor analysis revealed that five internally coherent dimensions of competence underlie the items of the ICQ. Although certain complications were encountered in these analyses, the results are clear enough to justify the division of the 40 items into five scales.

Because the five competence domains were moderately correlated, the data indicate that interpersonal competence tends to be context specific and that people can be competent in some domains of social behavior while being incompetent in others. On the other hand, there was some generalizability across domains. People who are skilled in one context may have greater opportunity to become skilled in other contexts that arise from earlier successes; for example, people who are able to initiate relationships successfully are more likely to have opportunities to develop emotional support or conflict management competence. Other variables, such as general intelligence and anxiety, may also have an impact across domains.

Considerable covariation was found in ratings of interactions with same-sex friends and romantic partners, suggesting that, within domains, competence may generalize across different types of interaction partners. This conclusion is tentative, however, because our questionnaire was restricted to two similar types of peer relationships, friendships and romantic relationships, which share many common features. It is possible that less cross-partner generalization would be observed if ratings were obtained for more dissimilar interaction partners, such as parents, co-workers, and therapists. Alternatively, one might argue that the high covariation between romantic and same-sex ratings may have occurred because the same items were used for both sets of scales. This explanation is not satisfactory, however, because differences between the two relationships were observed in the mean levels of ratings within several domains of competence. Further work is needed to establish the extent to which interpersonal competence generalizes across different interaction partners and types of relationships.

Comparison of mean levels of ratings sheds a somewhat different light on the issue of cross-domain and cross-partner generalizability of competence. Subjects reported that, for all domains except emotional support competence, they felt less competent interacting with romantic partners than with same-sex friends. These findings are consistent with those by other investigators showing that dating relationships are a central worry of college students (Shaver, Furman, & Buhrmester, 1984; Tower, Bryant, & Argyle, 1978).

Men and women differed in their levels of perceived competence, but the direction of these differences depended on the domain of interaction and the sex of the interaction partner. In terms of emotional support, women felt more competent than men in interactions with both friends and romantic partners, a finding consistent with prior studies (Burda, Vaux, & Schill, 1984; Reis, 1986). Two components of emotional support are empathy and caring, competencies at which women are thought to be more adept than men (Spence & Helmreich, 1978). On the other hand, women reported feeling less competent at initiating interactions with romantic partners than did men, which may be due to cultural norms about heterosexual interactions. Women did not, however, report feeling less assertive in romantic relationships. In fact, women reported slightly greater negative assertion competence than men in romantic relationships. Note that these sex differences are not large and that for both initiation and negative assertion competence, the sex of the partner accounts for five times more variance than the sex of the rater.

Women also reported feeling more competent than men at



Table 5  
*Correlations Between Self-Rated Interpersonal Competence and Self-Rated Social Skills Inventory (SSI) Scores*

SSI rating	Self-rated interpersonal competence				
	Initiation	Negative Assertion	Disclosure	Emotional Support	Conflict Management
Emotional Expressivity					
<i>r</i>	.38**	.15*	.26**	-.04	-.24**
<i>sr</i> <sup>2</sup>	.00	.00	.00	.03**	.06**
Emotional Sensitivity					
<i>r</i>	.28**	.23**	.38**	.40**	.17**
<i>sr</i> <sup>2</sup>	.00	.03**	.06**	.16**	.04**
Emotional Control					
<i>r</i>	-.01	.05	-.11	-.10	.12
<i>sr</i> <sup>2</sup>	.00	.00	.00	.01	.00
Social Expressivity					
<i>r</i>	.64**	.18**	.36**	.15*	.02
<i>sr</i> <sup>2</sup>	.11**	.00	.01*	.00	.00
Social Sensitivity					
<i>r</i>	-.21**	-.26**	-.03	-.12	-.03
<i>sr</i> <sup>2</sup>	.04**	.07**	.00	.01	.00
Social Control					
<i>r</i>	.55**	.27**	.28**	.25**	.11
<i>sr</i> <sup>2</sup>	.01*	.01	.00	.02*	.00
Social Manipulation					
<i>r</i>	.04	.05	-.04	-.16*	-.21**
<i>sr</i> <sup>2</sup>	.00	.00	.00	.01*	.03**
<i>R</i>	.70**	.42**	.47**	.53**	.43**

Note. *sr*<sup>2</sup> = squared semipartial correlation.

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

self-disclosing with same-sex friends, a finding reported in other research (Reis, Senchak, & Solomon, 1985). Similarly, women felt more competent disclosing with same-sex friends than with romantic partners. Interestingly, women did not report feeling more competent than men at self-disclosing in interactions with romantic partners. This finding is somewhat surprising in the light of the common belief that women are more inclined to self-disclose than men. Recent findings by Wheeler, Reis, and Nezlek (1983) shed some light on these results. They found that both men and women reported being more satisfied with intimate interactions when the partner was a woman. Moreover, women appear to make others more willing to disclose personal information. These differences might lead both men and women to feel more comfortable and competent when disclosing to female partners.

The correlations between the ICQ scales and the measures of social functioning lend support to the validity of the competence ratings. The significant correlations between ICQ scores and measures of dating activity are consistent with the view that self-perceptions of competence are related to the avoidance of initiation of interactions. Alternatively, people may perceive themselves as less able to handle certain situations because they encounter those situations infrequently. Ratings of emotional experiences were also significantly related to ICQ ratings in predictable ways; people who were more interpersonally competent

tended to report greater well-being—energy and less depression—anxiety and loneliness. It may be that people with greater social competence are better at managing events in their lives and therefore lead happier and more trouble-free existences. Also, experiencing certain negative emotions may interfere with social interactions.

The moderately strong yet discriminant pattern of correlations with Levenson and Gottman's (1978) measure establishes that the ICQ Initiation and Negative Assertion scales have some concurrent validity. Correlations with the other three ICQ dimensions were smaller, suggesting that these scales tap domains of competence that are not well represented on the Levenson and Gottman measure. Similarly, the high correlation between social reticence and initiation competence is consistent with the view that shyness is most acutely manifest in situations calling for the initiation of interactions. Furthermore, the low correlations between social reticence and other domains of competence are also consistent with the view that shy people are not necessarily less competent in all domains of social functioning, especially skills relevant to close relationships (Zimbardo, 1977).

Finally, the various correlations between the ICQ and Riggio's (1986) SSI provide further evidence of the discriminant validity of the ICQ scales and may identify important aspects of the communication processes in each competence domain.

Initiation competence is strongly related to social expressivity and control, skills that involve speaking out and readily adopting different roles (particularly leadership) to meet the demands of the situation. Initiation competence was also negatively related to social sensitivity; at its extreme, social sensitivity appears to inhibit initiation, as suggested by SSI items such as "I often worry that people will misinterpret something I have said to them." Negative assertion competence was also positively related to skill in taking spokesperson roles (social control) and negatively related to social sensitivity. The chief difference between initiation and assertion competence is that assertion was less related to skill in social expressivity (verbal facility) and emotional expressivity. Thus, although both initiation (which is often described as positive assertion) and negative assertion involve willingness to take control, initiation competence involves greater skill in expressing oneself through verbal and nonverbal channels.

Disclosure competence and emotional support competence had similar patterns of correlations with the SSI skills. Both were most strongly related to emotional expressivity, a skill involving the ability to decode others' emotional and nonverbal signals (e.g., "It is nearly impossible for other people to hide their true feelings from me"). As might be expected, the key differences between disclosure and emotional support competence were in verbal and nonverbal expressiveness, with disclosure competence more highly related to both social and emotional expressivity. Finally, Conflict Management proved to be the most distinctive of the ICQ scales. It was negatively related to both social manipulation (e.g., "Sometimes I feel that the social rules that govern other people don't apply to me") and emotional expressivity. Perhaps people who perceive themselves as good conflict managers are somewhat emotionally constrained and hesitant about manipulating others.

### Study 2

Whereas Study 1 exclusively examined self-perceptions of interpersonal competence, Study 2 investigated peer perceptions of interpersonal competence and the relations between peer and self-perceptions of competence. As frequent observers of a person's social behavior, peers are likely to be well-informed about a person's interpersonal effectiveness. Consequently, it is important to know the degree to which outsiders' appraisals are consistent with self-appraisals. The degree of convergence is helpful not only in evaluating the validity of self-reports but also because discrepancies may reveal theoretically interesting differences in perspectives.

Peer perceptions of competence are also important because peers' attitudes can directly influence social interactions. Socially inept persons are unlikely to be perceived as attractive friends or romantic partners. Finally, because valued peers serve as significant sources of reflected appraisal, their impressions may influence a person's self-perceptions (Cooley, 1902).

Study 2 was designed to address two sets of issues. The first issue concerned the degree of correspondence between self-perceptions and roommate perceptions of interpersonal competence. Roommates were selected to provide ratings of the target subject because previous research has shown that they are among college students' most frequent interaction partners

(Wheeler & Nezlek, 1977). It was hypothesized that self- and roommate perceptions of competence would be moderately correlated with each other. The second issue concerned the extent to which perceptions of interpersonal competence relate to personality characteristics and social adjustment as assessed by self-perceptions and peer perceptions. It was predicted that specific domains of competence would be more highly correlated with certain features of personality and social adjustment than would other domains, thus demonstrating the value of discriminating among domains of competence. In particular, we expected that masculinity would be most strongly related to the instrumental forms of competence called on when initiating relationships and being assertive, whereas femininity would be most strongly related to disclosure and emotional support competence. We also expected that social self-esteem and loneliness would be related to all five domains of interpersonal competence.

### Method

#### Subjects

Subjects were 74 male and 64 female first-year college roommates at the University of Rochester (37 male and 32 female roommate pairs). All subjects lived in campus dormitories and had not known their roommates before entering college. At the time the data were collected, subjects had known their roommates for an average of 8 months.

#### Procedure

Participants were recruited from dormitory hall meetings for a "social perception" study that was to examine students' perceptions of themselves and their roommates. Participation was voluntary and without compensation. At the initial meetings, participants received test packets containing materials for the self-ratings. They were asked to complete the questionnaires in private and to schedule an appointment within 2 weeks to return the self-ratings and complete a second set of questionnaires. The second packet, consisting of subjects' ratings of their roommates, was completed in a psychology laboratory. Roommates were scheduled at different times. Subjects did not know that they would be asked to describe their roommate until they arrived at the laboratory.

#### Measures

Subjects completed a 40-item version of the ICQ. On the basis of the results of Study 1, we did not ask for separate ratings of interactions with same-sex friends and opposite-sex romantic partners, but instead we asked subjects to rate interaction partners in general. They also completed the following measures: (a) the Personal Attributes Questionnaire (PAQ; Spence & Helmreich, 1978), which is a 24-item scale measuring masculinity and femininity; (b) the Texas Social Behavior Inventory (TSBI; Helmreich & Stapp, 1974), a 16-item measure of social self-esteem; and (c) the revised UCLA Loneliness Scale (Russell et al., 1980). The directions of the 20-item UCLA scale were modified to obtain separate ratings of state and trait loneliness. That is, subjects rated, on 5-point scales, how often they had felt the described way in the past few days (state loneliness) and how often they had had such experiences during the past few years (trait loneliness). Trait ratings have been shown to be more stable over time and are associated with a cluster of self-defeating coping and attributional styles, whereas state loneliness ratings are less stable and more affected by the quality of contemporary social experiences (Shaver et al., 1984). A shortened 16-item version

of the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1964) was also included to further examine the validity of the ICQ.

The roommate-rating packet contained versions of the ICQ, the PAQ, and the TSBI. The directions for each measure were modified so that subjects were instructed to rate their roommates rather than themselves. The internal consistency reliabilities (alpha) were adequate for all scales, ranging from .66 to .94 for the self-rated scales and from .73 to .93 for the roommate-report scales. Note that the PAQ and the TSBI were not originally developed and validated for use as peer report measures. Therefore, the results from these measures should be considered exploratory and interpreted with a certain degree of caution.

### Results

We computed correlations between self and roommate for ratings of corresponding ICQ scales, revealing moderate levels of convergence: Initiation,  $r = .37$ ; Negative Assertion,  $r = .35$ ; Disclosure,  $r = .29$ ; Emotional Support,  $r = .26$ ; and Conflict Management,  $r = .25$  (all  $ps < .01$ ). In all cases self-ratings for each scale correlated higher with roommate ratings on the corresponding scale than on the other scales, thus providing support for the discriminant validity of the dimensions assessed by the ICQ. Next, the mean levels of self- and roommate ratings were examined. Subjects rated their roommates as more competent than themselves in initiation competence,  $t(74) = 2.64$ ,  $p < .01$  ( $Ms = 3.42$  and  $3.12$ , respectively). Conversely, subjects rated themselves as more competent than their friends in disclosure competence,  $t(74) = 2.11$ ,  $p < .05$  ( $Ms = 3.28$  and  $3.03$ ), and in emotional support competence,  $t(74) = 3.33$ ,  $p < .01$  ( $Ms = 4.05$  and  $3.66$ ).

We conducted correlation and regression analyses to examine the relations between scores on the ICQ and the criterion measures of sex roles, loneliness, and social self-esteem. In addition to computing the overall multiple correlations, we computed semipartial correlations for individual ICQ scales to determine the extent to which each ICQ scale uniquely predicted the personality and adjustment measures. This procedure involved calculating the change in the overall squared multiple correlation when a particular ICQ scale was removed from the equation (Cohen & Cohen, 1983). Table 6 contains the results of the analyses of the relationships between self-rated interpersonal competence and self- and roommate-rated personality characteristics. The findings for sex role orientation largely confirmed predictions. PAQ masculinity scores were correlated with self-rated initiation competence ( $r = .41$ ), negative assertion ( $r = .33$ ), and conflict management ( $r = .26$ ). The regression analyses revealed that all three domains significantly contributed to the overall prediction, whereas ratings of disclosure and emotional support competence did not. On the other hand, femininity was most strongly associated with emotional support competence ( $r = .60$ ), disclosure competence ( $r = .47$ ), and conflict management competence ( $r = .42$ ), but it was not related to ratings of initiation and negative assertion competence. All three of the former ICQ scores significantly contributed to the regression equation. Both masculinity and femininity scores were related to conflict management competence ( $r = .26$  and  $r = .42$ , respectively). Although self- and roommate ratings of sex role orientation were significantly related to each other (femininity,  $r = .27$ ; masculinity,  $r = .22$ ), self-rated interpersonal competence was weakly related to roommate-rated sex

role orientation, with only 2 of the 10 coefficients reaching the  $p < .05$  level of significance.

Self-rated social self-esteem was significantly correlated with all five self-rated ICQ scores. Most strongly related were initiation competence ( $r = .63$ ), disclosure competence ( $r = .41$ ), and emotional support competence ( $r = .30$ ). The regression analyses revealed moderately strong levels of predictability,  $R(5, 133) = .71$ , with scores for initiation (24%) and negative assertion (3%) competence making unique contributions to the equation. Roommates' ratings of the subjects' social self-esteem were significantly related to self-rated social self-esteem ( $r = .35$ ) and to self-rated initiation competence ( $r = .29$ ), emotional support competence ( $r = .21$ ), and disclosure competence ( $r = .19$ ). Initiation scores were the only ones to uniquely contribute to the modest level of prediction ( $R = .33$ ).

Table 6 also contains correlations between self-rated interpersonal competence and social desirability. Two ICQ scales were significantly related to social desirability scores, conflict management competence ( $r = .46$ ) and emotional support competence ( $r = .23$ ), but the other three scales were not related.

Table 7 contains the results of the analyses of the relations between roommate ratings of subjects' competence and self- and roommate-rated personality characteristics. The findings largely parallel those reported in Table 6. Roommate-rated masculinity was significantly related to all five roommate-rated ICQ scales. Only negative assertion and conflict management competence significantly contributed to the regression equations,  $R(5, 133) = .44$ . On the other hand, roommate-rated femininity was strongly correlated with roommate ratings of emotional support competence ( $r = .72$ ), conflict management competence ( $r = .59$ ), and disclosure competence ( $r = .56$ ) and was more modestly related to initiation and negative assertiveness competence. Scores for support (12%) and disclosure (9%) significantly contributed to the high level of overall prediction ( $R = .80$ ). Self-Reported Masculinity was the only ICQ scale significantly related to roommate-rated initiation competence ( $r = .19$ ), whereas femininity was related to emotional support ( $r = .32$ ), disclosure ( $r = .22$ ), and initiation competence ( $r = .22$ ).

Concerning loneliness, the results generally support predictions, although the coefficients were somewhat smaller than those found in studies using self-rated social skills (see Table 4 and Wittenberg & Reis, 1985). State loneliness was significantly correlated with initiation competence ( $r = -.33$ ), emotional support competence ( $r = -.28$ ), disclosure competence ( $r = -.20$ ), and conflict management competence ( $r = -.20$ ; overall  $R = .38$ ). Self-reported trait loneliness scores were also related to roommate-reported conflict management competence ( $r = -.27$ ) and emotional support competence ( $r = -.21$ ; overall  $R = .28$ ).

Roommate judgments of subjects' social self-esteem were significantly related to all five of the roommate-rated ICQ scales. The strongest relations were with initiation competence ( $r = .67$ ) and emotional support competence ( $r = .48$ ). Regression analysis revealed that scores of initiation competence (21%), emotional support competence (4%), and negative assertion competence (2%) each significantly contributed to overall prediction ( $R = .75$ ). In addition, self-reported social self-esteem

Table 6  
*Correlations Between Self-Rated Interpersonal Competence and Self- and Roommate-Rated Personality*

Personality rating	Self-rated interpersonal competence					<i>R</i>
	Initiation	Negative Assertion	Disclosure	Emotional Support	Conflict Management	
<b>Self-rated</b>						
PAQ masculinity						
<i>r</i>	.41**	.33**	.12	.10	.26**	
<i>sr</i> <sup>2</sup>	.10**	.06**	.00	.00	.04**	.52**
PAQ femininity						
<i>r</i>	.15	.10	.47**	.60**	.42**	
<i>sr</i> <sup>2</sup>	.00	.00	.03**	.10**	.04**	.67**
Social self-esteem <sup>a</sup>						
<i>r</i>	.63**	.40**	.41**	.30**	.20*	
<i>sr</i> <sup>2</sup>	.24**	.03**	.00	.00	.00	.71**
Social desirability <sup>b</sup>						
<i>r</i>	.11	.02	.04	.23**	.46**	
<i>sr</i> <sup>2</sup>	.00	.00	.00	.03**	.10**	.47**
<b>Roommate-rated</b>						
PAQ masculinity						
<i>r</i>	.04	.08	-.02	-.03	.01	
<i>sr</i> <sup>2</sup>	.00	.00	.00	.00	.00	.10
PAQ femininity						
<i>r</i>	-.08	.00	.18*	.17*	.03	
<i>sr</i> <sup>2</sup>	.00	.00	.02*	.00	.00	.25
Social self-esteem <sup>a</sup>						
<i>r</i>	.29**	.08	.19*	.21*	.11	
<i>sr</i> <sup>2</sup>	.05**	.00	.00	.01	.00	.33**

Note. PAQ = Personal Attributes Questionnaire (Spence & Helmreich, 1978); *sr*<sup>2</sup> = squared semipartial correlation.

<sup>a</sup> Based on Texas Social Behavior Inventory scores (Helmreich & Stapp, 1974). <sup>b</sup> Based on revised UCLA Loneliness Scale scores (Russell, Peplau, & Cutrona, 1980).

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

was related to roommate-rated initiation competence ( $r = .38$ ) but not significantly related to the other four ICQ scales (overall  $R = .39$ ). Finally, roommate ratings of conflict management and emotional support competence were significantly correlated with self-rated social desirability ratings.

### Discussion

The results were largely consistent with predictions and provide further demonstration of the value of distinguishing among domains of interpersonal competence. The convergence between self- and roommate ICQ ratings indicates modest to moderate agreement between self- and other perceptions of competence. Methodological limitations, such as measurement error and response bias, may have worked against greater convergence. In addition, there are substantive reasons why we would not expect high agreement between self-ratings and roommate ratings (Furman, Jones, Buhrmester, & Adler, in press). Self-ratings and roommate ratings represent different perspectives on subjects' competence. The two perspectives base judgments on somewhat different samples of behavior; for example, some roommates may not confide in each other; thus, they would have little opportunity to observe each other's emotional support competence. The roommate's basis of compari-

son may also be somewhat different from that used in self-evaluation. Roommate evaluations are likely to be based on comparisons across people, whereas self-judgments are also influenced by comparisons with desired or ideal levels of competence and by subjective aspects of social performance such as feelings of effortfulness or insecurity. Thus, although levels of convergence are modest, they nonetheless bolster our confidence that the ICQ scales assess meaningful and visible dimensions of behavior.

Evidence of the utility of distinguishing among domains of interpersonal competence was provided by the correlations between the ICQ and masculinity and femininity. Competence in initiation and assertiveness was associated with a masculine or instrumental interpersonal style, whereas competence in emotional support and disclosure was associated with an expressive orientation. Competence in conflict management was associated with both masculine and feminine orientations. This pattern of relations was evident in both self-ratings and roommate ratings, indicating that the dimensions of interpersonal competence were consistently related to sex role orientations both in self-construals and in the construals of others.

It is particularly noteworthy that roommates' ratings of interpersonal competence were predictive of self-reported loneliness. This is consistent with Jones et al.'s (1982) findings that lonely people are perceived to be less socially attractive. The

Table 7  
*Correlations Between Roommate-Rated Interpersonal Competence and Self- and Roommate-Rated Personality*

Personality rating	Roommate-rated interpersonal competence					R
	Initiation	Negative Assertion	Disclosure	Emotional Support	Conflict Management	
<b>Self-rated</b>						
PAQ masculinity						
<i>r</i>	.19*	.00	-.03	.00	.13	
<i>sr</i> <sup>2</sup>	.05***	.00	.00	.00	.03	.28**
PAQ femininity						
<i>r</i>	.22**	-.03	.22**	.32**	.16*	
<i>sr</i> <sup>2</sup>	.02*	.02*	.00	.05**	.01	.39**
State loneliness						
<i>r</i>	-.33**	-.07	-.20*	-.28**	-.20*	
<i>sr</i> <sup>2</sup>	.06**	.00	.00	.02*	.00	.38**
Trait loneliness						
<i>r</i>	-.12	-.00	-.14	-.21*	-.27**	
<i>sr</i> <sup>2</sup>	.00	.00	.00	.00	.03*	.28*
Social self-esteem <sup>a</sup>						
<i>r</i>	.38**	.15	.07	.11	.01	
<i>sr</i> <sup>2</sup>	.11*	.00	.00	.00	.00	.39**
Social desirability <sup>b</sup>						
<i>r</i>	.00	-.05	-.07	.15	.19*	
<b>Roommate-rated</b>						
PAQ masculinity						
<i>r</i>	.25**	.36**	.18*	.26**	.29**	
<i>sr</i> <sup>2</sup>	.00	.07**	.00	.00	.03**	.44**
PAQ femininity						
<i>r</i>	.21*	.02	.56**	.72**	.59**	
<i>sr</i> <sup>2</sup>	.00	.00	.09**	.12**	.00	.80**
Social self-esteem <sup>a</sup>						
<i>r</i>	.67**	.34**	.38**	.48**	.34**	
<i>sr</i> <sup>2</sup>	.21**	.02*	.00	.04*	.00	.75**

Note. PAQ = Personal Attributes Questionnaire (Spence & Helmreich, 1978); *sr*<sup>2</sup> = squared semipartial correlation.

<sup>a</sup> Based on Texas Social Behavior Inventory scores (Helmreich & Stapp, 1974). <sup>b</sup> Based on revised UCLA Loneliness Scale scores (Russell, Peplau, & Cutrona, 1980).

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

fact that the correlations were moderate in size is not surprising because interpersonal competence has been hypothesized to be only indirectly linked to loneliness; that is, competence deficits are thought to bring about unsatisfying relationships, which in turn foster loneliness. It is unclear, however, whether the depressed affect associated with loneliness is the cause or the consequence of competence deficits, because either direction is theoretically plausible. All except one of the roommate-rated dimensions of competence (negative assertion) were related to loneliness, suggesting that a broad variety of social competencies is needed to develop the kinds of relationships that keep one from feeling lonely.

The high multiple correlations between social self-esteem and perceptions of interpersonal competence suggest that, taken together, the ICQ scales capture most of what is assessed by the TSBI. Counter to our expectation that each of the five domains of competence would contribute to predicting global social self-esteem, the results of the regression analyses indicate that initiation competence was the primary predictor of self-

esteem scores. This suggests that people may weigh this domain of competence particularly heavily when appraising their social selves. Alternatively, these findings may stem from the TSBI itself, which seems slanted toward initiation competence.

At first glance it appears somewhat troublesome that social desirability was significantly correlated with conflict management and emotional support competence. Note, however, that roommate-rated ICQ scores for these two scales were also significantly related to self-rated social desirability. This indicates that the association between competence ratings and social desirability ratings does not reflect simple self-report bias but instead describes a theoretically meaningful aspect of social behavior. The Crowne and Marlowe (1964) scale is intended to assess a person's concern about negative evaluation by others; this concern may, in fact, facilitate conflict management and the provision of emotional support.

Not surprisingly, the correlations between roommate ratings of interpersonal competence and self-ratings of loneliness, sex roles, and self-esteem were substantially smaller than the same

correlations when all ratings were derived from subjects (top panel of Table 6) or roommates (bottom panel of Table 6). No doubt methodological factors may have attenuated these relations to some extent. It is also likely that the cognitive, informational, and motivational differences noted earlier may have affected the results. However, significant findings consistent with our hypotheses were obtained, even in the face of these constraints. Consequently, it is apparent that public impressions of interpersonal competence are important correlates of these personality traits and loneliness. Of course, the causal direction of these effects remains unclear. It may be that sex role and loneliness differences produce differing public social behavior. Alternatively, interpersonal competence differences might lead others to find the target person more or less desirable as an interaction partner, thereby inducing varying levels of loneliness and personality characteristics. Regardless, the similarity of findings for self-ratings and roommate ratings lends construct validity to the notion that specific dimensions of interpersonal competence relate differentially to various criterion measures. In other words, not only do self- and roommate ratings correspond, but their correlates are also similar.

### Study 3

It has been proposed that different forms of interpersonal competence are called for at different stages of relationship development (Buhrmester, Shaver, Furman, & Willems, 1982; Lipton & Nelson, 1980). If this is true, different domains of competence should be more predictive of relationship quality at different stages of relationship development. Another issue concerns the role played by perceptions of another person's interpersonal competence in determining attitudes toward that person. That is, are perceptions of competence involved in the appraisal of another person's adequacy as an interaction partner? If so, are some domains of perceived competence more influential than other domains when evaluating an interaction partner?

We investigated these issues in Study 3 by examining perceptions of interpersonal competence in two types of relationships, a new acquaintanceship and an established friendship. New acquaintances and close friends rated subjects' competence as well as their satisfaction with their relationship with the subjects. We tendered several hypotheses. First, because of their more extensive knowledge of the subjects, close friends' ratings of interpersonal competence should be more concordant with self-ratings than with new acquaintances' ratings. Second, new acquaintances are expected to form reasonably reliable judgments about initiation competencies, but they should have less accurate impressions of other competencies. Accordingly, agreement between the new acquaintance ratings and self- and friend ratings of competence was expected for judgments of initiation competence only. Third, peers' competence judgments should be related to the peers' satisfaction with their relationships with subjects. In particular, new acquaintances' perceptions of initiation competence should be most strongly related to interaction satisfaction, whereas perceptions of emotional support competence, conflict management competence, and disclosure competence should be most related to close friends' relationship satisfaction ratings.

In addition to competence ratings, new acquaintances and friends rated subjects' personality traits. As in Study 2, we expected that each trait would be correlated somewhat differently with the ICQ dimensions of competence, thus demonstrating that appraisals of general personality traits are closely associated with perceptions of particular competencies.

### Method

#### Subjects

Subjects were 82 male and 69 female undergraduates enrolled in psychology courses at the University of California, Los Angeles. They received course credit for participating.

#### Procedures

Subjects were tested in groups ranging in size from 2 to 28. Immediately after arrival in a laboratory, each subject was paired with another same-sex subject with whom she or he was unacquainted. They were instructed to interact for 7 min "to get to know each other." Afterwards, they were separated and asked to complete questionnaires about their own interpersonal styles and the styles of their interaction partners. Each subject was then given an envelope containing an additional "social style" questionnaire for a close friend to fill out and was instructed to choose a close same-sex friend who knew him or her well. They were told that it was essential that the friends feel that their responses were completely confidential and that they should not be in the room when their friends filled out the questionnaires. Accompanying the friend's questionnaire was a letter explaining the nature of the study and the importance of candid responses. It further instructed the friend to seal the questionnaire in an attached envelope immediately after completion and drop it in the mail or bring it to the experimenter's office. Ninety-five percent of the subjects' friends returned the completed questionnaire.

#### Measures

All subjects rated themselves on the 40-item ICQ. They also rated their interaction partners on a 20-item version of the ICQ consisting of the 4 most reliable items from each scale: Initiation items were 1, 6, 11, and 21; Negative Assertion items 2, 27, 32, and 37; Disclosure items 3, 8, 23, and 26; Emotional Support items 4, 24, 34, and 39; and Conflict Management items 15, 20, 25, and 40. Cronbach alpha reliability coefficients for these abbreviated scales were somewhat lower than those for the 40-item scale, but were generally adequate (see Table 8). In addition, they rated their degree of satisfaction with the interaction with their partner on a 5-point scale (1 = *not a very satisfying interaction* to 5 = *the most satisfying brief interaction I've ever had*). Finally, subjects rated the partners' personality on six 5-point bipolar adjective scales: outgoing-reserved, warm-cold, dominant-submissive, confident-insecure, extraverted-introverted, and sensitive-insensitive. The friends' questionnaire packet contained an identical set of measures, with the one exception that friends rated relationship satisfaction rather than interaction satisfaction.

### Results

Correlations between self- and peer-rated interpersonal competence are presented in Table 8. In this analysis, self-report scores were based on the full 40-item ICQ because of their greater reliability. As expected, ratings by close friends pre-

Table 8  
Correlations Between Self-Rated and Peer-Rated Interpersonal Competence

Peer-rated interpersonal competence	Self-rated interpersonal competence					Scale alpha
	Initiation	Negative Assertion	Disclosure	Emotional Support	Conflict Management	
<b>New acquaintance</b>						
Initiation	.28**	.05	.20**	.16*	.08	.83
Negative Assertion	.11	-.09	.10	.06	.05	.75
Disclosure	.19*	-.03	.19*	.21**	.13	.78
Emotional Support	-.02	.07	.00	.09	.13	.80
Conflict Management	-.03	-.09	-.08	-.15	.03	.65
<b>Friend</b>						
Initiation	.50**	.17*	.21**	.08	.05	.82
Negative Assertion	.13	.21**	.15	.03	-.08	.81
Disclosure	.29**	.07	.31**	-.01	.01	.80
Emotional Support	.23**	.08	.21**	.41**	.16*	.75
Conflict Management	.10	.02	-.02	.18*	.31**	.69

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

dicted self-ratings better than did ratings by new acquaintances (mean  $r = .36$  for friends and mean  $r = .10$  for acquaintances for corresponding ICQ scales; comparisons were made by using the Cohen and Cohen, 1983, procedure for dependent samples;  $ps < .05$ ). New acquaintance ratings of initiation competence were significantly correlated with self-ratings ( $r = .28$ ), as were acquaintance and self-ratings of disclosure competence ( $r = .19$ ). Ratings by close friends were significantly associated with the corresponding self-ratings of initiation competence ( $r = .50$ ), emotional support competence ( $r = .41$ ), conflict management competence ( $r = .31$ ), disclosure competence ( $r = .31$ ), and assertion competence ( $r = .21$ ). In all cases self-ratings for each scale correlated higher with friend ratings on the corresponding scale than on the other scales, thus replicating the evidence of discriminant validity found in Study 2. These coefficients were all significantly greater than those found for the correspondence between acquaintance and self-ratings ( $ps < .05$ ). We also computed correlations between ratings by new acquaintances and close friends. As expected, only the correlation between ratings of initiation competence was significant ( $r = .25$ ).

Next, possible mean differences in ratings by self, acquaintance, and friends were examined in an ANOVA in which type of rater was treated as a repeated variable. In these analyses, self-report scores were computed on the same 20 ICQ items used in acquaintance and friend ratings. There were significant effects of type of rater for ratings of initiation competence,  $F(1, 147) = 6.57, p < .004$ ; emotional support competence,  $F(1, 146) = 13.66, p < .001$ ; and conflict management competence,  $F(1, 146) = 6.22, p < .002$ . Post hoc comparisons using the Newman-Keuls procedure revealed that for initiation competence, ratings by friends ( $M = 3.75$ ) and acquaintances ( $M = 3.67$ ) were significantly greater than self-ratings ( $M = 3.35$ ). For emotional support competence, ratings by self ( $M = 4.22$ ) and friends ( $M = 4.12$ ) were greater than those by acquaintances ( $M = 3.82$ ). Finally, for conflict management, ratings by ac-

quaintances ( $M = 3.77$ ) and self ( $M = 3.65$ ) were greater than ratings by friends ( $M = 3.45$ ).

Table 9 contains the results of correlation and regression analyses that examined the relations between ICQ ratings and ratings of satisfaction and personality traits. In the regression analysis, ICQ scores served as independent variables. Ratings of interaction satisfaction by new acquaintances were most strongly related to perceptions of subjects' initiation competence ( $r = .35$ ), although all components of interpersonal competence except conflict management were significantly correlated ( $R = .39$ ). Friends' ratings of relationship satisfaction, on the other hand, were predicted by judgments of the subjects' ability to provide emotional support ( $r = .47$ ), self-disclose ( $r = .20$ ), manage conflicts ( $r = .19$ ), and initiate interactions ( $r = .17, R = .48$ ).

The correlations between peer ratings of interpersonal competence and personality traits (see Table 9) generally conformed to expectations. Initiation competence was most strongly associated with being seen as outgoing, extraverted, confident, and warm. Assertiveness was associated with being viewed as extraverted, outgoing, and dominant. Disclosure competence was best related to impressions of being extraverted, outgoing, warm, and sensitive. Emotional support competence was associated with being sensitive and warm. Finally, conflict management competence was correlated with ratings of warmth, sensitivity, and nondominance. Interestingly, these patterns were true of relations with both new acquaintances and close friends.

### Discussion

Individuals' perceptions of their interpersonal competence corresponded reasonably well with the perceptions of friends who knew them well. The moderately strong levels of agreement between self- and friend ratings of competence were about the same as self-roommate correlations found in Study 2. This is

Table 9

*Correlations Between Peers' Ratings of Interpersonal Competence and Ratings of Interpersonal Traits and Relationship Satisfaction*

Interpersonal trait	Peer-rated interpersonal competence					R
	Initiation	Negative Assertion	Disclosure	Emotional Support	Conflict Management	
<b>New acquaintance ratings</b>						
Interaction satisfaction	.35**	.21**	.27**	.25**	.15	.39**
Outgoing	.60**	.35**	.36**	.20**	.05	.61**
Extraverted	.54**	.36**	.34**	.08	.00	.57**
Confident	.40**	.27**	.15	.05	-.08	.44**
Dominant	.24**	.24**	.24**	-.05	-.27**	.45**
Warm	.31**	.03	.36**	.42**	.37**	.55**
Sensitive	.10	.05	.31**	.49**	.38**	.55**
<b>Friend ratings</b>						
Relationship satisfaction	.17*	-.07**	.20*	.47**	.19*	.48**
Outgoing	.46**	.26**	.38**	.19*	.08	.53**
Extraverted	.44**	.20**	.29**	.23**	.10	.48**
Confident	.32**	.14	.06	.28**	-.02	.39**
Dominant	.16*	.33**	.04	.11	-.16*	.39**
Warm	.25**	-.02	.35**	.46**	.25**	.55**
Sensitive	.13	-.01	.25**	.46**	.29**	.52**

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

not surprising, because many roommates in Study 2 were also close friends. Even after a 7-min interaction, new acquaintances achieved some concordance with self- and friend ratings of initiation effectiveness. Some correspondence also occurred for ratings of disclosure competence, suggesting that this trait may also be visible in the earliest phase of relationship formation. As predicted, new acquaintances had greater difficulty arriving at accurate evaluations of other competencies or at least in agreeing with ratings provided by subjects and their close friends. This finding is not surprising because brief get-acquainted conversations generally do not give subjects an opportunity to display emotional support and conflict management competence. It is not until closer relationships develop that emotional support and conflict management competence are called on.

There were some interesting discrepancies in the mean levels of ratings by friends, acquaintances, and self. Friends and acquaintances rated subjects higher on initiation competence than subjects did themselves, a pattern similar to that found in Study 2. Perhaps apprehension is common in initiation situations, leading subjects to feel that they are performing less skillfully than they are seen to perform by peers. On the other hand, acquaintances' ratings of subjects' emotional support competence were significantly lower than self- and friend ratings, perhaps because new acquaintances may have less knowledge than a friend or oneself about one's ability to provide emotional support.

It is interesting to note that friends' ratings of initiation competence were not strongly predictive of friends' satisfaction ratings. This competence, on the other hand, was the best predictor of new acquaintances' satisfaction with their interaction. Initiation competence may be important in beginning relationships, but may lessen in impact once a relationship is well established; instead, competence in providing warmth and support becomes

important. Although these results are suggestive, longitudinal research is needed to test this hypothesis adequately.

The pattern of correlations between peer ratings of interpersonal competence and their ratings of personality traits provides further insight into the nature of competencies demanded at different stages of relationship development. Initiation and assertion competencies were strongly associated with the instrumental personality traits of being outgoing and extraverted. On the other hand, the more expressive competencies of emotional support and conflict management were associated with being seen as warm and sensitive. These findings are consistent with the pattern of correlations with masculinity and femininity found in Study 2. They suggest that satisfaction in close relationships is related to the partners' ability to adopt the feminine traits of providing support and intimacy. It is also noteworthy that ratings of dominance were negatively correlated with conflict management competence. Extreme forms of assertion may, in fact, interfere with effectively managing conflicts in peer relations. Many social skills training programs designed to enhance interpersonal relationships do not focus on expressive competencies such as emotional support, disclosure, and conflict management. Rather, they often feature assertion and initiation training. Although these competencies may matter in the initial stages of relationships, they may not be crucial to foster and maintain satisfying close friendships. If future research confirms these findings, then skills training programs should consider placing greater emphasis on teaching the expressive skills.

### Summary and Conclusions

Taken together, the three studies provide strong evidence of the value of distinguishing among domains of competence.



Many of our findings indicate meaningful differentiation among these five dimensions. These domains appear to represent forms of social behaviors about which there are moderate levels of agreement between self-perceptions and peer perceptions. Of course, the five domains do not exhaustively cover all important spheres of interpersonal competence. Other domains can be identified, particularly considering other types of relationships, such as parent-child relationships and relationships with coworkers. In addition, because the participants in our studies were all college students, we cannot assume that the domains of competence and their correlates will generalize to people of other ages, socioeconomic backgrounds, and cultures.

The correlations between the five domains of interpersonal competence and other constructs further attest to the importance of distinguishing among domains. In general, initiation and negative assertion competence were most closely associated with a cluster of instrumental traits, whereas disclosure, emotional support, and conflict management competence were associated with expressive personality traits. The findings of Study 3 provide tentative evidence that different domains of competence are more important in different stages of a relationship. We suspect that further research will confirm that initiation and disclosure competence are particularly important in the earlier stages, whereas emotional support and conflict management competence may be necessary to deepen and maintain relationships once they have been established.

Further work is needed to examine the specific skills and abilities that determine competence in each of the five domains. Observational coding procedures (e.g., Farrell, Rabinowitz, Wallander, & Curran, 1985) should be used to identify specific behavioral variables that are associated with effective social performance in each domain. Our results clearly suggest that different types of behavioral skills are important in different domains. We also expect that some domains will be more amenable to observation in the laboratory than others. Competence in initiation, assertion, and disclosure may be reasonably easy to assess in a laboratory in that they involve fairly public forms of social behavior. It may be more difficult to elicit reliable and valid samples of emotional support and conflict management behaviors, both of which are more private.

The results also show that there is an initial basis for confidence in the reliability and validity of the ICQ as a research instrument. The measure is reliable, has a sound internal structure, and correlates sensibly with other theoretically related variables. In future use it may be desirable to obtain ratings from multiple perspectives, including self-ratings, peer ratings, and observer ratings. It may also be useful to develop a role-play assessment procedure along the lines of Curran's (1982) Simulated Social Interaction Test that assesses competence in these five domains. Such convergent measures should provide valid assessments of interpersonal competence. The clinical usefulness of the ICQ also remains unexplored. An important extension of this work would examine perceptions of those who are experiencing problems in interpersonal relationships with peers.

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