

Development and Validation of a Fear-of-Intimacy Scale

Carol J. Descutner and Mark H. Thelen
University of Missouri

Two independent studies showed the Fear-of-Intimacy Scale (FIS) to be a valid and reliable measure of individuals' anxiety about close, dating relationships. Item-total analyses yielded a 35-item scale with high internal consistency and test-retest reliability. Construct validity was established by factor analysis and significant correlations. The FIS correlated positively with a loneliness measure; it correlated negatively with self-disclosure, social intimacy, and social desirability measures. These relations were maintained when partial correlations were conducted to control for social desirability. Subjects' FIS scores were significantly related to self-report data (e.g., subjects with higher scores reported briefer relationships) and positively related to therapists ratings about clients' fear of intimacy. It was also found that androgynous subjects had less fear of intimacy than masculine and undifferentiated subjects. The FIS holds promise for use in the assessment of clinical populations and for use as a research instrument.

Intimacy has long been considered by theoreticians to be a vital need of humans for mental health and psychosocial adjustment (Erikson, 1963; Sullivan, 1953). Empirical research substantiates a strong connection between intimacy and various indices of adjustment. For example, deficiencies in intimacy have been associated with depression (Costello, 1982) and with weak ego strength (Waring, McElrath, Lefcoe, & Weisz, 1981). In a prospective study, McAdams and Vaillant (1982) found that intimacy motivation predicted psychosocial adjustment 17 years later. One would then expect that individuals who fear intimacy would be at risk for emotional difficulties. Indeed, one of the most common problems identified by psychotherapy outpatients is difficulty with intimacy in relationships (Horowitz, 1979).

The many definitions of intimacy illustrate the complexity of this construct and the need for clearer conceptualization and operationalization (Schaefer & Olson, 1981; Sexton & Sexton, 1982). Rubenstein and Shaver (1982) have cataloged the features of intimacy to include openness, honesty, mutual self-disclosure, care, warmth, protection, helpfulness, devotion, mutual attentiveness, mutual commitment, surrender of control, dropping of defenses, emotional attachment, and distress when separation occurs. These features are described within a variety of individual, familial, extrafamilial, and sexual relationships. Many theorists define intimacy as a significant phenomenon outside of a sexual relationship (Maslow, 1954; Sullivan, 1953) or consider nonsexual and sexual intimacy to greatly enhance one another (Rubenstein & Shaver, 1982). We chose to focus on fear of intimacy because we believe that it is often an antecedent to intimacy problems.

Several self-report measures of intimacy have been developed from interviews aimed at defining the characteristics of intimacy, for example, the Miller Social Intimacy Scale (MSIS; Miller & Lefcourt, 1982). Some have applied interview data to existing theory, as in the development of the Intellectual, Physical, and Emotional scales of the Intimacy Development Inventory (IDI; Holt, 1977). However, items for the proposed Fear-of-Intimacy Scale (FIS) were developed directly from a conceptual model based on the authors' definition of fear of intimacy. In addition, the MSIS, IDI, and Schaefer and Olson's (1981) Pair Inventory assess intimacy only in the context of a current relationship. Whereas there is a possibility that scores on these existing measures reflect the lack of an immediate close relationship rather than an intimacy problem, the FIS assesses individuals' fear of intimacy whether or not they are in a relationship.

The Intimacy Status Interview (Orlofsky, Marcia, & Lesser, 1973) more closely parallels the objectives of the FIS because it was developed from theory and examines past as well as current relationships. Using criteria derived from Eriksonian theory in human development, Orlofsky et al. determined that there are different intimacy statuses reflecting varying levels of intimacy. However, the interview is time-consuming when compared with the self-report format of the FIS, which has the advantage of assessing a large population in a short period of time.

In sum, the FIS was designed to assess a specific variable that influences intimacy (fear of intimacy) in a close relationship or at the prospect of a close relationship. This is in contrast to social anxiety scales (e.g., the Social Anxiousness Scale; Leary, 1983), in which the assessed anxiety is experienced in different situations with various individuals, without an exchange of emotional significance. Our goal was to develop a self-report measure of fear of intimacy, based on a conceptual model of the construct, with acceptable levels of validity and reliability. The current format of the FIS was intended to assess close, heterosexual dating relationships, although the sexual orientation of

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Correspondence concerning this article should be addressed to Mark H. Thelen, Department of Psychology, 210 McAlester Hall, University of Missouri-Columbia, Columbia, Missouri 65211.

the target was unspecified. It was assumed that some individuals would answer the FIS with reference to a same-sex partner but, because of the small number of such persons, this should not interfere with the scale's development.

Items for the FIS were based on the definition that fear of intimacy is the inhibited capacity of an individual, because of anxiety, to exchange thoughts and feelings of personal significance with another individual who is highly valued. The fear-of-intimacy construct takes into account three defining features: (a) *content*, the communication of personal information; (b) *emotional valence*, strong feelings about the personal information exchanged; and (c) *vulnerability*, high regard for the intimate other. We propose that it is only with the coexistence of content, emotional valence, and vulnerability that intimacy can exist. Consider, for example, the customer who talks to an unknown bartender about his or her troubles. Although there may be personal content and emotional valence within the exchange, the bartender is not a significant other, and the self-disclosing customer is not vulnerable or at risk of being hurt by the bartender. Such a situation would not be considered an intimate exchange. The proposed fear-of-intimacy construct provides a framework for understanding the interaction.

Two studies on the FIS were undertaken. The purpose of the first study was to develop test items and to establish the construct validity and reliability of the scale. The second study served as cross-validation of the measure.

Study 1

Method

Subjects

Stage 1. Preliminary test items were administered to 116 male and 115 female Introductory Psychology students. Ethnic background was not determined.

Stage 2. Refined scale items and validation measures were administered to an independent sample of 133 Introductory Psychology students of unknown ethnic origin; 4 subjects were dropped because of language difficulties or noncompliance. The final subject pool of 129 students (mean age = 19.11 years, $SD = 1.66$) consisted of 59 men and 70 women. Thirty-nine of the male subjects and 44 of the female subjects completed the scale items of the FIS a second time 1 month later, along with a measure of sex-role orientation.

Stage 3. Therapists from a university counseling center, a private counseling agency, and a graduate training clinic provided information on 33 clients who completed the FIS. Ethnic background was not determined. Of these, 1 subject was excluded because of incomplete therapist responses, and 2 subjects were excluded because of low therapist ratings of confidence. The final subject pool of 6 male and 24 female clients had a mean age of 31.50 years ($SD = 9.99$).

Materials and Procedure

Stage 1. The initial items for the FIS ($N = 49$) were based on the fear-of-intimacy construct. Items were developed by us or modified from existing test measures. Eight items from the Intimacy Development Inventory (Holt, 1977) and two items from the intimacy subscale of Erikson's subscales (Ochse & Plug, 1986) were modified for use in the FIS. Most items included the construct features of content, emotional valence, or both. The target person of each item (i.e., an individual with whom the subject imagines to be with in a close, dating relationship) provided the feature of vulnerability. Each item was presented on a 5-point scale ranging from *not at all characteristic of me* (1) to *extremely characteristic of me* (5). Thus, a high score on the FIS indicates a high fear of intimacy.

Stage 2. A refined 41-item FIS was administered to Stage 2 subjects from which the final 35-item FIS was developed (see Appendix). To determine construct and discriminant validity, subjects also completed modified versions of the Jourard Self-Disclosure Questionnaire (JSDQ; Jourard, 1964) and the Miller Social Intimacy Scale (MSIS; Miller & Lefcourt, 1982),¹ the Revised UCLA Loneliness Scale (Russell, Peplau, & Cutrona, 1980), the Marlowe-Crowne Social Desirability Scale (M-CSD; Crowne & Marlowe, 1960), a short form of the Need for Cognition Scale (NCS; Cacioppo, Petty, & Kao, 1984),² demographic questions, and self-report items (see Table 2). Finally, 1 month later, 83 of the subjects completed the Bem Sex Role Inventory (BSRI; Bem, 1974) and the FIS a second time. Using the median split method of classification for the BSRI (Bem, 1977), (a) subjects with a mean self-rating on the Bem Masculinity scale at or above the group median of 5.20, and a mean self-rating on the Bem Femininity scale below the group median of 4.85 were classified as masculine, (b) subjects below the median on the Masculinity scale and at or above it on the Femininity scale were classified as feminine, (c) subjects with scores at or above the median on both the Masculinity and Femininity scales were classified as androgynous, and (d) subjects with both scores below the median were classified as undifferentiated.

Stage 3. Clients completed the FIS. The therapists of these clients were provided with the definition of fear of intimacy and asked to rate clients whom they had seen for a minimum of two sessions. On a 7-point scale that ranged from *no fear of intimacy* (1) to *a high fear of intimacy* (7), therapists rated how much fear of intimacy the client would have in a close, dating relationship. Also, on a 7-point scale that ranged from *not at all self-disclosing* (1) to *very self-disclosing* (7), therapists rated how self-disclosing the client had been with them. Finally, on a scale that ranged from *not at all confident* (1) to *very confident* (7), therapists were asked how confident they were about their fear-of-intimacy rating. A confidence rating of 5 or above was required for inclusion in the study. Two clients were excluded because their data did not meet this criterion.

Results

Test Construction

Stage 1. Item-total analysis of the initial 49-item scale showed 41 items with a correlation of .39 or above (mean r for 41 items = .54, $SD = .09$). The eight items with correlations below .39 were dropped from the scale, and seven of the remaining items were reworded to reduce response set effects and ambiguity.

Stage 2. Following item-total analysis of Stage 2 data ($N = 129$), one item with a correlation of .01 was dropped. Six consecutive item-total analyses were then performed with the removal of the lowest correlated item until all remaining items had item-total correlations of .40 or above (mean r for 35 items = .57, $SD = .10$).

¹ The instructions were modified to align the measures more closely with the FIS. On the JSDQ, subjects were asked to "indicate the extent that you would talk about the item to your closest opposite-sex friend who is not a relative." On the MSIS subjects were asked to "describe your relationship with your closest opposite-sex friend who is not a relative."

² Item content was the same as in the referenced article, with the addition of six filler items. Each item was presented on a 5-point scale anchored by *extremely uncharacteristic* (1) and *extremely characteristic* (5) instead of on a 9-point scale, as reported in the referenced article.

Subject scores on the final 35-item FIS ranged from 40 to 132, with a mean score of 78.75 (men = 81.90, women = 76.10), and a standard deviation of 21.82 (men = 20.58, women = 22.61). No sex difference by independent *t*-test analysis was found, $t(128) = 1.51, p > .10$. Internal consistency of the scale was demonstrated by an alpha coefficient of .93.

Construct Validity

Factor analysis. Nunnally (1978) has proposed factor analysis to be an important secondary procedure following scale construction by item-total analysis. Examination of the scree test from a principal-components analysis of the 35-item FIS ($N = 129$) showed the dominance of one primary factor (eigenvalue = 11.68) that accounted for 33.4% of the variance. The second factor (eigenvalue = 2.60) and third factor (eigenvalue = 1.83) accounted for 7.4% and 5.2% of the variance, respectively. Factor loadings of the items on the primary factor ranged from .39 to .77.

Correlational analyses. Construct validity was also examined by comparing the FIS with measures expected to be related and unrelated to the fear-of-intimacy construct. Correlation coefficients are presented in Table 1. Pearson product-moment correlations indicated a significant positive relationship between the FIS and the Revised UCLA Loneliness Scale ($r = .48$), whereas a significant negative relationship was found between the FIS and the JSDQ ($r = -.55$), MSIS ($r = -.60$), M-CSD ($r = -.39$), and NCS ($r = -.24$). When partial correlations were calculated to control for the influence of social desirability (see Table 1), the significant associations found between the FIS and measures of loneliness ($r = .41$), self-disclosure ($r = -.52$), and social intimacy ($r = -.58$) were maintained. However, the partial correlation between the FIS and NCS was not significant ($r = -.11$). Correlational analyses also indicated a significant relationship between the M-CSD and the measures of loneliness ($r = -.26, p < .005$), social intimacy ($r = .20, p < .05$), self-disclosure ($r = .21, p < .05$), and need for cognition, ($r = .37, p < .005$).

Comparison with self-report data. Spearman rank-order correlations (see Table 2) and independent *t* tests were used to investigate the relationship between the FIS and subjects' self-report of their feelings about relationships, dating behavior, and family relationships. Spearman rank-order correlations were performed because the procedure required fewer assumptions about the nature of the self-report data than did parametric statistics. Individuals with high FIS scores reported that they considered themselves less easy to get to know ($r = -.62$), less satisfied with the quality of their dating relationships ($r = -.39$), less satisfied with what they expect from a long-term relationship ($r = -.38$), less comfortable getting close to people ($r = -.61$), and as having briefer relationships ($r = -.34$). Partialing out the common variance with social desirability maintained these significant relationships (see Table 2). In contrast, no significant association was found between fear of intimacy and interest in an intimacy-based workshop ($r = -.13$) or the number of reported long-term relationships ($r = -.15$). Partial correlational analyses yielded similar results.

A significant group difference was not found between subjects with divorced parents ($M = 72.88, SD = 22.37, n = 26$) and those with married parents ($M = 80.45, SD = 21.72, n = 99$), $t(124) = 1.57, p > .10$. However, significantly higher FIS scores

were found for subjects not in an exclusive relationship ($M = 83.45, SD = 21.80, n = 78$) compared with those dating one person exclusively ($M = 71.54, SD = 20.48, n = 46$), $t(123) = 3.00, p < .005$. Also, subjects who had been told by dating partners that they were difficult to get close to ($M = 94.47, SD = 20.89, n = 34$) had higher FIS scores than those who had not been given this feedback ($M = 73.13, SD = 19.59, n = 90$), $t(123) = 5.31, p < .001$. Analysis of covariance (ANCOVA) procedures suggested that these significant relationships were maintained when social desirability was controlled (i.e., subjects in an exclusive versus those not in an exclusive dating relationship, $F[1, 121] = 14.11, p < .001$, and subjects who are difficult versus not difficult to get close to, $F[1, 121] = 27.22, p < .001$).

Comparison with sex-role orientation. The relationship between the FIS and the Bem Sex Role Inventory was investigated at Stage 2 (see Table 3). One-way analyses of variance (ANOVAs) among the masculine, feminine, androgynous, and undifferentiated subjects indicated a significant group difference, $F(3, 79) = 3.53, p < .05$. Androgynous subjects scored significantly lower on the FIS ($M = 67.81, SD = 25.04$) than did the masculine ($M = 84.31, SD = 21.80$) and the undifferentiated ($M = 86.87, SD = 20.57$) subjects. No significant difference was found between androgynous subjects and feminine subjects ($M = 80.72, SD = 19.63$), although androgynous subjects had a lower FIS score.

Therapist and client data. The FIS scores of clients ranged from 42 to 139 ($M = 94.47, SD = 26.04$). Spearman rank-order correlation coefficients indicated a significant positive relationship between client FIS scores and therapist's fear-of-intimacy ratings ($r = .37, p < .05$), but found no significant relationship between client FIS scores and self-disclosure ratings ($r = -.29, p > .10$). The clients' FIS scores were significantly higher ($M = 94.47, SD = 26.04$) than were the FIS scores of the Stage 2 students ($M = 78.75, SD = 21.82$), $t(158) = 3.42, p < .001$.

Test-Retest Reliability

Test-retest reliability of the FIS was determined by comparing 83 of the Stage 2 subjects' original scores ($M = 77.54, SD = 20.46$) with their scores 1 month later ($M = 79.07, SD = 23.13$). A Pearson correlation of .89, $p < .001$, indicates high reliability.

Study 2

Method

Subjects and Procedure

An independent sample of 94 Introductory Psychology students participated in the follow up to Study 1. Information on ethnic background was not obtained. One participant did not complete the measures properly and was dropped from the subject pool, leaving a final sample of 73 women and 20 men (mean age = 18.59 years, $SD = 1.47$). Measures were the same as those obtained in Study 1, except that data were not obtained from therapists.

Results

Item-total analysis of the data from Study 2 subjects suggested similar item selection for inclusion in the FIS with only three of the thirty-five scale items ($r_s = .37, .32, .30$) having correlations below .40 (mean r of 35 items = .56, $SD = .12$). Scores on the FIS ranged from 37 to 135 with a mean score of 75.78 (men = 77.65, women = 75.27), and a standard deviation

Table 1
Pearson Correlation Coefficients and Partial Correlation Coefficients Between the Fear-of-Intimacy Scale and Other Measures

Measure	Study 1				Study 2			
	<i>r</i>	<i>n</i>	Partial <i>r</i>	<i>n</i>	<i>r</i>	<i>n</i>	Partial <i>r</i>	<i>n</i>
Revised UCLA Loneliness Scale (Russell, Peplau, & Cutrona, 1980)	.48**	129	.41**	124	.54**	93	.50**	93
Jourard Self-Disclosure Questionnaire (Jourard, 1964)	-.55**	124	-.52**	124	-.46**	93	-.39**	93
Miller Social Intimacy Scale (Miller & Lefcourt, 1982)	-.60**	127	-.58**	124	-.50**	93	-.46**	93
Need for Cognition Scale (Cacioppo, Petty, & Kao, 1984)	-.24*	129	-.11	124	-.03	93	.06	93
Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1960)	-.39**	129	—	—	-.40**	93	—	—

* *p* < .01. ** *p* < .005.

of 22.13 (men = 23.77, women = 21.80). As in Study 1, no significant sex difference was found, $t(92) = .42, p > .50$, and the internal consistency of the scale was demonstrated with an alpha coefficient of .93.

Construct validity. In general, Study 2 findings upheld the construct validity of the FIS. Factor analysis ($N = 93$) again indicated the presence of one primary factor (eigenvalue = 11.36) accounting for 32.5% of the variance. Factor loadings of

items on the primary factor ranged from .28 to .85. In addition, analyses of the test measures and self-report data replicated most of the significant correlations found in Study 1; the absence of a significant relationship between fear of intimacy and need for cognition was a notable exception. Correlation coefficients are presented in Tables 1 and 2 and are not repeated here. As in Study 1, significant correlations between the Social Desirability Scale and measures of fear of intimacy ($r = -.40, p <$

Table 2
Spearman Correlation Coefficients and Partial Correlation Coefficients Between the Fear-of-Intimacy Scale and Self-Report Data

Item	Study 1				Study 2			
	<i>r</i>	<i>n</i>	Partial <i>r</i>	<i>n</i>	<i>r</i>	<i>n</i>	Partial <i>r</i>	<i>n</i>
1. How difficult or easy to get to know	-.62**	126	-.59**	119	-.35**	93	-.36**	90
2. Number of persons dated longer than two months	-.15	126	-.01	119	-.22*	93	-.19*	90
3. Satisfaction with quality of dating relationships	-.39**	126	-.34**	119	-.54**	92	-.52**	90
4. Satisfaction expected with long-term/marriage-type relationship	-.38**	125	-.33**	119	-.41**	93	-.49**	90
5. Interest in a workshop on how to get closer to people	-.13	126	-.04	119	-.01	93	-.03	90
6. Comfort in getting close to people	-.61**	122	-.60**	119	-.50**	92	-.45**	90
7. Time of longest, closest dating relationship	-.34**	124	-.24*	119	-.28*	92	-.16	90

Note. Subjects were asked to respond to each item in reference to themselves. Item 1 was on a 6-point scale ranging from *very difficult* (1) to *very easy* (6). Item 2 had the choices of 0, 1-2, 3-4, 5-6, 7 or more. Items 3 and 4 were on 6-point scales ranging from *very dissatisfied* (1) to *very satisfied* (6). "Interest" on Item 5 and "comfort" on Item 6 were assessed by one of the following descriptors: *not at all* (1), *somewhat* (2), *moderately* (3), *very* (4). Item 7 was an open-ended question.

* *p* < .05. ** *p* < .005.

Table 3
 One-way ANOVAs of Sex-Role Orientation for Study 1, Study 2, and Pooled Data

Sex-role orientation	<i>n</i>	Mean FIS	<i>SD</i>	<i>df</i>	<i>F</i>	<i>p</i>
Study 1						
Undifferentiated	23	86.87 ^a	20.57	3, 79	3.53	<.05
Masculine	16	84.31 ^a	21.80			
Feminine	18	80.72 ^{ab}	19.63			
Androgynous	26	67.81 ^b	25.04			
Study 2						
Undifferentiated	23	88.35 ^a	20.99	3, 89	5.93	<.005
Masculine	22	80.77 ^a	22.11			
Feminine	23	68.04 ^b	21.99			
Androgynous	25	66.96 ^b	17.00			
Pooled Data for Men						
Undifferentiated	16	86.00 ^a	21.27	3, 55	1.30	.28
Masculine	21	82.86 ^a	22.27			
Feminine	7	76.71 ^a	17.78			
Androgynous	15	70.80 ^a	27.78			
Pooled Data for Women						
Undifferentiated	30	88.47 ^a	20.49	3, 113	7.13	<.005
Masculine	17	81.53 ^{ab}	21.75			
Feminine	34	72.97 ^{bc}	22.59			
Androgynous	36	65.97 ^c	18.18			

Note. Superscripts indicate results of Duncan's Multiple Range tests based on the harmonic mean. Means with different letters are significantly different. FIS = Fear-of-Intimacy Scale score.

.001), loneliness ($r = -.24, p < .05$), social intimacy ($r = .25, p < .05$), self-disclosure ($r = .28, p < .01$), and need for cognition ($r = .20, p = .05$) were found. Covariance techniques controlling for social desirability indicated that the association between fear of intimacy and loneliness, social intimacy, and self-disclosure—as well as with most of the self-report data—remained (see Tables 1 and 2 for partial correlation coefficients).

Findings from independent *t* tests replicated findings in Study 1, with a higher FIS score found for subjects not in an exclusive relationship ($M = 80.57, SD = 23.61, n = 46$) versus subjects in an exclusive relationship ($M = 71.11, SD = 19.71, n = 47$), $t(92) = 2.10, p < .05$. In addition, subjects told by dates that they are difficult to get close to ($M = 87.75, SD = 22.93, n = 24$) had higher FIS scores than subjects who reported not getting this feedback ($M = 71.75, SD = 20.53, n = 68$), $t(91) = 3.18, p < .005$. As with Study 1, there was no significant difference in FIS scores between subjects whose parents were divorced ($M = 80.11, SD = 20.88, n = 19$) versus subjects whose parents were married ($M = 74.68, SD = 22.44, n = 74$), $t(92) = .95, p > .10$. The results of an ANCOVA to control for social desirability were consistent with the just-mentioned findings (i.e., subjects in an exclusive dating relationship versus those not in this kind of relationship, $F[1, 90] = 5.96, p < .05$, and subjects who are difficult versus not difficult to get close to, $F[1, 89] = 7.96, p < .01$).

To examine the data for men and women separately, subjects from Study 1 and Study 2 were pooled (men, $n = 79$; women, $n = 143$) because of the small number of men in Study 2. Correlational and *t* test analyses of the self-report data and test measures revealed similar results for men and women, and these results were consistent with the results of Study 1 and Study 2 in all but two instances. In both of these instances, the results for Study 1 had not been consistent with the results for Study 2. First, there was a significant relationship between fear of inti-

macy and need for cognition among men ($r = -.29, p < .05$) but not among women ($r = -.09, p > .05$). Second, there was a significant relationship between fear of intimacy and the number of reported long-term relationships among women ($r = -.21, p < .05$) but not among men ($r = -.17, p > .05$).

Comparison of the FIS with sex-role orientation was (a) investigated among the Study 2 subjects and (b) then pooled with Study 1 subjects who had completed the BSRI. The previously described median split method of classification (Bem, 1977) was used based on Masculinity and Femininity scale medians of 5.10. Findings are presented in Table 3. One-way analysis of variance among the Study 2 subjects yielded results similar to Study 1, $F(3, 89) = 5.93, p < .005$. Both androgynous ($M = 66.96, SD = 17.00$) and feminine ($M = 68.04, SD = 21.99$) subjects scored significantly lower on the FIS than did the masculine ($M = 80.77, SD = 22.11$) and undifferentiated ($M = 88.35, SD = 20.99$) subjects. Analysis of covariance supported the association between fear of intimacy and sex-role orientation while controlling for social desirability, $F(3, 88) = 2.89, p < .05$.

To examine whether gender influenced the sex-role orientation findings, the data from both studies were pooled (men, $n = 59$ and women, $n = 117$). A one-way ANOVA among the female subjects indicated a significant difference among groups, $F(3, 113) = 7.13, p < .005$, whereas similar analysis among the male subjects was not significant, $F(3, 55) = 1.30, p > .10$. Among the women, androgynous subjects scored significantly lower on the FIS than did the masculine and undifferentiated subjects. Feminine subjects scored significantly lower than the undifferentiated subjects.

A final series of analyses used covariance techniques to examine the relationship of the FIS and the 10 self-report items while controlling for the social intimacy, self-disclosure, and loneliness measures. Subjects from the two studies were combined

for each analysis (pooled $n = 222$). One item, *number of persons dated longer than 2 months*, had shown inconsistent results between Study 1 and Study 2. Excluding that item, the significant or nonsignificant findings between the FIS and self-report data in Study 1 and Study 2 were maintained in all but three cases.³ First, subjects in an exclusive relationship, versus those not in an exclusive relationship, did not differ on the FIS when common variance with the MSIS was controlled, $F(1, 213) = .11$, $p > .05$. Similarly, when partialing out the common variance with the JSDQ, there was no longer a significant relation between the FIS and the length of a subject's longest, closest dating relationship ($r = -.11$, $p > .05$, $n = 207$). Finally, when the common variance with the Revised UCLA Loneliness Scale was partialled out, there was a significant relation that was not previously obtained between the FIS and a subject's reported interest in an intimacy-based workshop ($r = -.12$, $p < .05$, $n = 209$). Although the correlation is not strong, it does indicate that those subjects with a high level of intimacy fear had less interest in attending the workshop. Overall, the FIS predicted the responses to the self-report items, even when controlling for the measures of social intimacy, self-disclosure, and loneliness.

Discussion

Data from the present studies show the FIS to be a valid and reliable measure of individuals' anxiety about close, dating relationships. The conceptual model and scale allow for this assessment even with people who are not presently involved in a relationship. The first study established the item content, construct validity, and reliability of the scale. A follow-up study provided cross-validation of the FIS.

Study 1 showed the FIS to have high internal consistency, high test-retest reliability, and acceptable construct validity supported by factor analysis and comparison with other measures. The dominance of one primary factor provided support for the construct validity of the scale as a unidimensional measure. Comparison of the FIS with related established measures, sex-role orientation, and subjects' self-report ratings on behavioral and emotional indices also supported the scale's validity. Finally, validation of the FIS to an external criterion was obtained by comparison of a client sample with therapists' ratings.

Correlational analyses provided empirical evidence for the construct validity of the FIS. As expected, fear of intimacy was significantly correlated with loneliness, low self-disclosure, and low social intimacy. Moderately strong correlations supported these measures as overlapping but not identical constructs. Such findings are consistent with those of other researchers who have identified, for example, self-disclosure as one part of intimacy (Gilbert, 1976; Waring & Chelune, 1983). In contrast, the weaker but significant correlations found between the FIS and measures of social desirability and need for cognition had not been predicted. These had been expected to be unrelated constructs supportive of discriminant validity. However, covariate techniques to control for social desirability indicated that need for cognition was not associated with fear of intimacy, and supported the original prediction of independence of the measures. Furthermore, no significant correlation was obtained between need for cognition and fear of intimacy in Study 2.

In both of the present studies, the measure of social desirability was significantly correlated with other measures as well as with the FIS. The association of social desirability with other measures is not without precedent (Crowne & Marlowe, 1960; Millham & Jacobson, 1978). Researchers have suggested that self-presentational biases are unlikely to account for experimental results when the effects of social desirability are statistically eliminated (Cacioppo & Petty, 1982) and that a socially desirable response style is not a threat to the construct validity of measures (Edwards, Edwards, & Clark, 1988). These statements are supported by our data indicating a strong correlation between the FIS and other measures even when social desirability was statistically controlled.

Further support for the validity of the FIS was demonstrated by comparing therapists' ratings with their clients' FIS scores. The prediction of a positive correlation between FIS scores and therapist ratings of fear of intimacy was upheld. Although the relationship between ratings of clients' self-disclosure and the FIS was not significant, the negative correlation was in the expected direction and consistent with the fear-of-intimacy construct. Also of interest was the marked difference between client and student FIS scores. As predicted, clients indicated a significantly higher fear of intimacy than did students who were assumed not to be in therapy. Because difficulty with intimacy in relationships is a frequently presented problem for therapy (Horowitz, 1979), the FIS is a promising instrument for assessment of client problems with intimacy and assessment of therapy gains.

Study 2 replicated many of the findings in Study 1. The consistency of results over two independent samples supported the item selection, internal consistency, factor structure, and construct validity of the FIS. Overall, the association between fear of intimacy and sex-role orientation was also upheld.

The investigation of sex-role orientation in the present studies was useful because there was not a significant difference between the FIS scores of men and women, although the mean score for men was higher. The findings on sex-role orientation are consistent with the view that low fear of intimacy is indicative of good mental health. Both studies found androgynous subjects to have significantly lower scores on the FIS than masculine and undifferentiated subjects. Androgynous individuals have generally been considered psychologically healthy (Bem, 1974; Gilbert, 1981) and have been found to be more loving (Coleman & Ganong, 1985) and more expressive (Ganong & Coleman, 1985). The question of whether men or women account for the present findings was investigated by pooling the subjects in Study 1 and Study 2 and analyzing the data for men and women separately. Although the pattern of results remained the same for both sexes (the undifferentiated subjects' mean FIS score was the highest, followed by masculine, feminine, and androgynous subjects' scores, respectively), only the women showed significant differences in fear of intimacy between androgynous and undifferentiated, and androgynous and masculine subjects.⁴ It is possible that a larger sample of

³ Tables listing all partial correlations and F statistics for the covariance analyses are available on request.

⁴ Androgynous is different from undifferentiated and masculine, but the latter two are not different (see Table 3).

men would reveal the same statistically significant differences as were found for women.

Finally, the FIS appears to be a better measure of fear of intimacy than other related measures. When the influence of established measures of social intimacy, self-disclosure, and loneliness were controlled, the strong associations between the FIS and several external validators remained. Thus, the FIS is supported by incremental validity in addition to strong construct validity.

The current findings show the FIS to be a promising instrument for the assessment of fear of intimacy and the investigation of its role in mental health. The specific focus of a close, dating relationship seemed appropriate for the scale in its early stages of development and closely fit the conceptual model of fear of intimacy. Whether the FIS can be extended to assess intimacy in family or client-therapist relationships has yet to be shown. Also, it is possible that the FIS is suitable to assess fear of intimacy in homosexual relationships. At present, the FIS's application to a limited target population may be considered a weakness; however, the instrument's strength at this point in its development may just as likely be in its specificity. Application of the FIS to other types of relationships is an indicated direction for future research.

Several lines of study might be profitably pursued with the FIS. Research with other populations (e.g., older subjects, married subjects vs. single subjects) are needed to test the generalizability of the current results. Comparisons with additional measures, such as clinical interviews and assessment of intimacy-based behaviors, would further assess the construct validity of the scale. Discriminant validity would be strengthened by comparison of the FIS with measures of social anxiety in order to distinguish fear of intimacy from low sociability. It is expected that the two constructs are unrelated; for example, an outgoing, talkative, and frequent dater can still be anxious about intimate relationships. If subsequent research affirms the validity and reliability of the FIS, future studies should be directed toward its use with clinical populations and the assessment of intimacy in different types of relationships. Finally, identification of the developmental antecedents of fear of intimacy is an area for further research.

References

- Bem, S. L. (1974). The measurement of psychological androgyny. *Journal of Consulting and Clinical Psychology, 42*, 155-162.
- Bem, S. L. (1977). On the utility of alternative procedures for assessing psychological androgyny. *Journal of Consulting and Clinical Psychology, 45*, 196-205.
- Cacioppo, J. T., & Petty, R. E. (1982). The need for cognition. *Journal of Personality and Social Psychology, 42*, 116-131.
- Cacioppo, J. T., Petty, R. E., & Kao, C. F. (1984). The efficient assessment of need for cognition. *Journal of Personality Assessment, 48*, 306-307.
- Coleman, M., & Ganong, L. H. (1985). Love and sex role stereotypes: Do macho men and feminine women make better lovers? *Journal of Personality and Social Psychology, 49*, 170-176.
- Costello, C. G. (1982). Social factors associated with depression: A retrospective community study. *Psychological Medicine, 12*, 329-339.
- Crowne, D. P., & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology, 24*, 349-354.
- Edwards, L. K., Edwards, A. L., & Clark, C. (1988). Social desirability and the frequency of social-reinforcement scale. *Journal of Personality and Social Psychology, 54*, 526-529.
- Erikson, E. H. (1963). *Childhood and society* (2nd ed.). New York: Norton Press.
- Ganong, L. H., & Coleman, M. (1985). Sex, sex roles, and emotional expressiveness. *The Journal of Genetic Psychology, 146*, 405-411.
- Gilbert, L. A. (1981). Toward mental health: The benefits of psychological androgyny. *Professional Psychology, 12*, 29-37.
- Gilbert, S. J. (1976). Self-disclosure, intimacy and communication in families. *The Family Coordinator, 25*, 221-231.
- Holt, M. L. (1977). Human intimacy in young adults: An experimental developmental scale. (Doctoral dissertation, University of Georgia, 1977). *Dissertation Abstracts International, 38*, 4583-A. (University Microfilms No. 77-30, 475).
- Horowitz, L. M. (1979). On the cognitive structure of interpersonal problems treated in psychotherapy. *Journal of Consulting and Clinical Psychology, 47*, 5-15.
- Jourard, S. M. (1964). *The transparent self*. Princeton, NJ: Van Nostrand.
- Leary, M. R. (1983). Social anxiousness: The construct and its measurement. *Journal of Personality Assessment, 47*, 66-75.
- Maslow, A. H. (1954). *Toward a psychology of being*. New York: Van Nostrand Reinhold.
- McAdams, D. P., & Vaillant, G. E. (1982). Intimacy motivation and psychosocial adjustment: A longitudinal study. *Journal of Personality Assessment, 46*, 586-593.
- Millham, J., & Jacobson, L. I. (1978). The need for approval. In H. London & J. E. Exner (Eds.), *Dimensions of personality* (pp. 365-390). New York: Wiley.
- Miller, R. S., & Lefcourt, H. M. (1982). The assessment of social intimacy. *Journal of Personality Assessment, 46*, 514-518.
- Nunnally, J. C. (1978). *Psychometric theory* (2nd ed.). New York: McGraw-Hill.
- Ochse, R., & Plug, C. (1986). Cross-cultural investigation of the validity of Erikson's theory of personality development. *Journal of Personality and Social Psychology, 50*, 1240-1252.
- Orlofsky, J. L., Marcia, J. E., & Lesser, I. M. (1973). Ego identity status and the intimacy versus isolation crisis of young adulthood. *Journal of Personality and Social Psychology, 27*, 211-219.
- Rubenstein, C., & Shaver, P. (1982). *In search of intimacy: Surprising new conclusions from a nationwide survey on loneliness and what to do about it*. New York: Delacorte Press.
- Russell, D., Peplau, L. A., & Cutrona, C. E. (1980). The revised UCLA Loneliness Scale: Concurrent and discriminant validity evidence. *Journal of Personality and Social Psychology, 39*, 472-480.
- Schaefer, M. T., & Olson, D. H. (1981). Assessing intimacy: The Pair Inventory. *Journal of Marital and Family Therapy, 7*, 47-60.
- Sexton, R. E., & Sexton, V. S. (1982). Intimacy: A historical perspective. In M. Fisher & G. Stricker (Eds.), *Intimacy* (pp. 1-20). New York: Plenum Press.
- Sullivan, H. S. (1953). *The interpersonal theory of psychiatry*. New York: Norton Press.
- Waring, E. M., & Chelune, G. J. (1983). Marital intimacy and self-disclosure. *Journal of Clinical Psychology, 39*, 183-190.
- Waring, E. M., McElrath, D., Lefcoe, D., & Weisz, G. (1981). Dimensions of intimacy in marriage. *Psychiatry, 44*, 169-175.

Appendix

Fear-of-Intimacy Scale

Part A Instructions: Imagine you are in a *close, dating* relationship. Respond to the following statements as you would *if you were in that close relationship*. Rate how characteristic each statement is of you on a scale of 1 to 5 as described below, and put your responses on the answer sheet.

1	2	3	4	5
<i>not at all characteristic of me</i>	<i>slightly characteristic of me</i>	<i>moderately characteristic of me</i>	<i>very characteristic of me</i>	<i>extremely characteristic of me</i>

Note. In each statement "0" refers to the person who would be in the close relationship with you.

1. I would feel uncomfortable telling 0 about things in the past that I have felt ashamed of.
2. I would feel uneasy talking with 0 about something that has hurt me deeply.
- X3. I would feel comfortable expressing my true feelings to 0.
4. If 0 were upset I would sometimes be afraid of showing that I care.
5. I might be afraid to confide my innermost feelings to 0.
- X6. I would feel at ease telling 0 that I care about him/her.
- X7. I would have a feeling of complete togetherness with 0.
- X8. I would be comfortable discussing significant problems with 0.
9. A part of me would be afraid to make a long-term commitment to 0.
- X10. I would feel comfortable telling my experiences, even sad ones, to 0.
11. I would probably feel nervous showing 0 strong feelings of affection.
12. I would find it difficult being open with 0 about my personal thoughts.
13. I would feel uneasy with 0 depending on me for emotional support.
- X14. I would not be afraid to share with 0 what I dislike about myself.
15. I would be afraid to take the risk of being hurt in order to establish a closer relationship with 0.
16. I would feel comfortable keeping very personal information to myself.
- X17. I would not be nervous about being spontaneous with 0.
- X18. I would feel comfortable telling 0 things that I do not tell other people.
- X19. I would feel comfortable trusting 0 with my deepest thoughts and feelings.
20. I would sometimes feel uneasy if 0 told me about very personal matters.

- X21. I would be comfortable revealing to 0 what I feel are my shortcomings and handicaps.
- X22. I would be comfortable with having a close emotional tie between us.
23. I would be afraid of sharing my private thoughts with 0.
24. I would be afraid that I might not always feel close to 0.
- X25. I would be comfortable telling 0 what my needs are.
26. I would be afraid that 0 would be more invested in the relationship than I would be.
- X27. I would feel comfortable about having open and honest communication with 0.
28. I would sometimes feel uncomfortable listening to 0's personal problems.
- X29. I would feel at ease to completely be myself around 0.
- X30. I would feel relaxed being together and talking about our personal goals.

Part B Instructions: Respond to the following statements as they apply to your past relationships. Rate how characteristic each statement is of you on a scale of 1 to 5 as described in the instructions for Part A.

31. I have shied away from opportunities to be close to someone.
32. I have held back my feelings in previous relationships.
33. There are people who think that I am afraid to get close to them.
34. There are people who think that I am not an easy person to get to know.
35. I have done things in previous relationships to keep me from developing closeness.

Note. X denotes items reversed for scoring.

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