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Measuring Belongingness: The Social Connectedness and the Social Assurance Scales

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The study developed 2 measures of belongingness based on H. Kohut's (1984) self psychology theory. The Social Connectedness Scale and the Social Assurance Scale were constructed with a split-sample procedure on 626 college students. Internal reliability estimates for the 2 scales were .91 and .82, respectively. Test–retest correlations revealed good test stability over a 2-week period (rs = .96 and .84, respectively). Cross-validation for the 2 measures was achieved with confirmatory factor analysis with an incremental fit index greater than .90. Scale functions are described and results are discussed in light of current research and theory.

Heinz Kohut's self psychology (1971, 1977, 1984) has received considerable attention in the field of counseling psychology over the past decade (Gelso & Fassinger, 1990). Early empirical research dates back to Patton, Connor, and Scott (1982), who provided operational definitions for two self constructs, namely, grandiosity and idealization. Soon thereafter, two self-report scales were constructed to measure aspects of these constructs, the Superiority Scale and the Goal Instability Scale, respectively (Robbins & Patton, 1985). Other self psychology measures have since been developed (Lapan & Patton, 1986; Shreve & Patton, 1988). With these developments in measurement, self psychology has been applied to numerous populations and areas of psychology, including career counseling, personality development, adolescent identity, and aging (Blustein & Palladino, 1991; Robbins, 1989; Robbins, Lee, & Wan, 1994).

Despite the recent developments and the heuristic value of self psychology, little research has been conducted on the alter ego or belongingness construct that was later proposed by Kohut (1984). This is surprising given both the importance and lack of belongingness in today's society. Clinical and social observations point to the growing feelings of loneliness, isolation, and alienation among adolescents, young adults, immigrants, and other groups in America (Blai, 1989; Rook, 1984; Sundberg, 1988).

The study was based on a master's thesis by Richard M. Lee under the supervision of Steven B. Robbins. The Social Connectedness Scale and the Social Assurance Scale are copyrighted materials and permission for use of the scales may be obtained from Richard M. Lee or Steven B. Robbins. The covariance matrices and complete LISREL results may be obtained from Richard M. Lee.

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Self Psychology

Kohut (1971, 1977) proposed that the self was the organizing center of experience and was originally composed of two needs, the needs for grandiosity and idealization. This conception and primacy of the self distinguishes Kohut's theory from other psychoanalytic theories by shifting the focus away from the traditional drive (i.e., libido) and psychic structure (i.e., id, ego, and superego) models (Patton & Sullivan, 1980). Kohut (1971, 1977) and, instead, emphasizing the relationship between the self and self-objects, which are cognitive representations of other people and their actions toward the self.

Later clinical observations made Kohut propose a third major self need, the need for an alter ego or belongingness (Kohut, 1984). Together, these three needs provide the structure and motivation for self-expression. Patton et al. (1982) detailed the developmental process of the needs for grandiosity and idealization. In their analysis, they described a process in which the maturing self comes to rely less on infantile representations of self and other and more on realistic representations for maintaining self-esteem and cohesion in time and space. This process is contingent on phase-appropriate empathic warmth and failure from significant people in the person's life. Thus, children may satisfy their idealization needs by merging or joining with a parent who is perceived as omnipotent, whereas adults may transfer those feelings inward and sustain themselves through ideals and goals. Likewise, children may satisfy their grandiosity needs by being overly exhibitionistic and by seeking constant attention, whereas adults may satisfy their needs through ambitions and the desire for accomplishment.

The alter ego (hereinafter referred to as belongingness) need, on the other hand, has not been as fully explicated. Kohut (1984) did provide the groundwork for the development of this need, from which others have since theoretically elaborated (Detrick, 1985; Dupont, 1989; Wolf, 1988). He noted that people seek to confirm a subjective sense of belongingness or "being a part of" in order to avoid feelings of loneliness and alienation. We propose that belongingness is composed of three aspects—companionship, affiliation, and connectedness—which are parallel to Patton et al.'s

(1982) model and consistent with the theoretical writings on this subject (Detrick, 1985; Dupont, 1989; Wolf, 1988). These aspects also correspond with the developmental literature on belongingness and attachment (Cherry, 1992–1993; Lyddon, Bradford, & Nelson, 1993), although people may experience a need for validation in any of these aspects throughout the life span (Kohut, 1984).

Companionship

Companionship originates in early infancy and extends throughout the adult life. The young child immediately forms a bond with the nurturing parent and this close one-on-one contact provides the child with a pervading sense of security and likeness, thereby serving as a foundation for self-esteem. As the child develops and matures, he or she may extend this sense of companionship to another close person or object, such as a sibling or a teddy bear. Between the ages of 4 and 12, companionship self-objects serve "as models to imitate and to provide the experience of likeness" (Wolf, 1988, p. 57). Skills and natural talents are thus developed and refined.

This proper development may not occur in all instances. Chronic or traumatic empathic failures early in life may disrupt the development of needs. In such instances, the child develops a self that is extremely fragile and vulnerable to empathic failures and low self-esteem. The person may have difficulty forming close relationships with people who are not exactly alike and may prefer isolation to avoid possible rejection. The person may also quickly attach to and mimic the behavior of people who are initially perceived as similar, only to be later disappointed. What becomes evident is that the child fails to develop adequate confidence and social skills necessary to maintain relationships and a stable sense of self.

Affiliation

The need for affiliation is commonly referred to as the need for twinship (Kohut, 1984). Affiliation or twinship plays an important role later in childhood during the transition toward adolescence when the child begins to establish peer relationships and function more comfortably alongside those with similar qualities in appearance, opinions, and values. These experiences foster and strengthen the child's self-esteem and allow the child to extend him or herself beyond the parent figure. Common examples include participation in group activities such as sports, civic clubs, and religious organizations.

Those who do not properly develop along this aspect are sensitive to perceived threats against their self-esteem, such as criticism or misunderstandings from peers. They are able to maintain personal one-on-one relationships (because of companionship self-objects) but may find it uncomfortable to engage in group activities without the reassuring presence of another person(s) beside them. The struggle to form bonds with others may lead the person to maintain superficial roles and relationships or join deviant or rebellious subcultures, such as gangs or cults—all in an attempt to ease the frustration of not belonging. These attempts to affiliate inevitably fail because they only confirm the deficiencies and faults in the self (Wolf, 1988).

Connectedness

A sense of connectedness begins to emerge during adolescence and extends throughout the adult life. The maturing self, having successfully maintained companionship and affiliation self-objects and without any threat to self-esteem, is able to feel comfortable and confident within a larger social context than family or friends. This sense of connectedness allows people to maintain feelings of being "human among humans" and to identify with those who may be perceived as different from themselves (Kohut, 1984, p. 200). Examples include the ability to identify with marital partners, parenthood, and other social roles in life.

A person struggling to feel connected begins to feel different and distant from other people. He or she may find it hard to accept social roles and responsibilities, leading the person into greater isolation. The person will try to relate with others but will get frustrated or disappointed by the failure of others to understand him or her. The person may begin to fantasize about finding a place where he or she belongs, rejecting more realistic roles and relationships. In the extreme case, the person may distance him or herself from society and lead a solitary life.

Frustrations along any aspect in the development of belongingness may impair the person's ability to effectively function in life. Deficits in the self that occur early in development may have a more profound impact on the child because basic issues of belongingness (e.g., likeness, trust, and rudimentary social skills) are not yet established. Frustrations that occur later in development may be traumatic or severe but the self is not as structurally fragile. In such cases, many people are able to adequately maintain their self-esteem and some personal relationships, although they may have chronic interpersonal or social difficulty. At any point in development, empathic failures or trauma may cause the person to regress to earlier forms of functioning to compensate for the profound lack of belongingness. For example, a college graduate who is unable to adjust to the adult world and fails to develop a sense of connectedness may try to recreate his college years by returning to the campus, or a 10-year-old child unable to establish peer relationships may cling to images of companionship, such as a teddy bear or an imaginary friend.

Belongingness as a Unique Construct

The development and sense of belongingness proposed by Kohut (1984) is consistent with literature within and outside of psychoanalysis. At the same time, the construct remains unique from related constructs, such as attachment (Ainsworth, 1989; Bowlby, 1988; Lopez & Gover, 1993; Lyddon et al., 1993), loneliness (Marangoni & Ickes, 1989; Russell, Cutrona, Rose, & Yurko, 1984; Weiss, 1974), and

perceived social support (Brown, Brady, Lent, Wolfert, & Hall, 1987; Newcomb, 1990).

Ainsworth (1989) and Bowlby (1988) have focused their research on the importance of attachment to the development of the child. The attachment construct emphasizes the infant's direct bond with the primary caregiver. It does not extend the construct beyond this basic relationship. Instead, they see the experiences from this relationship as having an effect on adolescent and adult behavior patterns—secure, avoidant, and anxious. Kohut (1984), on the other hand, offered a developmental model that views attachment theory as comparable to companionship, but as only one of three aspects in the development of belongingness.

Weiss (1974), Marangoni and Ickes (1989), and Russell et al. (1984) each detailed the nature of loneliness. The common definition or characteristics of loneliness include that it is a subjective experience, an aversive experience, and related to a deficit in social relationships. This definition is in line with the belongingness construct, but it diverges on two points. First, loneliness may be viewed as an affective and behavioral consequent of a lack of belongingness, which is a personality characteristic. Second, belongingness is a development process, while loneliness may be either an acute or chronic experience.

Perceived social support (Brown et al., 1987; Russell et al., 1984) has been a popular construct within the field of counseling psychology. It reflects an interaction between the self and social environment, much like belongingness. Perceived social support focuses more on the lack of an appropriate social environment, whereas belongingness focuses more on the deficiencies within the self. Furthermore, social support scales, such as the Interpersonal Support Evaluation List (Cohen, Mermelstein, Lamarack, & Hoberman, 1985), do not distinguish the different types of belongingness even though they assess a belonging construct.

In a summary of the literature on attachment, loneliness, and social support, Newcomb (1990) proposed that perhaps "loneliness and social support reflect opposite poles of a psychosocial construct of personal attachment or human connectedness" (p. 482). Thus, human connectedness would function as a higher order construct for these two related constructs. This conclusion would be consistent with Kohut's theory of belongingness.

Empirical Support for Belongingness

Although there has been little research involving Kohut's (1984) theory of belongingness, there is indirect empirical research to support the need for (or sense of) belongingness. For instance, companionship has been found to predict social satisfaction and well-being, ameliorate loneliness, and increase leisure experiences (Baldassare, Rosenfield, & Rook, 1984; Rook, 1987; Unger, 1984). Likewise, peer affiliation has been found to relate to adolescent self-esteem and mood, reducing stress and facilitating social interaction and friendships (Brown, Eicher, & Petrie, 1986; Brown & Lohr, 1987; Kulik, Moore, Mahler, 1993; Reddy, Baum, Fleming, & Aiello, 1981; Wong & Csiksazentmihalyi, 1991). Last, social connectedness has been linked to the psychosocial development of women, providing self-esteem and security, and has been related to maternal absence (Caffarella & Olson, 1993; Marcia, 1980; Tolman, Diekmann, & McCartney, 1989).

Other research has focused on how aspects of belongingness may interact with overall well-being and feelings of loneliness (Kaniasty, 1991; Reddy et al., 1981). Rook (1987) found companionship to directly effect well-being, while social support only served as a buffer. She also found companionship to be the strongest predictor of loneliness and social satisfaction. Inuzuka, Satoh, and Wada (1991) in a study of Japanese college students found 12.9% of women and 6% of men had imaginary companions of the same gender and age. These imaginary companions functioned to soothe feelings of loneliness.

Current research, however, remains limited and problematic. First, most research has failed to adequately measure the phenomenological sense of belongingness. In recent years, the emphasis has been on different types or quantities of social networks that may provide companionship, affiliation, or connectedness. In order for there to be a comprehensive understanding of belongingness, the phenomenological or subjective sense of belongingness must be studied. Second, comprehensive measures of belongingness do not exist. Attachment research has, at best, focused on only one aspect of belongingness (i.e., companionship). However, there appears to be other aspects of belongingness, and these have not been systematically explored. Last, Sarason, Sarason, and Pierce (1990) stressed the need to incorporate more theory-driven research in the study of personality characteristics and mental health. Despite these current limitations, evidence points to the need to further study belongingness.

Purpose of the Study

The primary purpose of this study was to develop reliable and valid self-report measures that tap aspects of belongingness proposed by self psychology theory (Kohut, 1984). Scale development proceeded according to traditional psychometric methodology (Dawis, 1987). The first step involved item development and analysis. This included (a) the development of operational definitions to capture the overall manifestations of belongingness, (b) the use of items that reflected mild to moderate forms of frustrations along the belongingness need, (c) principal-components analysis for the extraction of item factors, and (d) final item selection. The exploratory factor-analytic approach was selected over an a priori extraction of factors because the nature of the relationships among the aspects of belongingness within an adult nonclinical population was not known. The second step involved a content analysis of the factors to assign scale names and functions. The last step of the study was a cross-validation of the scales to establish reliability estimates and to confirm the existence and relationships of latent constructs, corresponding with the scales.

Method

Participants

Participants were undergraduates from a large urban southeastern university. This population was chosen because of the salience of belongingness and loneliness within the age group (Brown et al., 1986; Damsteegt, 1992; Sundberg, 1988). Questionnaires (796) were distributed to participants in the classroom or at assigned research times. A total of 626 participants completed the study, for a return rate of 79%.

A random split-sample procedure was used to develop the measures on the first split sample and cross-validate them on the second split sample (Anastasi, 1988; Breckler, 1990). The first split sample was composed of 204 (65%) women, 107 (34%) men, and two undisclosed participants. The mean age was 20.60 years (SD = 4.34, range = 17–44). Of the participants, 51% were college freshmen; 26%, sophomores; 14%, juniors; and 5%, seniors. Sixty-six percent identified themselves as European American; 19%, African American; 10%, Asian American; and 2%, Hispanic American.

The second split sample was composed of 198 (63%) women, 112 (36%) men, and three undisclosed participants. The mean age was 20.65 years (SD = 4.61, range = 17–48). Of the participants, 52% were college freshmen; 23%, sophomores; 14%, juniors; and 8%, seniors. Sixty-eight percent identified themselves as European American; 20%, African American; 5%, Asian American; and 2%, Hispanic American.

A separate sample of 18 participants was chosen from an undergraduate personality course for test–retest reliability. This sample group consisted of 14 women and 4 men. The average age was 23.78 years, with a range of 19 to 48 years. Thirteen participants identified themselves as European American; 4, African American; and 1, Asian American.

Procedure

A questionnaire packet, titled "Self-Perception Study," was developed that included (in this order) demographic information, the Marlowe–Crowne Social Desirability Index (Crowne & Marlowe, 1960), and 45 randomized items representative of belongingness. These packets were distributed to participants who were given 2 weeks to complete and return the material.

Results

Item Development and Analysis

Operational definitions. Three broad operational definitions were written to capture the overall manifestations or aspects of the belongingness need. The definitions were reviewed by a panel of four judges knowledgeable with the theory of self psychology. The panel consisted of a European American counseling psychologist and African American, Asian American, and Caribbean–English doctoral students in counseling psychology. Operational definitions were modified until agreement was reached by all judges. A fifth independent judge, a European American doctoral student in counseling psychology, who was unfamiliar with self psychology, reviewed the final versions for clarity and comprehension.

Item writing. Forty-five total items were written to reflect the basic content of the operational definitions with 15 items capturing the essence of each aspect. Items were written from a phenomenological perspective to best capture the subjective nature of the need for (and sense of) belongingness. Items were also written in only a negative direction to reflect behaviors, feelings, or both associated with a lack of belongingness. Items were intended to reflect mild to moderate forms of immature self expression along the belongingness line, which was based on numerous clinical examples (Kohut, 1984; Wolf, 1988). This procedure was done primarily for two reasons: (a) our research interest focused on the effects mild to moderate frustrations on belongingness may have on psychological health and behavior and (b) we wanted to avoid both response order effects and an agreement tendency that may occur when attempting to reverse score positive and negative items (Chan, 1991; Nunnally, 1978).

The items were evaluated by the original panel of judges, including the independent judge, for content validity and consistency with the operational definitions. Minor revisions were made until consensus was reached on all 45 items. Items were then placed on a 6-point Likert continuum (1 = *strongly agree*, 6 = *strongly disagree*). This positive response order was selected to maximize the response to the latent construct (Bardo, Yeager, & Klingsporn, 1982; Chan, 1991). A middle neutral point was omitted from the Likert rating to create a forced-choice scenario (Guy & Norvell, 1977). This process is consistent with similar scale construction procedures (Robbins & Patton, 1985) and is preferred when trying to measure a personality dimension (Nunnally, 1978). Optimal functioning, or a strong sense of belongingness, is then reflected in higher scores, whereas lower scores reflect the lack of a strong sense of belongingness.

Item analysis. The largest factors from the principal-components analysis of the items (N = 313) were selected and used to develop the measures of belongingness. Items from these factors were first correlated with the Marlowe–Crowne Social Desirability Index (Crowne & Marlowe, 1960) to exclude those items that elicit socially desirable responses (Anastasi, 1988). A moderate correlation cutoff (r = .30) was selected for this purpose (Nunnally, 1978). The following criteria were then used to determine the final measurement items: (a) each item maintained a significant correlation with only one factor, (b) if items were judged to overlap in wording, the item with the higher correlation was chosen, and (c) the number of items per measure was dependent on obtaining adequate internal item consistency, as calculated by coefficient alpha (Cronbach, 1951).

The analysis revealed a factor solution that converged after 21 iterations. Nine factors emerged with eigenvalues greater than 1.00. A scree plot analysis was used to reduce the number of principal factors. This analysis revealed two main factors with eigenvalues of 12.16 and 5.09 that accounted for 38% of the total variance. These two factors were chosen to develop measures of belongingness. Twenty-one items correlated with Factor 1, and nine items correlated with Factor 2. The first factor contained a majority of connectedness items (13 out of 21), along with 3

companionship and 6 affiliation items. The second factor was split between companionship and affiliation items (5 and 4, respectively). Only one item from Factor 1, and none from Factor 2, correlated above .30 with social desirability.

The top eight items from Factor 1 were selected to compose the first measure of belongingness. The only exceptions were with Items 5 (r = .741) and 7 (r = .705) from Factor 1. These two items both used the verb "to relate" in the self statement. Keeping with the criterion to avoid wording overlap, Item 7 was not selected since it had a lower factor correlation. The next item on the factor (Item 9) was then chosen as a replacement. All selected items maintained factor correlations above .677, and none had correlations with other factors above .261. Internal item consistency was high for these eight items (α = .91). Factor correlations, item means, and standard deviations are presented in Table 1.

Eight of nine items from Factor 2 were selected to compose the second measure of belongingness. All selected items maintained factor correlations above .536, and none had correlations with other factors above .339. The ninth item (r = .347) was omitted because it maintained a near equivalent correlation with Factor 3 (r = .327). Internal item consistency was high for these eight items drawn from Factor 2 (α = .82). Items, factor correlations, item means, and standard deviations are presented in Table 1.

Scale Names and Functions

Social Connectedness Scale. Factor 1 consisted of a mixture of items from all three aspects of belongingness: connectedness (4 items), affiliation (3 items), and companionship (1 item). The items portray a general emotional distance between self and others that may be experienced even among friends or close peers, as attested by the items "Even among my friends, there is no sense of brother/sisterhood" and "I don't feel related to anyone." This factor suggests that people in strong agreement with these statements have been frustrated from receiving appropriate empathy or understanding from peers or society, perhaps along the transition from adolescence to adulthood. Wolf (1988) described these people as typically exhibiting narcissistic personality disorders and narcissistic character traits. They struggle to feel socially connected throughout life, although they may have adequate social skills to maintain intimate relationships.

While item content reflects a moderate sense of social disconnectedness and detachment, the measure was named

Table 1
Results From Principal-Components Analysis

Item	Source	r	M	SD
Factor 1 (Social Connectedness)				
1. I feel disconnected from the world around me.	con	.839	4.73	1.38
2. Even around people I know, I don't feel that I really belong.	com	.779	4.51	1.51
3. I feel so distant from people.	con	.764	4.70	1.40
4. I have no sense of togetherness with my peers.	aff	.759	4.92	1.14
5. I don't feel related to anyone.	con	.741	5.11	1.17
6. I catch myself losing all sense of connectedness with society.	con	.736	4.82	1.33
7. Even among my friends, there is no sense of brother/sisterhood.	aff	.691	4.98	1.31
8. I don't feel I participate with anyone or any group.	aff	.678	4.84	1.36
Factor 2 (Social Assurance)				
1. I feel more comfortable when someone is constantly with me.	com	.736	4.09	1.54
2. I'm more at ease doing things together with other people.	aff	.693	3.26	1.27
3. Working side by side with others is more comfortable than working alone.	aff	.680	3.32	1.40
4. My life is incomplete without a buddy beside me.	com	.647	4.24	1.57
5. It's hard for me to use my skills and talents without someone beside me.	aff	.594	4.77	1.30
6. I stick to my friends like glue.	com	.551	4.46	1.50
7. I join groups more for the friendship than the activity itself.	aff	.537	4.03	1.46
8. I wish to find someone who can be with me all the time.	com	.537	4.20	1.63

Note. Source refers to the operational definition from which the item originated. Scale items are copyrighted (1994) by Richard M. Lee and Steven B. Robbins. con = connectedness; com = companionship; aff = affiliation.

the *Social Connectedness Scale.* This name properly reflects the inverse relationship between the item content (i.e., in a negative direction) and the direction of the rating system (from 1 = *agree* to 6 = *disagree*). Thus, higher scores reflect a more reported sense of social connectedness and belongingness. The mean for the Social Connectedness Scale was 38.85 (*SD* = 8.09) with a potential range of 8–48.

Social Assurance Scale. Factor 2 consisted of an equal number of companionship and affiliation items (4 items each). The items portray a general need for reassurance from at least one or more persons for a sense of belongingness. This quality is exemplified by the items "I'm more at ease doing things together with other people" and "My life is incomplete without a buddy beside me." This factor suggests that people in strong agreement with these statements have been frustrated from receiving appropriate empathy and support from important individuals or peers, perhaps along the transition from childhood to early adolescence. As a result, these people may not have adequately developed appropriate social skills and confidence to function independently in the world. Such people are described as having an alter ego hungry personality (Kohut, 1984; Wolf, 1988).

While item content reflects the moderate need for reassurance from others in order to belong and feel comfortable, the measure was named the *Social Assurance Scale.* Thus, higher scores on the scale reflect a more reported sense of assurance or confidence in social situations. The mean for the Social Assurance Scale was 32.27 (*SD* = 7.42) with a potential range of 8–48.

Cross-Validation

Coefficient alphas for the Social Connectedness Scale and the Social Assurance Scale were calculated, on the second split sample ($N = 313$), to confirm the reliability of the two scales. Results revealed alphas of .91 and .77, respectively. These results may be interpreted as meaning that 91% of the total score variance for Social Connectedness and 77% for Social Assurance were due to the true score variance (Crocker & Algina, 1986). The test–retest correlations, which were estimated on a separate sample during a 2-week interval, were .96 and .84, respectively. These results suggest that responses to the new measures are relatively stable across at least a 2-week interval (Crocker & Algina, 1986). Overall, the measures appear to have strong internal reliability and stability.

A Pearson product–moment correlation was computed on the second split sample to determine the relationship between Social Connectedness and Social Assurance. The correlation for the two scales was .341, suggesting that they are moderately related but independent factors. The finding served as the basis for testing two competing measurement models with confirmatory factor analyses (LISREL VII; Jöreskog & Sörbom, 1988). Competing measurement models were tested to confirm the theoretical relationship between the two constructs (Breckler, 1990). The first measurement model estimated the correlation between the two constructs, while the second measurement model estimated statistically independent constructs. The correlated measurement model specifically estimated the covariance between the two constructs. This index is more accurate than the Pearson product–moment correlation between the aggregate scale scores because it is the product of the correlation between the two constructs times their standard deviation (Bollen, 1989). It was expected that the correlated model would present a more accurate fit of the data given the theoretical relationship between the two constructs.

The models were tested on the second split sample ($N = 283$, after listwise deletion) with maximum-likelihood estimations on a covariance matrix (Bollen, 1989). Initial standardized solutions were conducted to set the strongest indicator loading for each construct to 1.0 (Long, 1983). Residuals for each indicator and the latent constructs were estimated as well. Results from these analyses revealed both models to have moderate to strong fits with the data (see Table 2). The chi-square value in both models was relatively high; however, this estimate must be cautiously evaluated given its potential for inflation when dealing with even a slightly nonnormal sample distribution (e.g., skewness; Bollen, 1989; Fassinger, 1987). An ad hoc measure of the chi-square value is the χ^2/df estimate. Ratios ranging from 3.0 or less (with less being better) are considered "good" fits with the data. In the case of the correlated model, the ratio was 2.5, whereas the ratio of the uncorrelated model was 2.8.

For both models, the goodness-of-fit index (GFI) was below .90 (the generally accepted benchmark for a strong model fit). However, the GFI has received a significant amount of criticism for being easily distorted by large sample sizes (Bentler & Bonett, 1980; Fassinger, 1987). The incremental fit index (IFI), a more reliable fit estimate, was also calculated in this study. The IFI was selected over Bentler and Bonett's (1980) normed indices because it has proved to be a more accurate assessment for large sample populations (Bollen, 1989). The IFI was greater than .90 for both measurement models, suggesting an adequate fit with the data.

A comparison between the two competing measurement models suggests that the correlated construct model (see Figure 1) represents a more accurate relationship between

Table 2
Goodness-of-Fit Indices for Competing Measurement Models

Index	Correlated model	Uncorrelated model
Total coefficient of determination	.982	.984
χ^2 (*df*)	260.04* (103)	289.60* (104)
χ^2/df ratio	2.5	2.8
Goodness-of-fit index	.899	.891
Root-mean-square residual	.080	.142
Incremental fit index	.916	.901

* $p < .05$.

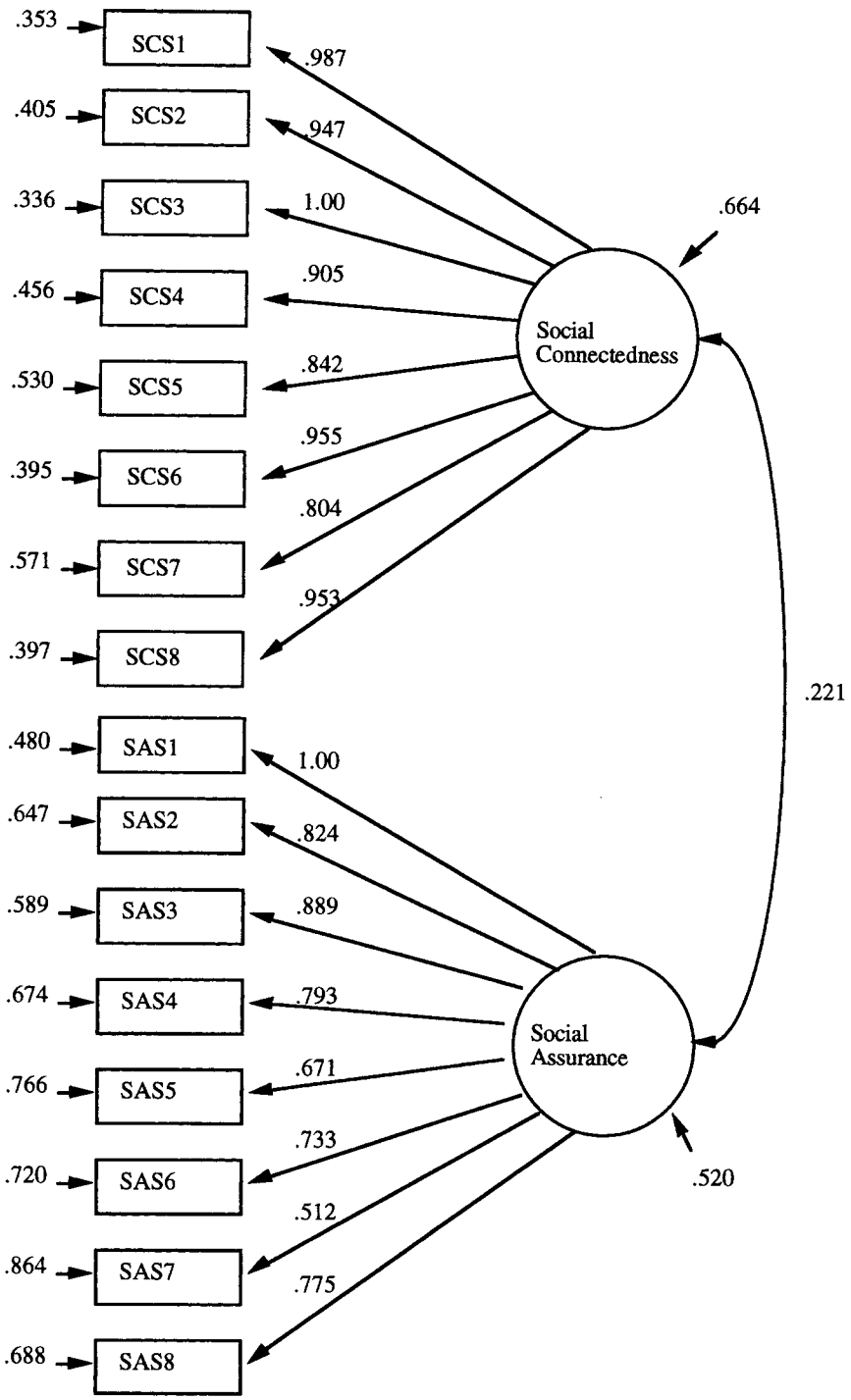

Figure 1. Results from the confirmatory factor analysis testing the correlated measurement models for the Social Connectedness Scale (SCS) and the Social Assurance Scale (SAS).

the two measures. The fit estimates—including the higher IFI, the lower χ^2/df ratio, and the lower root-mean-square residual—uphold this comparison. Figure 1 presents the individual indicator loadings on the constructs, as well as the residual error terms and correlation between the two constructs.

Discussion

The goal of the present study was to measure theoretical aspects of belongingness, which was accomplished with the construction of two self-report scales derived from self psychology theory (Kohut, 1984). The two scales (Social

Connectedness and Social Assurance) appear to tap independent aspects of belongingness with the correlation between the two constructs being small but significant (r = .221, $p < .05$). The scales were also found to be highly reliable and unidimensional in nature.

Social Connectedness appears to be related to one's opinion of self in relation to other people. In particular, the scale focuses on the emotional distance or connectedness between the self and other people, both friends and society. Items reflect the personal struggles of trying to maintain this form of belongingness. For instance, "I catch myself losing all sense of connectedness with society" and "I don't feel I participate with anyone or any group." Social Connectedness taps those aspects of belongingness that Kohut (1984) described as an "intense and pervasive sense of security" and the sense of being "human among humans" (p. 200).

Social Assurance appears to be related to one's reliance on other people. In particular, the scale focuses on the need for reassurance from others in social situations to sustain a sense of belongingness. This need for reassurance can come from various sources and in various situations. For instance, "I join groups more for the friendship than the activity itself" and "It's hard for me to use my skills and talents without someone beside me." Social Assurance also focuses on how the use of skills and talents depends on reassurance from other people. This conclusion is consistent with Kohut (1984), who described how a child gains a sense of belongingness by being "a cook next to a cook or a craftsman next to a craftsman" (p. 200).

The scales need to be validated and supported with additional research before further conclusions on the meaning of the scales can be drawn. In addition, comprehensive validation of self-report measures can only be achieved through the use of multiple methods, including intervention studies and observer ratings (Campbell & Fiske, 1959). For example, it would be interesting to examine how participants rated as high or low on belongingness respond to various social situations or photographs depicting different groups of people. These findings would provide confirmation and insight into how one's sense of belongingness can influence cognitive perceptions, as well as how one would behaviorally respond in demanding social situations.

What becomes evident is that both scales are promising instruments for understanding the complex dynamics underlying the sense of belongingness. They provide researchers and clinicians with reliable and valid tools to study the impact that two forms of belongingness (or the lack thereof) may have on other self needs such as idealization and grandiosity, similar constructs such as attachment and perceived social support, as well as self-esteem, identity, interpersonal relationships, and general mental health (e.g., loneliness and depression). It would be important to study how belongingness may have an impact on these related constructs. For example, if Kohut's (1984) theory is accurate, measures of adolescent attachment should relate more strongly with Social Assurance than Social Connectedness since Social Assurance taps aspects of companionship that are theoretically similar to attachment. It is also expected that different types of social support would correspond with Social Connectedness and Social Assurance, respectively. The research question would involve asking whether different types of social support satisfy different aspects of the need for belongingness. The Social Provisions Scale, for instance, assesses six forms of social support (i.e., attachment, social integration, reassurance of worth, opportunity for nurturance, guidance, and reliable alliance; Cutrona & Russell, 1987). Would the Reassurance of Worth subscale correspond with Social Assurance, while the Social Integration subscale correspond with Social Connectedness? These relationships need to be studied and clarified.

Potential limitations must also be addressed at this point. One puzzling finding and potential limitation is the emergence of only two factors from the original factor analysis, despite the fact that the items were written to reflect all three aspects of belongingness. One plausible explanation for this result is the sample population. Kohut (1984) developed his theory on the basis of a clinical population of patients with moderate to severe narcissistic personality disorders. However, the scales were developed on a nonclinical adult population. The emergence of three distinct constructs may be less likely among this population, given the lower likelihood that the nonclinical college population has experienced as much empathic trauma and frustration as Kohut's clinical population. A psychometric explanation centers on the development of the original items. The original item pool may not have accurately reflected the three distinct constructs or their operational definitions, despite the content analysis by the four judges. Indeed, items drawn from all three operational definitions appear to have converged into two distinct factors, suggesting that items reflect only two aspects of belongingness. A final explanation is a theoretical one: Three aspects of belongingness may not exist. While three were originally postulated, perhaps only two aspects of belongingness exist. For example, companionship and affiliation may refer to the same aspect of belongingness. This possibility is supported by the fact that the Social Assurance Scale is represented by an even amount of items from both operational definitions.

Inferences made from the study results must also be made with caution. For example, the participants were college-age students who may have been actively transitioning from family and high school relationships to college-peer-based relationships. In such instances, people may be highly sensitive to their need for belongingness. They may thus overidentify with the scale items and report stronger agreement. This tendency does not necessarily infer narcissistic personality disorders or traits, as Wolf (1988) suggested. It may merely be reflective of "lapses" in the self due to specific stressors, such as entering college and early adulthood.

Furthermore, the results from this study are not necessarily applicable beyond the college-age population. The developmental literature has noted the significant role of attachment and social reassurance during late adolescence and young adulthood and the diminishing need for belongingness as the adult matures with age (Brown et al., 1986; Lapsley, Rice, & FitzGerald, 1990). One speculation is that the nature of the belongingness construct may be age dependent. Preliminary evidence for such a maturation of the

self was found by a significant statistical difference between Social Assurance scores and age ($r = .238$, $p < .001$), whereby younger participants reported lower Social Assurance scores.

In summary, the two scales were constructed to reflect *aspects* of belongingness and not the whole construct. The emergence of only two scales, as opposed to three, merely confirms that the belongingness construct remains an elusive, complex, and multifaceted psychological construct. Limitations found within this study reflect the direction of the research and not necessarily a criticism of the belongingness construct or self psychology as a whole. Future research and application must be extended beyond college-age students and begin to clarify the relationship of these attributes of belongingness with other related and unrelated constructs.

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