

Sense of Belonging and Indicators of Social and Psychological Functioning

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Sense of belonging has recently been described and defined as one specific interpersonal process that influences health. The purpose of this study was to examine the relationships between sense of belonging and personal characteristics and selected indicators of social and psychological functioning in men and women. Using a sample of 379 community college students, sense of belonging was examined in relation to social support, conflict, involvement in community activities, attendance at religious services, loneliness, depression, anxiety, history of psychiatric treatment, and suicidality. Results indicated that sense of belonging is closely related to indicators of both social and psychological functioning. These relationships were generally stronger for women than for men. It appears that sense of belonging is a useful concept pertinent to exploration of social and psychological functioning.

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THE NATURE of people's interconnections with others and their perceptions of those relationships have become important areas of investigation for explaining alterations in physical and mental health. A pervasive human concern is establishing and maintaining relatedness to others (Kohut, 1977). Through interpersonal interactions, people survive, develop, and grow. The magnitude and importance of this element of human behavior has led to the generation of many concepts that seek to understand and explain interpersonal relatedness through social behavior, psychological drives, attachment behavioral systems, object relations motivational systems, and structural/cultural environments (Berscheid, 1994; Fishler, Sperling, & Carr, 1990; Sperling, Berman, & Fagen, 1994). Ostensibly, the nature and quality of a person's relatedness to others affects bio-psycho-social processes that influence behavior and promote or impair health. Much of this exploration has focused on the role of social networks and social support in relation to health outcomes reflective of both physical and mental health (Cohen & Syme, 1985; House, Landis & Umberson, 1988; Ganster & Victor, 1988). Other concepts proposed to influence social and psychological functioning include loneliness

(Lynch, 1976; Peplau, Russell, & Hein, 1979; Russell, Cutrona, Rose & Yurko, 1984), attachment (Sperling et al., 1994), and social integration (Case, Moss, Case, McDermott, & Eberly, 1992). Although each of these concepts differ with respect to their theoretical orientation, attributes, and functions, they will encompass some aspect of interpersonal relatedness.

Fishler et al. (1990) noted that different paradigms of interpersonal relationships can be integrated through the construct of relatedness. Recently, Hagerty, Lynch-Sauer, Patusky, Bouwsema, & Collier (1992) described a theoretical model of relatedness as an organizing construct under which various interpersonal processes influence health. They identified sense of belonging as one specific process of relatedness and presented an analysis of the concept, positing it to be an important element for mental health and social well-being. In this

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study, we examined the validity of the proposition that sense of belonging is an element of psychological and social functioning in men and women by describing relationships and differences between sense of belonging, personal characteristics, and indicators of social and psychological functioning. To more fully explicate sense of belonging, the current study addressed the following research questions: (1) What are the relationships and differences between men and women's personal characteristics and sense of belonging? and (2) What are the relationships and differences between men and women's psychological and social functioning and sense of belonging?

BACKGROUND

Sense of belonging has received little systematic attention, but it appears to be an important element in developing and managing one's relationship with others. Early empirical research on belonging, described initially as recognition and acceptance of a member by other members in a group, suggested that there was an inverse relationship between belonging and anxiety (Anant, 1966, 1967, 1969). This early research, however, was plagued with a number of problems, including lack of valid and reliable research instruments, sampling problems, and procedural concerns. Subsequent attempts to describe sense of belonging have been narrative and anecdotal rather than theoretical or empirical.

Belonging, despite its lack of theoretical analysis of empirical investigation, has been described richly and accorded importance in the psychological literature. Both Maslow (1954) and Thoits (1982) described belonging as a basic human need. Dasberg (1976) reported that Israeli soldiers experiencing battle-fatigue described feelings of loss of belonging, of being cut-off and uprooted, abandoned, rejected, and psychologically severed. Holocaust survivors described a feeling of not belonging anywhere after rescue from the concentration camps after World War II (Kestenberg & Kestenberg, 1988). Anant (1966) theorized that belonging was the missing link in understanding mental health and illness through a relational perspective.

Hagerty et al. (1992) posited that sense of belonging was a unique, relational phenomenon and completed an extensive concept analysis delineating the attributes, precursors, and consequences of the construct. They defined sense of belonging as "the experience of personal involvement in a system or environment so that persons feel themselves to be an integral part of that system or environment" (p. 173). Sense of belonging was proposed to have two defining attributes: (1) the experience of being valued, needed, or important with respect to other people, groups, or environments, and (2) the experience of fitting in or being congruent with other people, groups, or environments through shared or complementary characteristics. Precursors of sense of belonging were described as: (1) energy for involvement, (2) potential and desire for meaningful involvement, and (3) potential for shared or complementary characteristics (Hagerty et al., 1992). The proposed consequences of belonging was described as (1) psychological, social, spiritual, or physical involvement; (2) attribution of meaningfulness to that involvement; and (3) establishment or fortification of a fundamental foundation for emotional, cognitive, and behavioral responses. According to this model, sense of belonging is a psychological experience with both cognitive and affective components that is associated with affiliative behavior and psychological and social functioning (Fig 1). For a comprehensive

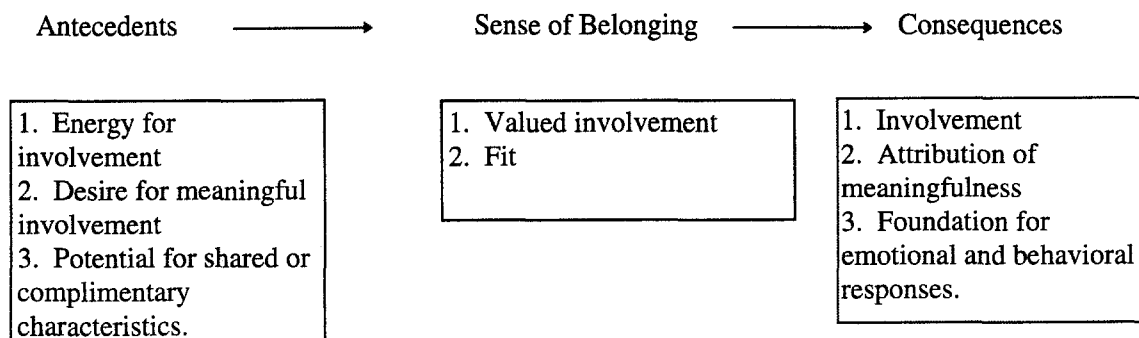


Fig 1. Sense of belonging model.

hensive description of the construct of sense of belonging, see Hagerty et al. (1992).

Sense of belonging was developed as one concept in a theory of human relatedness. One important theoretical assumption put forth by Hagerty, Lynch-Sauer, Patusky, & Bouwsema (1993), was that the expression, processes, and patterns of relatedness vary according to gender differences. This assumption is supported by descriptions of women's psychosocial development that emphasize the importance of their relationships with others (Gilligan, Lyons, & Hanmer, 1989; Jordan, Kaplan, Miller, Stiver, & Surrey, 1991). Unfortunately, most studies concluded on topics related to mental health do not examine differences between men and women. Such differences were examined in the current study in an attempt to address this gap.

Regardless of gender, an accumulating body of evidence supports the linkage between social bonds and well-being, irrespective of the manner in which social support or network ties are operationalized (Ganster & Victor, 1988). This is consistent with Caplan's (1974) early notation that support systems are necessary for maintaining the psychological and physical integrity of the person. Social support has been perhaps the most frequently studied relational concept associated with social and psychological functioning, including its direct and indirect roles in the management of stress and the prevention of amelioration of both physical and psychological illness (Cohen & Syme, 1985; Ganster & Victor, 1988; Coyne & Downey, 1991).

Social support has been defined and operationalized in a number of ways, including quantitative measures of the structural social network and self-reports of perceived availability of interpersonal and material resources (House & Kahn, 1985; Barrera, 1986). After a comprehensive review of studies that examined relationships between social support and well-being, Cohen and Wills (1985) concluded that social support, operationalized as both perceived resources and structural integration into a social network, does, to some extent, promote psychological health through both direct and indirect processes. Inconsistencies of findings regarding the direct and indirect effects of social support can be attributed to the failure to distinguish between multiple conceptualizations of the global concept of social support, lack of theoretical models to guide research, variations in measures of

social support, study methodology, and nature of the outcomes under investigation. Thus, despite the lack of a unified definition and model for the concept of social support, it does appear in some way to influence psychological and social adjustment.

The conceptualization of sense of belonging is more specific and basic than the more familiar construction of global social support. Sense of belonging does not capture the structural elements of social network nor does it necessarily tap the aspect of social support conceptualized as the perceived availability of resources from interpersonal relationships. Although much of the empirical data on social support has been atheoretical, there have been recent attempts to build models for understanding the precursors, attributes, and consequences of social support (Sarason, Sarason, & Pierce, 1990). In one model, Sarason, Pierce, & Sarason (1990) conceptualized a component of social support as sense of acceptance and described it as a trait or personality characteristic with the following elements: heightened interpersonal skills, self-efficacy leading to adaptive behavior under stress, lower anxiety, positive self-image, positive expectations of interactions with others, and a positive view of others' adjustment. These elements differ from the specific dimensions or attributes of sense of belonging, although the proposed outcomes are similar. Sense of acceptance and sense of belonging share one attribute, valued involvement in which the person feels loved, needed, and valued by others. However, sense of belonging also encompasses the attribute of fit, sharing similar or complementary characteristics that allows the individual to feel a part of a group, system, or environment. In the initial empirical work on developing a measure of sense of belonging and testing its theoretical basis, Hagerty and Patusky (1995) found that items developed to reflect the valued involvement and items developed to reflect perception of shared or complementary characteristics, loaded consistently on one factor, underscoring the interconnectedness of these dimensions. We postulate that sense of belonging is a unique element of relatedness and is one element among many concepts that comprise social support processes. Another relational concept examined in this study included conflict. Sense of belonging, conflict, and social support should be theoretically and empirically key correlates, but not so strongly related as to suggest that they are the

same construct. Other indicators used to represent social functioning included attendance at religious services and involvement in community activities.

We also postulate that sense of belonging is related to psychological functioning, which can be represented by depression, loneliness, anxiety, history of psychiatric treatment, and suicidality. Relationships among these concepts have been demonstrated by Anant (1966; 1967; 1969) and Hagerty and Patusky (1995), among others. It appears that lower sense of belonging is associated with poorer psychological functioning.

HISTORICAL DEVELOPMENT OF THE SENSE OF BELONGING INSTRUMENT

To test and refine the theoretical formulation of the concept of sense of belonging (Hagerty, et al., 1992), an earlier study focused on the development of a valid and reliable measure (Hagerty & Patusky, 1995). The description below presents a brief overview of the development of the sense of belonging instrument (SOBI). A complete description of the instrument's development and the psychometric testing can be found elsewhere (Hagerty & Patusky, 1995).

After the extensive concept analysis, items were generated for the SOBI from the literature, clinical experiences with psychiatric patients, and statements made by persons with no history of mental illness who had participated in a series of focus groups designed to illuminate the concept. Fifty-five initial items were sent to seven experts who had conducted research on related concepts. Experts were asked to rate the extent to which each item was clear and relevant to the definition of sense of belonging and the dimension it was purported to represent (valued involvement, fit, and antecedent). A revised measure consisting of 49 items on a self-report, Likert-type scale was tested with three sample groups; 379 community college students, 31 persons in treatment for major depressive disorder, and 37 retired Catholic nuns from a local convent.

Three methods were used to examine the construct validity of the SOBI; factor analysis, contrasted groups, and comparison with other measures. Factor analysis yielded a two-factor solution that explained 37% of the variance in the set of items. Two factor-based subscales were devised with items assigned to them based on magnitude of the factor loadings, dispersion of scores on that

item to reflect satisfactory variance, contribution of the item to the internal consistency of the proposed subscale, item to total scale correlation, and conceptual fit of the item with the domain represented by the subscale. As detailed in Hagerty and Patusky (1995), the two subscales became the SOBI-P (psychological experience—fit and valued involvement) and SOBI-A (antecedents). The SOBI-P consisted of 18 items scored on a four-point Likert-type scale of strongly agree to strongly disagree. Items of the SOBI-P scale tapped the characteristics of valued involvement (“If I died tomorrow, very few people would come to my funeral”; and, “I could disappear for days and it wouldn’t matter to my family.”) and fit (“I often wonder if there is anyplace on earth where I really fit in”; and, “I feel like a square peg trying to fit into a round hole”). The SOBI-A scale consisted of nine items scored like the SOBI-P. The SOBI-A scale represented a single factor of the antecedents or precursors of sense of belonging, which tapped the desire and ability for developing the sense of belonging. Two examples of the SOBI-A scale items are “It is important to me that I am valued or accepted by others”; and, “I want to be a part of things going on around me.”

The SOBI-P and SOBI-A interscale correlation was .45. Contrasting the group mean of scores for each of the sample groups also supported the construct validity of the SOBI. Group means of scores on both the SOBI-P and SOBI-A were hypothesized to differ significantly in theoretically meaningful ways. As proposed, nuns scored highest on both scales of the SOBI, followed by community college students and persons with depression. Scores on the SOBI correlated with measures of loneliness, reciprocity, and social support in the hypothesized directions, positively with reciprocity and social support, negatively with loneliness.

Reliability was evaluated with Cronbach’s coefficient alpha for the community college group, the depressed group, and the nuns. Coefficient alphas for each group were, respectively, .93, .93., and .91 for the SOBI-P and .72, .63, and .76 for the SOBI-A. Stability was examined through test-retest reliability with the student group which was .84 for SOBI-P and .66 for SOBI-A over an 8-week period.

METHODS

Sample

The sample consisted of 379 community college students. A community college was selected for its heterogeneity of students. Females constituted 59% of the subjects. Sixty-four percent of the subjects were Caucasian, 23% were African-American, 4% were Native American, 4% were Other, 3% were Asian, and 2% were Hispanic. Sixty-nine percent were single, 22% were married, and 10% were separated, widowed, or divorced. Ages of the subjects ranged from 18 to 72 with a mean age of 26 years.

Measures

In addition to sense of belonging as measured by the SOBI-P and SOBI-A (as described earlier), the following measures were used in the study.

Social support. Social support was measured by two instruments: the Social Support Scale of the Interpersonal Relationships Inventory (IRI) (Tilden, Nelson, & May, 1990), and a series of items depicting both perceived positive and negative aspects of interactions with spouse, relatives, friends, and coworkers (House & Kahn, 1985). The IRI is a 39-item Likert-type measure comprised of three separately scored subscales; social support, reciprocity, and conflict. The Social Support Scale was designed to measure the perceived availability or enactment of helping behaviors by persons with whom one is engaged in relationships. Evidence of content and construct validity has been reported for the Social Support Scale with internal consistency reliability ranging from .83 to .92 (Tilden, et al., 1990). In the current study, Cronbach's coefficient alpha was .93 for the Social Support Scale.

The social support negative and positive items were derived from scaling initially done by House and Kahn (1985). They are a series of Likert-type, self-report items that ask subjects to rate the frequency with which four types of persons (friends, relative, coworkers, spouse) provide positive, supportive actions and negative, nonsupportive actions. In the present study, the Cronbach's alpha coefficient for these ranged from .71 for friend-negative support to .93 for spouse-positive support.

Conflict. Conflict was measured by the Conflict scale of the IRI (Tilden, et al., 1990). This is a 13-item Likert-type, self-report instrument. It was designed to measure perceived discord or stress in

relationships. Evidence of content and construct validity and high internal consistency has been reported (Tilden, et al., 1990). In the current study, Cronbach's coefficient alpha for the conflict scale was .87.

Involvement in community activities. Subjects were asked whether or not they participated in community activities such as social clubs, athletics, and politics.

Attendance at religious services. Subjects rated the frequency with which they attended religious services, ranging from never to at least once a week.

Loneliness. Loneliness was measured by the Revised UCLA Loneliness Scale (RULS). The RULS is a 20-item self-report measure with demonstrated validity and reliability. A high internal consistency is evident with .94 coefficient alphas over several studies. Evidence of construct, concurrent, and discriminant validity have been cited (Russell, et al., 1980). Coefficient alpha for the RULS in the current study was .93.

Depression. Severity of depression was measured by the Beck Depression Inventory (BDI). The BDI is a self-report measure of the severity of depression, including affective, cognitive, motivational, and psychomotor components of depression. The BDI has good to excellent reliability with split-half correlations ranging from .78 to .93. The BDI has strong concurrent validity with significant correlations with a number of other measures of depression (Beck, Steer, & Garbin, 1988). Cronbach's coefficient alpha for the BDI in the current study was .90.

History of psychiatric treatment. Subjects were asked whether or not they had ever received any type of psychiatric treatment, including psychotherapy, group therapy, and medications for emotional difficulties.

Suicidality. Subjects were asked if they had experienced past or current suicidal thoughts or suicide attempts.

Anxiety. This was measured by the set of 10 items on the Anxiety Scale of the Symptom Checklist-90. These items tap symptoms and behaviors associated clinically with high manifest anxiety including, restlessness, nervousness, and panic (Derogatis & Cleary, 1977). The Anxiety Scale is reported to have good validity and reliability (Derogatis, 1977). It correlates highly with other mea-

asures of anxiety and, in this study, had a coefficient alpha of .90.

General information questionnaire. Study participants were asked to provide general demographic information, including age, gender, marital status, education level, annual household income, religious preference, and ethnic background.

Procedure

After approval from the Human Subjects Review Committee and community college administrators and instructors, students were invited to participate in the study through classroom announcements and flyers. Questionnaires were distributed and returned at a table in the lobby of a primary campus building. Students completed the questionnaires at home or in a nearby conference room to ensure privacy. On completion of the instruments, the students were paid a modest sum of \$5.00.

RESULTS

A growing body of literature suggests that there are important differences in psychological development, communication, and interpersonal relationships between men and women (Jordan, et al., 1991, Gilligan, 1982, Gilligan, Lyons, & Hanmer, 1989). Thus, data were analyzed separately by gender for each variable. The following results document findings for both men and women in the student group with respect to study variables. Significance was set at $p \leq .05$.

Age

To determine if there was any correlation between age of the respondents and scores on SOBI-P and SOBI-A, Pearson product-moment correlations were generated for men and women in the student group. There were no significant relationships between age and the SOBI-P (men: $r = .00$; women: $r = .05$) or the SOBI-A (men: $r = -.05$; women: $r = .00$).

Gender Differences

T-tests for comparison of means of independent samples were used to examine possible gender differences in scores on the SOBI-P and SOBI-A. There were no significant differences found between men and women for either SOBI-P ($t = .02$, $df = 360$, $p = .98$) or SOBI-A ($t = .12$, $df = 369$, $p = .90$).

Marital Status

Differences in group scores for each gender on the SOBI-P and SOBI-A based on marital status (married, single, separated, widowed, divorced) was examined using analyses of variance (ANOVA). There were no significant differences among any group responses on SOBI-P (men: $F = .42$, $df = 146$, $p = .74$; women: $F = 1.42$, $df = 214$, $p = .24$) or on SOBI-A (men: $F = 1.56$, $df = 151$, $p = .20$; women: $F = 1.4$, $df = 214$, $p = .24$).

Education

Pearson correlations were calculated to examine relationships between SOBI-P and SOBI-A and years of education for each gender. There were no significant relationships found for SOBI-P (men: $r = .03$; women: $r = .07$) or for SOBI-A (men: $r = -.01$; women: $r = .00$).

Income

For men, there were no significant differences for income on either SOBI-P ($F = .92$, $df = 140$, $p = .47$) or on SOBI-A ($F = .59$, $df = 145$, $p = .70$). For women, however, there was a significant difference for income on both SOBI-P ($F = 2.76$, $df = 211$, $p = .02$) and SOBI-A ($F = 3.8$, $df = 214$, $p = .00$). A least squared difference (LSD) post hoc multiple comparisons test revealed the significant differences for women to be between those who had annual household incomes of less than \$40,000 per year and those with annual household incomes of more than \$40,000 per year, with the higher income groups scoring higher on both the SOBI-P and SOBI-A.

Religious Preference

ANOVA was used to determine if there were any differences in student scores for each gender on the SOBI-P and SOBI-A based on the religious preferences of Protestant, Catholic, Jewish, Other, and None. For men, there were significant differences in scores on the SOBI-P ($F = 3.87$, $df = 145$, $p = .01$), but not on the SOBI-A ($F = 1.67$, $df = 150$, $p = .18$). For women, there were no significant differences for religious preferences on either the SOBI-P ($F = 1.84$, $df = 212$, $p = .12$), or on the SOBI-A ($F = .96$, $df = 216$, $p = .43$). An LSD post hoc comparison test depicted significant differences for the men on the SOBI-P to be between groups having a Protestant and Catholic

preference and, the group with no religious preference.

Ethnic Background

ANOVA revealed no significant differences for either gender between group means of any of the ethnic groups, Black, White, Hispanic, Native American, Asian, and Other, on SOBI-P (men: $F = .85$, $df = 146$, $p = .52$; women: $F = .99$, $df = 213$, $p = .42$) and on the SOBI-A (men: $F = .37$, $df = 151$, $p = .87$; women: $F = 1.19$, $df = 217$, $p = .31$).

Social Functioning

To examine the relationships between sense of belonging and social functioning for both males and females, correlations were calculated for SOBI-P and SOBI-A and (1) social support as measured by the Social Support Scale of the IRI and positive/negative support items and (2) conflict. Positive, moderate correlations were found between SOBI-P and the IRI Social Support Scale for both men and women. The SOBI-P and the IRI Conflict Scale were negatively and moderately correlated for both genders. The relationships between SOBI-A and Social Support and Conflict were similar in direction. There was a significant relationship between SOBI-A and Conflict for women, but not for the men (Table 1).

SOBI-P was positively related to the positive social support items and negatively related to the negative items for all four types of relationships for both genders. Likewise, SOBI-A was positively and significantly related to the positive items for both men and women. Although the negative social support items correlated in a weak, but significant way for the women, their correlations with SOBI-A were not significant for the men (Table 2).

To examine another aspect of social functioning, a t -test for independent samples was calculated to determine if there was a significant difference in

Table 1. Correlations Between SOBI-P, SOBI-A, and Social Support and Conflict as Measured by the IRI

	SOBI-P		SOBI-A	
	Women	Men	Women	Men
Social support	.65 ($n = 204$)	.44 ($n = 139$)	.40 ($n = 208$)	.20 ($n = 143$)
Conflict	-.45 ($n = 200$)	-.30 ($n = 137$)	-.30 ($n = 204$)	-.05* ($n = 142$)

*All correlations significant at $p \leq .05$ except as noted.

Table 2. Correlations Between SOBI-P, SOBI-A, and Positive and Negative Indicators of Perceived Social Support in Relationships

	SOBI-P		SOBI-A	
	Women	Men	Women	Men
Spouse positive	.56 ($n = 80$)	.44 ($n = 22$)	.35 ($n = 80$)	.23 ($n = 23$)
Relatives positive	.38 ($n = 212$)	.26 ($n = 144$)	.20 ($n = 216$)	.30 ($n = 149$)
Friends positive	.69 ($n = 213$)	.50 ($n = 144$)	.39 ($n = 217$)	.22 ($n = 148$)
Coworkers positive	.33 ($n = 132$)	.31 ($n = 108$)	.40 ($n = 135$)	.33 ($n = 112$)
Spouse negative	-.65 ($n = 80$)	-.29 ($n = 23$)	-.34 ($n = 80$)	-.08* ($n = 24$)
Relatives negative	-.40 ($n = 212$)	-.21 ($n = 144$)	-.17 ($n = 216$)	-.05* ($n = 149$)
Friends negative	-.40 ($n = 213$)	-.49 ($n = 144$)	-.21 ($n = 217$)	-.09* ($n = 149$)
Coworkers negative	-.36 ($n = 132$)	-.07* ($n = 107$)	-.18 ($n = 135$)	-.01* ($n = 110$)

*All correlations significant at $p \leq .05$ except as noted.

sense of belonging between group means of respondents who were involved in community activities and those who were not. Results indicated a significant difference for women ($t = 2.76$, $df = 213$, $p = .01$) on SOBI-P but no significant differences on SOBI-A ($t = 1.80$, $df = 213$, $p = .08$). Women who scored higher on sense of belonging were more involved in community activities. There were no significant differences for men on either SOBI-P ($t = -.01$, $df = 146$, $p = .99$) or SOBI-A ($t = 1.17$, $df = 150$, $p = .24$).

To examine differences in group means on sense of belonging and religious attendance, one-way ANOVAs were calculated. Results indicated a significant difference for women ($F = 4.48$, $df = 212$, $p = .01$) for SOBI-P with LSD post hoc comparison tests revealing the differences to be between those women who attended religious services, regardless of the frequency, compared with those who never attended church. There were no significant differences for women on SOBI-A ($F = 1.99$, $df = 213$, $p = .14$). For men, there were no significant differences on SOBI-P ($F = 1.8$, $df = 140$, $p = .17$) or SOBI-A ($F = .52$, $df = 142$, $p = .59$).

Psychological Functioning

Because of violations of the assumption of normality, linear transformations were made on two variables, the BDI and anxiety scores. A series of correlations were calculated between SOBI-P,

SOBI-A, and the measures of loneliness, depression, and anxiety. Results, shown in Table 3, show that there is a significant relationship for men and women between these indicators and SOBI-P. However, relationships between SOBI-A and anxiety and depression were not significant for the men, but were for the women. As proposed, these were inverse relationships.

T-tests for independent samples were used to examine differences in sense of belonging for subjects who had a history of psychiatric treatment, suicide attempts, and suicidal thoughts (Table 4). For both genders, there was a significant difference ($p < .05$) in group means on SOBI-P for each of these variables. Those who scored lower on the SOBI-P tended to have a psychiatric treatment history, current or past suicidal thoughts and attempts. For SOBI-A, there were no significant differences for women or men with respect to these variables.

DISCUSSION

Results of this study indicate that age, gender, marital status, education, and ethnicity have no significant relationship to scores on either SOBI-P or SOBI-A. Although these variables had no direct relationship to sense of belonging, it remains unclear how these characteristics would perform as intervening or mediating variables in relationships between sense of belonging and other concepts. For example, although there were no differences when comparing gender responses on either belonging measure, when scores for men and women were examined separately in relation to variables such as involvement in community activities, income, and religious attendance, there were significant differences.

Sense of belonging was related to social support measured both as global perceived availability of resources and as specific positive and negative social support behaviors from four types of significant others. As theoretically proposed, higher sense

Table 4. T-Tests for Selected Indicators of Psychological Functioning for SOBI-P and SOBI-A

	SOBI-P		SOBI-A	
	Women	Men	Women	Men
History of psychiatric treatment	$t = 3.52$ $p = .00$	$t = 1.99$ $p = .04$	$t = 1.68$ $p = .09$	$t = 1.26$ $p = .21$
Suicidal thoughts	$t = -4.32$ $p = .00$	$t = -3.78$ $p = .00$	$t = -.30$ $p = .76$	$t = -1.84$ $p = .07$
Suicidal attempts	$t = -3.81$ $p = .00$	$t = -2.76$ $p = .02$	$t = -1.04$ $p = .30$	$t = -1.19$ $p = .26$

of belonging and its antecedents tended to be associated with more perceived support and to positive social support actions for both genders. Negative social support and conflict were negatively related to sense of belonging, although these relationships were usually stronger for women than for men. Positive interactions with friends were strongly related to SOBI-P for both men and women and may reflect the nature of the community college student sample. For women, negative interactions with spouse appeared to be important in relation to lower sense of belonging whereas for men, negative interactions with friends were more strongly related to lower sense of belonging. Again, these findings may reflect the study sample, many of whom were not married, were employed in lower-level and temporary jobs, and were immersed in a network of friends. Yet, the differences between women and men in the extent to which negative interactions with spouse were related to sense of belonging was in marked contrast. These findings suggest that the lack of a supportive spouse and negative interactions with a spouse may indeed have a more profound influence on women than on men. These findings are consistent with Brown and Harris' (1978) model of depression for women that depicts the lack of a confiding, intimate relationship with spouse as a vulnerability factor for depression.

Although there were no significant differences for men in sense of belonging between those who were involved in community activities and attended religious services and those who were not, there were significant differences for women. This is consistent with recent theories and research contending that women define themselves more in terms of their interpersonal relationships or "self-in-relation" and belong to a web of social ties that substantiate their feelings of self and of being valued and important (Jordan, et al., 1991). It is interesting that men who expressed a Protestant or Catholic religious preference did differ in their

Table 3. Correlations Between SOBI-P, SOBI-A and Selected Indicators of Psychological Functioning

	SOBI-P		SOBI-A	
	Women	Men	Women	Men
Loneliness	-.78 ($n = 210$)	-.66 ($n = 143$)	-.44 ($n = 214$)	-.36 ($n = 148$)
Anxiety	-.53 ($n = 203$)	-.53 ($n = 139$)	-.14 ($n = 207$)	-.08* ($n = 148$)
Depression	-.62 ($n = 196$)	-.54 ($n = 130$)	-.28 ($n = 199$)	.00* ($n = 132$)

*All correlations significant at $p \leq .05$ except as noted.

psychological sense of belonging from men who did not. This raises questions as to whether religious affiliation influences men's sense of belonging or, through self-selection, men who choose a religious preference are more prone to philosophical or psychological belonging. It remains unclear as to why identification of a Jewish preference was not associated with differences in sense of belonging, although the low number of Jewish men in the study may have affected this.

Income was inversely related to sense of belonging only for women in the lower socioeconomic group. This finding may be related to research that suggests women from lower socioeconomic groups may be more at risk for problems such as depression (Brown, 1989). Women in lower socioeconomic groups face multiple challenges; low sense of belonging may be one factor that contributes to their vulnerability for phenomena such as depression, teen pregnancy, and lack of employment.

With respect to psychological functioning, lower scores on the SOBI-P were related to loneliness, depression, and anxiety, a history of psychiatric treatment, and suicidal thinking and attempts. These relationships tended to be stronger for women than for men, although significant for both genders. The psychological state of sense of belonging was clearly related to indicators of psychological functioning. Although it can be argued that sense of belonging might be an epiphenomenon of psychiatric disorders such as depression and anxiety, it was related consistently to indicators of past functioning such as history of psychiatric treatment and suicidality, even in subjects who were not depressed at the time of the study. Thus, while sense of belonging may fluctuate in relation to emotional disturbances and situational events, it may be a relatively stable characteristic of the individual.

The high inverse correlation between loneliness and sense of belonging for women suggests that these two concepts may be more theoretically related than originally hypothesized and may reflect opposite poles of relatedness. Hagerty, et al. (1992) postulated that loneliness is an outcome of deficits in sense of belonging which might explain the strong relationship. The relationship is less strong for men again suggesting that for women, fitting in and feeling valued are important components of self and that failure to connect with others is more apt to result in loneliness.

Overall, sense of belonging seems to be more strongly related to both social and psychological

functioning for women than for men. Although these findings do not discount the importance of relationships for men, they do show the stronger interconnections for women and the possible impact of those relationships on social and psychological functioning. It is probable that sense of belonging, as a cognitive, affective, and behavioral experience, interacts with or is a product of a host of variables within the individual and the environment. This is consistent with recent theories of women's development that emphasize women's sense of self in relation to context and other people (Jordan, et al., 1991). Additional research should be conducted on sense of belonging and its relationship to concepts such as self-esteem, self-concept, and personality factors. Sense of belonging may be an important resiliency factor.

These findings may be relevant to self-help mutual aid groups such as Alcoholics Anonymous. It is common that when new members cannot identify with the experiences of the established group's members, they often feel that their experiences are unique and different, thus not benefitting from the support available. As they feel that they do not belong, they are more likely to not seek support, more likely to drop out and relapse into old patterns of behavior (Sheeren, 1988).

The results of this study support the theoretical development and validity of the sense of belonging concept as measured by the SOBI-P and as defined and described by Hagerty, et al. (1992). Although both measures performed as hypothesized with indicators of psychological and social functioning, relationships with the study variables and SOBI-A tended to be weaker. The paucity of robust relationships between SOBI-A and indicators of psychological and social functioning suggests that the antecedents may be vital in a person's initial development of a sense of belonging, but less efficacious with respect to current experience of sense of belonging. This may also reflect the need for additional refinement of this particular scale including an increase in the number of items and reduction of measurement error by increasing attention to the range of antecedents necessary for the sense of belonging (Hagerty & Patuskay, 1995). Further research is indicated in this regard.

In conclusion, it appears that sense of belonging is a potentially useful concept pertinent to exploration of both social and psychological functioning. Understanding the parameters and conditions under which sense of belonging develops, and influences

or is influenced by cognition, affect, and behavior, may well lead to new insights pertinent to social and psychological functioning of individuals and groups. In addition to theoretical models, the concept has the potential to be clinically relevant, targeting interventions that assist patients to develop the capacity and skills to augment their sense of belonging.

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