

The Social Support Appraisals (SS-A) Scale: Studies of Reliability and Validity

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A scale of subjective appraisals of support (SS-A) was developed. Data from five student and five community samples indicated that the 23-item scale had good reliability, had adequate concurrent, convergent, and divergent validity with other perceived support measures, and showed predicted associations with measures of theoretically related antecedents (support network resources) and consequences (psychological well-being). These associations were typically at least as strong as those found for other published measures of support appraisals and were quite consistent across samples. Given the adaptability of the SS-A to different modes of presentation and varied populations, it appears to be a useful brief measure of support appraisals.

The last decade has seen a plethora of studies falling under the rubric of social support. Despite the popularity of the topic, there remains a persistent need for conceptual clarification and more focused theory-based measures (Thoits, 1982; Turner, Frankel, & Levin, 1983). The majority of social support research has been conducted with hastily developed or post hoc measures of imprecise or obscure constructs. Almost a decade ago, Dean and Lin (1977) noted the lack of social support measures with demonstrated reliability and validity. Such measures have been slow in emerging (Tardy, 1985; Wood, 1985); moreover, as researchers engage in the conceptual elaboration and differentiation of social support, the need for a range of measures with distinct foci has increased.

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SOCIAL SUPPORT AS A META-CONSTRUCT

From our perspective, social support is best seen as a meta-construct (Cook & Campbell, 1979), comprising several component constructs: (a) support network *resources* (i.e., the size, structure, and relationship characteristics of support networks), (b) specific supportive *acts* (e.g., listening, comforting, advising, loaning money, socializing, or assisting with tasks), and (c) *subjective appraisals* of support (perceptions/beliefs that one is involved, cared for, respected and/or having one's social needs met). Presumably, support resources provide the context for supportive acts; both the acts and the relationships themselves lead to appraisals of the adequacy of support. However, this process is undoubtedly complex. What characteristics of support networks (size, density, composition, closeness of relationships, etc.) promote timely, appropriate supportive behavior (listening, practical assistance, advice)? What features of networks and supportive behavior promote positive subjective appraisals of support in the individual (or more likely, a particular type of individual)? The links between these facets of social support have barely begun to be studied (Stokes, 1983; Stokes & Wilson, 1984; Vaux & Harrison, 1985; Vaux & Wood, 1985).

Similar conceptual distinctions have been made by a number of researchers (e.g., Barrera, 1981; Barrera & Ainlay, 1983; Gottlieb, 1981; Heller & Swindle, 1983; Shumaker & Brownell, 1984; Thoits, 1982; Turner et al., 1983; Vaux, 1982; Vaux & Harrison, 1985). Further, such conceptual distinctions are implicit in several of the more coherent definitions of social support (Cobb, 1976; Kaplan, Cassel, & Gore, 1977). This multifaceted view of social support casts a somewhat more positive light on the great variety of support measures utilized by researchers. Variety per se is not the problem, but the confusion (theoretically and empirically) of different support constructs is a serious impediment to advances in our understanding. Many attempts at measurement, implicitly recognizing the richness of the support meta-construct, try to capture all its facets (resources, behavior, and appraisals) in a single composite measure and so fail to adequately assess any of them. In contrast, we have attempted to develop a set of interrelated measures tapping, respectively, social support resources, behavior, and appraisals, only the last of which is discussed here.

SUBJECTIVE APPRAISALS OF SUPPORT

The focus of this paper is one component of the social support meta-construct, namely, subjective appraisals of support. Several attempts to elucidate social support conceptually draw attention to the importance of

this facet. Cobb (1976) defines social support as “information leading the subject *to believe* [italics added] that he is cared for and loved, esteemed, and a member of a network of mutual obligations” (p. 300). Thus “support” (the information) is in fact support only if it leads to certain beliefs in the individual—a patently phenomenological view. Kaplan et al. (1977) offer a similar though more explicitly subjective view: Support is the degree to which an individual’s social needs (for affection, security, approval, belonging, etc.) are met through social interaction. Thoits (1982) has expanded this model to include social support (gratification of needs) through socioemotional and instrumental aid (behavior) provided by the social support system (a subset of the social network)—a perspective very similar to the one we presented above.

Subjective appraisals of support appear to be especially important in regard to psychological well-being. In several studies, for instance, satisfaction with support or perceived adequacy of support has shown a stronger relationship to distress or well-being than did social support network measures (Barrera, 1981; Hirsch, 1980; Procidano & Heller, 1983; Sarason, Levine, Basham, & Sarason, 1983). Such findings are consistent with Barrera’s (1981) statement that “knowledge of people’s subjective appraisals of the adequacy of support is more critical to the prediction of their well-being than simply collecting information about the number of supporters or the quantity of supportive behaviors to which they have access” (p. 85). In short, there exist both theoretical and empirical reasons to conceptually clarify subjective appraisals of support, and to develop measures thereof.

Other Measures of Support Appraisals

Several researchers recently have taken a subjective appraisal approach to measuring support, at least in part (e.g., Barrera, 1981; Henderson, Duncan-Jones, Byrne, & Scott, 1980; Hirsch, 1980; Holahan & Moos, 1982; McFarlane, Neale, Norman, Roy, & Streiner, 1981; Procidano & Heller, 1983; Sarason et al., 1983; Schaefer, Coyne, & Lazarus, 1981; Turner et al., 1983). Although some reliability and validity data are available on all these measures, in most cases they differ markedly from support appraisals in the sense proposed by Cobb (1976) or Kaplan et al. (1977). In many cases, for instance, the focus is primarily on satisfaction with support (e.g., Barrera, 1981; Hirsch, 1980; Sarason et al., 1983) as a complement to network resources or other measures. (In a similar vein, McFarlane et al. (1981) obtain ratings on the “helpfulness” of discussions with others on various topics.) Although an important subjective appraisal, support satisfaction per se is a limited representation of the support appraisal constructs outlined above, for example, Cobb’s (1976) notion of feeling loved, respected, and involved.

Tardy (1985) discusses seven measures of social support in terms of whether support is received or provided, available or enacted, and described or evaluated.² Applying the conceptual distinction of support resources, behavior, and appraisals reveals that four of the measures are primarily concerned with support network resources, one with support behavior, and two with subjective appraisals. Tardy's designation of a measure as evaluative refers primarily to ratings of satisfaction (Barrera, 1981; Sarason et al., 1983) or helpfulness (McFarlane et al. 1981) with network support, rather than subjective appraisals more generally.³ Four support appraisal measures, including the two reviewed by Tardy (1985), are discussed below.

Holahan and Moos (1982) selected subscales from the Family- and Work-Environment Scales to develop the Family- and Work-Relations Index (FRI and WRI), respectively. (The subscales are added to yield FRI and WRI scores.) The FRI consists of three subscales: Cohesion, Expressiveness, and Conflict. The WRI is made up of two scales: Involvement (with the job) and Peer Cohesion. These measures are explicitly subjective, clearly include support appraisal content (e.g., the Cohesion scales), and have shown stress-buffering relationships. Yet these scales were adapted from more general measures of social climate, they seem to contain superfluous content (e.g., expressiveness, job involvement), and it is not clear which support appraisal construct they operationalize. Finally, a strength of the scales, their focus (on family or work relations respectively), may be a drawback when a measure of appraisals of support from all sources is needed.

The Henderson et al. (1980) instrument was based explicitly on Weiss's (1974) theory of the important provisions of social relationships (cf. Kaplan et al., 1977). However, it was modified extensively on the basis of empirical

²Depending on one's conceptualization of "social support", seven measures may appear an abundance or a great scarcity! It is noteworthy that a search of *Psychological Abstracts* in 1984 produced almost 700 citations under the topic of "social support networks" (introduced only in 1982), yet only seven measures met Tardy's criteria of being relatively focused and having some demonstrated reliability and validity. Further, Tardy's (1985) selection, though not exhaustive, is hardly biased; it converges quite well with measures selected by other reviewers (e.g., Wood, 1985). One might conclude that the field is not quite yet replete with flawless measures for every occasion!

³Measures of satisfaction or helpfulness of support are *components* of larger measures usually focusing on support networks. Some of these measures represent a fairly comprehensive assessment of support networks (e.g., Barrera, 1981), some focus on one mode of support (e.g., advice or guidance, McFarlane et al., 1981), and some are scored for relatively little information beyond network size (e.g., Sarason et al., 1983): all these measures are (necessarily) fairly lengthy. Of the appraisal measures discussed above, the Henderson et al., (1980) instrument was designed as an in-person interview, the other three instruments as self-administered paper-and-pencil measures. The Procidano and Heller (1983) and Holahan and Moos (1982) measures seem suitable for several modes of presentation. Whereas the Turner et al. (1983) measure has perhaps the strongest conceptual base, presentation of the vignettes in other than written form might be demanding on respondents.

item analyses, so that it provides measures of the availability and adequacy of attachment and social integration. The latter combines several of Weiss's categories (friendship, acquaintance, reassurance of worth, and reliable alliance) since the instrument failed to differentiate these. Of practical importance, this instrument was designed to be administered by a trained interviewer, restricting its utility somewhat.

Based on Caplan's (1974) statement regarding the functions of social networks, Procidano and Heller (1983) designed their measure to assess "the extent to which an individual perceives that his/her needs for support, information, and feedback are fulfilled by friends . . . and by family" (p. 2). Using data from college students, an initial pool of 84 items was reduced to 35 on the basis of item-total correlations, duplicated to refer to family and friends, and reduced to the two final sets of 20 items, again on the basis of item-total correlations. Thoits (1982) has pointed out that Caplan's statement cannot be considered a very useful theoretical definition of social support since it includes the very term to be defined. Further, Tardy (1985) has noted that the scales include items reflecting both the receipt and provision of support, and the enactment and availability of support, weakening its focus to some degree. Nonetheless, Procidano and Heller (1983) have presented evidence regarding the scales' reliability and construct validity with respect to support resources, distress, and observed social interactions in anticipation of a stressful situation.

Turner et al., (1983) have taken an approach very similar to our own. Focusing on Cobb's (1976) conceptualization, these researchers modified and expanded Kaplan's (1976) social support vignettes in an attempt to assess the individual's feelings of being loved, esteemed, and involved. Nine items each consist of a set of three short descriptions of persons with varying levels of support. The respondent indicates which of the three he or she is most like. (A 5-point scale allows the respondent to check in-between described persons.) Turner et al. (1983) have used this measure in studies of very large, distressed samples and report extensive evidence of reliability and validity with respect to network resources and distress.

Summary and Aims

A number of measures focusing on subjective appraisals of support have been outlined above. Reliability and validity data exist on several of these measures, and many researchers will find one or other suitable to their purpose (cf. Tardy, 1985; Wood, 1985). However, relatively few of these measures are based explicitly and directly on a coherent theoretical social support construct (cf. Thoits, 1982), such as those presented by Cobb (1976)

or Kaplan et al. (1977). Further, and of considerable importance, the need persists for a relatively short measure suitable for presentation through a variety of modalities (i.e., mail survey, self-administration, personal or telephone interview).

A search for meaningful theoretical definitions of social support led Thoits (1982) to the somewhat similar statements by Cobb (1976) and Kaplan et al. (1977) presented earlier. Like Turner et al. (1983), we focus on the subjective appraisal implicit in Cobb's definition: beliefs that one is loved, respected, and esteemed by and involved with family, friends, and others. These beliefs constitute the subjective appraisal of information provided by the existence of supportive relationships and the occurrence of supportive interactions. In this paper, we present a 23-item self-report instrument based on this theoretical position, with data on its reliability and validity.

The approach to construct validity utilized here was modest though carefully considered (cf. Cook & Campbell, 1979). An attempt was made to establish convergent and divergent validity with respect to other measures focusing on subjective appraisals of support. Empirical relationships were examined between the support appraisal measure and theoretically linked antecedent and consequent variables, specifically measures of support network resources and psychological distress.

Although the data address only concurrent validity and consist predominantly of self-report measures, the nature of our samples did allow us to assess relationships with other-report criteria at several points. Patterns of convergent and divergent validity were assessed with respect to subscales (e.g., family and friend support) across measures, and across members of the same families. Finally, data are provided on a wide range of measures and from several samples (five student and five community) showing a fair degree of heterogeneity. The consistency of the findings provides an excellent indicator of their external validity with respect to both persons and measures (Cook & Campbell, 1979).

METHOD

Participants

Five college student and five community samples provided data presented in this report. The data from five samples (two student and three community samples) were collected specifically for this paper, the remainder, as part of an ongoing series of studies on social support. The major characteristics of the 10 samples, and the measures each completed, are presented in Tables I (student) and II (community). The samples are quite heterogeneous: The student samples include one constituted entirely of non-traditional mature women students and another of black students; the com-

Table 1. Student Samples: Characteristics and Measures Completed

Characteristics and measures	S1: Under-graduates (n = 156)	S2: Under-graduates (n = 87)	S3: Mature women students (n = 98)	S4: Under-graduates (n = 100)	S5: Black undergraduates (n = 76)
Source	Subject pool	Subject pool	Student Register	Subject pool	Black Studies class
Sex	48% female		100% female	56% female	55% female
Age	90% < 23		Mean age = 37 (30-61)	90% < 25 (estimate)	90% < 25 (estimate)
Marital status	96% single		51% married 35% divorced/separated		
Other info.			60% parents		100% black
Method	Group admin.	Group admin.	Mail survey (50% return)	Group admin.	Group admin.
Measures					
Perceived support	SS-A PSS ^c Satisfaction with friends ^b	SS-A	SS-A Network satisfaction ^f	SS-A Network satisfaction ^f	SS-A
Support resources			SS-R ⁱ	SS-R ⁱ SS-B ⁱ CESD ^c	SS-R ⁱ SS-B ⁱ CESD ^c
Distress/well-being	CESD ^c ABS ^d UCLA ^e	SCL-90/ Life satisfaction ⁷ Optimism ⁸ PRF ⁶	SS-R ⁱ CESD ^c ABS ⁴	SS-R ⁱ SS-B ⁱ CESD ^c	NOS ^j
Personality		Affiliation Autonomy Nurturance Succorance Aggression			

^aProcidano & Heller (1983).

^bDeveloped for this study.

^cRadloff (1977).

^dBradburn (1969).

^eShaul (1981).

^fDerogatis, Lipman, & Covi (1973).

^gCantrill & Roll (1971).

^hJackson (1974).

ⁱVaux (1982).

^jVaux, Burda, & Stewart (in press).

Table II. Community Samples: Characteristics and Measures Completed

Characteristics and measures	C1: Community fathers (n = 113)	C2: Community teenagers (n = 113)	C3: Community adults (n = 44)	C4: Community adults (n = 140)	C5: Community adults (n = 52)
Source	Fathers of Sample S1	Siblings of S1	Telephone book	Telephone book	Telephone book
Sex	100% male	53% female	72% female	60% female	62% female
Age	Mean = 48 (35-65)	Mean = (12-18)	Mean = 37 (20-84)	Mean = 39 (20-83)	Mean = 42 (20-85)
Marital status	100% married	0% married	48% married	49% married	60% married
Education	42% college degree	In high school	—	36% college degree	50% college degree
Occupation/median income	47% professional	—	\$12,000-\$20,000	\$8,000-\$12,000	\$8,000-\$12,000
Method	Mail survey	Mail survey	Mail survey	Telephone interview	Mail survey
Return rate	60%	60%	26%	70%	27%
Measures	SS-A Cohesion ^a Expressiveness ^a Conflict ^a	SS-A Cohesion ^a Expressiveness ^a Conflict ^a	SS-A PSS ^d Satisfaction with friends ^e	SS-A	SS-A PSR ^f SSQ ^h RKS ^g
Perceived support	SS-A Cohesion ^a Expressiveness ^a Conflict ^a	SS-A Cohesion ^a Expressiveness ^a Conflict ^a	SS-A PSS ^d Satisfaction with friends ^e	SS-A	SS-A PSR ^f SSQ ^h RKS ^g
Support resources	SS-A Cohesion ^a Expressiveness ^a Conflict ^a	SS-A Cohesion ^a Expressiveness ^a Conflict ^a	SS-A PSS ^d Satisfaction with friends ^e	SS-A	SS-A PSR ^f SSQ ^h RKS ^g
Distress/well-being	CESD ^b ABS ^c	CESD ^b ABS ^c	CESD ^b ABS ^c UCLA ⁱ	SS-R/ CESD ^b ABS ^c	SS-R/ CESD ^b ABS ^c

^aHolahan & Moos (1982).

^bRadloff (1977).

^cBradburn (1969).

^dProcidano & Heller (1983).

^eDeveloped for this study.

^fVaux (1982).

^gTurner, Frankel, & Levin (1983).

^hSarason, Levine, Basham, & Sarason (1983).

ⁱShaul (1981).

munity samples include one constituted entirely of fathers and another of adolescents.

Measures

The Social Support Appraisals Scale (SS-A) is a 23-item instrument based explicitly on Cobb's (1976) definition of social support and designed to tap the extent to which the individual believes that he or she is loved by, esteemed by, and involved with family, friends, and others. The complete instrument is presented in the Appendix. Three scores are typically computed: SS-A total (sum of all 23 items), SS-A family (sum of 8 "family" items), and SS-A friends (sum of 7 "friend" items). (The remaining eight items refer to "people" or "others" in a general way.)

The validity of the SS-A was assessed in terms of convergent and divergent validity with other subjective support measures, and an examination of its relationships with theoretically linked antecedents (support network resources) and consequences (psychological distress). Consequently, the measures completed by respondents fell into three major categories: social support appraisals, social support resources (support network characteristics), and distress and well-being. In addition, Sample 2 completed several personality measures. The instruments used are described below.

Social Support Appraisal Measures

Perceived Social Support (PSS: Procidano & Heller, 1979, 1983). This instrument consists of two 20-item scales designed to tap perceptions of support from family and friends, respectively. The instrument has shown excellent internal consistency and good construct validity with respect to measures of support resources, distress, and personality (Procidano & Heller, 1983).

Satisfaction with Friends. Three single-item measures were developed for this study to tap, respectively, satisfaction with the number of friends, satisfaction with the quality of friendships, and agreement (on a 4-point scale) with the statement "I have friends and acquaintances, but sometimes I just feel 'different' from them."

Family Relations Index (FRI: Holahan & Moos, 1982). The Family Relations Index is composed of three subscales (cohesion, expressiveness, and conflict) from the Family Environment Scale. The index contains perceived social support content (e.g., cohesion scale) and has shown empirical relationships to life stress and distress similar to those of social support. Though the FRI is normally a composite score, the scales were kept separate here

since Cohesion and Conflict, but not Expressiveness, were judged to tap support appraisals.

Social Support Questionnaire (SSQ: Sarason et al., 1983). The SSQ consists of 27 questions (e.g., "Whom can you really count on to listen to you when you need to talk?" "With whom can you totally be yourself?"). For each item, the respondent lists relevant people and indicates how satisfied (6-point scale) he or she is with the support available. Two scores are computed: average (per item) number of people and average support satisfaction. The measure has shown excellent internal consistency and stability, and good validity with measures of adjustment, personality, and experimental tasks. A modified form was used here that asked respondents to think of all relevant supporters and indicate their number rather than actually list them.

Provision of Social Relations Scale (PSR: Turner et al., 1983). The 18-item PSR was designed to tap five of the provisions of social relations identified by Weiss (1974): attachment, social integration, reassurance of worth, reliable alliance, and guidance. The measure has shown this structure in a college sample but not in two non-college samples, where family and friend subscales emerged in factor analyses. The measure has shown good internal consistency and convergent validity with measures of perceived support, support resources, and distress.

Revised Kaplan Scale (RKS: Turner et al., 1983). Like the SS-A, the RKS was explicitly based on Cobb's (1976) conceptualization of support, and consists of nine sets of three vignettes describing individuals with varying levels of support. The measure has shown excellent internal consistency and good convergent validity with measures of support appraisals, support resources, and distress.

Support Network Satisfaction (SNS: Vaux, 1982). In completing the Social Support Network Resources (SS-R) measure described below, respondents provide satisfaction ratings for each of the five modes of support assessed.

Social Support Resource Measures

Social Support Resources (SS-R: Vaux, 1982). This instrument was designed to tap many aspects of the individual's social support network. Respondents are asked to list up to 10 individuals who provide them with each of five kinds of support: emotional support, practical assistance, financial assistance, socializing, and advice/guidance. (Thus a total of 50 persons may be identified.) Each kind of support is described and specific questions asked to facilitate recall. Total network size (excluding repetitions) and five support-mode-specific size scores are computed. The respondent also completes a series of items for each different person mentioned, designed to assess the characteristics (e.g., closeness, complexity, and balance) and nature (e.g.,

husband, friend) of the relationship. Mean or proportion scores (across network members) are computed for each of these variables.

Social Support Behaviors (SS-B: Vaux, 1982). The SS-B is an inventory of 45 specific supportive behaviors, tapping the five modes of support noted above. Subjects indicate how likely family members and friends (separately) would be to engage in each specific behavior in time of need. Excellent internal consistency has been reported for the total scales and subscales. Evidence for the adequacy of the measure in tapping five modes of support is provided by studies involving classification of items by judges, differential sensitivity of subscales in a role adoption procedure, differentiated receipt of support in the face of different life problems, and confirmatory factor analysis (Vaux, Riedel, & Stewart, in press).

Psychological Distress/Well-Being Measures

Center for Epidemiological Studies Depression Scale (CESD: Radloff, 1977). The CESD is a 20-item measure of depressed mood used widely in community studies. It has shown excellent reliability and good construct validity.

Affect Balance Scale (ABS: Bradburn, 1969). This is a 10-item scale tapping recent negative and positive feeling states; it yields separate positive and negative affect scores. Extensive evidence of reliability and validity exists.

UCLA Revised Loneliness Scale (Shaul, 1981). This 20-item measure is a revised version of a scale developed by Russell, Peplau, and Ferguson (1979). Good internal consistency reliability and adequate criterion validity have been reported (Shaul, 1981).

SCL-90 (Derogatis, Lipman, & Covi, 1973). Designed initially to assess a range of psychological disorders, this instrument has been used to assess distress or "demoralization" in community samples (Dohrenwend et al., 1980). It has shown excellent reliability and good construct validity.

Life Satisfaction, Optimism, and Happiness. Two items based on Cantil and Roll's (1971) "Ladder of Life" were used. Respondents answered the questions "Overall, how would you describe your life as it is now?" and "Overall, how do you expect your life to be in 5 years?" on a 5-point scale ranging from "worst possible life" to "best possible life". A third item asked respondents to rate (on a 5-point scale) how "happy" they have felt recently.

Personality Measures

Personality Research Form (PRF: Jackson, 1974). Several social-related personality characteristics were selected from the PRF: affiliation, autonomy, nurturance, succorance, and aggression. The short (10-item) form

of these scales was used. The PRF scales have excellent reliability and validity.

Network Orientation Scale (NOS: Vaux, Burda, & Stewart, in press). The 20-item NOS was designed to tap a negative orientation towards utilizing support resources (cf. Tolsdorf, 1976). It has shown excellent internal consistency, good stability, and adequate convergent validity with respect to measures of social support and personality.

RESULTS

Internal Consistency and Subscale Intercorrelation

The SS-A total scale and family and friend subscales showed good internal consistency across samples. Mean Cronbach alpha coefficients for the three scales were .90, .80, and .84 for the five student samples, and .90, .81, and .84 for the five community samples. Of the 30 coefficients, only 3 fell below .80. The family and friend subscales were moderately associated for both student samples (mean $r = .51$) and community samples (mean $r = .52$), supporting their utility as separate subscales.

The presentation of results on the validity of the SS-A is organized into four sections. These deal with the association of the SS-A with other measures of support appraisal, network resources and supportive behavior, distress and well-being, and personality, respectively. Findings are presented across samples within these categories.

SS-A and Other Support Appraisal Measures

Four college and four community samples provided data on a range of support appraisal measures. Correlations between these measures and SS-A scores are presented in Table III. Samples S3, S4, and C4 indicated satisfaction with the support provided by each of five support networks. Significant moderate positive correlations were found between SS-A scores and satisfaction with network support, quite consistently across samples (Table III, Panel A). These moderate correlations were evident for each SS-A score (i.e., total, family and friend), and for satisfaction with support provided by each of five networks (emotional, socializing, practical, financial, and advice/guidance).

Samples S1 and C3 completed the PSS. Correlations between family and friend scores for the PSS and SS-A show a pattern indicating moderate convergent and divergent validity. In particular, correlations between respective pairs of family or friend scales are considerably higher than those between family and friend scales, especially for the community sample. These

Table III. Correlation of SS-A Scales with Support Appraisal Measures

Social support measures	Social Support Appraisals							
	Total Family Friends	S3 (n = 98)	S4 (n = 100)	C4 (n = 140)				
A. Network satisfaction^d								
Emotional	.42 ^c	.44 ^c	.13	.11	.12	.30 ^c	.20 ^b	.28 ^c
Socializing	.30 ^b	.32 ^c	.36 ^c	.20 ^a	.20 ^a	.18 ^a	.34 ^c	.20 ^b
Practical	.43 ^c	.42 ^c	.58 ^c	.62 ^c	.61 ^c	.60 ^c	.21 ^b	.14
Financial	.39 ^c	.45 ^c	.38 ^c	.20 ^a	.20 ^a	.20 ^a	.22 ^b	.24 ^b
Advice/guidance	.28 ^b	.34 ^c	.35 ^c	.23 ^b	.22 ^b	.22 ^a	.22 ^b	.09
B. Perceived support (PSS)^e								
Family	.44 ^c	.56 ^c	.21 ^c	.79 ^c	.82 ^c	.48 ^c		
Friends	.46 ^c	.28 ^c	.53 ^c	.52 ^c	.32 ^a	.72 ^c		
C. Family environment (FRI)^f								
Cohesion	.31 ^c	.29 ^c	.32 ^c	.23 ^b	.34 ^c	—		
Expressiveness	—	.12	—	—	.14	—		
Conflict	—	.21 ^b	—	.18 ^a	—	.12	—	.16 ^a

^ap < .05.

^bp < .01.

^cp < .001.

^dVaux (1982).

^eProcidano & Heller (1983).

^fHolahan & Moos (1982).

relationships were particularly strong for Sample C3 ($r = .82$ and $.72$). The relationship between the SS-A total scale and the Prociano and Heller (1983) scales is significant and moderate (Table III, Panel B).

Samples C1 and C2 were composed of fathers and teen-agers from the same families. As might be expected, some overlap in perceptions of family support ($r = .27$, $p < .01$) but not friend support ($r = .07$, ns) was found, providing some evidence of convergent and divergent validity for the family and friend scales.

The Family Relations Index was completed by mothers in these families. Both fathers' and adolescents' SS-A scales showed significant small to moderate relationships with family cohesion and significant small negative correlations with family conflict (see Table III, Panel C). SS-A scores did not correlate significantly with family expressiveness, though family SS-A shows the stronger correlation ($p < .10$). Somewhat unexpectedly, fathers' (but not adolescents') SS-A friend scores also showed relationships with family cohesion and conflict, perhaps reflecting the fact that family members may also view one another as friends.

Sample C5 provided data on three support appraisal measures: SSQ, RKP, and PSR (see Table IV). SS-A scales showed significant small to

Table IV. Correlation of SS-A Scales with Support Appraisal Measures

Social support measures	SS-A: C5 ($n = 52$)		
	Total	Family	Friends
Social Support Questionnaire (SSQ) ^d			
SSQ: Number	.28 ^a	.24	.33 ^b
SSQ: Satisfaction	.47 ^b	.38 ^b	.36 ^b
Provision of Social Relations (PSR) ^e			
Attachment	.57 ^c	.24 ^a	.65 ^c
Integration	.49 ^c	.31 ^b	.55 ^c
Worth	.63 ^c	.54 ^c	.47 ^c
Alliance	.69 ^c	.65 ^c	.50 ^c
Guidance	.52 ^c	.56 ^c	.35 ^b
Family	.67 ^c	.73 ^c	.40 ^b
Friends	.61 ^c	.32 ^b	.69 ^c
Total	.73 ^c	.54 ^c	.67 ^c
Revised Kaplan Scale (RKS) ^e			
Love	.52 ^c	.33 ^b	.52 ^c
Respect	.49 ^c	.43 ^c	.40 ^b
Network	.59 ^c	.35 ^b	.54 ^c
Total	.66 ^c	.45 ^c	.61 ^c

^a $p < .05$.

^b $p < .01$.

^c $p < .001$.

^dSarason, Levine, Basham, & Sarason (1983).

^eTurner, Frankel, & Levin (1983).

moderate associations with SSQ satisfaction and smaller associations, as expected, with SSQ number (of people providing support). Significant moderate relationships were found between SS-A scales and the PSR subscales tapping five social "provisions." Moderate associations were found with the PSR total scale, and a strong pattern of convergent and divergent relationships was found with the PSR Family and Friend subscales. (The association between respective family and friend scales was $r = .73$ and $.69$, respectively.) Finally, the SS-A scales showed moderate associations with the RKP Love, Esteem, and Network scales (between the total scales, $r = .66$).

Discriminant Validity. Finally, subgroups of Sample S1 were identified on the basis of (a) reported satisfaction with the number of current friends, (b) satisfaction with the quality of current friendships, and (c) feeling "different" from friends. SS-A scores were not significantly different for those relatively satisfied or dissatisfied with the number of current friends. However, compared to those less satisfied with the quality of their friendships, those more satisfied reported greater feelings of support in toto, $t(110) = -4.78$, $p < .0001$, and especially from friends, $t(110) = -7.33$, $p < .0001$. Similarly, those reporting feeling different from friends also reported significantly lower feelings of support in toto, $t(112) = -2.79$, $p < .01$, and especially from friends, $t(112) = -3.15$, $p < .005$. These findings are consistent with the qualitative nature of the support measure, and the relative independence of the family and friend subscales.

SS-A and Support Resources

Three college (S3, S4, and S5) and one community (C4) sample provided data on support network resources. Correlations of these measures with SS-A scores are presented in Table V. Support appraisals show significant small relationships with support resources variables including the size of networks, relationship characteristics such as closeness and complexity, and network composition measures such as the proportion of close friends. These associations are fairly consistent across samples except for S5, the black student sample.

Two college samples (S4 and S5) provided data on supportive behaviors. As presented in Table VI, SS-A scores showed significant small to moderate relationships with many of the supportive behavior measures. The pattern of relationships is suggestive of appropriate convergence and divergence of SS-A and SS-B measures (e.g., higher friend-friend than friend-family associations). This is most evident for Sample S4 with the SS-B friend measures, all of which correlate significantly with SS-A friends, and none of which correlate significantly with SS-A family.

Table V. Correlation of SS-A Scales with Social Support Resource Variables

Support network resources ^d	Social Support Appraisals											
	S3 (n = 98)			S4 (n = 100)			S5 (n = 76)			C4 (n = 140)		
	Total	Family	Friends	Total	Family	Friends	Total	Family	Friends	Total	Family	Friends
Network size												
Total	-.14	-.18 ^a	-.16	.22 ^b	.24 ^b	.23 ^b	-.16 ^a	.18 ^b	-.19 ^b	.12	.11	.11
Emotional	.42 ^c	.23 ^a	.22 ^a	.30 ^c	.31 ^c	.31 ^c	.22 ^b	.17 ^a	.20 ^b	.27 ^c	.22 ^c	.31 ^c
Socializing	-.28 ^b	.18 ^a	.22 ^a	.31 ^c	.32 ^c	.34 ^c	.16	.19 ^b	.13	.12	.16 ^b	.21 ^b
Practical	-.14	.26 ^b	.23 ^a	-.28 ^b	.11	.10	.11	.11	.11	.12	.11	.11
assistance	-.14	.18 ^a	.19 ^a	.28 ^b	.29 ^b	.30 ^c	-.11	.13	-.11	.12	.11	.11
Financial	-.14	-.18 ^a	.19 ^a	.28 ^b	.29 ^b	.30 ^c	-.11	.13	-.11	.12	.11	.11
Advice/guidance	-.14	-.18 ^a	.19 ^a	.28 ^b	.29 ^b	.30 ^c	-.11	.13	-.11	.12	.11	.11
Relationship characteristics												
Frequency	-.14	-.18 ^a	.19 ^a	.28 ^b	.29 ^b	.30 ^c	-.11	.13	-.11	.12	.11	.11
Closeness	.42 ^c	.23 ^a	.22 ^a	.30 ^c	.31 ^c	.31 ^c	.22 ^b	.17 ^a	.20 ^b	.27 ^c	.22 ^c	.31 ^c
Balance	-.28 ^b	.18 ^a	.22 ^a	.31 ^c	.32 ^c	.34 ^c	.16	.19 ^b	.13	.12	.16 ^b	.21 ^b
Complexity	.28 ^b	.29 ^b	.17 ^a	.25 ^b	.23 ^b	.25 ^b	-.16 ^a	.11	.11	.16 ^a	.11	.31 ^c
Density	-.14	-.18 ^a	.19 ^a	.28 ^b	.29 ^b	.30 ^c	-.11	.13	-.11	.12	.11	.11
Network composition												
Spouse	.18 ^a	.12	-.14	-.24 ^a	.29 ^b	.39 ^c	-.14	.34 ^c	-.21 ^a	-.18 ^a	.14 ^a	.13
Immediate family	-.14	.12	-.14	-.24 ^a	.29 ^b	.39 ^c	-.14	.34 ^c	-.21 ^a	-.18 ^a	.14 ^a	.13
Extended family	-.14	.12	-.14	-.24 ^a	.29 ^b	.39 ^c	-.14	.34 ^c	-.21 ^a	-.18 ^a	.14 ^a	.13
Close friend	.36 ^c	.29 ^b	.39 ^c	-.14	.34 ^c	-.21 ^a	-.18 ^a	.14 ^a	.13	.10	.10	.10
Acquaintance	-.14	.12	-.14	-.24 ^a	.29 ^b	.39 ^c	-.14	.34 ^c	-.21 ^a	-.18 ^a	.14 ^a	.13
Other	-.38 ^c	-.34 ^c	-.21 ^a	-.18 ^a	.14 ^a	.13	.10	.10	.10	.10	.10	.10

^ap < .05.
^bp < .01.
^cp < .001.
^dVaux (1982).

Table VI. Correlation of SS-A Scales with Social Support Behaviors

Social support behaviors ^d	SS-A: S4 (n = 100)			SS-A: S5 (n = 76)		
	Total	Family	Friends	Total	Family	Friends
Family						
Total	.58 ^c	.52 ^c	.47 ^c	.35 ^b	.33 ^b	.27 ^a
Emotional	.54 ^c	.57 ^c	.37 ^c	.43 ^c	.44 ^c	.25 ^a
Social	.52 ^c	.49 ^c	.44 ^c	.17	.14	.18
Practical assistance	.44 ^c	.29 ^c	.42 ^c	.39 ^c	.34 ^b	.37 ^c
Financial assistance	.37 ^c	.33 ^c	.33 ^c	.35 ^b	.34 ^b	.30 ^b
Advice/guidance	.53 ^c	.48 ^c	.39 ^c	.36 ^b	.32 ^b	.28 ^b
Friends						
Total	.46 ^c	.12	.65 ^c	.53 ^c	.29 ^b	.58 ^c
Emotional	.35 ^c	.06	.55 ^c	.53 ^c	.35 ^b	.59 ^c
Social	.46 ^c	.16	.57 ^c	.27 ^b	.10	.48 ^c
Practical assistance	.39 ^c	.11	.51 ^c	.45 ^c	.20 ^a	.56 ^c
Financial assistance	.20 ^a	.04	.40 ^c	.57 ^c	.36 ^b	.56 ^c
Advice/guidance	.35 ^c	.06	.53 ^c	.50 ^c	.32 ^b	.54 ^c

^ap < .05.

^bp < .01.

^cp < .001.

^dVaux (1982).

SS-A and Distress/Well-Being

Five college and four community samples provided data on a range of distress and well-being measures. Correlations between these measures and the SS-A are presented in Table VII. The CESD (depressed mood) and SS-A showed significant moderate inverse correlations across four community samples and the mature women student sample and smaller associations across three student samples. Further, these relationships were typically found for the SS-A total scale and family and friend subscales.

Smaller and less consistent relationships were observed with positive and negative affect. SS-A total, family, and friend scales each showed significant small correlations with positive affect in four of five samples, the adolescent sample (C2) being the exception. The SS-A scales also showed significant small inverse relationships with negative affect in three of the five samples (C1, C2, and C3).

The SS-A and loneliness showed significant small to moderate inverse correlations in a student sample (S1) and a strong inverse relationship in a community sample (C3). The SS-A scales also showed significant small to moderate inverse correlations with the SCL-90 in Sample S2. Among Samples S2, S4, and S5, small positive correlations (significant in 7 of 9 tests) were evident between SS-A and current life satisfaction. Only the total SS-A score was significantly related to optimism (expected life satisfaction 5 years in the future) among Sample S2. Finally, significant small positive correlations were found between SS-A and happiness for Samples S4 and S5.

Table VII. Correlation of SS-A Scale with Psychological Distress and Well-Being

Psychological distress measures	SS-A															
	C1 (n = 113)		C2 (n = 113)		C3 (n = 44)		C4 (n = 140)		S1 (n = 154)							
	Total	Friends	Total	Friends	Total	Friends	Total	Friends	Total	Friends						
Depressed mood (CESD) ^d	-.40 ^c	-.33 ^c	-.39 ^c	-.43 ^c	-.42 ^c	-.22 ^b	-.55 ^c	-.66 ^c	-.19	-.14	-.17 ^a	-.04	-.27 ^b	-.16 ^a	-.21 ^b	
Positive affect (ABS) ^e	.32 ^c	.24 ^b	.29 ^c	.02	.17 ^a	.05	.34 ^a	.35 ^b	.30 ^a	.21 ^b	.00	.20 ^b	.37 ^c	.20 ^b	.36 ^c	
Negative affect(ABS) ^e	-.21 ^b	-.20 ^b	-.16 ^a	-.30 ^c	-.22 ^b	-.23 ^b	-.42 ^a	-.43 ^b	-.51 ^c	.00	-.13	.08	.03	.03	-.07	
Loneliness (UCLAY)							-.71 ^c	-.72 ^c	-.68 ^c				-.40 ^c	-.27 ^c	-.32 ^c	
	S2 (n = 87)		S3 (n = 98)		S4 (n = 100)		S5 (n = 76)									
Depressed mood (CESD) ^d																
SCL-90 ^g																
Life satisfaction ^h	-.35 ^h	-.23 ^a	-.42 ^c				-.40 ^c	-.41 ^c	-.49 ^c	-.16	-.18	-.14				
Optimism ^h	.19 ^a	.14	.19 ^a				.43 ^c	.31 ^c	.33 ^c	.33 ^b	.21 ^a	.17				
Happiness ^h	.22 ^a	.17	.17				.39 ^c	.31 ^c	.27 ^b	.36 ^b	.21 ^a	.27 ^b				

^ap < .05.

^bp < .01.

^cp < .001.

^dRadloff (1975).

^eBradburn (1969).

^fShaul (1981).

^gDerogatis, Lipman, & Covi (1973).

^hCantril & Roll (1971).

SS-A and Personality

Sample S2 completed five scales from the PRF: affiliation, autonomy, nurturance, succorance, and aggression. SS-A scales (total, family, and friend) showed significant small positive correlations with both nurturance ($r = .22, .18, .18$) and succorance ($r = .24, .21, .11$) and significant small negative correlations with autonomy ($r = -.25, -.22, -.19$). Only SS-A friends showed a significant (small) positive correlation with affiliation ($r = .19$), as might be expected. No relationship with aggression was expected, though SS-A total showed a significant small inverse association ($r = -.20$).

Finally, significant small to moderate negative correlations were found between SS-A and negative network orientation, for both Sample S4 ($r = -.37, -.16, -.50$) and S5 ($r = -.57, -.49, -.52$). Individuals with a negative orientation to utilizing support resources tend to feel less supported.

DISCUSSION

Overall the data provide extensive evidence of the reliability and validity of the SS-A. The internal consistency of the scale and subscales was consistently very good across samples. Moderate correlations between subscales suggested the utility of separate family and friend scales to supplement the total scale score. The extensive data on the convergence of the SS-A with other support appraisal measures and its relationship to theoretically linked antecedent and consequent variables yield a picture that provides a good deal of evidence for the scale's validity.

Support Appraisals

Convergent validity with a variety of support appraisal measures was consistently quite good, and predicted patterns of convergent and divergent validity were found across appraisals of support from different sources. Although the associations were typically not strong, it should be recalled that the various measures had quite varied theoretical bases despite their common focus on subjective appraisals. Associations were lowest with measures focusing on satisfaction, though even here a moderate association ($r = .47$) was found between SS-A (total) and Sarason et al.'s (1983) satisfaction measure.

Associations with scales sharing common theoretical underpinnings (e.g., RKP and PSR) and/or a common focus with respect to source (e.g., family or friends) were typically larger than those with a more distinct basis (e.g., SSQ). For example, associations of approximately .70 were evident

between SS-A family or friend subscales and corresponding PSR and PSS subscales. In short, highlighting associations between the SS-A and those scales or subscales where convergence would be most expected, the relationships are typically in the moderate to strong range (.50–.80). These relationships are comparable to those reported by Turner et al. (1983) between the PSR and RKS ($r = .62$ for the total scales in two studies). Validity data reported on other support appraisal measures (e.g., the PPS and FRI) have not included comparisons with other support appraisal measures.

Support Resources and Behavior

Strong relationships were not expected between the SS-A and network variables. Though many significant associations were observed, these were typically weak (less than .30). However, these relationships are at least as strong as those reported for other support appraisal measures. For instance, the PSS friend and family scales were largely unrelated to tangible and intangible support network variables (1 of 7 associations was significant for each scale; Procidano & Heller, 1983); a moderate correlation (.34) was reported between the SSQ average number and average satisfaction scores (Sarason et al., 1983); finally, Turner et al. (1983) report moderate associations with a range of composite social resource indices for the RKS (.19–.49) and PSR (.24–.48). Finally, associations between the SS-A and reports of supportive behavior were moderate in strength particularly with respect to supportive behavior from friends. To our knowledge, no data have been published on the association of other support appraisal measures with supportive behavior.

Psychological Distress

The SS-A showed predicted associations with a broad range of distress and well-being measures, though these varied in strength across samples. Associations with depressed mood (CESD) for instance were moderate for the community and mature women student samples ($-.40$ or more) but weak (around $-.20$) for the student samples. Further, appraised family support shows a stronger association with depressed mood among the community samples than does friend support. Similarly, the association with loneliness was strong for a community sample and weak to moderate for a student sample. Small to moderate associations were found with the SCL-90. Finally, small to moderate associations were found for positive and negative affect, life satisfaction, and happiness.

These findings are comparable to those for other support appraisal measures, which have rarely shown stronger associations with distress and well-being. For instance, small to moderate associations were reported between SSQ satisfaction and depression, anxiety, and hostility (highest $r = -.22$ for males, and $-.43$ for females, both for depression) (Sarason et al., 1983); Turner et al. (1983) report similar associations with anxiety, depression, and anger for the RKS (highest $r = -.44$ in two studies); Procidano and Heller (1983) report small to moderate associations between the depression, psychasthenia, and schizophrenia scales (from the short form of the MMPI) and the PSS family (highest $r = -.43$) and friend (highest $r = -.23$) scales. In short, the associations between the SS-A and a range of distress indices are comparable to or stronger than those reported for other support appraisal measures.

Perhaps most important, the majority of observed associations between the SS-A and support appraisals, support resources, and psychological distress showed fairly consistent patterns across measures, types of subject (adolescent, college student, and parent), and mode of data collection (group administration, mail survey, and telephone interview). In short, our findings regarding the construct validity of the SS-A appear to have good external validity with respect to persons, method of data collection, and operationalization of validating constructs (cf. Cook & Campbell, 1979).

As noted earlier, our strategy in assessing validity was modest, relying largely on concurrent validity with primarily self- and some other-report measures and observing patterns of relative convergence and divergence across measures. Predicted relationships did emerge between measures completed by different family members (comparable in strength to those reported for siblings by Procidano & Heller, 1983). Future efforts to validate the SS-A should include performance measures and focus on predictive, discriminant, and criterion validity. The lack of these kinds of validity data is a shortcoming that the SS-A shares with most other measures of social support. To our knowledge, validity data involving observations or performance measures are available only on the PSS (Procidano & Heller, 1983) and the network size (number) scale of the SSQ (Sarason et al., 1983). In the former study, subjects with low PSS friend scores talked less with a friend or sibling, and those with low PSS family scores talked less to a sibling, in anticipation of a stressful experience. Also, PSS friend (but not family) scores were associated with trait anxiety, but neither predicted state anxiety in anticipation of the stressor (Procidano & Heller, 1983).

Clearly, it is important that further research be conducted to demonstrate the validity of measures of support appraisals (and other facets of social support) with respect to observational and performance criteria. However, a note of caution is warranted. The construct of support appraisals

is much more like "satisfaction with life" than "fear of spiders": It is probably diffuse in source, manifestation, and effect. Consequently, the difficulty of finding situationally and behaviorally specific criteria for validation purposes should not be underestimated.

The history of social support theory and research is one of conceptual and empirical differentiation. Support appraisals are no exception. Once we put the spotlight on this aspect of support, it too becomes multifaceted: satisfaction (Barrera, 1981), helpfulness (McFarlane et al., 1981), attachment, integration, reassurance of worth, reliable alliance, and guidance (Weiss, 1974), and love, respect, and involvement (Cobb, 1976). Do these distinct appraisals buffer different stressors equally well and in the same way? Do they promote well-being in a similar manner? Research is currently underway to examine the extent to which the SS-A might be used to assess love, respect, and involvement somewhat independently, allowing more elaborate theorizing and hypothesis testing.

CONCLUSION

In spite of the popularity of social support research, there persists a strong need for more explicit conceptualization and focused measurement. Taking the perspective that social support is a meta-construct comprising support resources, interactions and appraisals, measures of each of these facets was developed. The present paper focused on the SS-A, a measure of subjective appraisals of support. This measure has a number of strengths that set it apart from several other published support appraisal measures. First, it was based explicitly on a sound theoretical position (Cobb, 1976; cf. Kaplan et al., 1977; Thoits, 1982; Turner et al., 1983): subjective appraisals of information that one is loved, respected, and involved. As a result, it is more distinct conceptually from support resources and behaviors than are other measures of support appraisals. Second, the present findings indicate that the SS-A shows predicted relationships with a range of measures of support appraisals, support resources, personality characteristics, and psychological distress; these relationships are as strong or stronger than those reported for other support appraisal measures. Third, unlike many support appraisal measures, it allows independent assessment of support from family and friends. Fourth, the SS-A has now been used with a variety of populations, including adolescents, traditional and nontraditional students, community adults, and senior citizens. Fifth, the brevity and format of the measure permits presentation in various formats, including mail survey, personal interview, and phone interview. In all these contexts, the instrument has worked well in that respondents appear interested and motivated, and

missing data are rare. In conclusion, the SS-A appears to be a versatile and useful brief measure of one facet of social support: subjective appraisals that one is loved, respected, and involved.

REFERENCES

- Barrerra, M., Jr. (1981). Social support of pregnant adolescents: Assessment issues. In B. H. Gottlieb (Ed.), *Social networks and social support*. Beverly Hills: Sage.
- Barrerra, M., Jr., & Ainlay, S. (1983). The structure of social support: A conceptual and empirical analysis. *Journal of Community Psychology*, *11*, 133-143.
- Bradburn, N. (1969). *The structure of psychological well-being*. Chicago: University of Chicago Press.
- Cantril, A. H., & Roll, C. W. (1971). *Hopes and fears of the American people*. New York: Universe Books.
- Caplan, G. (1974). *Support systems and community mental health*. New York: Behavioral Publications.
- Cobb, S. (1976). Social support as a moderator of life stress. *Psychosomatic Medicine*, *38*, 300-314.
- Cook, T. D., & Campbell, D. T. (1979). *Quasi-experimentation: Design and analysis issues for field settings*. Chicago: Rand McNally.
- Dean, A., & Lin, N. (1977). The stress-buffering role of social support: Problems and prospects for systematic investigation. *Journal of Nervous and Mental Diseases*, *165*, 403-417.
- Derogatis, L. R., Lipman, R. S., & Covi, L. (1973). SCL-90: An outpatient psychiatric rating scale-preliminary report. *Psychopharmacology Bulletin*, *9*, 13-28.
- Dohrenwend, B. P., Dohrenwend, B. S., Gould, M. S., Link, B., Neugebauer, R., & Wunsch-Hitzig, R. (1980). *Mental illness in the United States: Epidemiological estimates*. New York: Praeger.
- Gottlieb, B. (Ed.). (1981). *Social networks and social support*. Beverly Hills: Sage.
- Heller, K., & Swindle R. W. (1983). Social networks, perceived social support and coping with stress. In R. D. Felner, L. A. Jason, J. Moritsugu, & S. S. Farber (Eds.), *Preventive psychology: Theory, research and practice in community intervention*. New York: Pergamon Press.
- Henderson, S., Duncan-Jones, P., Byrne, R. G., & Scott, R. (1980). Measuring social relationships: The interview schedule for social interaction. *Psychological Medicine*, *10*, 723-734.
- Hirsch, B. J. (1980). Natural support systems and coping with major life changes. *American Journal of Community Psychology*, *8*, 159-172.
- Holahan, C. J., & Moos, R. H. (1982). Social support and adjustment: Predictive benefits of social climate indices. *American Journal of Community Psychology*, *10*, 403-415.
- Jackson, D. N. (1973). *Personality research form manual*. New York: Research Psychologists Press.
- Kaplan, A. (1976). *Social support: Construct and its measurement*. Unpublished bachelor of art thesis, Brown University.
- Kaplan, B. H., Cassel, J. C., & Gore, S. (1977). Social support and health. *Medical Care*, *15*, (Suppl.), 47-58.
- McFarlane, A. H., Neale, K. A., Norman, G. R., Roy, R. G., & Streiner, D. L. (1981). Methodological issues in developing a scale to measure social support. *Schizophrenia Bulletin*, *7*, 90-100.
- Procidano, M., & Heller, K. (1979). *Toward the assessment of perceived social support*. Paper presented at the meetings of the American Psychological Association, New York.
- Procidano, M., & Heller, K. (1983). Measures of perceived social support from friends and from family: Three validation studies. *American Journal of Community Psychology*, *11*, 1-24.

- Radloff, L. (1977). The CES-D Scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement, 1*, 385-401.
- Russell, D., Peplau, S. A., & Ferguson, M. L. (1979). Development of a measure of loneliness. *Journal of Personality Assessment, 42*, 290-294.
- Sarason, I. G., Levine, H. M., Basham, R. B., & Sarason, B. R. (1983). Assessing social support: The Social Support Questionnaire. *Journal of Personality and Social Psychology, 44*, 127-139.
- Schaefer, C., Coyne, J. C., & Lazarus, R. (1981). The health-related functions of social support. *Journal of Behavioral Medicine, 4*, 381-406.
- Shaul, S. L. (1981). *Loneliness: A comparison of two group counseling strategies with adults*. Unpublished doctoral dissertation, University of Washington.
- Shumaker, S. A., & Brownell, A. (1984). Toward a theory of social support: Closing conceptual gaps. *Journal of Social Issues, 40*, 11-36.
- Stokes, J. P. (1983). Predicting satisfaction with social support from social network structure. *American Journal of Community Psychology, 11*, 141-152.
- Stokes, J. P., & Wilson, D. G. (1984). The Inventory of Socially Supportive Behaviors: Dimensionality, prediction, and gender differences. *American Journal of Community Psychology, 12*, 53-70.
- Tardy, C. H. (1985). Social support measurement. *American Journal of Community Psychology, 13*, 187-202.
- Thoits, P. A. (1982). Conceptual, methodological, and theoretical problems in studying social support as a buffer against life stress. *Journal of Health and Social Behavior, 23*, 145-159.
- Tolsdorf, C. (1976). Social networks, support, and coping: An exploratory study. *Family Process, 15*, 407-417.
- Turner, R. J., Frankel, B. G., & Levin, D. (1983). Social support: Conceptualization, measurement, and implications for mental health. In J. R. Greenley (Ed.), *Research in community mental health*. Greenwich, CT: JAI Press.
- Vaux, A. (1982). *Measures of three levels of social support: Resources, behaviors, and feelings*. Unpublished manuscript, Southern Illinois University.
- Vaux, A., Burda, P., Jr., & Stewart, D. (in press). Orientation towards utilizing support resources. *Journal of Community Psychology*.
- Vaux, A., & Harison, D. (1985). Support network characteristics associated with support satisfaction and perceived support. *American Journal of Community Psychology, 13*, 245-268.
- Vaux, A., Riedel, S., & Stewart, D. (in press). Modes of social support: The Social Support Behavior (SS-B) Scale. *American Journal of Community Psychology*.
- Vaux, A., & Wood, J. (1985). *Social support resources, behavior, and appraisals: A path analysis*. Unpublished manuscript.
- Weiss, R. S. (1974). The provisions of social relations. In Z. Rubin (Ed.), *Doing unto others*. Englewood Cliffs, NJ: Prentice-Hall.
- Wood, Y. R. (1985). Social support and social networks: Nature and measurement. *Advances in Psychological Assessment, 6*, 312-353.

APPENDIX

Below are a list of statements about your relationships with family and friends. Please indicate how much you agree or disagree with each statement as being true.

	(circle one number in each row)			
	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE
My friends respect me	1	2	3	4
My family cares for me very much	1	2	3	4
I am not important to others	1	2	3	4
My family holds me in high esteem	1	2	3	4
I am well liked	1	2	3	4
I can rely on my friends	1	2	3	4
I am really admired by my family	1	2	3	4
I am respected by other people	1	2	3	4
I am loved dearly by my family	1	2	3	4
My friends don't care about my welfare	1	2	3	4
Members of my family rely on me	1	2	3	4
I am held in high esteem	1	2	3	4
I can't rely on my family for support	1	2	3	4
People admire me	1	2	3	4
I feel a strong bond with my friends	1	2	3	4
My friends look out for me	1	2	3	4
I feel valued by other people	1	2	3	4
My family really respects me	1	2	3	4
My friends and I are really important to each other	1	2	3	4
I feel like I belong	1	2	3	4
If I died tomorrow, very few people would miss me	1	2	3	4
I don't feel close to members of my family	1	2	3	4
My friends and I have done a lot for one another	1	2	3	4