

The Inventory of Socially Supportive Behaviors: Dimensionality, Prediction, and Gender Differences¹

Joseph P. Stokes² and Diane Grimard Wilson

University of Illinois at Chicago

The nature of social support as measured by the Inventory of Socially Supportive Behaviors (ISSB) was explored in the study. The results of a principal components analysis suggest that it is appropriate to use the ISSB as a global measure of a unidimensional construct. The components that emerged were interpretable, however, and are consistent with the types of social support that have been cited in the literature. Males and females do not differ in overall social support as measured by the ISSB, but females report receiving more emotional support than males do. Social network variables predicted ISSB scores for males but not for females. The network variable that predicted social support most strongly was the number of people a respondent felt close to and could confide in or turn to for help in an emergency. The meanings and implications of these findings are discussed.

A large body of research in the last decade has attempted to explicate the processes of natural helping. Because this research recognizes that importance of the social context in which an individual is embedded, the study of social support has received particular attention. Empirical studies on social support have appeared in the literatures of psychology, sociology, public

¹The authors gratefully acknowledge the Office of Social Science Research of the University of Illinois at Chicago for providing support for keypunching the data in this study. While working on this project, Diane Grimard Wilson was supported by National Institute of Mental Health Training Grant U.S. Public Health Service 2-T01-MH 13087-08.

²All correspondence should be sent to Joseph Stokes, Department of Psychology, P. O. Box 4348, University of Illinois at Chicago, Chicago Illinois 60680.

health, and medicine. Their findings suggest an association between social support and the prevention of psychological disorders, especially in times of stress (Henderson, 1977; Hirsch, 1979, 1980; Holahan & Moos, 1981; Wilcox, 1981; and many others).

Although most researchers share common assumptions about what social support is, their definitions vary a great deal. For example, Cobb's (1976) definition restricts social support to information that one is loved, esteemed, and part of a mutual network of obligations. Caplan (1976) provides a broader definition that includes any input provided directly by another to help the target person with emotional issues, to provide physical assistance or material aid, or to impart cognitive guidance. This definition includes objective, tangible forms of support as well as more intangible support such as esteem-building and feelings of closeness.

Clearly related to conceptions of social support are methods of operationalizing the support in empirical investigations. Early measures of social support were typically crude indices of social embeddedness (e.g., marital status) or of the availability of a significant other during a crisis. Only recently have the measurement issues in research on social support been addressed seriously. Barrera, Sandler, and Ramsay (1981) have taken a big step toward more satisfactory measurement of social support with their development of the Inventory of Socially Supportive Behaviors (ISSB).

The ISSB contains 40 specific behaviors that are considered examples of social support as defined by Caplan (1976). Respondents complete the ISSB by indicating the frequency with which they have been the recipient of each of these behaviors in the past month. Barrera et al. reported good reliability and some evidence of validity for the ISSB. As evidence of validity the authors report that scores on the ISSB correlated with the size of the subjects' social networks and that reported supportive behaviors from families were related to scores on the Cohesion Subscale of the Family Environment Scale (Moos, Insel, & Humphrey, 1974). The ISSB is a promising research tool; the research reported here is designed to increase understanding of its nature and psychometric properties.

DIMENSIONALITY OF THE ISSB

One aim of the current research is to explore the dimensionality of the ISSB through factor analytic procedures. Barrera et al.'s use of coefficient alpha to measure the reliability of the ISSB implies an assumption of unidimensionality, and the high values they report for this measure of internal consistency (.93 and .94) suggest this assumption is reasonable. Several researchers, however, have categorized social support into different types

(e.g., Hirsch, 1980; Mitchell, 1982; Wilcox, 1981; Burda, Vaux, & Schill, Note 1). Types of support that appear frequently in the literature include emotional support (feelings of closeness, intimate interactions, esteem building, comfort, encouragement), the provision of material goods or tangible assistance, cognitive guidance (advice, information, feedback), and socializing (having a companion for dining or attending movies, sharing interests). Mitchell and Trickett (1980) review various categorizations of social support and conclude that most can be summarized in terms of four functions that are very similar to those just described.

These different types of social support are measured by the ISSB. There are numerous items that assess emotional support (e.g., "Told you he/she feels close to you," "Expressed interest and concern in your well-being"), material/tangible assistance (e.g., "Gave you over \$25," "Watched after your possessions while you were away"), and cognitive guidance (e.g., "Gave you feedback on how you were doing without saying it was good or bad," "Told you what to expect in a situation that was about to happen"). Socializing is less well represented in the ISSB as only two items seem to relate to this type of support ("Talked with you about some interest of yours" and "Did some activity together to help you get your mind off things"). Knowing more about the dimensions of social support that are measured by the ISSB may increase its usefulness in subsequent research or may provide the groundwork for other researchers to develop measures of more specific aspects of social support.

PREDICTING SUPPORTIVE BEHAVIORS

A second purpose of this research is to predict social support, as measured by the ISSB, from social network variables. According to Wellman (1981), a social network is a set of nodes (in this case people) connected by a set of ties (relations of some sort). Network analysis (Mitchell & Trickett, 1980) allows for a quantitative description of a social network. Research by Stokes (1983) suggests four variables that are important descriptors of social networks.

The first of these is the size of the network. Previous research suggests that the size of one's network is related to its ability to provide social support and satisfy one's needs. Oritt, Behrman, and Paul (Note 2) found that network size was correlated with the amount of available social support but not with satisfaction with that support. Stokes (1983) found a curvilinear relation of network size and one's satisfaction with the network, such that satisfaction was greatest for middle values of network size. Barrera et al. (1981) obtained significant correlations of both available and actual social

network size with scores on the ISSB. Thus, on an empirical as well as an intuitive basis, one can predict that the size of a network will be related to its ability to provide supportive behaviors.

A second dimension of social networks that seems important is the number of people in the network one feels close to, i.e., the number one can confide in or turn to for help in an emergency. Several studies (Brown, Bhrolchain, & Harris, 1975; Conner, Powers, & Bultena, 1979; Lowenthal & Haven, 1968; Miller & Ingham, 1976) indicate that having at least one close confiding relationship is an important feature of an effective supportive social network. Stokes (1983) found that the number of these close relations in a social network was a good predictor of satisfaction with that network. It seems reasonable to predict that as the number of close relations in a network increases, the number of supportive behaviors as measured by the ISSB will also increase.

The other two network variables whose relation to the ISSB are considered in this study are the percentage of relatives in the network and the density of the network. There is no empirical basis for predicting the relation of percentage of relatives and scores on the ISSB. It is not clear whether a social network dominated by relatives would be more or less likely to provide the kinds of supportive behaviors measured by the ISSB. Hence, no specific predictions are made about the relation of percentage of relatives and ISSB scores.

It would seem that dense networks, where members are highly interconnected, would be cohesive, strong, and effective support systems. There are data, however, that suggest lower density networks may be more helpful than higher density ones. Hirsch (1979) found that denser networks furnished greater quantities of support, but that the recipients of support from the denser networks were less satisfied with the support they received. In another study Hirsch (1980) also found that lower density networks were associated with more satisfying support among young widows and mature women returning to school. Similarly, Wilcox's (1981) data suggest that less dense networks may facilitate healthy adjustment following a divorce. Stokes (1983) found no relation between density satisfaction with social networks. He argues that the results of Hirsch and Wilcox regarding density may be peculiar to the types of transitional crises they studied. The relation of density and ISSB scores is explored with no a priori predictions.

Thus, the model in this research maintains that ISSB scores will be related to network size and the number of close relations in the network, and that these relations may not be linear. Following Barrera et al. (1981), finding these relations might be considered validating evidence for the ISSB. This interpretation, however, involves what may be a premature assumption about the relation of these network variables to supportive

behaviors. Perhaps it makes more sense to assume the validity of the ISSB based on the content of the items and to consider this research as testing hypotheses about the relation of the network variables to socially supportive behaviors as measured by the ISSB.

GENDER DIFFERENCES IN SOCIAL SUPPORT

The third goal of this research is to explore gender differences in social support as measured by the ISSB. The differential distribution of supportive resources between males and females has not been addressed very often in research. Most of the research on social support has used only male (e.g., Croog, Lipson, & Levine, 1972; Tolsdorf, 1976) or female (e.g., Barrera, 1981; Hirsch, 1980) subjects, and those studies with both males and females have typically not reported data separately by gender (e.g., Andrews, Tennant, Hewson, & Vaillant, 1978; Wilcox, 1981; Oritt et al., Note 2). There are, however, conceptual reasons to suggest that gender may be an important variable.

Burda et al. (Note 1) point out that socialization for males emphasizes autonomy, self-reliance, and independence—traits that may hinder both the development and use of social support resources. The stereotypic male may be reluctant to acknowledge difficulties or to ask others for help or guidance in solving problems. Other writers (Fausteau, 1974; Goldberg, 1976; Lewis, 1978) suggest that men have difficulty with intimate relationships and that their friendships tend to be shallow and unsatisfying. According to this reasoning, men might find emotional support less available than women would.

The stereotypic woman, on the other hand, is warm, expressive, and comfortable with intimacy. She is also more prone to acknowledge personal difficulties and to seek help from others. If there is any validity to these stereotypes, it might be reflected in the socially supportive behaviors men and women receive.

What little empirical evidence there is suggests women may receive more supportive behaviors than men do. Hirsch (1979) found that female college students spent more time interacting with others in their social networks and more time sharing feelings and personal concerns than did males during an exam period. Burda et al. (Note 1) report results suggesting that females are superior to males on several different measure of support. Their females had larger social networks composed of more similar others and perceived themselves as having more support than did the males. With

regard to the type of support, females reported receiving more emotional support, but there were no gender differences on the other types of social support that were measured (cognitive guidance, material aid, and socializing). Caldwell and Bloom (1982) found that immediately after a divorce, women were more active socially than men. Women also had more contact with and received more support from their parents than did men. Data from Burke and Weir (1978) show that adolescent females receive more social support from peers than do adolescent males.

These conceptual and empirical considerations suggest that females will score higher than males on the ISSB, especially on items related to emotional support. Females may also have larger networks and more network members to whom they feel close.

METHOD

Subjects

Subjects were 97 male and 82 female undergraduate students in an introductory psychology course whose participation partially fulfilled a course requirement. Most of the students were freshman (58%) or sophomores (23%) who had never married (92%) and who lived at home with their families of origin (83%). Subjects met with the experimenter in groups of about 20 and completed the instruments described below as well as other scales that are not considered in this article.

Instruments

Inventory of Socially Supportive Behaviors. The ISSB (Barrera et al., 1981) asks respondents to report the frequency with which they receive 40 specific supportive actions on a scale from 1 (not at all) to 5 (about every day). Barrera et al. report good reliability and some evidence of validity for the ISSB. In this paper the ISSB score refers to the average rating per item and has a possible range of 1 to 5.

Social Network List. This measure, modeled after Hirsch (1980), asks subjects to list in a matrix "the initials of up to 20 people who are significant in your life and with whom you have contact at least once a month." Subjects then put an X in those boxes of the matrix that connected people who were significant in each others' lives and who had contact with each other at least once a month. Subjects also indicated which persons in their

lists were relatives and whom they could “confide in or turn to for help in an emergency.”

The following variables which reflect the structure of a subject’s social network were obtained from the Social Network List: (a) Size, number of people listed; (b) Confide, number of people the subject feels close to, i.e., the number he or she could confide in or turn to for help in an emergency; (c) % Relatives, percentage of network members who are relatives; (d) Density, proportion of the total possible number of relations which actually exist among members of the respondent’s network, excluding the respondent (that is, the number of Xs in the matrix divided by the total number of Xs possible).

RESULTS

Dimensionality of the ISSB

A principal components analysis of the 40 items of the ISSB yielded 10 components with eigenvalues greater than 1. The only large differences between eigenvalues for the components occurred between Components 1 (eigenvalue = 10.73) and 2 (eigenvalue = 2.76). This result suggests that the ISSB can be considered unidimensional, a conclusion that is supported by the large values for coefficient alpha that were reported by Barrera et al. (1981) (.93 and .94). Coefficient alpha for the current sample was also quite high (.925).

Nevertheless, because many writers have classified social support into several types, we decided to examine the nature of the principal components. The decision of how many components to retain for rotation was rather arbitrary, but it was clear that retaining all 10 would be undesirable: 7 of the 10 components had eigenvalues less than 1.75; 4 had eigenvalues less than 1.25. Because several researchers have divided social support into four types (Mitchell & Trickett, 1980), we retained four components and rotated them obliquely (Promax; Hendrickson & White, 1964), so as not to enforce statistical independence on the types of support, which logically might be intercorrelated. In fact, using an orthogonal rotation (Varimax) does not change the interpretation of the components. Items which had loadings of .40 or greater on each component are listed in Table I. The intercorrelations of the four rotated components are presented in Table II.

The four components described by the items in Table I are interpretable and might be described as follows: (1) Emotional support, or

Table I. Promax Rotated Principal Components From the ISSB

ISSB item	Loading
<i>Component 1</i>	
31 Told you she/he feels close to you	.82
18 Comforted you by showing you some physical affection	.76
10 Told you that you are OK just the way you are	.73
29 Let you know that she/he will be around if you need assistance	.71
30 Expressed interest and concern in your well-being	.61
24 Listened to you talk about your private feelings	.58
2 Was right there with you (physically) in a stressful situation	.45
14 Expressed esteem or respect for a competency or personal quality of yours	.44
<i>Component 2</i>	
4 Watched after your possessions when you were away	.66
38 Provided you with a place to stay	.61
34 Loaned you over \$25	.61
17 Gave you over \$25	.46
39 Pitched in to help you do something that needed to get done	.45
1 Looked after a family member when you were away	.45
3 Provided you with a place where you could get away	.42
<i>Component 3</i>	
28 Told you how he/she felt in a situation that was similar to yours	.80
5 Told you what she/he did in a situation that was similar to yours	.79
36 Gave you feedback on how you were doing without	.57
27 Said things that made your situation clearer and easier to understand	.56
7 Talked with you about some interest of yours	.49
6 Did some activity together to help you get your mind off things	.44
33 Told you what to expect in a situation that was about to happen	.41
37 Joked and kidded to try to cheer you up	.41
16 Suggested some action that you should take	.40
15 Gave you some information on how to do something	.40
<i>Component 4</i>	
21 Checked back to see if you followed the advice you were given	.65
13 Made it clear what was expected of you	.55
22 Gave you under \$25	.53
32 Tole you who you should see for assistance	.51
17 Gave you over \$25	.51
12 Assisted you in setting a goal for yourself	.48
23 Helped you understand why you didn't do something well	.45
19 Gave you some information to help you understand a situation you were in	.43

more precisely acceptance and intimate interaction; (2) Tangible assistance and material aid; (3) Cognitive information, feedback, and clarification; (4) Guidance with a parental or directive quality. Coefficient alphas computed for each component as defined by the items in Table I were .85, .71, .83, and .77, respectively.

The variance accounted for by each of the four rotated components is as follows: Emotional support, 18.46%; Tangible assistance, 12.30%; Cognitive information, 18.65% Directive guidance, 14.29%. Together the four components account for 43.2% of the variance in the original correlation matrix. (The sum of the variance accounted for by the four separate components is greater than the total variance they account for as a group because the components are correlated with one another. To the degree that any two components are correlated, the variance accounted for by the first is also accounted for by the second.)

One point about the ISSB items warrants mention. Barrera et al. (1981) expressed concern about the usefulness of seven infrequently endorsed items that had correlations of less than .30 with the ISSB total score. In the data reported here each of the seven items was endorsed more frequently than in Barrera et al.'s sample, and all 40 items had correlations greater than .30 with the total ISSB score.

Predicting ISSB Scores From Network Variables

A regression analysis was performed to predict the total score on the ISSB from the size of the network (Size) and the number of people in the network whom the respondent felt close to and could confide in or turn to for help in an emergency (Confide). The model using these two variables was predictive of ISSB scores, although not strongly so, $F(2, 178) = 6.54, p$

Table II. Intercorrelations of Obliquely Rotated Components From the ISSB

Component	Component			
	1	2	3	4
1	—			
2	.21	—		
3	.38	.26	—	
4	.30	.25	.38	—

$< .002$; $R^2 = .069$. Of the two predictor variables, only Confide was significantly related to the dependent variable. Pearson product-moment correlations of the network variables and ISSB scores are shown in Table III. Neither Density nor % Relatives was related to ISSB scores at a statistically significant level.

Because we had predicted a curvilinear relation between Size and ISSB scores and between Confide and ISSB scores, the regression analysis reported above was repeated adding the squares of Size and Confide as predictor variables. The squares of the variables carry the quadratic component of the relation of the predictor and criterion variables (Cohen & Cohen, 1975). The addition of these two variables increased the R^2 to .093, an increase which is not statistically significant, $F(2, 175) = 2.29$.

Gender Differences

Table IV presents the means and standard deviations for each variable for both the whole sample and for males and females separately. The genders did not differ in total scores on the ISSB; they did differ in scores on the first component (Emotional support), $t(177) = -3.378$, $p < .001$, with females reporting more support. Males and females also differed significantly on the percentage of network members who are relatives, $t(177) = -2.281$, $p < .05$, the percentage being higher for females. The intercorrelations of the network variables and ISSB scores are reported separately for males and females in Table III.

When the regression analyses were performed separately for males and females, interesting differences emerged. For females, Size and Confide showed no linear relation to ISSB scores, $F(2, 79) = .54$, $R^2 = .014$, nor did

Table III. Intercorrelations of Social Network Variables and ISSB Scores

Variable	Whole sample ($N = 179$)	Males ($n = 97$)	Females ($n = 82$)
Size	.13	.16	.11
Confide	.25 ^b	.37 ^b	.10
% relatives	-.10	-.19	-.01
Density	.12	.23 ^a	-.01

^a $p < .05$.

^b $p < .001$.

Table IV. Means and Standards Deviations for Whole Sample and for Males and Females

Variable	Whole sample (<i>N</i> = 179)		Males (<i>n</i> = 97)		Females (<i>n</i> = 82)	
	<i>X</i>	<i>SD</i>	<i>X</i>	<i>SD</i>	<i>X</i>	<i>SD</i>
Size	10.87	3.80	11.15	4.13	10.54	3.36
Confide	7.41	3.46	7.62	3.83	7.16	2.97
% relatives	38.31	19.53	35.28	19.59	41.89	18.95
Density	.29	.16	.29	.16	.28	.16
Satisfaction	15.46	3.47	15.04	3.87	15.95	2.86
ISSB	2.52	.54	2.48	.55	2.57	.54

the addition of the quadratic components lead to statistically significant prediction, $F(4, 77) = .59$, $R^2 = .030$. For males, however, the model using the variables Size and Confide was predictive of ISSB scores, $F(2, 94) = 8.57$, $p < .001$, $R^2 = .154$. As in the analysis using the entire sample, only Confide was related to the ISSB scores. Adding the squares of Confide and Size to the prediction of ISSB scores for males did increase the R^2 to .242. This increase is statistically significant, $F(2, 91) = 5.27$, $p < .01$. For both Size and Confide there is a curvilinear relation for males with ISSB scores. In each case the relationship appears to be a monotonic, negatively accelerated one that becomes asymptotic. (The relation with Size may turn downward at higher values of Size, making its shape more like an inverted U; there just are not enough subjects to make this distinction with confidence.) The point at which the curve levels off (that is, the point beyond which increases in the predictor variable are not associated with increases in ISSB scores) is about 10 for Confide and about 12 for Size.

The pattern obtained when predicting ISSB scores from Size and Confide—moderate but statistically significant prediction for the whole

Table V. Correlations of the Network Structure Variable Confide with Principal Component Scores of the ISSB

Component	Whole sample (<i>N</i> = 179)	Males (<i>n</i> = 97)	Females (<i>n</i> = 82)
1 (Emotional support)	.191 ^a	.274 ^a	.132
2 (Tangible assistance)	.039	.119	-.091
3 (Cognitive information)	.273 ^c	.365 ^c	.151
4 (Guidance)	.172 ^a	.267 ^b	.042

^a $p < .05$.

^b $p < .01$.

^c $p < .001$.

sample, better prediction for males alone, and no prediction for females—holds when the first (Emotional support), third (Cognitive information), or fourth (Guidance) principal component score is used as the criterion variable. As in the analysis using the total scores on the ISSB, Confide is the only network structure variable that is correlated with scores on the three components. Table V reports the correlations of Confide with the four principal components for males, females, and the whole sample. The second principal component of the ISSB scores cannot be predicted from network structure variables for the whole sample or for males or for females.

The percentage of relatives in the network is related significantly and negatively to Component 3 and only Component 3 for the whole sample and for males ($r = -.246$, $N = 179$, $p < .001$ for the whole sample; $r = -.309$, $n = 97$, $p < .01$ for males). The percentage of relatives significantly increases the prediction of Component 3 even if the variable Confide is entered first into the prediction equation.

Density is not significantly related to ISSB scores for the whole sample or for females (see Table III). Density and ISSB scores are correlated for males ($r = .23$, $p < .05$). Density and Confide are also correlated for males ($r = .25$; $p < .05$). If Confide and Density are used to predict ISSB scores for males in a hierarchical regression analysis with Confide entered first, the contribution of Density is not statistically significant (increment in $R^2 = .022$). If Density is entered first, the contribution of Confide produces a substantial and statistically significant increase in R^2 (.1025). Thus, the correlation of Density and ISSB scores appears to be attributable to their mutual correlation with a third variable, Confide.

The principal components analysis for the ISSB items reported above was repeated for each gender separately, despite the fact that the small number of subjects relative to the number of variables suggests that the results of these analyses may not be reliable. For the males, the first four principal components accounted for 46.9% of the original variance, with each of the four rotated components accounting for the following percentages: Emotional support, 16.84%; Tangible assistance, 13.00%; Cognitive information, 18.16%; Directive guidance, 19.21%. (As noted earlier, the sum of the variance accounted for by the four components is greater than the variance they account for as a group because the four components are correlated.) The components for males were very similar to the components for the whole sample, although their order was changed. For females, the four components accounted for about the same percentage of variance (46.2), but their structure was somewhat different. A component for emotional support appeared and accounted for 16.77% of the variance. A second component (18.11% of the variance) included the items related to cognitive information and guidance. Two components

reflected tangible assistance and material aid; one emphasized financial help (10.43%) and the other tangible services (15.51%).

DISCUSSION

The principal components analysis of the ISSB suggests that using the total score as a global measure of social support is appropriate. The first principal component was considerably larger than any others. Retaining and rotating four components, however, yields a solution that coincides well with the types of social support frequently cited in the literature. The first two components measure emotional support and tangible/material support, respectively. The third and fourth components each measure a type of cognitive support that includes information, advice, and/or feedback. The two items with the highest loading on Component 3 focus on information from someone in a situation that was similar to the respondent's situation. This component emphasizes helpful information and nonevaluative feedback, especially that which would come from a peer. The cognitive support represented in Component 4 has a more directive or parental quality. It is likely that this component may be specific to the current sample, which is composed mainly of young adults who still live with their families of origin and for whom parental directive guidance is more salient and prevalent than it is in the general population. In a more general sample, probably three components—emotional, tangible, and cognitive support—would appear. The limitations of this sample of college students living with their families of origin should be considered in interpreting the results of all parts of this study.

The one type of social support that is commonly cited in the literature but is not measured adequately by the ISSB is socializing—having companionship for dining, attending entertainment, sharing common interests, etc. Researchers with interests in this type of social support should consider supplementing the ISSB with an instrument that measures socializing directly.

The principal component scores used in the data analysis for this study were computed by weighting each of the 40 items of the ISSB by its loading on the component being computed. A simpler scoring procedure would be to sum the responses to the items that load on each factor as presented in Table I. These two scoring procedures are roughly equivalent; the correlations between component scores for the two procedures are .976, .922, .954, and .935 for the four components, respectively. Thus, other researchers may add the responses to items in Table I to produce satisfactory component scores.

The hypothesis that socially supportive behaviors could be predicted from the network variables Size (number of network members) and Confide (number of network members the respondent could confide in or turn to for help in an emergency) was supported. Of the network structure variables used in this study, only Confide was linearly related to ISSB scores, and then only for males. Size and Confid had curvilinear relations with ISSB scores for males, such that increases in the size of the network or the number of people one feels close to in the network are associated with the number of supportive behaviors received up to a point. Increases in Size and Confide after that point are not correlated with increased support.

The unexpected finding of gender differences in the ability to predict ISSB scores from network structure variables is intriguing. This finding may reflect societal values regarding sex-role socialization for males and females. The socialization of males emphasizes independence and deemphasizes expression of feelings. Men, therefore, must have a rather close relationship with another person before they talk about feelings or receive certain types of support. Males might have a number of buddies with whom they socialize, but interchanges that provide other types of social support are restricted to fairly close relationships for men. Thus, the network variable Confide predicts social support received by men.

The socialization of females, on the other hand, typically places less emphasis on independence and more on verbal expressiveness. For females expressions of support and caring are given and received more easily than for males. Females talk more easily about feelings and personal concerns and may do so in relationships that are not particularly close. Therefore, the number of close relationships females report is not associated with social support as measured by the ISSB.

It seems that the types of behaviors measured by the ISSB are available to females regardless of the nature of their social networks. Perhaps this finding reflects our culture's general tendency to provide support, especially emotional support, to females. The data reported here as well as other data (Burda et al., Note 1; Hirsch, 1979) show that females receive more emotional support than males.

The one gender difference in the network structure variables was a higher percentage of relatives in the networks of females. One might speculate that this difference accounts for females receiving more emotional support than males. If relatives are more likely than nonrelatives to provide emotional support, the gender difference in emotional support would be explained by the difference in the percentage of relatives. In fact the percentage of relatives is not related to emotional support (Component 1) either for the whole sample ($r = -0.23$) or for males ($r = -.135$) or for females ($r = .011$).

Despite the fact that females receive more emotional support than males, the impact or perceived support of a particular behavior (e.g., being

told someone feels very close to you) might be greater for males because such expressions of caring are less common and, in some situations, relatively proscribed. Further, to the degree that our culture is differentially supportive of males and females, females may attribute social support they receive to their gender, not to their personal characteristics. A woman might be more likely than a man to perceive verbal expressions of emotional support as ingenuine or even patronizing. This reasoning underscores a limitation in the “count-the-behaviors” approach to social support that the ISSB adapts and suggests the utility of including global measures of perceived support in addition to the ISSB. The perception of support and the attribution for the cause of the support behaviors are potentially important variables that are not tapped in the reported frequency of supportive behaviors.

The importance of closeness in a relationship as a prerequisite for social support for males is not limited to emotional support. Although males and females do not differ in the amount of overall support they receive, the amount of support received is correlated for males but not for females with the number of close relationships reported. It seems that the types of behaviors measured by the ISSB are available to females regardless of the nature of their social networks. At least for the female college students used in this study, the amount of emotional support, cognitive information, and guidance they report receiving is unrelated to characteristics of their networks. Perhaps this finding reflects our culture’s tendency to provide emotional and cognitive support to females. For males, however, support—even information, advice, and guidance—is available only from those to whom the man feels somewhat close.

In summary, this research supports the usefulness of the ISSB as a measure of social support while at the same suggesting some of its limitations. The ISSB appears to be a psychometrically sound measure of socially supportive behaviors. It can be used appropriately as a global measure of support, although measures of more specific types of support are also available from the ISSB. Two limitations of the ISSB suggested by this study are that it does not measure socializing aspects of social support adequately and that it contains no measure of perceived subjective support. Although having relatively objective measures of supportive behaviors received is useful, researchers must consider the individual subject’s perception and interpretation of that support.

REFERENCE NOTES

1. Burda, P. C., Vaux, A., & Schill, T. S. *Social support resources: variations across sex and sex-role*. Paper presented at the meeting of the Eco-Community Psychology Interest Group, Chicago, October 1981.

2. Oritt, E. J., Behrman, J., & Paul, S. C. *Social support: Conditions related to satisfaction with received support*. Paper presented at the annual convention of the American Psychological Association, Washington, D.C., August 1982.

REFERENCES

- Andrews, G., Tennant, C., Hewson, D. M., & Vaillant, G. E. Life event stress, social support, coping style, and risk of psychological impairment. *Journal of Nervous and Mental Disease*, 1978, 166, 307-315.
- Barrera, M. Social support in the adjustment of pregnant adolescents: Assessment issues. In B. H. Gottlieb (Ed.), *Social networks and social support*. Beverly Hills: Sage, 1981.
- Barrera, M., Sandler, I. N., & Ramsay, T. B. Preliminary development of a scale of social support: Studies on college students. *American Journal of Community Psychology*, 1981, 9, 435-447.
- Brown, G., Bhrolchain, M., & Harris, T. Social class and psychiatric disturbance among women in an urban population. *Sociology*, 1975, 9, 225-254.
- Burke, R. J., & Weir, T. Sex differences in adolescent life stress, social support, and well-being. *Journal of Psychology*, 1978, 98, 277-288.
- Caldwell, R. A., & Bloom, B. L. Social support: Its structure and impact on marital disruption. *American Journal of Community Psychology*, 1982, 10, 647-667.
- Caplan, G. The family as support system. In G. Caplan & M. Killilea (Eds.), *Support systems and mutual help: Multidisciplinary explorations*. New York: Grune & Stratton, 1976.
- Cobb, S. Social support as a moderator of life stress. *Psychosomatic Medicine*, 1976, 38, 300-314.
- Cohen, J., & Cohen, P. *Applied multiple regression/correlation analysis for the behavioral sciences*. Hillsdale, N.J.: Erlbaum, 1975.
- Conner, K. A., Powers, E. A., & Bultena, G. L. Social interaction and life satisfaction: An empirical assessment of late-life patterns. *Journal of Gerontology*, 1979, 34, 116-121.
- Croog, S., Lipson, A., & Levine, S. Helping patterns in severe illness: The roles of kin network, non-family resources and institutions. *Journal of Marriage and the Family*, 1972, 34, 32-41.
- Faustau, M. F. *The male machine*. New York: McGraw-Hill, 1974.
- Goldberg, H. *The hazards of being male: Surviving the myth of masculine privilege*. New York: Nash, 1976.
- Henderson, S. The social network, support, and neurosis. *British Journal of Psychiatry*, 1977, 131, 185-191.
- Hendrickson, A. E., & White, P. O. Promax: A quick method for rotation to oblique simple structure. *British Journal of Statistical Psychology*, 1964, 17, 65-70.
- Hirsch, B. J. Psychological dimensions of social networks: A multimethod analysis. *American Journal of Community Psychology*, 1979, 7, 263-277.
- Hirsch, B. J. Natural support systems and coping with major life changes. *American Journal of Community Psychology*, 1980, 8, 159-172.
- Holahan, C. J., & Moos, R. N. Social support and psychological distress: A longitudinal analysis. *Journal of Abnormal Psychology*, 1981, 90, 365-370.
- Lewis, R. A. Emotional intimacy among men. *Journal of Social Issues*, 1978, 34, 108-121.
- Lowenthal, M. F., & Haven, C. Interaction and adaptation: Intimacy as a critical variable. *American Sociological Review*, 1968, 33, 20-30.
- Miller, P. M., & Ingham, J. G. Friends, confidants, and symptoms. *Social Psychiatry*, 1976, 11, 51-58.
- Mitchell, R. E. Social networks and psychiatric clients: The personal and environmental context. *American Journal of Community Psychology*, 1982, 10, 387-401.
- Mitchell, R. E., & Trickett, E. J. Social networks as mediators of social support: An analysis of the effects and determinants of social networks. *Community Mental Health Journal* 1980, 16, 27-44.

- Moos, R. H., Insel, P. M., & Humphrey, B. *Family, work, and group environment scales: Combined preliminary manual*. Palo Alto, Calif.: Consulting Psychologists Press, 1974.
- Stokes, J. P. Predicting satisfaction with social support from social network structure. *American Journal of Community Psychology*, 1983, *11*, 141-152.
- Tolsdorf, C. Social networks, support, and coping: An exploratory study. *Family Process*, 1976, *15*, 407-417.
- Wellman, B. Applying network analysis to the study of support. In B. H. Gottlieb (Ed.), *Social networks and social support*. Beverly Hill: Sage, 1981.
- Wilcox, B. L. Social support, life stress, and psychological adjustment: A test of the buffering hypothesis. *American Journal of Community Psychology*, 1981, *9*, 371-386.