

Development of a Brief Social Support Questionnaire

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The Social Support Questionnaire (SSQ) is a psychometrically sound instrument for measuring two divergent aspects of support. The utility of this promising new measure is constrained, however, by its length. The present research details how a brief version, less than half as long as the full 54 item SSQ, was developed with a student group. The Brief SSQ was then evaluated with a further student sample and a large group of unemployed people. The data from both groups showed that the two subscales of the brief SSQ were both highly reliable. In addition, some evidence for the validity of the measure and the norms for both groups are presented. The Brief SSQ offers a short version of the SSQ that possesses comparable psychometric characteristics, but is considerably more palatable to subjects less motivated to fill out questionnaires than first year university students.

The role of social support in preventing or reducing the negative consequences of stressful life events has attracted considerable research attention in recent years (Leavy, 1983). Researchers have studied social support among such diverse subject groups as unemployed men (Gore, 1978), pregnant adolescents (Barrera, 1981), new mothers (Cutrona, 1984), Vietnam veterans with Post Traumatic Stress Disorder (Keane, Scott, Chavoya, Lamparski, & Fairbank, 1985), depressed psychiatric patients (Billings & Moos, 1985), and women quitting cigarette smoking (Coppotelli & Orleans, 1985). In a review of the research on social support and psychological disorder, Leavy (1983) concluded that regardless of the research methods used, the finding that poorer social support is associated with increased psychological distress is consistently reported. Moreover, where the mentally retarded and their families are concerned, one editor has recently described social support as "The issue for the 1980's" (Rowitz, 1985).

One criticism of most of the studies comprising the first wave of social support research, has been that they have typically employed ad hoc measures of social support

with questionable reliability and unknown validity (Leavy, 1983). This situation has been remedied somewhat since Leavy's review, by a flurry of promising, new, psychometrically acceptable measures (see Tardy, 1985, for a critical discussion of seven of these instruments).

One of the most promising of the recently developed support measures is the Social Support Questionnaire (SSQ; Sarason, Levine, Basham, & Sarason, 1983). The SSQ provides scores on two important dimensions of social support, namely network size and perceived social support. In a series of studies with university student subjects, the authors of the SSQ have provided an impressive body of data to suggest that this is a reliable and valid new measure for research purposes.

A problem sometimes arises, however, when an instrument such as the SSQ, which has been developed and evaluated solely on college students, is administered to less privileged and less motivated subjects. The present research originated from a study conducted by the senior author which focussed on social support among unemployed New Zealanders. Preliminary investigations showed the full SSQ to be quite impractical for applied research of this nature within the community. The measure is simply too long and the nature of the 27 items too repetitive for use with non-student samples.

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In addition, it would have been impractical to ask subjects to complete the full SSQ in combination with other questionnaires. To this end, the present study reports an attempt to develop and evaluate a brief version of the SSQ. The study comprised two stages. Part 1 was concerned with the identification of the items for the brief version of the SSQ. In Part 2 the reliabilities of the two subscales of the Brief SSQ were evaluated on two disparate groups. The correlations between the Brief SSQ, a separate measure of social support, and a measure of stress-related symptoms were also examined to furnish some evidence for the convergent and discriminative validity of the shortened version of the SSQ.

Method

Part 1 Item Identification

Subjects. The subjects were 106 second year psychology students (60 female, 46 male) who completed the full 27 item SSQ as part of the practical component of their course.

Analysis. When completing the SSQ the respondent was instructed to supply the initials of supporters for each of 27 problems or subjects, (e.g. "Who can you really rely on when you need help?"). The mean number of supporters listed yielded the Network Size or SSQ-N score. In addition, subjects were asked to note in brackets their relationship with that person (e.g., brother) and then to rate their level of satisfaction with the total support for that situation along a six-point continuum from *very satisfied* to *very dissatisfied*. The latter, when averaged provided the Satisfaction or SSQ-S score.

To arrive at a brief version of the SSQ, the item-total score correlations were first calculated for both the Network Size (SSQ-N) and Satisfaction (SSQ-S) subscales, and then the mean correlation for each pair of related (Network, N, and Satisfaction, S) items was computed. The three item pairs with the lowest mean item-total correlations were eliminated from the analysis and the new item-total correlations were calculated. This procedure was repeated until a brief version of the SSQ comprising 12 N and 12 S items was arrived at. As this version was less than half the length of the original, and retained high reliabilities of above .90 for both subscales, it was deemed an appropriate stage at which to terminate the iterative procedure. The N and S subscales of the brief SSQ and coefficient alphas of .92 and .93. The best twelve items from the full SSQ were 15, 17, 21, 23, 25, 29, 33, 37, 39, 45, 49, and 51. Having developed a highly reliable version

of the SSQ which is less than half the length of the original, it remained to evaluate this brief measure with other groups. Certain minor alterations in wording from the full SSQ were necessary in the interests of readability before the measure was administered to the unemployed subjects in Part 2.

Part 2 Evaluation

Subjects. Two groups of subjects completed the Brief SSQ in the second stage of this study. Both groups were part of an ongoing research project investigating social support, in particular its multi-dimensional nature, and the relationship between social support and stress in the community.

Group 1 consisted of 300 unemployed people living in Wellington, New Zealand, at the time of the study. Of these, 237 were contacted directly at the Labour Department's reporting office and the remainder were contacted through agencies providing training or support for the unemployed. Members of the unemployed group received the sum of five dollars for taking part in this project. The socio-economic status (SES) of the subjects was recorded using the revised Elley and Irving scale (Johnston, 1983). This is a 6-point scale with 1 reflecting the highest and 6 the lowest socio-economic background, based upon the economic and educational status of an individual's occupation. Since neither university students nor unemployed people are accounted for by this scale, the subjects' SES was estimated according to their father's or mother's occupation. Based on this categorization, 60% of the unemployed subjects came from the four lowest socio-economic categories. Unemployed subjects classified their ethnicity as European (58%), Maori (30%), Non-Maori Polynesian (7%), or Other (5%). Eighty percent of the unemployed subjects had completed four, or less than four, years of secondary school education. Subjects' ages ranged from 14 to 59, with 73% of unemployed subjects being under 25. Of the 300 subjects, 41% were female and 59% male.

Group 2 consisted of 400 first year psychology students who completed the Brief SSQ as part of the practical component of their course. Of this student group, 69% came from the two highest categories of the SES scale. Their ages ranged from 17 to 48, with 86% of the sample being under 25. Of the 400 student subjects 56% were female and 44% male. Ethnic group was not recorded for this group as the data was originally collected independently as part of a larger research endeavour. All data obtained from both groups were collected anonymously and on a voluntary basis.

Instruments. In addition to providing basic demographic data and completing the SSQ, all

subjects also completed the Inventory of Socially Supportive Behaviours (Barrera & Ainlay, 1983) and a twenty item version of the General Health Questionnaire (Siegert, McCormick, Walkey, & Taylor, 1987). These provided a conceptually distinct and separate measure of social support (McCormick, Siegert, & Walkey, 1987) and a measure of symptomatology against which to validate the brief SSQ.

Results

Responses for the unemployed and student groups for the three questionnaires administered were analysed using the Statistical Analysis Systems package (Helwig & Council, 1979). Split-half and coefficient alpha reliabilities for both the N and S subscales were calculated for both groups of subjects. For the unemployed subjects the corrected split-half reliability coefficients were .96 and .92 for the N and S subscales respectively. For the student group the corresponding figures were .94 and .93. Coefficient alpha ranged from .91 for the S scale for both groups, to .93 and .94 for the N scale of the student and unemployed groups respectively.

Item-total correlations were calculated for both subscales for both subject groups. For the student group, the N scale Item-total correlation ranged from .70 to .82, with a mean of .76. For the S scale they ranged from .63 to .80 with a mean of .71. For the unemployed group, the N scale Item-total correlations

ranged from .73 to .82 with a mean of .79. For the S scale they ranged from .65 to .78, with a mean of .73.

The correlations of the N and S scale of the brief SSQ with the other social support measure (ISSB) and the stress measure (GHQ) are presented in Table 1. Both the N and S scales reveal low to moderate positive correlations ($p < 0.0001$) with the ISSB for both subject groups. The S scale shows a modest negative correlation with the GHQ ($p < 0.0001$) for both groups. The N scale shows a very low, negative, albeit significant ($p < 0.05$) correlation with GHQ score for the student group and no significant relationship with GHQ score for the unemployed subjects.

Finally, the decile ranks for each subscale for both groups are presented in Table 2. The scoring procedure for the Brief SSQ was the same as for the full length SSQ with one necessary modification, namely that total raw scores on both N and S subscales were divided by 12 rather than by 27 to achieve final scores. For the unemployed group, the N score ranged from a minimum of 0 to a maximum of 9, with a median score of 2.17. For the student group the N score ranged from a minimum of 0.26 to a maximum of 9 with a median of 3.42. For the S scale the unemployed group's scores ranged from 0.40 to 6.0 with a median of 5.08, and the student group's scores ranged from 0.27 to 6.0 with a median score of 5.08.

Table 1: Correlations of Brief SSQ-N and SSQ-S Subscales with ISSB and GHQ for Students and Unemployed.

	Unemployed (N = 300)		Students (N = 400)	
	SSQ-N	SSQ-S	SSQ-N	SSQ-S
GHQ	-.09	-.26**	-.12*	-.26**
ISSB	.34**	.33**	.41**	.35**
SSQ-N	-	.36**	-	.46**

* $p < .05$ ** $p < .0001$

Table 2: *Decile Norms for Students and Unemployed*

Decile	Network (SSQ-N)		Satisfaction (SSQ-S)	
	Unemployed	Students	Unemployed	Students
1	0.75	1.58	3.50	4.00
2	1.00	2.17	4.33	4.42
3	1.25	2.67	4.67	4.75
4	1.75	3.00	4.92	4.92
5	2.17	3.42	5.08	5.08
6	2.75	3.92	5.33	5.25
7	3.25	4.58	5.50	5.42
8	3.83	5.42	5.57	5.58
9	4.92	6.33	5.92	5.83
10	9.00	9.00	6.00	6.00

Discussion

The present study involved the development of a brief version of the Sarason, et al. (1983) Social Support Questionnaire. The full version of the SSQ is impressive both in terms of its psychometric properties and for the body of evidence the authors provide in support of validity. At the same time, its development has relied entirely upon college student data, and in practice it is an over long questionnaire, with numerous redundant items. Although the present study, for pragmatic reasons, also relied upon student data to develop a briefer version, it has attempted to go a step further by then rigorously evaluating that brief version with a disadvantaged group from within the wider community.

The Brief SSQ described in the present study was developed using a traditional item analysis method with a sample of university students. It was subsequently evaluated on a second sample of 400 students and a sample of 300 unemployed people. The results of the evaluation were gratifying. Both the N and S subscales displayed high internal reliability

and homogeneity as measured by split-half reliability, coefficient alpha, and item-total correlations for both groups. Moreover these coefficients compare favourably with those reported for the full 54 item SSQ as described by Sarason et al. (1983) in their original development of the SSQ. It should be emphasized that the Brief SSQ was evaluated on two separate and disparate groups. One a relatively homogeneous group of largely white, educated, university students who represent the high socio-economic sectors of society. The other sample, an ethnically diverse group of unemployed persons, with comparatively little education and representing a broad span of socio-economic backgrounds albeit heavily skewed towards the lower socio-economic end of the spectrum.

The correlations with other tests were all in the predicted direction and provide some initial validation for the Brief SSQ. Correlations with the ISSB were low-moderate and positive. The ISSB is a measure of the number of supportive behaviours that others have done for, or with, the respondent. It does not provide an index of network size or

satisfaction with that support, as does the SSQ. These results suggest that the N and S subscales of the Brief SSQ are measuring different, albeit related dimensions of the same construct, from the ISSB (i.e. social support). Correlations with a brief symptom measure (GHQ) were as would be predicted negative, if somewhat modest. Moreover, they support a growing body of research suggesting that individual perception of social support is likely to be a better predictor of well-being than structural measures (e.g. Leavy, 1983). In addition to the above data on the reliability and validity of the Brief SSQ, normative data were provided for two large samples of quite disparate groups.

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