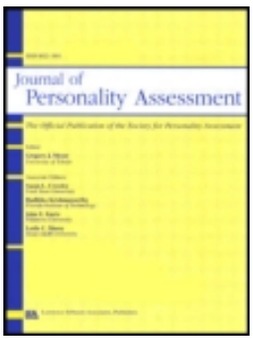

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The Development of the 2-Way Social Support Scale: A Measure of Giving and Receiving Emotional and Instrumental Support

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A number of studies support the refinement of various types of social support into 2 primary dimensions: emotional support and instrumental support. There is increasing recognition of benefits aligned with giving as well as receiving social support, yet there has been no single measure published that incorporates all of these elements. This study presents the development of the 2-Way Social Support Scale (2-Way SSS) using community samples ($n = 372$; $n = 417$) and provides evidence for the scales' factor structure, reliability, and validity. The 2-Way SSS concurrently appraises 4 principal dimensions: (a) giving emotional support, (b) giving instrumental support, (c) receiving emotional support, and (d) receiving instrumental support. The completeness of the scale, combined with the generic quality of the items, enhances its utility across a diversity of contexts. Importantly, this scale provides a measurement tool that will enable the comparison of social support research outcomes across studies and populations.

A large body of research attests to the importance of the relationship between social support, health, and well-being (e.g., Albrecht & Goldsmith, 2003; Brown, Nesse, Vinokur, & Smith, 2003; Liang, Krause, & Bennett, 2001; Lindsey & Yates, 2004). A number of studies support the refinement of various types of social support found in the literature into two primary dimensions: emotional support and instrumental support (e.g., Semmer, Elfering, Jacobshagen, Beehr, & Boos, 2008), and there is increasing recognition of the benefits specifically aligned with giving as well as receiving social support (Brown et al., 2003; Vaananen, Buunk, Kivimaki, Pentti, & Vahtera, 2005). However, there is currently no single measure that incorporates all of these elements. Therefore, this article presents research undertaken in the development of a new social support inventory, termed the 2-Way Social Support Scale (2-Way SSS). The scale is made up of four components: (a) giving emotional support, (b) giving instrumental support, (c) receiving emotional support, and (d) receiving instrumental support. In the first instance, a review of pertinent literature is presented that provides a clear rationale for the need to develop such a scale and the myriad of potential applications.

IMPORTANCE OF RECEIVING SOCIAL SUPPORT

As a positive mediating factor across both physical and psychological health domains, the receipt of social support is important at both an individual and societal level (Brown et al., 2003; Liang et al., 2001). Research confirms that individuals who receive high levels of social support experience better health and well-being (Fratiglioni, Want, Ericcson, Mayyton, & Winblad, 2000), recover faster from illness (Lang, 2001), and demonstrate healthier coping strategies during times of adversity (Cohen, Gottlieb, & Underwood, 2000). More specifically, receiving high levels of social support has been aligned with the prevention and reduction in magnitude of symptoms of major illnesses (Rodriguez et al., 2008; Taylor, 2007), more positive outcomes postsurgery (Alferi, Carver, Antoni, Weiss, & Duran, 2001), accelerated recovery following childbirth (Taylor, 2007), and the prevention of depressive disorders (Stice, Ragan, & Randall, 2004).

BENEFITS OF GIVING SOCIAL SUPPORT

Despite the traditional orientation of social support investigations toward the benefits of receiving support, attention has been turned recently to the bidirectional nature of the construct, recognizing the advantages of giving as well as receiving support (Vaananen et al., 2005). Akin to research regarding receiving social support, giving social support has been associated with reduced rates of mortality (Brown et al., 2003). Although research examining the benefits of giving social support is still in its infancy, such benefits have been shown in a number of diverse areas, such as improved affect in couples undergoing assisted reproduction processes (Knoll, Kienle, Bauer, Pfuller, & Luszczynska, 2007) and with improved happiness and decreased depression in volunteers (Brown et al., 2003).

The reciprocal nature of social support is reflected in the bidirectional support hypothesis (Maton, 1987), which suggests that greater psychological benefits will be gained by individuals who both provide and receive support over time as opposed to those who primarily give or receive, suggesting a summative beneficial effect. Furthermore, there is also some research that has emphasized the importance of maintaining a degree of equilibrium between giving and receiving social support, as although giving might enhance life satisfaction, too much giving could also lead to distress (De Jong Gierveld & Dykstra, 2008; Liang et al., 2001).

Unfortunately, however, studies confirming the benefits of giving functional support remain limited and there are still very few instruments that evaluate the giving of social support with any degree of psychometric reliability or validity (Henderson, Duncan-Jones, Byrne, & Scott, 1980; Van Horn, Schauffli, & Taris, 2001). For example, current research tends to measure giving support with a single item (e.g., Brown et al., 2003).

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The ability of the 2-Way SSS to concurrently measure both the giving and receiving elements of social support is an important addition to the current social support literature.

Dimensions of Social Support

Research attests to the impact of receiving and giving social support on mortality (Brown et al., 2003), which has significant public health implications and alone might justify the need for measurement instruments to remain abreast of contemporary theoretical findings. Furthermore, social support is understood to be a complex factor comprising both "functional" and "structural" dimensions (Lindsey & Yates, 2004). The structural component depicts discernable information about an individual's social network, such as the size, makeup, and strength of relationships (Lindsey & Yates) and the functional element is largely intangible and subjective, representing the provision of various types of assistance by significant others (Lindsey & Yates; Williams, Barclay, & Schmied, 2004). Although the structural component is important, the functional dimension of social support tends to be the better predictor of health and well-being (Hupcey, 1998; Ye, Zhang, & Xu, 2007).

Many of the current multidimensional representations of social support are based on research that examines only received social support and can be attributed to the model initially proposed by House (1981). In House's model, there are four divisions of functional support: (a) emotional concern, (b) instrumental aid, (c) information assistance, and (d) appraisal. Within this early representation, emotional concern depicts the expression of emotions such as liking or loving, instrumental aid pertains to the provision of services, information assistance refers to advice regarding the environment, and appraisal encapsulates assistance with self-evaluation. This conceptualization has maintained prominence within the literature for much of the past three decades, with a majority of theorists adopting some version of these groupings. Current categories now commonly term these dimensions emotional support, material or instrumental support, informational support, and appraisal support (e.g., Cohen & Wills, 1985; Sarafino, 2006).

Variations of this four-factor model are generally differentiated by the use of alternate terminology and definition of the categories. Comparison of models such as those by Sarafino (2006) and Caltabiano, Byrne, Martin, and Sarafino (2002) illustrate this trend. In contrast to Sarafino, who defined four social support functions including emotional/esteem support, tangible support, informational support, and companionship support, Caltabiano et al. (2002) proposed five factors including emotional support, tangible or instrumental support, informational support, esteem support, and network support, which delineates the structural dimension of the construct. Unlike Sarafino, Caltabiano et al. identified esteem support as a separate element from emotional support and defined this type of assistance as that which relates to self-evaluation, competence, and feelings of value and self-worth. In this way, esteem support is likened to the appraisal support originally proposed by House (1981). The variation within these three models is merely one example of the substantial alternation in factor differentiation and terminology evident within the literature.

Irrespective of this high degree of diversity, two overarching categories of support have been consistently identified as the most salient and encompassing: emotional support and instrumental support (Declercq, Vanheule, Markey, & Willemsen, 2007). Other types of social support can be circumscribed by these two categories and these two categories can be applied to both the receiving and giving of social support. Semmer and colleagues (2008) postulated that supportive people will either pay attention to the emotions of others or will provide tangible assistance, thereby rendering all other types of support redundant. For example, informational support can be viewed as a form of tangible aid, as the help provided is given with the intention of solving a problem or accomplishing a task. Similarly, esteem or appraisal support could be deemed emotional support as praise or expression of high regard for another individual might be considered a sentimental act (Semmer et al., 2008).

Existing Measures

To evaluate the theoretical models already outlined, an array of social support measures has evolved over the past three decades. Although some demonstrate psychometric rigor, many have been developed or modified for specific studies and populations, lack theoretical underpinning, and either fail to provide psychometric information (Bowling, 2005) or are of poor psychometric quality. Instruments that concurrently measure both the giving and receiving of social support are particularly limited. Commonly used measures such as Henderson's Global Reciprocity Measure (Henderson et al., 1980), the Scale of Perceived Reciprocity in Intimate Relationships (Vaananen et al., 2005), and the Specific Reciprocity Index (Van Horn et al., 2001) are all single-item instruments that measure reciprocity in relationships and do not differentiate between the types of support provided or received. Although the Social Support Questionnaire (SSQ; Sarason, Levine, Basham, & Sarason, 1983) and the Interview Schedule for Social Interactions (ISSI; Henderson et al., 1980) also measure reciprocal support, both appear to primarily index emotional support or fail to differentiate between types of support (Wills & Shinar, 2000). Furthermore, despite being one of the most widely used social support scales, the SSQ is predominantly structurally focused. In essence, there is currently no single comprehensive scale, with support for psychometric quality, that evaluates giving and receiving both emotional and instrumental support. The development of the current scale, the 2-Way SSS, therefore fills a significant gap within the field of social support measurement.

The Current Research

The development of the 2-Way SSS has occurred over a period of years, utilizing several different samples. Starting with the recognition that a psychometrically valid scale that captured giving and receiving support was not evident in the literature, the research reported here followed guidelines for scale development as stipulated by a number of experts in the area, including Gregory (2007) and Aiken and Groth-Marnat (2006). An initial pool consisting of 56 items drawn from existing measures of social support was piloted (Skorka, 2007). These items were chosen to reflect the variety of functional support factors discussed in the literature at that time (e.g., the emotional, instrumental, esteem, informational, and network support model proposed by Caltabiano et al., 2002). Testing these items on a sample of 436 undergraduate students failed to elicit a stable solution beyond the two factors of emotional and instrumental support. For example, items pertaining to esteem support loaded onto emotional

support and informational support items tended to load with instrumental support. It was concluded that, although a large number of theoretical dimensions of social support are identified in the literature, this initial pilot, in conjunction with the review of the social support research, indicated that the two consistent overarching factors of social support were emotional and instrumental support. Further piloting (Jacobson, 2009) found a similar pattern of results, again highlighting the overarching nature of the emotional and instrumental support categories.

Therefore, the purpose of the research presented here was to explore the possibility of reliably measuring these dimensions of instrumental and emotional support in both receiving and giving directions. In this study, two data sets are used. Data from the first sample were analyzed via exploratory factor analysis to examine the underlying factor structure and allow for the possibility that a structure other than the four hypothesized dimensions might emerge. A four-factor model was derived that included (a) received emotional support, (b) received instrumental support, (c) giving emotional support, and (d) giving instrumental support. The internal factor structure of the scale was then confirmed using the stringent procedure of confirmatory factor analysis on a second sample. Convergent validity was sought through correlation of the subscales to the well-known SSQ (Sarason et al., 1983) and Berlin Social Support Scale (BSSS; Schulz & Schwarzer, 2003). Predictive validity was examined through the relationship of the 2-Way SSS with indicators of well-being.

It was hypothesized that the convergent validity of the 2-Way SSS would be supported through significant positive correlations between the receiving factor of the 2-Way SSS and its subscales with the SSQ (Sarason et al., 1983) and the BSSS (Schulz & Schwarzer, 2003). Significant but weaker correlations between the giving factor of the 2-Way SSS and its subscales with these scales were also expected. It was also hypothesized that the predictive validity of the giving and receiving factors of the 2-Way SSS would be supported through significant negative correlations with the Perceived Stress Scale (PSS; Cohen, Karmarck, & Mermelstein, 1983) and the K10 measure of depression (Kessler & Mroczek, 1992) and that there would be significant positive correlations with the Satisfaction With Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985) and the General Health Questionnaire 12 (GHQ–12; Goldberg et al., 1997).

Method

Participants

Sample 1 consisted of 372 participants: 191 undergraduate students and 181 members of the broader community in the same geographical area. There were 237 (63.7%) females and 118 (31.7%) males (4.5% undefined sex) and ages ranged from 17 to 81 years ($M = 29.67$, $SD = 14.07$). Sample 2 consisted of 417 participants, 128 (30.7%) males and 289 (69.3%) females, with an age range of 17 to 68 years ($M = 28.67$, $SD = 13.37$) made up of 248 undergraduate students and 169 community members from the same geographical area. The invitation to participate in the survey was offered to students during routine lectures, and community participants were engaged through the promotion of the study by student representatives.

Measures

2-Way Social Support Scale. Drawing from the literature, existing social support measures, and pilot data from research projects led by the authors (Jacobson, 2009; Skorka, 2007), an initial pool of 41 items was generated. This pool was further refined to ensure face validity and the subsequent collection of items was piloted on a group of undergraduate students to identify areas of ambiguity. The final iteration of the instrument that was used in data collection consisted of 29 items, which were designed to assess receiving emotional support, receiving instrumental support, giving emotional support, and giving instrumental support. Participants were asked to indicate the degree to which each statement was true for them on a 6-point Likert scale ranging from 0 (*not at all*) to 5 (*always*) with higher scores indicating higher levels of giving or receiving social support. This scale was given to both samples.

Predictive Validity Measures: Sample 1. The PSS was devised by Cohen and colleagues (1983). It is a 10-item scale designed to assess the amount of stress an individual perceives in his or her life. Responses are measured on a 5-point Likert scale ranging from 0 (*never*) to 4 (*fairly often*). Some of the items on this scale are negatively worded and reverse scored. After accounting for this, a higher score on the PSS represents higher levels of stress. The PSS displayed adequate internal reliability in the current sample ($\alpha = .77$).

The K10 scale completed by Sample 1 was devised by Kessler and Mroczek (1992). It is a 10-item instrument designed to provide an indication of depressive symptoms exhibited by individuals. The K10 is measured on a 5-point Likert scale ranging from 0 (*none of the time*) to 4 (*all of the time*). The higher the score, the greater the number of depressive symptoms an individual is experiencing. The K10 displayed strong internal reliability in the current sample ($\alpha = .90$).

The SWLS (Diener et al., 1985) was also completed by the first sample. It is a five-item instrument measuring general life satisfaction. The SWLS is measured on a 7-point Likert scale where a higher average response indicates more satisfaction with life. The SWLS also displayed good internal reliability in the current sample ($\alpha = .89$).

Predictive Validity Measures: Sample 2. The GHQ–12 (Goldberg et al., 1997) that was completed by Sample 2 is a well validated and commonly used measure of general well-being. The 12-item GHQ asks questions around daily functioning and happiness (e.g., have been able to enjoy your normal day-to-day activities). The measure is responded to on a 4-point Likert scale where a higher average response indicates greater well-being. The GHQ displayed good internal reliability in the current sample ($\alpha = .85$)

Convergent Validity Measures: Sample 1. To compare the 2-Way SSS to another measure of social support, the BSSS was used. The BSSS was designed by Schulz and Schwarzer (2003) and is an eight-item scale that has a focus on the receipt of social support. Responses are measured on a 4-point Likert scale ranging from 1 (*strongly disagree*) and 4 (*strongly agree*). The items are statements about support systems available in an individual's life and a higher average response demonstrates higher levels of social support. The BSSS also displayed strong internal reliability in the current sample ($\alpha = .91$)

Convergent Validity Measures: Sample 2. The SSQ (Sarason et al., 1983) is one of the most widely used social support measures (Lindsey & Yates, 2004). Consisting of 27 items, the scale requires individuals to list (a) all the people to

whom they can turn to in specific situations, and (b) to indicate their level of satisfaction with each of these identifiers (Lindsey & Yates; Sarason et al.). The SSQ has demonstrated reliability across a range of populations and has exhibited high internal reliability and moderate predictive validity in regard to well-being (Bowling, 2005). The SSQ displayed good internal reliability in the current sample ($\alpha = .87$).

Results

Data Analysis

Missing data in all scales was found to be minimal (less than 2.5%) and completely random and as such was replaced using the expectation-maximization procedure via SPSS missing values analysis. Exploratory factor analysis via SPSS was conducted on Sample 1 data to refine the pool of items to the strongest, most parsimonious, and theoretically sound solution. Confirmatory factor analysis via AMOS was subsequently undertaken on Sample 2 data to validate the factor structure derived from the first sample.

Exploratory Factor Analysis (Sample 1)

The 29 items of the 2-Way SSS were subjected to a principal components analysis (PCA) with a Varimax rotation. A Kaiser–Meyer–Olkin (KMO) of .93 demonstrated excellent sampling adequacy and Bartlett's Test of Sphericity was significant, $\chi^2(N = 372, 784) = 6154.19, p < .001$, providing support for the factorability of the data. A four-factor solution emerged from the analysis with the interitem correlation matrix revealing that the majority of interitem coefficients were above .40 ($r >$ .40). The four factors accounted for 59.78% of the variance.

Factor 1 ($n = 9$ items) contained items reflecting receiving support. Factor 2 ($n = 7$ items) contained items reflecting giving emotional support. Factor 3 ($n = 7$ items) contained items reflecting giving emotional support. Factor 4 ($n = 4$ items) consisted of receiving instrumental support items. After consideration of the item loadings, eight items were removed from the initial factor analysis because of low loadings (less than .40) or complex cross loadings (see Appendix). Hence, a second PCA was conducted on the remaining 21 items. This time, an Oblimin direct rotation was used due to the lack of orthogonality of components. The KMO of .93 and significant Bartlett's Test of Sphericity, $\chi^2(N = 372, 694) = 4817.82, p < .001$, indicated suitability of the data for the analysis. The extracted four-factor solution accounted for 65.58% of the variance (see Table 1).

Table 1.—Final item factor loadings for four principle factors of the 2-Way Social Support Scale, Sample 1.

Item	Factor Loading	Item *M*	Item *SD*	Adjusted Item Scale *r*
Factor 1: Receiving Emotional Support	$\alpha = .92$			
1. There is someone I can talk to about the pressures in my life	.96	4.17	1.0	.74
2. There is at least one person that I can share most things with	.91	4.33	0.98	.69
3. When I am feeling down there is someone I can lean on	.85	4.33	1.01	.78
4. There is someone in my life I can get emotional support from	.83	4.28	1.07	.72
5. There is at least one person that I feel I can trust	.76	4.48	0.87	.66
6. There is someone in my life that makes me feel worthwhile	.74	4.37	0.98	.74
7. I feel that I have a circle of people who value me	.51	4.08	1.03	.61
Factor 2: Giving Emotional Support	$\alpha = .86$			
8. I am there to listen to other's problems	.83	3.98	0.96	.61
9. I look for ways to cheer people up when they are feeling down	.79	4.04	1.70	.63
10. People close to me tell me their fears and worries	.79	3.76	2.26	.69
11. I give others a sense of comfort in times of need	.77	3.77	0.98	.62
12. People confide in me when they have problems	.63	3.60	1.02	.68
Factor 3: Receiving Instrumental Support	$\alpha = .86$			
13. If stranded somewhere there is someone who would get me	.79	4.42	0.96	.59
14. I have someone to help me if I am physically unwell	.78	4.25	1.17	.52
15. There is someone who would give me financial assistance	.76	4.06	1.21	.52
16. There is someone who can help me fulfil my responsibilities when I am unable	.52	3.64	1.18	.63
Factor 4: Giving Instrumental Support	$\alpha = .84$			
17. I help others when they are too busy to get everything done	.62	3.96	0.98	.66
18. I have helped someone with their responsibilities when they were unable to fulfil them	.58	3.55	1.03	.62
19. When someone I lived with was sick I helped them	.52	3.85	1.06	.50
20. I am a person others turn to for help with tasks	.49	3.45	1.03	.57
21. I give financial assistance to people in my life	.46	2.97	1.37	.45

Confirmatory Factor Analysis (Sample 2)

The four-factor model for receiving and giving emotional and instrumental social support established through exploratory factor analysis was validated on the data from the second sample through confirmatory factor analyses (CFA) via AMOS. The model was represented by two overarching exogenous variables of giving and receiving social support with two unobserved endogenous variables of emotional and instrumental support represented below each of these. All factors were allowed to be correlated. Examination of modification indexes and standard estimates of item loadings revealed one item ("I give financial assistance to people in my life") loaded below .4 on the giving instrumental support factor and displayed correlated error with several items, so it was consequently removed. The final model displayed sound goodness of fit indexes: $\chi^2(N = 417, 169) = 309.14, p < .05$; CFI = .97; GFI = .94; IFI = .97; RMSEA = .04; AIC = 403.35; CAIC = 653.79, and high item loadings (see Figure 1). The Consistent Akaike Information Criterion (CAIC) is an indicator of parsimony when comparing models, with smaller values indicting the most parsimonious fitting model (Byrne, 2001). The Comparative Fit Index (CFI) indicates the improvement of the proposed model from the independence or null model (Byrne); hence, models with higher fit indexes indicate a better fit of the model to the data. The four-factor model was more parsimonious and a better fit of the

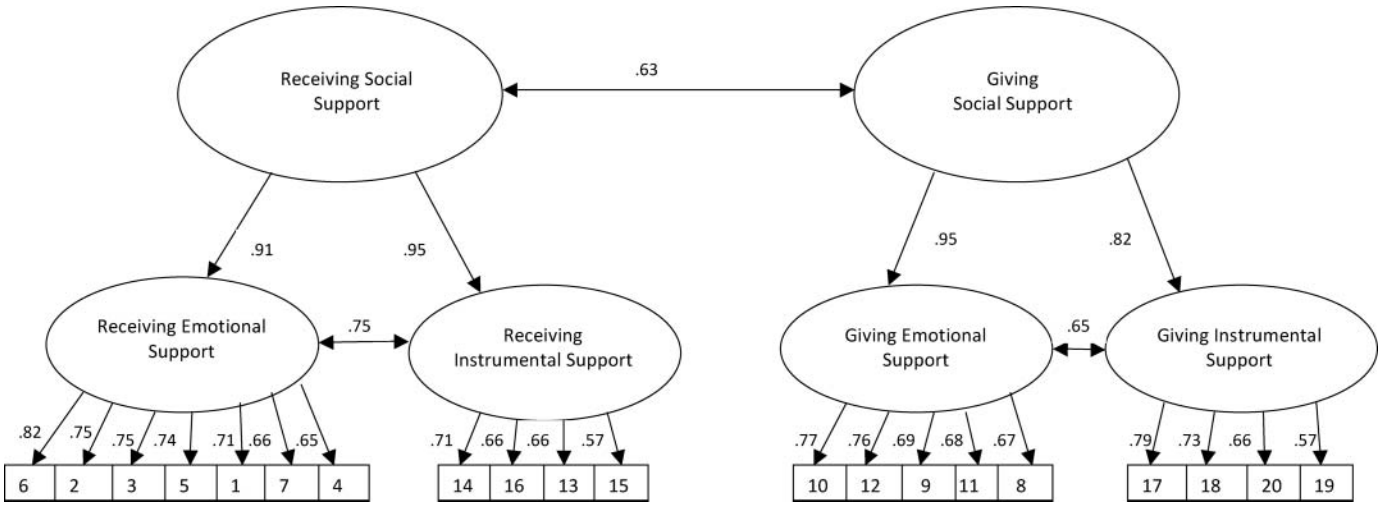

FIGURE 1.—Results of the confirmatory factor analysis of the four-factor model of the 2-Way Social Support Scale showing item loadings on each factor and factor intercorrelations. *Note.* Figures beside arrows represent item loadings and numbers in boxes represent item numbers as they appear in Table 1.

data than the comparative two-factor model, with items loading directly onto the unobserved endogenous variables of either giving or receiving social support: $\chi^2(N = 417, 153) = 583$, $p < .05$; CFI = .96; GFI = .93; RMSEA = .05; AIC = 416.85; CAIC = 668.51. It was also a better fit than a one-factor model with all items loading directly onto the unobserved endogenous variable of social support, $\chi^2(151) = 681$, $p < .05$; CFI = .86; GFI = .81; RMSEA = .09; AIC = 773.11; CAIC = 997.63).

Internal Consistency and Convergent Validity

The assignment of items to subscales was based on the final CFA solution. Subscale scores reflected the mean total of the items that loaded on each component. Cronbach's alpha coefficients were calculated to assess the internal consistency of all subscales across all samples. As demonstrated in Table 2, the internal reliability of all subscales was moderate to high (ranging from .81 to .92). The four subscales of the 2-Way SSS show moderate to large correlations with the two existing social support measures, the SSQ and BSSS (see Table 2). It is noteworthy that the receiving emotional support subscale is consistently the strongest correlate of the SSQ and BSSS. This result was expected, as both of the existing measures focus predominantly on receiving emotional support.

TABLE 2.—Sample 1 correlations between 2-Way Social Support Scale subscales and the Berlin Social Support Scale and Sample 2 correlations between subscales and Sarason's Social Support Scale.

	Alpha	RE	RI	GE	GI
Sample 1					
Receiving emotional (RE)	.92	1.00			
Receiving instrumental (RI)	.86	.690*	1.00		
Giving emotional (GE)	.86	.376*	.418*	1.00	
Giving instrumental (GI)	.84	.414*	.471*	.686*	1.00
Berlin Social Support Scale	.91	.661*	.623*	.425*	.456*
Sample 2					
Receiving emotional (RE)	.90	1.00			
Receiving instrumental (RI)	.81	.745*	1.00		
Giving emotional (GE)	.84	.610*	.533*	1.00	
Giving instrumental (GI)	.81	.492*	.513*	.648*	1.00
Sarason Social Support Scale	.87	.552*	.422*	.317*	.277*

*$p < .001$.

Predictive Validity

The predictive validity of the 2-Way SSS was evaluated using a series of hierarchical regression analyses. For Sample 1, three well-being criteria were tested in three separate analyses: the PSS, an indicator of stress; the K10, an indicator of depression; and the SWLS, an indicator of life satisfaction. In each regression equation, the 2-Way SSS receiving subscales were entered as Step 1 and the giving subscales as Step 2. In Sample 1, the models of prediction for the outcome variables measured were all significant: the K10, $R = .31$, $F(4, 358) = 9.80$, $p < .001$; the PSS, $R = .23$, $F(4, 360) = 4.53$, $p = .001$; and the SWLS, $R = .50$, $F(4, 365) = 31.16$, $p < .001$. In Sample 2, the outcome variable was the GHQ–12, used as an indicator of general health. The regression analysis demonstrated that the four 2-Way SSS subscales produced a significant predictive model, $R = .22$, $F(4, 412) = 5.01$, $p = .001$. As can be seen by the R-square change statistics in Table 3, the giving social support subscales added significantly to the earlier models receiving support for all dependent variables except the K10.

Overall, these models indicate that different aspects of social support are differentially related to these outcome variables (see Table 3). Receiving emotional support was negatively related to depression, positively related to life satisfaction and general health, but not related to perceived stress. Receiving instrumental support was negatively related to perceived stress and positively related to life satisfaction. Giving emotional support was negatively related to perceived stress and positively related to general health, and giving instrumental support was positively related to life satisfaction.

The incremental validity of the 2-Way SSS over existing scales in predicting well-being outcome variables was tested through a further series of hierarchical regressions. For Sample 1, the three well-being criteria were tested in three separate analyses: the PSS, the K10, and the SWLS. In each equation, the BSSS was entered in the first step and the four 2-Way SSS

TABLE 3.—Beta weights from regression analyses of the 2-Way Social Support Scale subscales as predictors of life satisfaction, general health, depression, and stress.

2-Way Social Support Scale Subscale	K10	R^2_{Cha}	PSS	R^2_{Cha}	SWLS	R^2_{Cha}	GHQ–12	R^2_{Cha}
Step 1		.09*		.01		.24*		.03*
Receiving emotional	–.265*		–.073		.317*		.176*	
Receiving instrumental	–.097		–.151*		.142*		.144*	
Step 2l		.01		.04*				.02*
Giving emotiona	–.089		–.168*		.031	.02*	.134*	
Giving instrumental	–.010		–.074		.123*		.106*	

Note. PSS = Perceived Stress Scale; SWLS = Satisfaction With Life Scale; GHQ–12 = General Health Questionnaire 12.
*$p < .05$.

subscales were entered simultaneously in the second step. The subscales of the 2-Way SSS accounted for significant incremental variance in all three analyses: K10, $R^2_{cha} = .036$, $F_{cha}(4, 350) = 9.80$, $p < .01$; PSS, $R^2_{cha} = .05$, $F_{cha}(4, 350) = 4.58$, $p < .001$; SWLS, $R^2_{cha} = .064$, $F_{cha}(4, 350) = 7.77$, $p < .001$. In Sample 2, in predicting GHQ scores, the SSQ was entered as the first step and the four 2-Way SSS subscales were entered as a block at Step 2. Again, the addition of the four 2-Way SSS subscales produced a significant increase in variance accounted for by the predictive model, $R^2_{cha} = .025$, $F(4, 411) = 2.65$, $p = .045$. Table 4 shows the beta weights for these regressions and the zero-order correlations for each of the predictor variables.

DISCUSSION

This research sought to present the development of a reliable instrument that could measure both the giving and receiving of emotional and instrumental support. The findings of both the exploratory PCA and CFA provide psychometric support for this proposed theoretical factor structure across two samples. The results of the exploratory PCA showed a clear separation of items into either giving or receiving emotional or instrumental support. This four-factor model showed excellent fit in the CFA of item data obtained from Sample 2. The results of this study provide empirical support for these two functional dimensions of emotional and instrumental support in both directions of receiving and giving support.

TABLE 4.—Beta weights and zero–order correlations from regression analyses of the 2-Way Social Support Scale subscales as predictors of life satisfaction, general health, depression, and stress after the BSSS or SSQ were entered as Step 1.

	K10		PSS		SWLS		GHQ–12	
2-Way SSS Subscale	Beta	*r*	Beta	*r*	Beta	*r*	Beta	*r*
BSSS/SSQ	–.110	–.24*	.069	–.01	.196*	.45*	.235*	.26*
Receiving emotional	–.203*	–.28*	–.087	–.07	.242*	.47*	.086	.18*
Receiving instrumental	–.065	–.23*	–.173*	–.10*	.077	.41*	.020	.14*
Giving emotional	–.111	–.05	–.162*	–.13*	.007	.28*	.166*	.13*
Giving instrumental	–.010	–.10*	–.068	–.09*	.114*	.33*	.096	.11*

Note. SSS = Social Support Scale; PSS = Perceived Stress Scale; SWLS = Satisfaction With Life Scale; GHQ–12 = General Health Questionnaire 12; BSSS = Berlin Social Support Scale; SSQ = Social Support Questionnaire.
*$p < .05$.

The convergent validity of the four subscales of the 2-Way SSS is further evidenced by the consistent pattern and strength of the correlations between the subscales and other well-known measures of social support. The receiving emotional support subscale of the 2-Way SSS was the most strongly related subscale to both the BSSS and SSQ. As both of these scales predominantly measure the receipt of social support, this is the pattern that was expected. Across both samples, the receiving subscales of the 2-Way SSS correlated more highly than the giving subscales with the BSSS and SSQ. It must be noted, however, that there are also strong correlations between the 2-Way SSS subscales, indicating that the dimensions of emotional and instrumental support overlap.

The predictive validity of the 2-Way SSS was supported by the pattern of relationships found between the four subscales and the measures of well-being. Receiving emotional support was a significant predictor of the well-being indicators of general health and SWLS scores and a significant negative predictor of depression. These findings are consistent with a large body of research attesting to the positive influence of social support on well-being (e.g., Albrecht & Goldsmith, 2003; Brown et al., 2003; Liang et al., 2001; Lindsey & Yates, 2004). Giving emotional support was also significantly associated with reduced stress, and giving instrumental support was associated with higher levels of life satisfaction, providing partial support for past research indicating that giving social support is linked to greater happiness (Brown et al.). The different patterns of results across the four subscales of the 2-Way SSS in predicting well-being variables further attests to the utility of a single measure that allows direct comparisons of the influence of giving and receiving these specific types of social support on distinct outcomes and contexts.

In terms of predicting well-being, the regression analyses provided some interesting results and permitted an examination of the impact of giving support on various well-being measures, beyond the variance accounted for by receiving support. The giving support subscales added to the prediction of stress, life satisfaction, and general health, but did not add to the prediction of depression. Receiving emotional support was protective in terms of warding off depressive symptoms as measured by the K10 (Kessler & Mroczek, 1992) and receiving instrumental support was protective in regard to stress levels as measured by the PSS (Cohen & Wills, 1985). Receiving social support (emotional and instrumental) was predictive of higher scores on the SWLS and GHQ–12 scales. The most significant study to date that has examined this additive relationship was published by Brown et al. (2003). In their research, giving support was measured with a single item. This supporting evidence using a well-constructed scale is exciting for future research.

The results from this study are encouraging in that it is the first study to show that giving and receiving social support can be measured within one psychometrically sound instrument. Further, giving and receiving social support fall into the same two broad categories regarding the function of that support. These findings have clear implications for future social support research and theory building. Past research has shown that giving social support might be more important to individual well-being than receiving social support (e.g., Brown et al., 2003; Knoll et al., 2007). However, the lack of standardized instruments to simultaneously measure the giving and receiving of social support has made the comparative influence of the direction of

social support on well-being difficult to ascertain (Henderson et al., 1980; Van Horn et al., 2001). The ability of this scale to concurrently measure both the giving and receiving elements of emotional and instrumental social support provides an important step in such comparative research and theory building.

Although the current research provides a strong foundation for the newly developed 2-Way SSS, further testing of the scale across a range of populations and with a range of outcome variables is clearly required to build further evidence of the reliability and applicability of the scale. For example, examining the predictive power of the 2-Way SSS with respect to well-being in emergency service personnel and others whose primary role is in caring for people is one such step. A research instrument such as the 2-Way SSS might then provide an opportunity for empirical research to examine well-being and positive outcomes in these professions, rather than the psychopathology approach on which research has tended to focus (e.g., Figley, 1995). Occupational groups such as emergency service personnel also provide an ideal sample for examining social support and its relationship to a variety of factors in a fully prospective design. That is to say that inherent in such occupations is an elevated level of exposure to highly challenging experiences. Future research could also extend the scale development process through using item response theory analysis. Test–retest reliability of the measure would also be advantageous in further investigating the psychometric soundness of the 2-Way SSS.

Of course there are also limitations to this research. The most notable of these limitations might be the cross-sectional nature of the studies. Clearly, causality cannot be claimed when employing such a research design. Two thirds of the participants in these studies were female; future studies should use gender-balanced groups to further evaluate the validity of the 2-Way SSS. Another limitation is the self-report nature of the data, so results must be regarded as preliminary and future studies might choose to include corroborating evidence of support. For example, such research could employ couples where both members report on the giving and receiving of social support regarding a specific instance when support was needed. Indeed, the presented research points the way forward to many studies that could aim to increase knowledge of the scale's psychometric properties or to examine the influence of giving and receiving social support on a broad range of outcome variables.

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APPENDIX

The following eight items were not included in the final analysis:

- There are people that would give me practical assistance.
- There is someone who can give me an honest opinion.
- I feel good when I help others.
- I give my time to the people in my life.
- I tell others when I am proud of them.
- I tell the people in my life how great I think they are.
- In an emergency there is someone I could call for a ride to hospital.
- I give people I know a lift somewhere when they need it.