Reliability and validity of the Brief 2-Way Social Support Scale: an investigation of social support in promoting older adult well-being

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Abstract

Objectives: This study aimed to explore the relationship between well-being and perceived stress, and the functional dimensions of social support in older adults.

Method: Data from 306 older adults were obtained in a survey containing the two-way Social Support Scale (2-Way SSS). Also, a subset of the sample ($N = 165$) was filled out with measures of well-being and perceived stress, and a follow-up survey was completed 3 months later ($N = 111$).

Results: Confirmatory factor analyses and reliability analyses provide evidence for a 12-item Brief 2-Way SSS as a reliable and valid measure of the four domains of Social Support. Correlations and regression analyses indicated the scale displayed good concurrent and predictive validity across time points, with receiving emotional support positively associated with well-being at Time 1 (T1) and Time 2 (T2), and Receiving Instrumental Support negatively associated with perceived stress at T1 and T2.

Conclusions: This study provides support for the importance of examining the influence of separable elements of social support on psychological outcomes in older adults. The Brief 2-Way SSS was found to have good psychometric properties in this sample of older adults.

As living conditions improve and life expectancy increases, the world's ageing population is growing substantially, creating both opportunities and challenges for the society. Although people will encounter challenges to their well-being as they age, such as deteriorating health and social isolation, older people are nevertheless able to live their lives in ways that are socially integrated and fulfilling. Recent research has demonstrated that the promotion of various psychosocial factors cannot only buffer against decrements in health and well-being but can also actively improve well-being as one ages. Therefore, it is imperative to understand the factors that contribute to the well-being of older adults in order to enhance the quality of life of this population.[1,2]

One factor related to improved well-being is social support. A considerable body of literature demonstrates that various modalities of social support can buffer against the negative impacts of ageing.[3–5] Social support consists of numerous subconstructs, such as quantitative (structural) and qualitative (functional) support.[6,7] Functional support in particular has shown a strong association with well-being. Functional support can be grouped into a number of domains rooted in the specific type of support, such as instrumental support, which refers to tangible practical support and emotional support, which refers to the receipt of empathy, concern, affection and encouragement.[8] This research indicates that the instrumental and emotional support can be seen as

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the overarching factors of functional support, which subsume the other facets of social support that have emerged in the literature.[9,10]

The receipt of both emotional and instrumental social support in older adulthood has been strongly linked to enhanced health and well-being.[11,12] The benefits have been explained in relation to both the stress-buffering hypothesis and the main effects hypothesis,[8] with research indicating that both mechanisms can affect well-being and protect against the negative effects of stress.[13,14]

Earlier research available on the influence of giving social support in this population has tended to focus on reciprocity, which emphasises social exchanges rather than the effect of each type of support independently.[3] Brown et al.[3] examined both giving and receiving social support in older adults in a controlled trial conducted over a period of 5 years with mortality as the outcome. The results demonstrated that receiving social support was predictive of longevity, but became insignificant once giving support, which was added to the model. A limitation of this research was that giving and receiving social support was measured using only one item for each of the two types of support measured. Steffens et al.[15] also found that the beneficial effects of giving support were greater than receiving support in a study of retirees.

Similarly, a study by Thomas[5] focused on the giving and receiving emotional support and found that the initial relationship between receiving support and well-being became insignificant when giving support was added to the model. Again, this study did not use a validated measure of the giving of social support, but rather it was assessed through the addition of a small number of extra items. In contrast to these findings, a study by Warner et al.[16] found that providing emotional support to others, and the anticipation that support would be available if needed, predicted mental and physical quality of life, but that receiving emotional support actually negatively predicted quality of life. In this case, receiving and providing emotional support was gauged by responses to two interview questions.

The impact of giving and receiving social support on symptoms of depression rather than the presence of well-being was examined in a large population study of over 20,000 older adults in Japan.[17] In this research, support was measured with a Japanese translation of the 2-Way Social Support Scale (2-Way SSS).[9] Giving social support to people outside the family was found to be a more beneficial buffer against depression for both men and women.

The inclusion of a brief and psychometrically sound measure of both giving and receiving social support in population-based studies of older adults would greatly benefit research in this area and help to provide theoretical advancement and practical recommendations in the field. While there are many well-validated and widely used measures of receiving social support of different types, such as the Multidimensional Scale of Perceived Support,[18] the 2-Way SSS is currently the only validated measure of both giving and receiving social support

in a single-scale. While this scale measures perceptions of social support given and received and does not objectively assess what is actually received or given, many items were developed to be behaviourally anchored. That is, respondents are asked if they have actually performed certain supportive behaviours. Research also indicates that the perception of support may actually be more important to subjective well-being than the actual receipt of support.[19]

The 2-Way SSS[9] was originally developed based on two large undergraduate student and general community samples as an instrument capable of measuring the two main functions of social support: emotional and instrumental in both giving and receiving directions. This was a major contribution to the social support literature and enabled a body of research to be developed looking at the influence of both giving and receiving social support on a number of outcome variables and populations including older adults.[17,20] In the development paper, the authors noted the importance of further testing of the scale across a range of populations and with a range of outcome variables to build evidence of the reliability and applicability of the scale. The 2-Way SSS has been translated into a number of languages and researchers have reported that it has functioned well in a diverse culture and populations (e.g. Brazil,[21] the USA[20] and Israel[22]).

The current research aims to explore the reliability and validity of the 2-Way SSS for use in an older adult population. Furthermore, to enhance the use of the 2-Way SSS in large-scale studies examining a multitude of factors in this population, the current study also aimed to identify the most parsimonious scale that could reliably measure the giving and receiving of emotional and instrumental social support. To add to the psychometric evidence in support of the scale, the research design was both cross-sectional and longitudinal. The longitudinal data were used for test–retest reliability and allowed for the theoretical extension of our understanding of the influence of the four domains of giving and receiving social support on older adults' well-being across time.

Method

Statistical analyses and power calculations

As the theoretical four-factor structure of the 2-Way SSS has been confirmed in previous research,[9,17,20] to assess the structure and adequacy of items on the scale for use with an older adult population, confirmatory factor analysis (CFA) was used. A sample size of 200 was adequate for the small model tested.[23] As no significant changes to well-being outcomes were expected within the 3-month follow-up time frame, regression analyses, regressing Time 1 (T1) social support cross-sectionally on to T1 well-being outcomes and longitudinally on to Time 2 (T2) well-being outcomes were used to demonstrate the influence of social support on older adult well-being outs across time. Allowing for a T2 response rate as low as 30%, a sample of 300 was sought in the first

Table 1. Sample demographic data.

Demographic	Total T1		Subsample T1		Subsample T2	
	Count	%	Count	%	Count	%
N	306		165		111	
Sex						
Female	189	61.76%	105	63.64%	69	62.16%
Male	117	38.24%	60	36.36%	42	37.84%
Relationship status						
Married/De facto	179	58.50%	111	67.27%	77	69.37%
Separated/Divorced	37	12.09%	15	9.09%	9	8.11%
Widow(er)	85	27.78%	36	21.82%	24	21.62%
Other	2	0.65%	2	1.21%	1	0.90%
Completed education						
Postgraduate	18	5.88%	9	5.45%	7	6.31%
Undergraduate	70	22.88%	34	20.61%	21	18.92%
Year 12	69	22.55%	38	23.03%	25	22.52%
Year 10	101	33.01%	58	35.15%	42	37.84%
Primary school	43	14.05%	22	13.33%	13	11.71%
No schooling	1	0.33%	1	0.61%	0	0.00%
Financial situation						
Very comfortable	13	4.25%	6	3.64%	2	1.80%
Little comfortable	44	14.38%	21	12.73%	19	17.12%
Satisfactory	168	54.90%	91	55.15%	63	56.76%
Little uncomfortable	63	20.59%	36	21.82%	18	16.22%
Very uncomfortable	15	4.90%	9	5.45%	7	6.31%
	M (*SD*)	Range	M (*SD*)	Range	M (*SD*)	Range
Age (years)	74.29 (8.35)	56–95	72.79 (7.29)	56–92	73.02 (7.04)	56–87

instance to ensure an adequate T2 sample of <100 for the proposed longitudinal regression.[24]

Participants and procedure

Participants at T1 were 306 older adults (≥55 years, being the only selection criteria) were recruited from the broad geographical area of South East Queensland, Australia. Demographic data presented in Table 1 show that participants were predominantly female and partnered. About half (51.31%) of the participants had completed year 12 or higher and reported being in a 'satisfactory' or better financial position (73.53%).

Packages containing an introductory letter and participant information sheet, the short survey (with questions on basic demographics and the 2-Way SSS), a complimentary teabag, and a reply-paid envelope were distributed to potential participants via community and social organizations frequented by older adults (e.g. retirement communities, churches, libraries). Participants were invited to be contacted for follow-up; those who consented (*n* = 165) were asked to also complete the measures of psychological well-being and perceived stress and to generate a code for matching purposes. After 3 months, follow-up surveys containing demographic questions, the 2-Way SSS, psychological well-being and

perceived stress measures, and the same code generator, were sent to participants. Of the 165 participants who had consented to be sent follow-up surveys, 111 responses were received at T2 (32.73% attrition). Demographics of the subsample at T2 were comparable to the larger cohort, as shown in Table 1.

Measures

Social support. The original 20-item 2-Way SSS[9] was developed to assess the subjective experience of the separable aspects of social support that have been identified in previous research–giving and receiving both emotional and instrumental social support. Participants indicate the frequency of their experience on a six-point scale rated from 0 (*not at all*) to 5 (*always*), where higher scores indicate greater social support given and received. The scale can be summed to yield two higher order factors of giving and receiving social support; however, of greatest utility are the validated subscales that identify the four aforementioned aspects of social support. The 20-item 2-Way SSS has demonstrated good internal consistency (subscales α = 0.81–0.92), predictive validity with measures of well-being and incremental validity over other social support measures.[9]

Table 2. Goodness of fit indices for confirmatory factor analytic models of the 2-Way SSS.

Model	χ^2	df	p	CFI	NNFI (TLI)	RMSEA	SRMR	AIC
12-item 4 factors (final model)	113.07	49	<0.001	0.965	0.952	0.066	0.054	171.07
12-item 2 factors	293.32	53	<0.001	0.868	0.835	0.122	0.066	343.32
20-item 4 factors (original model)	474.98	165	<0.001	0.898	0.883	0.079	0.067	564.98
20-item 2 factors	648.72	169	<0.001	0.842	0.823	0.097	0.070	720.72
20-item 1 factor	1196.76	170	<0.001	0.663	0.623	0.141	0.107	1276.76

CFI: comparative fit index ; TLI: Tucker–Lewis index; RMSEA: root mean square error of approximation; SRMR: standardized root mean square residual; AIC: Akaike information criterion; NNFI: non-normed fit index.

Internal consistency of the 20-item version's subscales were good in the current sample ($\alpha = 0.75$–0.87); correlations of the factors between time points indicated good temporal stability ($r = 0.74$–0.75). Refinement of the original measure and the fitness of the resulting 12-item solution (Brief 2-Way SSS) are described in the following sections.

Psychological well-being. Ryff's[25] Psychological Well-being Scales (PWBS) are one of the most widely published measures of psychological well-being. Several versions of the PWBS exist, consisting of 18–120 items.[26] The 42-item version[27] was used in the current study. Responses are made on a six-point scale ranging from *disagree strongly* to *agree strongly*. Items can be summed to yield a total well-being score, as in the current study, or six subscales can be examined. Once the scale's 22 negatively worded items are reversed for a summation, higher scores indicate greater well-being. Internal consistency of the measure was excellent in the current sample ($\alpha = .89$).

Perceived stress. The Perceived Stress Scale[28] (PSS) is a widely used measure of general distress. Respondents indicate, on a five-point scale from *never* to *very often*, how frequently they have experienced the indicated thoughts or feelings over the previous month. Scores on the seven positively worded items are reversed and summed across all 14 items to yield a total score out of 56, where higher scores indicate greater distress. The PSS has good internal consistency ($\alpha = 0.85$), test–retest reliability and predictive validity with measures of depressive and anxiety.[28]

Results

Data cleaning and assumption checks

Results of Little's missing completely at random (MCAR) test show that the small proportion of missing data in each sample (Total = 2.14%, SUB_{T1} = 2.11%, SUB_{T2} = 2.50%) were missing completely at random at T1, $\chi^2 (3023) = 3133.86$, $p = 0.078$, so were replaced using SPSS Expectation Maximization imputation. Confirmatory Factor Analysis, using AMOS version 23, was conducted on the full T1 dataset ($N = 306$) to confirm the most parsimonious factor structure of the 2-Way SSS in a

sample of older adults. Further analyses were conducted on the subsample only ($n_{T1} = 165$; $n_{T2} = 111$) using SPSS version 23.

CFA and model refinement

In line with recommended procedure for running a CFA for testing a structure of an overarching construct, with underlying dimensions,[29] the initial 20-item model was specified with two overarching exogenous factors (giving and receiving support), each with two endogenous factors (instrumental and emotional support), according to the model derived in the development paper.[9] The exogenous factors were allowed to correlate. Table 2 shows that fit of the original model was moderate in this sample of older adults. Modification indices and standardised item loadings were examined, and poor-performing items that exhibited either high error intercorrelations or low loadings were removed to improve parsimony and refine model fit. No ideal number of items was sought and modification continued until the best fitting model was arrived upon, in which no significant gains and only poorer fit resulted from the removal of further items (see Supplemental Appendix for full list of items and loadings). The final 12-item solution is depicted in Figure 1 with resultant factor loadings and intercorrelations.

Table 2 presents goodness-of-fit indices for the above models as well as a single-factor model and a two-factor model with all items loading directly onto two endogenous variables of giving or receiving social support; indicating that the 12-item solution of two endogenous factors (instrumental and emotional support), underlying each of the two exogenous factors (giving and receiving support), provided the best fit of the data. Although none of the models tested returned a non-significant χ^2 test for model fit, indices presented in Table 2 confirm a good fit of the 12-item model.[30]

Correlations between the total score and factors of the 20-item scale and their 12-item scale counterparts were all above $r = 0.93$ and significant at $p < 0.001$ (Total, $r = 0.980$; Total Receiving, $r = 0.961$; Total Giving, $r = 0.977$; Receiving Emotional, $r = 0.941$; Receiving Instrumental, $r = 0.930$; Giving Emotional, $r = 0.961$; Giving Instrumental, $r = 0.967$). Although these correlations are inflated due to the conceptually overlapping items, these high correlations indicate that all components of the refined scale reliably represent the measurement of the original.
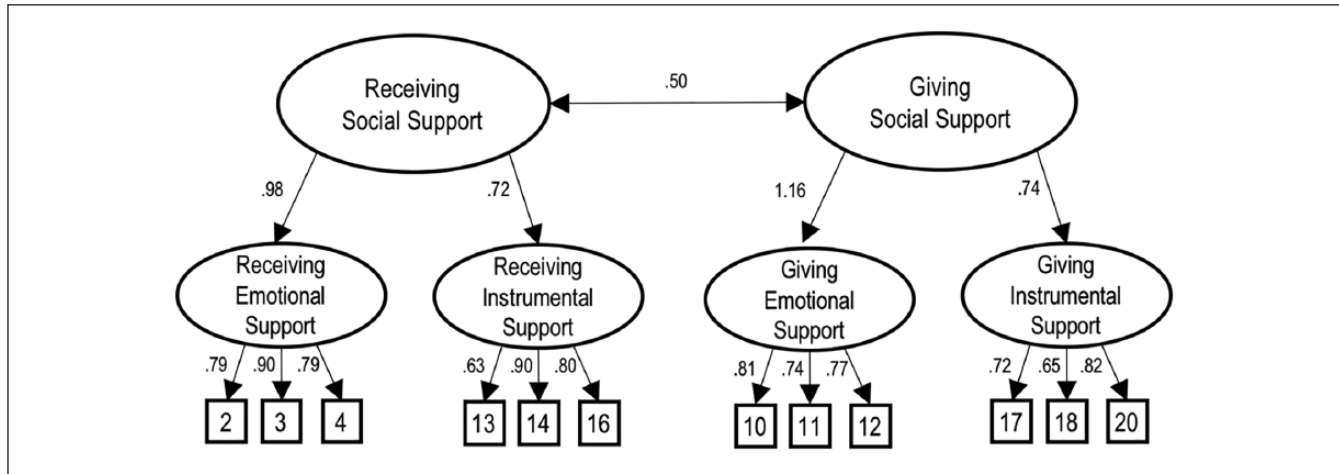
Figure 1. Final model of the 12-item Brief 2-Way SSS showing standardised regression weights and correlations.
Note: Item numbers reflect those published in Shakespeare-Finch and Obst.[9]

Subsample: fitness of the Brief 2-Way SSS

Descriptives. Table 3 displays descriptives, and both inter-correlations of the Brief 2-Way SSS factors and correlations with comparison measures at both waves of data collection. Scores indicate that participants typically gave and received moderate-to-high amounts of both emotional and instrumental social support. PWBS and PSS data were largely normal at both time points, while social support factors were negatively skewed; however, all residuals in the regression models tested were normally distributed and so data were not transformed. Scores indicated that well-being was generally moderate-to-high, while perceived stress was low.

Internal consistency and test–retest reliability of the Brief 2-Way SSS. Cronbach's alpha coefficients displayed in Table 3 show the good internal consistency of each social support factor. Internal consistency of the two higher order factors of Receiving and Giving social support were very good ($\alpha = 0.878$ and 0.875, respectively, at T1). Correlations of the four factors between T1 and T2 were between $r = 0.69$ and $r = 0.73$ (Table 3, bold text), indicating good temporal stability of the Brief 2-Way SSS. This is despite additional variability that was likely introduced with the long period between data collection points (3 months).

Bivariate correlations. The inter-correlations displayed in Table 3 show moderate, positive associations between most social support factors, the weakest association being between receiving emotional support and giving instrumental support, in line with the theory underpinning the scale constructs. A moderately strong positive association between the two giving support factors was observed, suggesting that individuals who gave one form of support were more likely to also give the other. The social support factors were also weakly-to-moderately, positively related to well-being

scores at both time points. Perceived stress was inversely related to all other variables; moderately strong with well-being, but weakly to moderately with social support.

Relationship between social support subscales and well-being and perceived stress

T1 scores on the four social support subscales were regressed cross-sectionally onto T1 and longitudinally onto T2 well-being (PWBS) and perceived stress (PSS) scores. In all regressions, age, sex, financial status, education level and partnership status (partnered, non-partnered) were entered into the regression in Step 1 with the T1 Receiving Emotional and Instrumental Support and Giving Emotional and Instrumental Support subscales scores entered at Step 2.

Table 4 presents the regression coefficients, significance values and squared semi-partial correlations for each of the variables in the regression.

Time 1 well-being. The model including demographic variables and social support measured at T1 accounted for 39% of the variance in well-being scores as reported at T1, ($F(9,148) = 10.41$, $p < 0.001$). Demographic variables accounted for 6% ($F(5,152) = 2.06$, $p = 0.07$) and social support 38% ($F(4,148) = 19.58$, $p < 0.001$) of the variance is well-being as measured cross-sectionally. As can be seen in Table 4, being female, financial status, and being partnered were positively related to well-being while age was negatively related to well-being, Receiving and giving emotional support and giving instrumental support emerged as significant unique positive predictors of well-being, while receiving instrumental support was not significant.

Time 2 well-being. The model including demographic variables and social support measured at T1 accounted for 42% of

Table 3. Descriptives, internal consistencies and bivariate correlations of the revised 2-Way social support scale subscales, psychological well-being scales, and perceived stress scale at Times One and Two.

	α	M (SD)	Range	Z_{Skew}	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
Time I															
2WSSS-12 (T1)															
1. Receive emotional[a]	0.877	12.97 (2.83)	0 – 15	–9.70	—										
2. Receive instrumental[a]	0.800	12.89 (2.67)	2 – 15	–9.10	0.578***	—									
3. Give emotional[a]	0.855	11.63 (2.66)	2 – 15	–4.82	0.341***	0.355***	—								
4. Give instrumental[a]	0.749	11.57 (2.64)	3 – 15	–5.36	0.246**	0.394***	0.699***	—							
5. PWBS[a]	0.898	189.87 (25.67)	118 – 241	–1.18	0.330***	0.265**	0.493***	0.450***	—						
6. PSS[a]	0.859	12.62 (6.66)	0 – 33	1.82	–0.230**	–0.274**	–0.161*	–0.118	–0.514***	—					
Time 2															
2WSSS-12 (T2)															
7. Receive emotional[b]	0.903	13.17 (2.60)	0 – 15	–8.64	**0.700***	0.433**	0.269**	0.131	0.407***	–0.320**	—				
8. Receive instrumental[b]	0.822	13.25 (2.30)	3 – 15	–8.27	0.430***	**0.720***	0.329***	0.229*	0.241*	–0.296**	0.528***	—			
9. Give emotional[b]	0.811	11.82 (2.44)	4 –15	–3.21	0.209*	0.331***	**0.689***	0.476***	0.459***	–0.210*	0.316**	0.490***	—		
10. Give instrumental[b]	0.766	11.73 (2.48)	2 – 15	–4.41	0.204*	0.379***	0.679***	**0.728***	0.492***	–0.196*	0.320**	0.482***	0.693***	—	
11. PWBS[b]	0.885	193.55 (22.94)	134 – 245	–1.44	0.431***	0.368***	0.462***	0.376***	**0.830***	–0.573***	0.447***	0.399***	0.542***	0.552***	—
12. PSS[b]	0.826	12.25 (6.06)	0 – 33	2.81	–0.306**	–0.379***	–0.289**	–0.267*	–0.619***	**0.726***	–0.424***	–0.363***	–0.389***	–0.357***	–0.670***

Note: α: Cronbach's alpha; Scale possible totals: 2WSSS-12 factors = 15, PWBS = 252, PSS = 56; numbers in bold indicate test–retest reliabilities.

[a]n = 164.

[b]n = 110.

***$p < 0.001$, **$p < 0.01$, *$p < 0.05$ (two-tailed).

Table 4. Regression coefficients in the final step of the regressions on T1 and T2 well-being and perceived stress.

	Time 1 (N = 165)			Time 2 (N = 111)		
	B (95%CI)	β	sr^2	B (95%CI)	β	sr^2
Well-being						
Age	−0.73 (−1.24, −0.22)	−0.208**	−0.23	−0.07 (−0.68, 0.533)	−0.023	−0.02
Sex	−11.09 (−18.82, −3.36)	−0.207**	−0.23	2.86(−6.1, 11.82)	0.060	0.05
Financial status	7.56 (3.45, 11.68)	0.249***	0.29	4.02−0.54, 8.54)	0.154*	0.14
Education	0.35 (−2.80, −3.51)	0.016	0.02	0.95(−2.44, 4.34)	0.048	0.05
Relationship status	−10.15 (−18.88, −1.42)	−0.184*	−0.19	0.3.47(−13.65, 6.7)	−0.068	−0.06
Receiving emotional support	2.01 (0.52, 3.49)	0.223**	0.22	2.58(0.80, 4.35)	0.313**	0.24
Receiving instrumental support	0.69 (−2.38, 0.995)	−0.072	−0.07	0.34(−1.58, 2.26)	0.039	0.03
Giving emotional support	3.15 (1.07, 5.22)	0.311**	0.24	1.94(−0.27, 4.12)	0.221	0.14
Giving instrumental support	2.31 (0.42, 4.20)	0.234*	0.20	1.37(−0.73, 3.48)	0.153	0.11
Perceived stress						
Age	0.05 (−0.11, 0.20)	0.05	0.04	0.05(−0.12, 0.21)	0.053	0.05
Sex	1.84 (−0.45, 4.12)	0.133	0.12	2.33(−0.134.8)	0.187	0.16
Financial status	−2.09 (−3.31, −0.88)	−0.267**	−0.25	−1.71(−2.9, −0.47)	−0.250**	−0.23
Education	−0.05 (−0.98, 0.89)	−0.008	−0.01	−0.34(−1.2,0.59)	−0.066	−0.06
Relationship status	2.85 (0.26, 5.43)	0.199*	0.16	3.51(0.7, 6.31)	0.262**	0.21
Receiving emotional support	−2.7 (−0.70, 0.17)	−0.114	−0.09	−0.23(−0.71, 0.26)	−0.104	−0.08
Receiving instrumental support	−0.44 (−0.94, 0.06)	−0.176*	−0.13	−0.54(−0.79, 0.41)	−0.236*	−0.17
Giving emotional support	−.25 (−0.87, 0.36)	−0.096	−0.06	−0.19(−1.16, 0.07)	−0.083	−0.05
Giving instrumental support	0.01 (−0.55, 0.57)	0.003	0.01	−0.35 (−0.93, 0.23)	−0.147	−0.10

Note: All predictor variables from Time 1 Survey; statistics taken from Final Model; CI = Confidence Interval, β = standardised regression coefficient, sr^2 = squared semi-partial correlation.
*$p < 0.05$, **$p < 0.01$, ***$p < 0.001$.

the variance in well-being scores as reported at T2 ($F(9,98) = 5.90$, $p < 0.001$). Demographic variables accounted for 6.6% $F(5,102) = 1.44$, $p = 0.215$ and social support 35.2% $F(4,98) = 10.70$, $p < 0.001$ of the variance in the longitudinal measure of well-being. As can be seen in Table 4, financial status, and being partnered remained positively related to well-being at T2, only receiving emotional support remained a significant unique positive predictor of well-being 3 months later.

Time 1 perceived stress (PSS). The model including demographic variables and social support measured at T1 accounted for 30% of the variance in perceived stress scores as reported at T2 ($F(9,148) = 3.99$, $p < 0.001$). Demographic variables accounted for 11.1% ($F(5,152) = 3.81$, $p = 0.003$) and social support 19.5% ($F(4,148) = 3.85$, $p = 0.005$) of the variance in the longitudinal measure of perceived stress. As can be seen in Table 4, financial status and being partnered were positively related to perceived stress at T1. Of the social support factors, only receiving instrumental support emerged as a significant unique predictor.

Time 2 perceived stress. The model including demographic variables and social support measured at T1 accounted for 43% of the variance in perceived stress scores as reported at

T2 ($F(9,98) = 4.55$, $p < 0.001$). Demographic variables accounted for 12.8% ($F(5,102) = 3.00$, $p = 0.014$) and social support 29.5% ($F(4,98) = 5.79$, $p < 0.001$) of the variance in the longitudinal measure of well-being. As can be seen in Table 4, financial status and being partnered remained positively related to well-being at T2, while receiving instrumental support at T1 also remained a significant unique positive predictor of perceived stress 3 months later.

Discussion

The current study aimed to explore the use of the 2-Way SSS in an older population and to identify the most parsimonious scale for use in this population while maintaining good psychometric properties. Furthermore, the research aimed to examine the relationship between social support factors and well-being in older adults both cross-sectionally and longitudinally. The results of the current study provide evidence for a 12-item version of the 2-Way SSS, which captures all four of the constructs from the original scale (receiving emotional support, receiving instrumental support, giving emotional support and giving instrumental support) and displays sound psychometric properties in the sample of older adults. Furthermore, the study provides evidence of a strong relationship between social support and both well-being and

perceived stress. Importantly, the nature of this relationship emerged as distinct across the different domains of social support, with giving and receiving emotional support and giving instrumental support related to well-being and receiving instrumental support associated with lower perceived stress. These findings attest to the importance of examining social support at this dimensional level.

Using CFA to test the measurement models for each of the four dimensions, receiving emotional support, receiving instrumental support, giving emotional support and giving instrumental support, allowed for a close examination of item fit to construct. Of note is that the 12-item, four-factor model produced better fit indices than the 12-item, two-factor model (of just giving and receiving). This finding indicates that items are distinguishing between the distinct social support functions of emotional and instrumental support. Using the modification indices provided by the CFA procedure, the authors arrived at a solution, which gave the least number of clear independent indicators for each of the four dimensions. The high correlations between these reduced items and the original full scale constructs indicate that the Brief 2-Way SSS is adequately tapping these constructs. Furthermore, the brief version of the scale showed strong psychometric properties, with internal reliabilities and test–retest correlations all above 0.7.

The Brief 2-Way SSS subscales showed strong correlational relationships with well-being, as would be expected based on past research findings. The pattern of findings from the cross-sectional and longitudinal regressions provide further evidence for the validity of the Brief 2-Way SSS and the constructs it measures.

Social support and well-being in the older adult population

The results of regression analyses provide evidence for the importance of examining both the giving and receiving of emotional and instrumental social support. The cross-sectional analysis indicated that well-being has a strong relationship with both receiving and giving emotional support. This is consistent with the growing body of research indicating that social support acts as a perceived resource to promote well-being.[4,11] This may be of particular importance in older adulthood as changes related to ageing, such as retirement, loss of mobility and/or the loss of a spouse, may threaten the availability of support thereby impacting functioning and well-being.[31] It is of interest that although receiving instrumental support was bivariately related to well-being, it did not account for a significant amount of unique variance, indicating that the perception of having emotional support available may have a greater impact on well-being than more tangible practical support.

Giving both emotional and instrumental social support was uniquely associated with well-being, indicating that giving support to others may be particularly important for

positive effect in older adulthood. Giving social support can foster intimacy in relationships, which promotes positive emotions,[32] and provide a sense of fulfilment, which has been linked to enhanced psychological well-being.[5] The value of giving social support is also corroborated in the research on generativity. Generativity involves caring for others and making contributions to society, a significant factor associated with well-being in older adulthood and integral to successful aging.[33]

Of interest in the current finding was that while giving emotional support emerged as strongly correlated with well-being in cross-sectional data, only receiving emotional support remained associated with well-being over time. This finding suggests that giving social support may have an instant *feel good* benefit, for older adults, possibly by contributing to their feeling of self-worth. However, receiving emotional support had a long-term association with well-being, displaying a significant relationship even after a 3-month period. Perhaps, the fact that someone has been there to listen and care for you enhances a person's feeling of belonging and being cared about which contributes in a stable way to an overall sense of well-being.

The findings of the regression analyses with perceived stress as the outcome, indicated that receiving instrumental support was associated with lowered perceived stress across time. Receiving instrumental support did not emerge as uniquely associated with well-being; rather, it was the perception of having emotional support available that displayed the stronger relationship with well-being. These findings are theoretically consistent with the stress buffering and main effects hypothesis[8] regarding the influence of social support, with emotional support directly related to well-being and instrumental support linked to reductions in perceived stress,[13,14] indicating these two types of social support work through different mechanisms.

Strengths and limitations

The current study has the notable strength including data from a longitudinal follow-up. This allowed to examine the test–retest reliability of the Brief 2-Way SSS and to investigate the contribution of different facets of social support to well-being and perceived stress across time. There are of course limitations due to the self-report nature of the data and inherent social desirability of the topic, and results should be interpreted in this light. Furthermore, the 2-Way SSS only assesses participant's subjective perceptions and does not include any objectively assessment of the social support actually received or given.

While the current findings present strong evidence for the Brief 2-Way SSS as a measure of the four underlying constructs of receiving emotional support, receiving instrumental support, giving emotional support and giving instrumental support, further validation of this brief version of the scale is required in an independent sample of older adults and across

other populations and in different cultural contexts. Research that examines a wide array of constructs, such as psychical health, identity and community connectedness that may also impact on the well-being of older adults, alongside social support, is needed to build our theoretical understanding and to provide evidence-based recommendations for those working in the field.

Conclusion

In conclusion, the differing results in the predication of well-being and stress, both cross-sectionally and longitudinally, have provided evidence for the importance of examining both the giving and receiving of social support in its constituent parts of emotional and instrumental support. Furthermore, the current research showed the application of these constructs in a large sample of older adults. Finally, the research provides evidence for a brief 12-item version of the 2-Way SSS as a psychometrically valid measure of the elements of social support. A sound but a brief measure is an important step forward for continued research into social support.

Declaration of conflicting interests

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Supplemental material

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