Psychometric Properties of the DSM-5 Social Anxiety Disorder Dimensional Scale in an

Australian Community Sample

Abstract

The Social Anxiety Disorder Dimensional Scale (SAD-D) is a 10-item scale developed by the Diagnostic and Statistical Manual (Fifth Edition) Anxiety, Obsessive-Compulsive Spectrum, Posttraumatic, and Dissociative Disorder work group to supplement current dichotomous approaches to assessment of Social Anxiety Disorder (SAD). The aim of the present study was to evaluate the psychometric properties of the SAD-D in an Australian community sample. Two-hundred and ninety-one participants (72.9% female) aged 18-76 years *(M* =28.46; *SD* =12.30) completed the study. Confirmatory factor analysis indicated support for the unidimensional structure of the SAD-D (RMSE=.08; CFI=.97). The measure demonstrated strong internal consistency (α=.94), as well as good and divergent validity. The SAD-D showed excellent test-retest reliability (ICC=.93). Overall, the SAD-D appears to be a brief and reliable measure of SAD symptomatology. Limitations, including the use of a predominantly female convenience sample, and failure to include the mental health and background of the sample, are discussed.

Keywords: Dimensional scale; DSM-5; factor structure; psychometric properties; SAD-D; social anxiety disorder

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Social anxiety disorder (SAD) is characterised by the experience of significant anxiety in social and/or performance situations resulting in significant distress and/or impairment (APA, 2013). SAD has an early age of onset, with 50% of those with the condition diagnosed by 11 years (Stein & Stein, 2008). Globally, SAD has an average lifetime prevalence of 4% and higher lifetime prevalence rates in high income countries including the United States, Europe, and New Zealand (Stein et al., 2017). In Australia, the 12-month prevalence rate for SAD is 4.7% with women reporting higher rates than men (i.e., 5.7% and 3.8% respectively; Australian Bureau of Statistics, 2008). The lifetime prevalence rate is 8.4% in Australia (Australian Bureau of Statistics, 2008).

SAD is a chronic condition that can have a pervasive impact on one's functioning and quality of life (Mendlowicz & Stein, 2000; Saarni et al., 2007). Data on days of work lost have shown that SAD is amongst the top ten most impairing conditions, impacting mental and physical health, functioning, and quality of life (Mendlowicz & Stein, 2000; Saarni et al., 2007). SAD is a risk factor for major depressive disorder and can co-occur with a number of other mental health conditions including alcohol use disorder, eating disorders, bipolar disorder, and obsessive-compulsive disorder (Stein & Stein, 2008). Given the prevalence and pervasiveness of the disorder, the assessment and diagnosis of SAD is an important first step in the delivery of evidence-based treatments.

Self-report measures are an important component of an evidence-based, multi-modal assessment (Moses et al., 2020). Self-report measures can be used to assess symptomology, symptom severity, and to track treatment outcome (Moses et al., 2020). Furthermore, self-report measures are efficient, low-cost, and relatively easy to administer and score (De Sousa et al., 2018; Herbert et al., 2014; Knappe & Hoyer, 2014). This highlights the usefulness of

self-report measures in the assessment of SAD both in clinical practice as well as in research settings.

The fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) introduced dimensional approaches to supplement the categorical classification of mental disorders (APA, 2013). Dimensional assessments allow clinicians and researchers to assess aspects of psychopathology that categorical approaches cannot determine, such as capturing disorder severity, evaluating presentations at a subclinical level, and monitoring changes in symptomology over time (LeBeau et al., 2015). It also enables the within category variation in disorder manifestation to be interpreted in terms of variability in different dimension such as thought, affect, and behaviour, which is not possible with categorical assessment (Krueger et al., 2005).

The DSM-5 Anxiety, Obsessive-Compulsive Spectrum, Posttraumatic, and Dissociative Disorder work group developed the Social Anxiety Disorder Dimensional Scale (SAD-D), a 10-item dimensional assessment of SAD symptoms that correspond to the DSM-5 criteria (LeBeau et al., 2012). Initial psychometric validation of the SAD-D demonstrated good psychometric properties (LeBeau et al., 2012). In this preliminary study, an initial sample of 57 undergraduate students and 48 participants with clinically significant social anxiety disorder symptoms were used. The results indicated preliminary evidence of the scale's unidimensionality, good internal consistency ($\alpha = .85$), good convergent validity ($r_s = .69$) with the Social Phobia Inventory (Connor et al., 2000), and good test-retest reliability (Intraclass Correlational Coefficient = .81; LeBeau et al., 2012).

Since this initial psychometric evaluation, the psychometric properties of the SAD-D have been replicated in a North American clinical sample (LeBeau et al., 2016), a German student and treatment-seeking sample (Beesdo-Baum et al., 2012; Knappe et al., 2014; Knappe et al., 2013), a Dutch-speaking paediatric sample (Moller & Bogels, 2016), and a

Brazilian student sample (DeSousa et al., 2017). Across these replication studies the SAD-D has been found to have a unidimensional structure (Beesdo-Baum et al., 2012; DeSousa et al., 2017; Knappe et al., 2014), good to excellent internal consistency (Cronbach's alphas between .86 and .91; DeSousa et al., 2017; Knappe et al., 2014; LeBeau et al., 2016; Moller & Bogels, 2016), and good test-retest reliability (ICCs between .77 and .83; DeSousa et al., 2017; Knappe et al., 2014). Correlations of the SAD-D with measures of similar and different constructs provided support for its convergent and divergent validity respectively (Beesdo-Baum et al., 2012; DeSousa et al., 2017; LeBeau et al., 2016; Moller & Bogels, 2016). The scale's sensitivity and specificity as well as its ability to differentiate those with a diagnosis of SAD from those without was found to be good to excellent (Beesdo-Baum et al., 2012; Knappe et al., 2014; Knappe et al., 2013; Moller & Bogels, 2016) and a cut score of 14 has been used to indicate clinically relevant symptoms (Beesdo-Baum et al., 2012).

Research to date suggests that the SAD-D is a valid and reliable dimensional measure as demonstrated through numerous studies utilising clinical and non-clinical samples (Beesdo-Baum et al., 2012; DeSousa et al., 2017; Knappe et al., 2014; Knappe et al., 2013; LeBeau et al., 2012; LeBeau et al., 2016; Moller & Bogels, 2016). The SAD-D is a freely available, brief, and quick measure to administer. The SAD-D also allows for classification of subthreshold diagnoses to be made and for the symptoms to be measured across time points to discern any changes as a result of treatment (DeSousa et al., 2017; Knappe et al., 2014; LeBeau et al., 2012).

Despite the numerous benefits of the SAD-D, it is important to note that there are a number of limitations to the existing literature. Firstly, the psychometric validation of the SAD-D has so far been restricted to samples in the United States, Germany, Brazil, and the Netherlands. These studies have predominantly utilised restricted samples with specific anxiety disorders or non-clinical samples with homogenous sample characteristics

(participants were primarily young, female, and well-educated), which hinders the generalisability of results to the wider population (Beesdo-Baum et al., 2012; Knappe et al., 2013; LeBeau et al., 2016; Moller & Bogels, 2016). Secondly, there are a limited number of studies investigating the English version of the SAD-D, and the psychometric properties of the SAD-D have not been investigated with an Australian sample. The expression and prevalence of SAD has been shown to differ across cultures and countries (Hofmann, Anu Asnaani, & Hinton, 2010; LeBeau et al., 2012; Stein et al., 2017), therefore, the SAD-D requires validation in different cultures and ethnicities.

The aim of the present study was to address some of the limitations of the existing literature and investigate the psychometric properties of the SAD-D within an Australian community sample. In particular, the present study aims to investigate the scale's 1) factor structure; 2) internal consistency; 3) test-retest reliability; and 4) convergent and divergent validity. It is hypothesised that the SAD-D will demonstrate results consistent with previous studies (Beesdo-Baum et al., 2012; DeSousa et al., 2017; Knappe et al., 2014; Knappe et al., 2013; LeBeau et al., 2012; LeBeau et al., 2016; Moller & Bogels, 2016), showing a unidimensional structure and excellent reliability and validity.

Method

Participants

A total of 394 participants commenced the study. Incomplete data or participants that did not meet inclusion criteria were removed from all analyses. Two hundred and ninety-one participants aged 18 to 76 years *(M* = 28.46*, SD* = 12.30), primarily female (72.9%) participated in the study. Inclusion in the study required participants to be at least 18 years of age and living in Australia. Sample characteristics are outlined in Table 1. The study was approved by the Human Research and Ethics Committee of Western Sydney University (Approval number: H13180).

TABLE 1 HERE

Measures

The Social Anxiety Disorder Dimensional Scale (SAD-D*; *LeBeau et al., 2012).

The SAD-D (LeBeau et al., 2012) is a 10-item self-report measure examining the severity of social anxiety symptoms over the previous month. Four items reflect fear and anxiety related cognitions and physiological symptoms (e.g., "anxiety, worry, or nervousness about upcoming social situations"). Four items assess the frequency of avoidance behaviours (e.g., "refuse to attend social situations"). One item distinguishes between emotional and physiological manifestations of panic and one item assesses the frequency of cognitive avoidance (e.g., distraction) in anxiety-provoking situations (LeBeau et al., 2012). Each item is rated on a five-point Likert scale ranging from zero ("never" or "none") to four ("all the time" or "extreme"). The SAD-D has previously demonstrated good validity and internal consistency in previous samples (α > .85; DeSousa et al., 2017; Knappe et al., 2014; LeBeau et al., 2012; LeBeau et al., 2016; Moller & Bogels, 2016). Cronbach's alpha for the current sample is described below.

The Agoraphobia subscale of the Fear Questionnaire (FQ-A; Marks & Mathews, 1979).

The FQ-A (Marks & Mathews, 1979) is a five-item self-report measure assessing the likelihood of avoidance behaviours in agoraphobia-related situations. Each item is rated on a nine-point Likert scale ranging from zero ("would not avoid it") to eight ("always avoid it"). The FQ-A has previously demonstrated acceptable internal consistency in previous samples (α between .60 and .85; Arrindell et al., 1984; Frombach et al., 1999). The FQ-A was used to assess divergent validity given the symptom differences between agoraphobia and social anxiety disorder. In the current sample, the FQ-A had a Cronbach's alpha of .90.

The Social Interaction Anxiety Scale-6 (SIAS-6) and Social Phobia Scale-6 (SPS-6; Mattick & Clarke, 1998; Peters et al., 2012).

The SIAS-6 and SPS-6 (Mattick & Clarke, 1998; Peters et al., 2012) are two six-item self-report companion measures designed to be used together to assess interaction and performance fears (e.g., eating and drinking) in social anxiety, respectively. Each item is rated on a five-point Likert scale ranging from zero ("not at all characteristic or true of me") to four ("extremely characteristic or true of me"). The SIAS-6 and SPS-6 have previously demonstrated to retain the construct validity of the original longer forms which showed good internal consistency ($\alpha > .88$; Peters et al., 2012). The SIAS-6 and SPS-6 were selected for use as a measure of convergent validity for this study given both are freely available and routinely used in clinical practice. In the current sample, the SIAS-6 and SPS-6 had a Cronbach's alpha of .88 and .91 respectively.

Procedure

This study was part of a larger body of research being undertaken investigating the psychometric properties of a number of DSM-5 dimensional scales. Participants were recruited via posts on various social networking sites, online community notice boards, and via email. Recruitment sources were specifically selected in attempt to access a heterogenous sample. This post included an anonymous link to the study questionnaire. Recruitment source was not monitored. Part A was an online questionnaire that took approximately 20 minutes to complete. In Part A participants reviewed an information sheet before providing consent to participate. Participants were then asked to complete a brief demographics questionnaire, the SAD-D, the FQ-A, and the SIAS-6 and SPS-6. Upon completion of Part A, participants were invited to participate in Part B of the study in order to examine the test re-test reliability of the measure. Those who indicated an interest in completing Part B of the study were asked to create a unique identification code to anonymously link their responses from Part A to Part B. These participants were emailed a link to Part B of the study two weeks after completing Part A and were asked to complete the study questionnaires again in a fixed order.

Statistical Analyses

All analyses were performed using IBM SPSS Statistics Version 26 and IBM SPSS Amos Version 26. Prior to conducting statistical analyses, assumption testing was completed. Data exhibited slight positive skewness and multivariate non-normality, thus non-parametric tests were used as appropriate.

Factor structure was examined using confirmatory factor analysis (CFA) using maximum likelihood estimation with data collected in Part A of this study. For goodness of fit indices, the Comparative Fit Index (CFI), the Tucker-Lewis Index (TLI), the Standardised Root Mean Square Residual (SRMR), and the Root Mean Square Error of Approximation (RMSEA) were calculated. The model was considered to have an acceptable fit if the CFI and TLI values were equal to or higher than 0.90 and the SRMR and RMSEA values were less than 0.08 (Brown, 2006; Hu & Bentler, 1999). The model was considered to have a good fit if the CFI and TLI values were higher than 0.95 and the SRMR and RMSEA values were equal to or lower than 0.05 (Brown, 2006; Hu & Bentler, 1999). The SRMR statistic was used due to evidence that it is robust to the method used to estimate the model parameters (Shi & Maydeu-Olivares, 2020).

Cronbach's alpha was calculated to examine the internal consistency for SAD-D in both samples (Part A and Part B). In line with DeSousa et al. (2017), test-retest reliability was examined by calculating the Intraclass Correlation Coefficient (ICC) between the total score on the SAD-D in Part A and Part B. This was calculated using a Two-Way Mixed Effect Model and Absolute Agreement Type, with a confidence interval set to 95%. ICCs above 0.50, 0.75, and 0.90 were considered to have moderate, good, and excellent respectively (Koo & Li, 2016). With two observations per subject, an ICC greater than .5, an alpha of .05 and power of .80, 22 participants are required to estimate the value of ICC (Bujan & Baharum, 2017). The SIAS-6, SPS-6, and FQ-A self-report measures were used to examine convergent

and divergent validity, consistent with LeBeau et al.'s (2012) methodology. Due to non-normal data, Spearman's rho was used to examine convergent and divergent validity, correlating the SAD-D with the SIAS-6 and SPS-6 to examine convergent validity and correlating the SAD-D with the FQ-A to examine divergent validity. Visual inspection of scatterplots indicated a monotonic relationship between variables. The strength of correlation coefficients were interpreted in line with Cohen (1992) where 0.10 is "small", 0.30 is "moderate", and 0.50 is "large".

Results

Descriptive Statistics

The descriptive statistics for the sample are depicted in Table 2. In Part A, 167/291 (57.40%) scored 0-10 on the SAD-D, 77/291 (26.46%) scored 11-20, 33/291 (11.34%) scored 21-30, and 14/291 (4.81%) scored 31-40. 98/291 (33.7%) of the sample met criteria for SAD based on a cut score of 14.

TABLE 2 HERE

Factor Structure

Initial CFA results demonstrated acceptable CFI, TLI, and SRMR but unacceptable RMSEA: $\chi^2 (35) = 168.30$, $p < .001$, CFI = .94, TLI = .92, SRMR = .04, RMSEA = .12. Post hoc review of the modification indices indicated that there was high local covariance between two sets of items, item four with item five (assessing physiological symptoms of anxiety) and item six with item seven (assessing avoidance and escape behaviours related to anxiety). Consistent with the methodology of DeSousa et al. (2017) the correlations between the error terms for these two sets of items were set to be freely estimated and the CFA was conducted again. The model's fit indices from the subsequent analysis demonstrated good fit to the data: $\chi^2 (33) = 92.36$, $p < .001$, CFI = .97, TLI = .96, SRMR = .03, RMSEA = .08. All items loaded significantly on the single factor. Unstandardised and standardised factor loadings and

squared multiple correlations are provided in Table 3. The correlations between SAD-D items

are outlined in Table 4.

TABLE 3 HERE

TABLE 4 HERE

Validity

There was a statistically significant, strong, positive correlation between the SAD-D

and the SIAS-6 (r_s = .66, p <.001) and SPS-6 (r_s = .74, p <.001). A weaker positive

correlation was found between the SAD-D and the FQ-A (r_s = .53, p <.001).

Reliability

Cronbach's alpha for the SAD-D was α = .95 at Time 1 and α = .94 at Time 2. Apart

from item 1 which indicated moderate test-retest reliability, all other items indicated good to

excellent test-retest reliability (ICCs between .75 and .90, p <.05) including the total scale

(ICC = .93, p <.001). The ICCs for the SAD-D items and SAD-D total at Time 1 and Time 2

are outlined in Table 5.

TABLE 5 HERE

<div align="center">

Discussion

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The SAD-D was developed by the DSM-5 Anxiety, Obsessive-Compulsive Spectrum,

Posttraumatic, and Dissociative Disorder work group as a brief, easy to administer and score,

freely available self-report dimensional measure of social anxiety symptoms. The aim of the

present study was to evaluate the psychometric properties of this scale in an Australian

community sample. The study aimed to replicate the initial psychometric validation study

conducted by LeBeau et al. (2012) by examining the factor structure, internal consistency,

test-retest reliability, and convergent and divergent validity of the SAD-D. It was

hypothesised that the SAD-D would exhibit a unidimensional structure, and good-excellent

validity and reliability, as has been seen in previous studies. These hypotheses were supported in the current study.

The findings from the present study suggest that the SAD-D consists of a single factor, which is consistent with the findings of previous studies (Beesdo-Baum et al., 2012; DeSousa et al., 2017; Knappe et al., 2014). All items of the SAD-D loaded significantly onto the single factor. Item four and item five, which both measure physiological symptoms of anxiety, exhibited high inter-item correlations which suggests that they may be measuring a similar concept. There was also a strong local covariance between item six and item seven. This is consistent with DeSousa et al.'s (2017) study which was conducted with a Brazilian community sample. These two items measure avoidance and escape behaviours related to anxiety-provoking situations. DeSousa et al.'s (2017) adjustment of the model to acknowledge this local dependency improved model fit, as did the adjustment in the present study. However, other studies examining the factor structure of the SAD-D have not had the same issues with high inter-item correlations and covariance (e.g., Beesdo-Baum et al., 2012). Further studies investigating the factor structure of the SAD-D utilising community samples are needed to address these discrepancies.

Consistent with LeBeau et al. (2012), results from the present study indicated that the SAD-D exhibits excellent internal consistency, and this result is consistent with previous studies using community samples (DeSousa et al., 2017; Knappe et al., 2014; Moller & Bogels, 2016). The present study also contributed to the small existing literature examining the test-retest reliability of the SAD-D (Knappe et al., 2014) and results showed good to excellent test-retest reliability between SAD-D scores at Time 1 and Time 2, with the exception of one item (Item 1) which showed moderate test-retest reliability. This result is preliminary due to the small number of participants who completed the questionnaires at Time 2. This observed lower response rate in the test-retest condition of the study may be

explained by factors that are likely to influence volunteering, such as interest or perceived importance in the topic investigated (Rosnow & Rosenthal, 1997). It is important that future studies investigate the consistency of SAD-D scores across time in larger samples. One way to improve participation may be by explicitly stating the theoretical and practical importance of the research.

Results indicated that the SAD-D demonstrates good convergent validity as shown through the strong, positive correlation with the SIAS-6 and SPS-6 (Mattick & Clarke, 1998; Peters et al., 2012), two validated measures of SAD symptoms. The SAD-D was also shown to demonstrate good divergent validity with a weaker correlation with the FQ-A (Marks & Mathews, 1979), a validated measure of agoraphobia symptoms. These results are consistent with the findings of LeBeau et al. (2012) in their original study. The positive correlation between the SAD-D and the FQ-A though smaller than that of the SAD-D and the SIAS-6 and SPS-6 was still in the large range. This could be due to the SAD-D's utilisation of items that correspond to the main domains of anxiety that may also be relevant to both social anxiety and agoraphobia symptomology (LeBeau et al., 2012; Shear et al., 2007). Future studies should investigate the SAD-D's discriminant validity using scales that measure different constructs unrelated to anxiety.

This study is the first to investigate the psychometric properties of the SAD-D in an Australian community sample. The current sample characteristics indicate that participants were predominantly employed with varying levels of education with the majority having achieved a high school certificate level of education. Australian population data on the labour force and education level attained reflect similar percentages, indicating that the current sample is likely to be representative of the Australian population (Australian Bureau of Statistics, 2017, 2020). The mean score on the SAD-D in this Australian community sample ($M = 11.25$; SD $= 9.49$) was higher compared to previous studies that have used community

samples, which have reported mean scores of 4.7-6.5 (DeSousa et al., 2017; Knappe et al., 2014; LeBeau et al., 2012). As this research partially took place parallel to the Coronavirus (COVID-19) global pandemic, this result could be explained by the effects of COVID-19 on mental health, which have previously been reported to include increased symptoms of depression and anxiety in Australian adults (Fisher et al., 2020). Aside from the high prevalence of SAD in Australia (Australian Bureau of Statistics, 2008), an alternative explanation for these higher mean scores may be derived from findings that those with clinically significant symptoms may have an inherent interest in a study investigating SAD compared to those who do not (Rosnow & Rosenthal, 1997). This may make it more likely for them to participate in the research contributing to the higher mean scores recorded in the current study compared to other studies in other countries.

The results ascertained from the present study reflect the scale's psychometric properties within a predominantly female sample. This is similar to previous studies where there was a higher proportion of females in their samples (Beesdo-Baum et al., 2012; DeSousa et al., 2017; Knappe et al., 2014; Knappe et al., 2013; LeBeau et al., 2012; LeBeau et al., 2016; Moller & Bogels, 2016). Whilst there is Australian data that supports the trend reflected in the current study's sample composition, where females are more likely to be affected by anxiety disorders and at higher rates than males (Australian Bureau of Statistics, 2008), this study has utilised a female biased sample and further research with larger male samples are required.

Although the findings of the present study have demonstrated support for the SAD-D's psychometric properties, there are several limitations that should be addressed. The present study did not investigate the scale's psychometric properties with a clinical sample. Future studies should investigate the SAD-D's factor structure and psychometric properties with an Australian clinical sample. The present study did not investigate the SAD-D's sensitivity and

specificity. Future studies utilising clinical and non-clinical samples may wish to investigate the SAD-D's sensitivity and specificity, and establish cut-scores between non-clinical and clinical populations. Furthermore, the recruitment source for the present study was not monitored. Future studies advertising to community samples may find it beneficial to monitor recruitment source to ascertain further information on sample composition. This may be particularly useful in understanding whether there are differences in SAD symptomology between those in urban and rural parts of Australia and whether the psychometric properties of the SAD-D can be replicated. The time between participants completing the SAD-D at Time 1 and Time 2 was not monitored. Future studies may wish to monitor the number of days lapsed between Time 1 and Time 2 administrations. The performance of this scale as compared to interview-based assessments was not assessed in this study but is warranted to assess validity and diagnostic sensitivity with clinical and non-clinical samples. Data on treatment outcomes is required to assess the sensitivity of this scale to treatment change. Finally, future researchers may wish to assess divergent validity utilising a different measure than that used here given the comorbidity between social anxiety disorder and agoraphobia.

Overall, the results from this study build on the existing literature and provide preliminary evidence that the SAD-D is a valid and reliable tool that can be used to supplement categorical assessments of SAD symptomology in Australia. The SAD-D is a freely available, easy to administer and score dimensional measure, making it a useful and time-efficient scale that can be used in research and clinical practice. The results from the present study add to the growing literature on the psychometric validation of the English version of the SAD-D. The findings also provide support for the assessment practices used in Australia. Although the results are in support of the SAD-D's psychometric properties, further research should be conducted with clinical samples to further investigate its psychometric properties in other populations.

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Table 1

Sample characteristics (N = 291)

Variable	*n*	%
Gender (% female)	212	72.9
Marital status		
Single	184	63.4
Married	54	18.6
De Facto	37	12.8
Divorced	11	3.8
Widowed	1	0.3
Separated	3	1.0
Employment status		
Working part time	82	28.3
Working full time	80	27.6
Unemployed	12	4.1
Studying	100	34.5
Retired	2	0.7
Full time carer	3	1.0
Other	11	3.8
Education level		
School certificate	29	10.0
Trade certificate	17	5.8
Higher school certificate	138	47.4
Bachelor degree	55	18.9

Postgraduate degree	42	14.4
Doctorate	10	3.4
Country of origin		
Australia	227	78.0
New Zealand	3	1.0
Asia	25	8.6
Europe	4	1.4
UK	6	2.1
North America	5	1.7
South America	3	1.0
Middle East	12	4.1
Africa	5	1.7
Other	1	0.3

Note. Percentages are based on valid percent.

Table 2

*Descriptive statistics for measures (*N = 291*)*

Measure	*M (SD)*	Median	Range	Possible range
SAD-D Total	11.25 (9.49)	9.00	0-40	0-40
Item 1	0.93 (1.08)	1.00	0-4	0-4
Item 2	1.45 (1.11)	1.00	0-4	0-4
Item 3	1.40 (1.15)	1.00	0-4	0-4
Item 4	1.02 (1.21)	1.00	0-4	0-4
Item 5	1.20 (1.23)	1.00	0-4	0-4
Item 6	1.19 (1.15)	1.00	0-4	0-4
Item 7	1.08 (1.14)	1.00	0-4	0-4
Item 8	1.25 (1.26)	1.00	0-4	0-4
Item 9	1.09 (1.16)	1.00	0-4	0-4
Item 10	0.64 (1.08)	0.00	0-4	0-4
SIAS-6 SPS-6 Total	11.94 (10.61)	10.00	0-47	0-48
FQ-A Total	8.44 (9.02)	6.00	0-40	0-40

Table 3

Factor loadings and squared multiple correlations for SAD-D (N = 291)

Item	Unstandardised	Standardised	Squared multiple correlations
Item 1	1.00**	.77**	.60
Item 2	1.12**	.84**	.71
Item 3	1.10**	.80**	.64
Item 4	1.25**	.86**	.75
Item 5	1.28**	.87**	.75
Item 6	1.14**	.82**	.68
Item 7	1.10**	.81**	.65
Item 8	1.13**	.75**	.56
Item 9	1.06**	.76**	.58
Item 10	.87**	.67**	.45

Note: **Significant at <.001

Table 4

*Correlations between SAD-D items (*N = 291)

	Item									
	1	2	3	4	5	6	7	8	9	10
SAD-D item 1	-									
SAD-D item 2	.72	-								
SAD-D item 3	.59	.69	-							
SAD-D item 4	.67	.73	.70	-						
SAD-D item 5	.67	.76	.70	.83	-					
SAD-D item 6	.62	.69	.64	.67	.67	-				
SAD-D item 7	.59	.61	.63	.67	.67	.77	-			
SAD-D item 8	.57	.61	.66	.61	.58	.63	.64	-		
SAD-D item 9	.56	.61	.57	.62	.64	.67	.67	.64	-	
SAD-D item 10	.53	.53	.52	.57	.55	.57	.57	.56	.55	-

Note. All correlations significant at < .001.

Table 5

SAD-D item scores and Intraclass Correlation Coefficients at Time 1 and Time 2 (N = 22)

	Time 1		Time 2		ICC
	M	*SD*	*M*	*SD*	
SAD-D item 1	0.64	1.00	0.41	.67	.58*
SAD-D item 2	1.55	1.10	1.27	1.08	.82**
SAD-D item 3	1.45	1.10	1.27	1.08	.90**
SAD-D item 4	0.82	.96	0.68	.95	.84**
SAD-D item 5	0.91	.97	0.77	.87	.75*
SAD-D item 6	0.95	.90	1.09	1.15	.78*
SAD-D item 7	0.82	1.01	0.86	.89	.76*
SAD-D item 8	0.95	1.13	1.05	1.25	.87**
SAD-D item 9	0.91	1.19	0.82	1.18	.85**
SAD-D item 10	0.32	.89	0.45	1.10	.86**
SAD-D total	9.32	8.29	8.68	8.32	.93**

Note: *Significant at <.05; **Significant at <.001