The Revised Social Anxiety Scale: Exploratory and Confirmatory Factor Analysis

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THE CONSTRUCT OF SOCIAL ANXIETY emerged from factor analytic research of general anxiety and fear scales that consistently suggested that there was a socially based component of anxiety (Bates, 1971; Endler, Hunt, & Rosenwein, 1962). A number of specific social anxiety scales were developed to measure this construct. One such scale is the Revised Social Anxiety Scale (Scheier & Carver, 1985), which originates from the social anxiety factor Fenigstein, Scheier, and Buss (1975) found while developing their Self-Consciousness Scale. Scheier and Carver (1985) simplified the wording of some of the original six social anxiety items and changed the format to a 4-point Likert scale.

The Revised Social Anxiety Scale measures both affective and behavioral aspects of social anxiety. The scale has been demonstrated to be internally consistent (α = .79) and temporally stable, with a test–retest reliability of .77 (Leary, 1991). However, Leary (1983) noted that two of the six items are behavioral self-reports rather than items that measure social anxiety. Our study examined the factor structure of the Revised Social Anxiety Scale (Scheier & Carver, 1985) by comparing a single factor model and a two-factor model using exploratory and confirmatory factor analysis.

We administered the Revised Social Anxiety Scale to 96 undergraduate psychology students (47 men and 49 women) at the University of Ulster. Their ages ranged from 20 to 43 years (M = 24.0, SD = 5.2). First, we performed an exploratory factor analysis. The factors were extracted using principal compo-
ments, and factors with eigenvalues greater than 1 were retained. An oblique rotation was requested using direct oblimin because we anticipated that the factors may be correlated. The solution yielded two factors (eigenvalues = 2.88 and 1.03). Factor 1 explained 48% of the variance and Factor 2 explained 17% of the variance. The pattern matrix showed a reasonably well-defined structure with Items 1–3 loading on the second factor and Items 4–6 loading on the first factor. The correlation between the factors was .36.

We performed a series of confirmatory factor analyses. The model parameters were estimated using LISREL 8 with polychoric correlations and an asymptotic weight matrix (Jöreskog & Sörbom, 1993). Initially, two models were specified: a single factor model and a two-factor model. The structure of the two-factor model was based on the exploratory factor analysis. The first three items were specified to load on the first factor, and the last three items to load on the second factor. The correlation between the factors was a free parameter to be estimated. Neither the single factor model, \( \chi^2(9) = 26.95, p = .001 \), nor the two-factor model, \( \chi^2(8) = 17.57, p = .025 \), explained the data. However, the latter model was a significantly better description of the data, \( \chi^2(1) = 9.38, p < .05 \). An inspection of the residuals indicated that if the sixth item had been allowed to load on both factors, the fit of the model would be substantially improved. When this factor loading was freed and the model re-estimated, the chi-square—\( \chi^2(7) = 12.38, p = .89 \)—and other fit indices (GFI = 0.97; NFI = 0.92; CFI = 0.96) indicated that the model was an acceptable explanation of the data. The estimated factor loadings were reasonably high, ranging from .352 to .936. The estimated correlation between the two factors was .597 (p < .05).

These analyses suggest that the Revised Social Anxiety Scale measures two constructs. The first factor could be described as measuring verbal performance difficulties. The item related to talking to strangers (Item 4) and nervousness when talking (Item 5) loaded strongly on the first factor and the item related to nervousness in front of groups (Item 6) loaded moderately on this factor. Although Item 6 did not directly assess verbal performance difficulties, it addressed both nervousness and group anxiety, which can be seen as components of verbal performance difficulties. The second factor is defined by items relating to shyness (Item 1), contingent encounters (Item 2), embarrassment (Item 3), and nervousness in front of groups (Item 6). It represents a more global construct of social anxiety. The correlation between the two factors was .59. This supports Beatty's (1984) proposition that although the subjective and behavioral components of social anxiety are related, the correlation between them need not necessarily be high.

REFERENCES


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