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Extended Abstract

**Psychological Properties of the Academic Support Scale
(Persian version)**

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Introduction

Social support is a protective factor for health status and level of performance. Indeed, the higher support related to the lower emotional, mental and physical problems. Parent and peer are two important sources for child and adolescent. In an academic situation, the teacher is another source of support. Academic support is an indicator for social support in academic situations. Mother, father, peer, and teacher are sources of academic support in the situation. A child who receives academic support will be better in academic performance. To assess the academic support, many instruments were developed.

Academic Support Scale is aimed to assess academic support that a child may get from father, mother, peer, and teacher (four important sources of academic support). This scale was developed by Sands and Plunkett (2005). The purpose of the study was to check the psychometric properties of the academic support scale.

Method

The sample consisted of 254 high school students (90 boys and 164 girls) with an age ranged between 16 to 18 years old in Shiraz city. The sampling method was multistage cluster sampling and sample unit for the first stage was school and for the second stage was

12 Studies in Learning & Instruction

classroom. Persian version of the Academic Support Scale was used in the study. The scale is a 24-items scale with a four point scale (from strongly disagree =1 to strongly agree=4). The scale includes four factors: father academic support, mother academic support, peer academic support, and teacher academic support. Each factor was assessed by 6 items of the scale. To check the psychometric properties of the scale, principle component factor analysis with an oblique rotation was run to exam factor structure of the scale, Alpha coefficient and test-retest methods were used for checking scale reliability.

Results

Exploratory factor analysis (PCA) was used to find out the factor structure of the Academic Support Scale. The KMO index for the sampling adequacy of the scale was 0.83 and the Bartlett's test for the correlation matrix of data was significant ($\chi^2 = 2484.78, P < 0.0001$). Based on these two indexes, principle component factor analysis with an oblique rotation was used to determine the underlying factor structure of the scale. The factor solution was determined using the scree plot method to try to limit the probability of over- or under-estimation which is reasoned to occur using the Kaiser criterion for eigenvalues of greater than one. It was decided that a factor load of .40 was appropriate to include items for each extracted factor. Items were selected for each factor that had the highest loadings on that particular factor and which were at least .10 different than the other factors. The factor solution comprised a total of 24 items grouped into four factors that accounted for more than 57% of the variance. These factors named mother academic support (MAS), father academic support (FAS), teacher academic support (TAS), and peer academic support (PAS). Factor 1, MAC (eigenvalue = 6.45), accounted for 26.8% of the variance. Factor 2, FAS (eigenvalue = 3.3) accounted for 13.7 % of the variance. Factor 3, TAS, (eigenvalue = 2.3) accounted for 9.6 % of the variance. Factor 4, PAS, (eigenvalue=1.8) accounted for 7.5% of the variance.

The reliabilities (internal consistencies) of the factors were estimated using Cronbach's alpha. Alpha coefficients for the MAS, FAS, TAS, and PAS were 0.86, 0.85, 0.85, and 0.76 respectively. Test-retest reliability (with a week interval) for the factors were between 0.78 to 0.64. To examine the gender differences on the Academic support scales, independent sample t-test was used. The results showed that there are significant differences between male and female on MAS ($t = 2.8$, $P < .01$), FAS ($t = 2.0$, $P < .05$) scores. In both measures the mean scores of female were lower than male.

Discussion

The main aim of this study was the analysis of the psychometric properties of the Persian version of the Academic Support Scale. The factor structure found in the sample of Iranian students coincides closely with the conceptual and empirical structures suggested in the study by Sands and Plunkett (2005). The study revealed that this instrument is suitable to evaluate academic support, showing adequate reliability and validity in an Iranian sample.

Keywords: Academic support, Academic support scale, Psychometric Properties