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Development of Attitude to University Life Scale: Validity and Realibility Studies of Scale

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Abstract

This study aims to develop a measurement tool that evaluates the attitude of university students to university life and also to conduct the validity of this measurement tool. Study group comprised of 355 students, 162 (45.63%) of whom were females with a mean age of 20.72 and 193 were males (54.37%) with a mean age of 20.93. Exploratory Factor Analyses were used in order to test the validity of the scale developed for this study. In addition, internal consistency analysis were used in order to evaluate the reliability of the scale. As a result of the factor analysis study, the Attitude to University Life Scale consisted of 25 items and 4 factors. Study findings revealed that this measurement tool can be used for Turkish university students as a valid one.

1. Introductıon

The behaviors and attitudes of an individual around his/ her family, friends and classmates are important. Life is a living being's continuous effort for adaptation to his/ her environment with these behaviors and attitudes. Therefore, an individual adapts through the reactions to the changes in his/ her environment in this dynamic process with these behaviors and attitudes (Geçtan, 1995).

In this process, especially university life is very important because a late adolescent is influenced by the environment and the environment is influenced by the late adolescent in his/ her university life. In other words,

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adolescents are influenced by parents and peers and they are affected by adolescents. Adjustment is a dynamic process in which it changes, continues and reduces the needs of the body and the society. Adjustment is a satisfying relationship between the organism and physical, psychological and social environment. When adolescents encounter self-challenge, they achieve adjustment by coping with the situation or showing a reaction. On the one hand adolescents try to adapt to the transition from childhood to adulthood; on the other hand, they achieve cognitive adaptations such as changing their old attitudes or finding ways to cope with new problems (Crow and Graham, 1973). Thus, the attitude is significant at the university life.

As it can be understood from the descriptions above, the attitude of an individual at the university is of a significant place for his/ her adulthood reactions. Therefore, developing an assessment tool is the purpose of this study so as to identify the attitudes of university students towards the university life.

2. Method

2.1 Participants

In the first phase of this study, 11 students aged 20-24 studying at Kırıkkale University Faculty of Education during the Fall Term of 2013-2014 Academic Year were asked to write an essay so as to obtain some clues about their attitude to university life as Tezbaşaran (1996) proposed. In the second phase, three psychological guidance and counselling experts were consulted regarding their opinions about Attitude to University Life Scale trial form and then a 80-item scale was developed. In the third phase, the trial form was implemented on the second study group in order to carry out factor analysis. In the third phase, the trial form was implemented on the second study group in order to carry out factor analysis. The study group consisted of a total of 100 students aged 18-26 studying at Kırıkkale University Faculty of Arts and Science, Faculty of Engineering, Faculty of Economics and Administrative Sciences during the Fall Term of 2013-2014 Academic Year. Following the results of the analysis, the scale was finalized as a 71-item scale and it was implemented on a total of 355 students aged 18-26 (mean age 20.831), of whom are 162 females (45.63%) (mean age 20.72) and 193 males (54.37%) (mean age 20.93) studying at Agrı Ibrahim Çeçen University Faculty of Arts and Science, Faculty of Education, Afyon Kocatepe University Faculty of Economics and Administrative Sciences, Faculty of Engineering, Anadolu University Faculty of Law, Faculty of Pharmacy, Ankara University Faculty of Law, Faculty of Health Sciences, Atatürk University Faculty of Theology, Doğuş University Faculty of Law, Eskişehir Osmangazi University Faculty of Arts and Science, Faculty of Medicine, Gazi University Faculty of Economics and Administrative Sciences, Faculty of Law, Faculty of Engineering, Marmara University Faculty of Law, Mustafa Kemal University Faculty of Economics and Administrative Sciences, Kadir Has University Faculty of Engineering, and Kırıkkale University Faculty of Engineering, Faculty of Health Sciences and Faculty of Law.

2.2 Research Insturment

The Development of Attitude to University Life Scale (AULS): The statements were written down regarding academic adjustment, the four factor of AULS, consists of statements regarding the courses; academic issues; study habits; course schedule and their department. 71 items were written down in order to measure the four factors which had been determined earlier. All the statements included in AULS are flat statements covering attitude to university life. The scale was developed in order for individuals to reveal information about themselves basing on Likert-type scale (Tezbaşaran, 1996). The answers are designed as a five-item Likert-type scale, being "Totally Agree" (5 points), "Strongly Agree" (4 points), "Undecided" (3 points), "Strongly Disagree" (2 points), "Totally Disagree" (1 point).

2.3 Procedure

AULS draft was implemented on students in a classroom environment as a group. Prior to the implementation, the students were informed of the aim of the study and they were assured that their responses would be kept secret.

2.4 The Analysis of the Data

Data analysis was carried out through SPSS 18.0 package programmes. The upper limit of the margin error was determined as 0.05. Content Analysis was conducted in order to form the themes of AULS. In the frame of construct validity, Exploratory Factor Analysis (EFA) was carried out for the data gathered from the study group in order to determine to what extent the items are included in the four factors (Büyüköztürk, 2003; Sümer, 2000).

3. Results (Findings)

This section covers the findings regarding the validity of AULS.

3.1. Findings regarding the Validity of AULS

Exploratory Factor Analysis (EFA) and Principal Component Analysis (PCA) as a factoring technique were conducted in order to examine the factoral structure of AULS (Kline, 1994). While the factoral structure was being examined there was no limitation to the number of factors and the minimum eigen value was determined as 1.00 in the first analyses. Prior to the factor analysis, Kaiser-Meyer-Olkin (KMO) coefficient and Barlett Sphericity were carried out in order to determine the appropriateness of the data. KMO value was found as 0.880 and the result of Barlett test (x^2: 9187.820; p:0.00) was meaningful. After that, Exploratory Factor Analysis (EFA) was conducted through using Varimax Rotation and Principal Component Analysis. The results revealed that 25 out of 71 items of AULS were grouped under four factors and the explanation of variance regarding the scale was found 31.924 %. The factor loadings of the subscale items gathered from the factor analysis are given in Table 1.

Table 1 Factor Loadings of Attitude to University Life Scale

	Factors			
Items	Factor I	Factor II	Factor III	Factor IV
5.	0.506			
6.	0.500			
8.	0.560			
10.	0.651			
11.	0.713			
12.	0.645			
13.	0.512			
14.	0.556			
53.		0.530		
54.		0.387		
55.		0.598		
56.		0.715		
57.		0.693		
58.		0.467		
70.		0.334		
49.			0.481	
50.			0.684	
51.			0.458	

52.				0.708
26.				0.424
30.				0.384
32.				0.610
36.				0.370
40				0.328
41.				0.545
Percentages of Variance Explanation	20.445	4.680	3.477	3.322
Total Percentages	20.445	25.125	28.602	31.924

As a result of the Exploratory Factor Analysis, the Attitude to University Life Scale consisted of 25 items and 4 factors. The Exploratory Factor Analysis revealed that factor loadings explained 31.924 % of the variance of the scale. The factor loadings of factor I consisting of 8 items varied between 0.500-0.713 and explained 20.445 % of the variance. The factor loadings of factor II consisting of 7 items varied between 0.334-0.715 and explained 4.680 % of the variance. The factor loadings of factor III consisting of 4 items varied between 0.458-0.708. and explained 3.477 % of the variance. And, the factor loadings of factor IV consisting of 6 items varied between 0.328-0.610 and explained 3.322 % of the variance. If the measurement of the factor loading is 0.45 or over it means it is a good measurement, however, this value limit can be decreased to 0.30 since there are few items in the analysis (Büyüköztürk 2005). Moreover, this tool is a valid one peculiar to a sample group bearing the characteristics of Turkish culture.

3.2 The Findings regarding the Reliability of AULS

3.2.1 Internal Consistency

The reliability of the scale was calculated by utilizing the data gathered from the 25 items proved valid according to the factor analysis procedure. Cronbach Alpha related to subscales of AULS was calculated according to the results of the implementation carried out on the study group consisting of a total of 355 students. Cronbach alpha coefficients related to the subscales of AULS were found 0.821 for factor I, 0.801 for factor II, 0.743 for factor III and 0.724 for factor IV. Item-total correlations and Cronbach alpha internal consistency coefficients are given in Table 2.

Table 2 Item-total Correlations and Cronbach Alpha Internal Consistency Coefficients regarding the Subscales of AULS

	Items	Item-total Correlations	Cronbach Alfa
Factor I		0.476-0.640	0.786- 0.809
Factor II		0.451- 0.627	0.757- 0.790
Factor III		0.459-0.608	0.641- 0.726
Factor IV		0.337-0.543	0.659-0.724

4. Results and Discussion

In this study, the factor analysis and construct validity were carried out for the Attitude to University Life Scale,

which is developed so as to assess students' attitude to university life in terms of factors. It can be argued that the scale is a valid assessment tool when the findings of this study are considered.

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