

## The Psychometric Properties of the Utrecht Homesickness Scale: A Study of Reliability and Validity

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### Abstract

*Problem Statement:* Globalization and technological developments have complicated modern life, while social mobility has increased along with interactions between diverse age and cultural groups. More and more people involved in this interaction and social mobility whether in short or long terms. However, adapting to new lifestyles while becoming more diversely interactive and socially mobile can be problematic for people who miss their past lives, previous circumstances, homes, and friends. This feeling of unrequited longing to return home can be termed *homesickness*, especially when applied to university students, many of whom for the first time live away from home. Students suffering from homesickness may need psychological help, support, and guidance to alleviate, if not prevent, homesick feelings while pursuing academic achievement and beginning their nascent careers. Despite the substantial amount of students suffering from homesickness, as of yet there has been no tool to measure severity of homesickness in university students, which signals a gap in the literature.

*Purpose of Study:* The purpose of this study was to investigate the psychometric properties of the Utrecht Homesickness Scale (UHS) with a Turkish sample.

*Methods:* A total of 1130 freshmen university students (59% female, 41% male) studying different majors at a college campus located in the western part of Turkey participated in this study. Their ages ranged from 16 to 27.

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*Findings and Results:* Analysis results provide enough psychometric support to suggest that the UHS could be used with five dimensions and 18 items in order to understand the homesickness level of freshmen in Turkey. Findings from exploratory and confirmatory factor analysis suggest that the five-factor model was replicated within this sample, which supports the scale's construct validity that is identical to the scale's original form. Thus, results similarly verify that the UHS has both a high internal consistency value and test-retest reliability. Above all, results also show that the total scale score of the UHS correlated significantly with measures of loneliness, social support, social connectedness, and general satisfaction with life.

*Conclusions and Recommendations:* The results suggest that the UHS and its subscales are reliable and valid scales to use for research evaluating the homesickness of freshmen university students in Turkey.

*Keywords:* Homesickness, reliability, validity, freshmen students, Utrecht homesickness scale

Contemporary cultures nurture environments in which the effects of technological developments begun during the Industrial Revolution are observable at both social and individual levels (Gross, 2005). These technological developments have ushered in an age of globalization that, though allowing increased social mobility and interactions between diverse age and cultural groups, has irrevocably complicated modern life. Inland mobility—joining the army, attending boarding school, attending a university in a different city—has increased as much as interculturality, which occurs with overseas training programs, immigration, and study abroad and foreign exchange programs. While the foregoing kinds of mobility are often voluntary, mobility in general also occurs involuntarily due to civil war, regime shift, natural disaster, food shortage, and unemployment, among other variables. Whether mobility is voluntary or involuntary, however, adapting to new lifestyles and new cultures can be problematic for individuals who miss their past lives, previous circumstances, homes, and friends. This feeling can be termed *homesickness*.

Homesickness has been defined as “an emotion which is felt after leaving house and home and is characterized by negative emotions, ruminative cognitions about home, and somatic symptoms” (Van Tilburg, 2005, p. 35). According to Thurber and Sigman (1998), homesickness is an anxiety condition caused by separation from home and attachment figures—parents, siblings, other relatives, and friends—and often manifests itself in a preoccupation with home and a deep desire to return there. Archer, Ireland, Amos, Broad, and Currid (1998) have conceptualized homesickness to be a form of separation reaction that includes behaviors and experiences stemming from a loss of accustomed place and activities and causing a sense of losing meaningful values. Thurber and Walton (2007) have emphasized that homesickness is a functional value loss that the individual experiences along with anxiety caused

by real or perceived separation from attachment figures. Upon considering all of the above definitions, homesickness is an experience of negative emotional reactions to a sense that home and accustomed environment have been negated from one's life.

On the one hand, Van Tilburg, Vingerhoets, and Van Heck (1996) have conceptualized homesickness as an experience accompanied by affective, cognitive, psychomotor, and physical symptoms. On the other hand, Bergsma (1963) differentiated normal and pathological homesickness after explaining that homesickness is a normal experience that can, however, have pathological effects if not healthily coped with (as cited in Van Vliet, 2001). Perhaps most evenhandedly, Vingerhoets (2005) points out the difficulty of clearly defining homesickness without excluding all of its dimensions. Although the literature does not agree to any one definition, there seems to be a consensus that homesickness includes missing home and friends, feeling lonely, experiencing problems with adapting to new environments, and frequently thinking about home. In light of all the definitions above, homesickness can be conceptualized as a disturbing emotional experience caused by separation from home, family, familiar people, and an accustomed environment, as well as a condition with physical, emotional, cognitive, and psychomotor components.

Research examining the universality of homesickness shows that the condition is widespread among children, adolescents, and college students (Kegel, 2009; Poyrazli & Lopez, 2007; Thurber & Walton, 2007; Van Tilburg, Vingerhoets, & Van Heck, 1996). Additionally, Van Tilburg et al. (1996) stated that homesickness is a phenomenon common to different cultures and age groups all over the world. To better explain the general spread of homesickness, Fisher (1989) reported that more than half of all people experience homesickness at least once during their lives. Regarding students in a specific place, Scopelliti and Tiberio (2010) reported that 74% of students living in Rome had experienced homesickness. However, other studies have reported widely different percentages for student homesickness for an array of locales; Fisher and Hood (1988) reported 35%; Stroebe, Van Vliet, Hewstone, and Willis (2002) reported 50%; Thurber (2005) reported 94%; Van Tilburg, Vingerhoets, and Van Heck (1996) reported 50%; and Van Vliet (2001) reported 48.7%. A study by Carden and Feicht (1991) reported that 77% of Turkish students experience homesickness compared to 19% of American students, suggesting that students from different cultures do not experience homesickness equally. In general, these findings indicate that homesickness is common among youth, especially college students.

According to Kegel (2009), homesickness is related to many personal, interpersonal, and environmental factors. Studies that anticipate Kegel's (2009) report that homesickness is related to loneliness (Grimes, 2007); academic achievement, physical symptoms, depression, anxiety, difficulty with memory, and concentration (Burt, 1993; Stroebe et al. 2002; Van Tilburg, Vingerhoets, Van Heck, & Kirschbaum, 1999); cultural identity, external locus of control, and interaction with the members of a different culture (Ward & Kennedy, 1993); a high level of social anxiety and a low level of social support (Urani, Miller, Johnson, & Petzel, 2003); adaptation to university life (Poyrazli & Lopez, 2007); low self-respect (Paul & Brier, 2001);

emotional balance (Stroebe, Van Vliet, Hewstone, & Willis, 2002); ability to regulate emotions (Yoo, Matsumo, & LeRoux, 2006); conditional-continual anxiety level and anxiety of separation (Flett, Endler, & Besser, 2009), and self-efficacy level (Smith, 2007). Common to these research studies are the ideas that 1) homesickness is related to personal, interpersonal, and environmental variables and that 2) a high level of homesickness negatively affects college students' academic and psychosocial adaptation.

Other studies have emphasized the idea that college students with either a high or low level of homesickness differ in relation to certain variables. For instance, Fisher, Frazer, and Murray (1986) concluded that students reporting a high level of homesickness had less positive expectations about separation, had less experience with separation, and showed more non-traumatic disorders than students reporting a low level of homesickness. At the same time, Fisher and Hood (1987) showed that students with high levels of homesickness had reported higher levels of somatic complaints as well as depression than students who had reported no homesickness. Carden and Feicht (1991) reported that students with high levels of homesickness were more committed to their families, had less social skills, and were less socially mature than students with low levels of homesickness. Thus, depending on certain variables, students with either high or low levels of homesickness can be differentiated.

As observable in the literature, several scales have been developed to evaluate homesickness levels for different cultural and age groups, including university students. One of these scales is the Utrecht Homesickness Scale (UHS), which we have chosen to adapt for Turkish students for specific reasons. First, the UHS has five different dimensions to improve a categorical understanding of the different aspects of homesickness among college students. Secondly, the simplicity and brevity of the UHS allow multiple measures to be used though participants' time is limited.

#### *Psychometric Properties of the Utrecht Homesickness Scale*

The Utrecht Homesickness Scale (UHS) was developed by Stroebe et al. (2002) to study homesickness among two different cultures: that of the Netherlands and that of the U.K. The UHS contains 20 items; four questions evaluate five factors, including missing family, adjustment difficulties, missing friends, loneliness, and ruminations about home. For Stroebe et al., participants were asked to rate the items based on the extent to which they had experienced the respective feelings over a period of four weeks. Items which were scored with a 5-point Likert-type scale for which higher scores represented higher levels of homesickness. For the Netherlands sample, the internal consistency coefficient for total homesickness was .94, while for each subdimension Cronbach's alpha was determined to be: 0.90 for missing family; 0.88 for adjustment difficulties; 0.87 for missing friends; 0.85 for loneliness; and 0.80 for ruminations thoughts about home (Stroebe et al., 2002). For the U.K. sample, the internal consistency coefficient for total homesickness was .93, while for each subdimension Cronbach's alpha was determined to be: 0.85 for missing family; 0.84 for adjustment difficulties; 0.78 for missing friends; 0.84 for loneliness; and 0.86 for ruminations thoughts about home (Stroebe et al., 2002).

The psychometric properties of the UHS were investigated regarding college students in different countries and cultures. Watt and Badger (2009) investigated psychometric characteristics of UHS for international university students studying at Australian universities to report a version of the UHS with 15 items for five factors. Another standardization study of the UHS was conducted by Ejei, Dengahni, Ganjavi, and Khodapanahi (2008) for an Iranian university sample to report a Persian form of the UHS containing 36 items and five factors.

The main purpose of this study was to adapt the UHS developed by Stroebe et al. (2002) for the population of students at Turkish universities. Though in the framework of developmental and preventive guidance it is clear that some students suffering homesickness may need psychological help and support, there is as of yet no tool to measure homesickness levels of Turkish university students. Therefore, this study aims to fill such a gap by adapting the UHS for the Turkish collegiate population in order to make it available to researchers and counselors in Turkey.

## Method

### *Participants*

A total of 1130 freshmen university students (59% female, 41% male) studying in different majors at Pamukkale University, whose campus is located in the western part of Turkey, participated in this study. Participants' ages ranged from 16 to 27. Since the original form of the UHS was developed for freshmen university students, we confined our study to freshmen students in order to comply with the same method used to develop the original scale. To obtain more reliable results for the validity and reliability analyses, we used five different student groups. For this reason, we also implemented separate data collections for each of the analyses we planned to conduct. The exploratory factor analysis was implemented for 337 freshmen students (184 females, 153 males) aged 16 to 27 ( $M = 18.59$ ,  $SD = 1.41$ ) studying in different majors at Pamukkale University. Data from a group of 250 freshmen students were used to conduct the confirmatory factor analysis (158 females, 91 males) aged 17 to 19 ( $M = 18.12$ ,  $SD = 0.88$ ). For concurrent validity, data from a total of 190 freshmen students (109 females, 81 males) aged 17 to 23 ( $M = 18.65$ ,  $SD = 1.08$ ) were analyzed. For the reliability coefficient of the scale, data from a total of 289 freshmen students (182 females, 107 males) aged 17 to 23 ( $M = 18.53$ ,  $SD = 1.25$ ) were analyzed. Finally, data from 64 participants aged 17 to 20 ( $M = 18.6$ ,  $SD = 0.76$ ) were analyzed to conduct the test-retest reliability of UHS.

### *Research Instruments*

*Demographic Questionnaire.* Prepared by the researchers, this questionnaire asked participants to report variables, such as age and gender.

*UCLA Loneliness Scale (UCLALS).* The UCLALS was implemented to measure loneliness. Scores on this scale are based on 20 items using a 4-point Likert-type scale ranging from "never" to "often." For the present study, we used a Turkish version of the UCLALS (Demir, 1989). The test-retest reliability over five weeks was reported to be .94.

*Multidimensional Scale of Perceived Social Support (MSPSS)*. The MSPSS is a self-report instrument developed by Zimet et al. (1988) to measure the perceived support from three domains: family, friends, and a significant other. Each item used a 7-point Likert-type scale ranging from “very strongly disagree” to “very strongly agree.” Zimet et al. reported internal reliability estimates of .88 for total score, while those for the subscales of family, friends, and significant other were reported to be .87, .85, and .91, respectively. Factor analysis of the MSPSS confirmed the three-factor structure of the measure. For the present study, we used a Turkish version of the MSPSS (Eker, Arkar, & Yaldiz, 2001). According to Eker et al. (2001), the factorial structure of the MSPSS was confirmed and the internal reliability for total score was estimated to be .89, while that for the subscales of family, friends, and significant other was reported to be .85, .88, and .92, respectively.

*Satisfaction with Life Scale (SWLS)*. The SWLS is a measure of life satisfaction developed by Diener, Emmons, Larson, and Griffin (1985) in which respondents use a 7-point Likert-type scale ranging from “very strongly disagree” to “very strongly agree” for each item. The SWLS has strong internal reliability (.80 to .89) and moderate temporal stability (.64 to .84) (Diener et al., 1985). For the present study, we used a Turkish version of the SWLS (Yetim, 1993) whose test-retest reliability was .73 and whose alpha coefficient was .86 (Yetim, 1993).

*The Utrecht Homesickness Scale (UHS)*. The UHS is a measure of homesickness developed by Stroebe, Van Vliet, Hewstone, and Willis (2002) consisting of five subscales; “Missing Family”, “Loneliness”, “Missing Friends”, “Adjustment Difficulties”, and “Ruminations about Home”. These five subscales include 20 items, each of which is scored with a 5-point Likert-type scale ranging from “not at all” to “very strong” for which higher scores indicate a higher level of homesickness (Stroebe, et al., 2002). Stroebe et al. reported internal reliability estimates of .94 for the total score and .90, .87, .88, .80 and .85 for the Missing Family, Missing Friends, Adjustment Difficulties, Ruminations About Home and Loneliness subscales. Results of factor analysis of the UHS also confirmed its five-factor structure of the measure; within this set of 20 variables, the five factors explained 73% of the variance (Stroebe et al., 2002).

*Social Connectedness Scale (SCS)*. The SCS (Lee & Robbins, 1995) was applied to measure the level of social connectedness of participants. The scale includes eight items scored with a 6-point Likert-type scale ranging from “strongly agree” to “strongly disagree” for which higher scores indicate more perceived social connectedness. The SCS has a high level of internal consistency at .91 (Lee & Robbins, 1995). For the present study, we used a Turkish version of the SCS (Duru, 2007). Duru (2007) reports that the factorial structure of the SCS was confirmed and the internal reliability was estimated to be .90 for the total score. Duru (2007) also reported that the test-retest correlation coefficient demonstrated that the scale had an adequate test stability over a four-week period ( $r=.90$ ).

### Procedures

After receiving permission from the scale's developers, the UHS for this study was translated into Turkish. The translated scale was checked by three scholars in the field of counseling with a strong command of English to achieve accuracy and expression consistent with Turkish. The scale was back translated into English by a scholar from the Department of English Language Teaching and subsequently reviewed by three scholars in the field of counseling. Finally, informed consent was obtained from students who volunteered to participate in the study. Each participant was administered a packet of surveys during a class period.

### Data Analyses

Cronbach's alpha coefficient was implemented to determine the UHS's internal consistency reliability, while the Pearson product-moment correlation coefficient was examined for test-retest reliability. The validity of the UHS was determined using both the exploratory factor analysis and the confirmatory factor analysis. In addition, to provide support for concurrent validity, correlations were examined by using four prominent scales. Also, a t-test was used to determine group differences among male and female participants in regards to their levels of missing family, adjustment difficulties, missing friends, loneliness, and Ruminations about home.

## Results

### Descriptive Statistics

Table 2 shows the means and standard deviations for the total UHS and the five subscales. The means for the subscales were: missing family ( $M = 13.52$ ,  $SD = 2.92$ ), adjustment difficulties ( $M = 8.81$ ,  $SD = 3.43$ ), missing friends ( $M = 9.86$ ,  $SD = 1.92$ ), loneliness ( $M = 5.85$ ,  $SD = 2.38$ ), and ruminations about home ( $M = 9.04$ ,  $SD = 3.01$ ). The mean for total homesickness was ( $M = 47.10$ ,  $SD = 10.01$ ).

### Validity Studies

*Exploratory factor analysis.* We used a factor analysis to partially assess the validity of the scale. The principal components of factor analysis with varimax were used to understand a number of factors. We used a variety of criteria to determine the number of common factors to retain: the eigenvalue greater than 1 criterion, the screen test, the amount of common variance explained, and conceptual interpretability of the factor structure. As suggested by Fayers and Machin (1998), both the normal distribution of data and the applicability of correlation matrices to items in factor analysis were tested with Kaiser-Meyer-Olkin (KMO) measure and Bartlett's test. For this study's sample, the KMO measure of adequate sampling was .90, which exceeds the acceptable minimum of .60 (Tabachnick & Fidel, 2001). This result indicates that the data represented a homogeneous collection of variables that were suitable for factor analysis. Meanwhile, Bartlett's test of sphericity was significant for the sample [ $\chi^2 = 4382.260$ ,  $df = 190$ ,  $p < .000$ ], which indicates that the

set of correlations in the correlation matrix were significantly different from zero and thus suitable for factor analysis.

Of the 20 items, Table 1 shows that 19 items had high loading regarding their intended factors, while one item (i.e., item 8) loaded on a different factor and was thus excluded. We conducted a further analysis for the 19 remaining items. The KMO measure of adequate sampling was determined to be .89 for the sample. Bartlett's test of sphericity was significant for the sample [ $\chi^2 = 4192, 493, df=171, p <.000$ ], which indicates that the set of correlations in the correlation matrix were significantly different from zero and thus also suitable for factor analysis.

Results yielded a five-factor structure, which was in line with the original UHS. The five factors with eigenvalues greater than 1 explained approximately 73.25% of the total variance. Factor loadings of items that settled at each subscale of the UHS with five factors varied between .55 and .91. Factor 1 (i.e., missing family) explained 36.98% of the total variance (eigenvalue= 7.02); factor 2 (i.e., adjustment difficulties) explained 17.31% (eigenvalue= 3.28); factor 3 (i.e., missing friends) explained 7.22% (eigenvalue= 1.37); factor 4 (i.e., loneliness) explained 6.23% of the total variance (eigenvalue= 1.18); and factor 5 (i.e., ruminations about home) explained 5.50% of the total variance (eigenvalue= 1.04). Table 1 presents factor analysis results of the UHS.

Exploratory factor analysis results obtained from this study's Turkish version of the UHS showed that the factor structure of the Turkish version of UHS was consistent with that of the original UHS and thus appropriate to use for Turkish freshmen.

*Confirmatory factor analysis.* We evaluated the appropriateness of a five-factor model representing the five dimensions of homesickness with confirmatory factor analyses using AMOS 7.0 (Arbuckle, 2006) for structural equation modeling. We then evaluated the measurement and structural models with the following fit indexes: chi-square, the goodness-of-fit index, comparative fit index, incremental fit index, normed fit index, and relative fit index. GFI, CFI, IFI, NFI, and RFI fit indexes range from 0 to 1, with values of .90 or higher indicating an adequate fit and values greater than 0.95 indicating a very good fit. For the RMSEA and SRMR, values below .08 indicate a good fit (Hu & Bentler, 1999). We used the following commonly used criteria to evaluate the adequacy of the models: RMSEA and SRMR  $\leq$  .08 (Hu & Bentler, 1999), GFI  $\geq$  .90, CFI  $\geq$  .90, IFI  $\geq$  .90, NFI  $\geq$  .90, and RFI  $\geq$  .90, (Bentler, 1990; Browne & Cudeck, 1993) and  $\chi^2/df < 5$  (Marsh & Hocevar, 1985). The CFA results were:  $\chi^2=397.68$  (df = 160,  $p <.001$ , N=250),  $\chi^2/df = 2.486$ , RMSEA=0.077, SRMR=0.07, CFI=0.93, TLI = 0.91, IFI=0.93, NFI=0.88, RFI=0.86, and GFI=0.86. When we examined the path diagram and output file on the basis of the squared multiple correlations, we removed one item (i.e., item 18) that performed poorly from the ruminations about home subscale and then reperformed the analysis. The CFA results for the new analysis were:  $\chi^2=254.64$  (df = 125,  $p <.001$ , N=250),  $\chi^2/df = 2.037$ , RMSEA=0.065, SRMR=0.06, CFI=0.96, TLI = 0.95, IFI=0.96, NFI=0.92, RFI=0.90, and GFI=0.90. Overall, the fit indexes in this study indicated that the model provided a good fit to the data.

*Concurrent validity.* While factorial validity is a popular method to assess an instrument's validity, another method is gauges an instrument's concurrence with other instrument(s) that have valid and reliable properties. To provide support for concurrent validity, we examined correlations by using four prominent scales: the UCLA Loneliness Scale (UCLALS), the Satisfaction with Life Scale (SWLS), the Multidimensional Scale of Perceived Social Support (MSPSS), and the Social Connectedness Scale (SCS). The results showed that the total scale score of the UHS correlated significantly with measures of loneliness ( $r = .50, p < .01$ ), social support ( $r = -.22, p < .05$ ), social connectedness ( $r = -.41, p < .01$ ), and satisfaction with life ( $r = -.32, p < .01$ ) on university students. As shown in Table 2, all correlations to loneliness, social support, social connectedness, and satisfaction-with-life measures emerged as expected, indicating that increased perceptions of homesickness are related to higher levels of loneliness and lower levels of satisfaction of life, social support and social connectedness.

#### *Reliability Studies*

*Internal consistency reliability.* We calculated internal reliability estimates for the total scale and the five subscales (see Table 2). The results confirmed that the UHS has a high internal reliability. We determined that the internal consistency coefficient of the total scale to be .90. The subscales for missing family, adjustment difficulties, missing friends, loneliness and thoughts about home subscales demonstrated high internal consistency (.91, .89, .82, .81, and .74, respectively). Item-total correlations ranged between .25 and .67.

*Test-retest reliability.* We calculated the Pearson product-moment correlation coefficient for test-retest reliability. Data from 64 students was analyzed at the end of four weeks after initially completing the questionnaire. The test-retest reliabilities for the Missing Family, Loneliness, Missing Friends, Adjustment Difficulties, and Ruminations about Home were .75, .45, .56, .75, and .70, respectively. For the whole scale, we obtained the value .80 ( $N = 64$ ). Thus, the UHS demonstrated adequate test stability over a four-week period.

**Table 1.**

*Factor Loadings for Exploratory Factor Analysis with Varimax Rotation of the Utrecht Homesickness Scale (UHS)*

Items	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
1	<b>.91</b>				
2	<b>.91</b>				
3	<b>.86</b>				
4	<b>.74</b>				
5				<b>.73</b>	
6				<b>.88</b>	
7				<b>.84</b>	
9			<b>.60</b>		
10			<b>.68</b>		
11			<b>.77</b>		
12			<b>.74</b>		
13		<b>.85</b>			
14		<b>.85</b>			
15		<b>.75</b>			
16		<b>.82</b>			
17					<b>.55</b>
18					<b>.79</b>
19					<b>.63</b>
20					<b>.76</b>

*Note:* Factor loadings > .40 are in boldface.

#### *Group Differences*

To determine group differences among male and female participants in regard to levels of Missing Family, Loneliness, Missing Friends, and Ruminations about Home, a t-test was conducted (N=190). The results of the t-test show that females reported higher levels of missing family (M=14.03, SD =2.9) than did males (M=12.82, SD =2.7). This difference was meaningful at  $p < .01$ . Results also show that males reported higher levels of adjustment difficulties (M=9.53, SD =3.6) and ruminations about home (M=9.61, SD =2.8) than did female students (M=8.28, SD =3.1 for adjustment difficulties; M=8.61, SD =3.0 for ruminations about home). These differences were also significant at  $p < .05$ . On the other hand, there were not any statistically significant group differences between female and male participants in terms of missing friends, loneliness, and total score of homesickness.

**Table 2**

Bivariate correlations among interval variables, means, standard deviations, ranges, and alpha coefficients (N = 190)

Variables	1	2	3	4	5	6	7	8	9	10
1. Missing family	-	.10	.52**	.16*	.34**	.57**	.09	.04	.21**	-.03
2. Loneliness		-	.33**	.63**	.49**	.69**	-.62**	-.41**	-.47**	.67**
3. Missing friends			-	.48**	.57**	.76**	-.14	-.11	-.04	.24**
4. Adjustment difficulties				-	.58**	.80**	-.41**	-.40**	-.28**	.49**
5. Ruminations about home					-	.82**	-.39**	-.26**	-.22**	.42**
6. Total homesickness						-	-.41**	-.32**	-.22**	.50**
7. Social connectedness							-	.35**	.61**	-.74**
8. Satisfaction with life								-	.45**	-.45**
9. Social support									-	-.54**
10. Loneliness (UCLALS)										-
M	13.52	5.85	9.86	8.81	9.04	47.47	39.97	21.98	63.82	35.63
SD	2.92	2.38	1.92	3.43	3.01	10.40	8.36	6.03	13.06	10.41
Range	4-16	3-12	3-12	4-16	4-16	18-72	10-48	5-33	34-84	20-76
Alpha Coefficient ( $\alpha$ )	.91	.81	.82	.89	.74	.90	.91	.86	.89	.96

\*  $p < .05$

\*\*  $p < .01$

## Discussion and Conclusion

The aim of this study was to test the validity and reliability of the UHS with a sample of Turkish freshmen university students. The results of the analyses provided psychometric support that the scale could be used with five dimensions and 18 items to better understand the homesickness levels of freshmen university students in Turkey. The results also show that the scale has a high internal consistency value and acceptable test-retest reliability, for the internal consistency analysis results of the adapted scale resemble those of the original. The concurrent validity analysis results of the UHS revealed positive relation with the loneliness, and negative relation with social support, social connectedness, and satisfaction with life as

expected. In conclusion, the results from this investigation suggest that the UHS is a reliable and valid scale to use in research related to homesickness among freshmen university students in Turkey.

We applied an exploratory factor analysis and a confirmatory factor analysis to the scale to analyze the factor construct. Findings from exploratory factor analysis suggest that the five-factor model was replicated within this sample of Turkish freshmen university students, which supports the construct validity of this scale that does not differ from the original scale's form. We observed that the range of factor loadings shifted from .55 to .91 and that five factors explained 73.25% of the total variance. Item-total correlations ranged from .25 to .67. In addition, the results of the confirmatory factor analysis indicate that the UHS has five factors. Upon examining the path diagram and output file according to squared multiple correlations, one item that performed poorly was removed from subscale for the ruminations about home to leave 18 items. We then reperformed the analysis. Overall, the fit indexes in this study indicate that the model fits the data well. These results were in line with those of previous studies given the implementation of exploratory factor analysis and confirmatory factor analysis (Ejei et al., 2008; Stroebe et al., 2002; Watt & Badger, 2009).

Furthermore, the UHS correlated, as expected, with loneliness, social support, social connectedness, and satisfaction-of-life measures. Therefore, the general evaluation of this study is that the UHS is a reliable and valid scale for future research examining homesickness among freshmen university students in Turkey.

Results also show gender differences between male and female university students in terms of the dimensions of homesickness. Results indicate that female students report higher levels of missing family than male students. Findings also suggested that male students report higher levels of adjustment difficulties and ruminations about home than female students. Stroebe et al. (2002) studied two different sample (one in the Netherlands, and one in the U.K.) in terms of homesickness to find that while no gender differences existed in the Netherlands sample, female students in the U.K. reported more homesickness than did male students. In another study, Watt and Badger (2009) found that female university students were more homesick than males. Results of Stroebe et al. also show that there were cultural differences related to homesickness, for U.K. students reported a

higher level of homesickness level than did students in the Netherlands (Stroebe et al., 2002). Taken together, it appears that there are some inconsistent results in terms of gender and culture in the literature. Thus, future research should reassess gender and culture differences to produce more accurate results.

In conclusion, the UHS developed by Stroebe et al. (2002) and adapted to Turkish could be used by both researchers and counselors to collect descriptive data and to observe the development of students in college environments. The UHS could also be a useful tool during counseling sessions to help counselors and students become more aware of the level of homesickness that the student may be experiencing. Alternatively, the UHS can be used as a screening tool to identify problems and thus obtain information about students seeking help for adjustment difficulties and homesickness. Finally, the UHS may be helpful while planning counseling procedures and establishing goals associated with a client's specific, problematic experiences with homesickness.

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### Utrecht Sıla Özlemi Ölçeğinin Psikometrik Özellikleri: Bir Geçerlik ve Güvenirlilik Çalışması

#### Atf:

- Duru, E., & Balkis, M. (2013). The psychometric properties of the Utrecht homesickness scale: A study of reliability and validity. *Eğitim Araştırmaları-Eurasian Journal of Educational Research*, 52, 61-78.

#### (Özet)

*Problem Durumu:* Küreselleşmenin ve teknolojik gelişmelerin bir fonksiyonu olarak çağdaş yaşam karmaşıklaşmakta, farklı yaş grupları ve farklı kültürler arasında etkileşim ve sosyal hareketlilikler gittikçe artmaktadır. Artık daha çok sayıda insan, kısa ya da uzun süreli olarak bu etkileşime ve sosyal hareketliliğe katılmaktadır. Gerek askere gitme, yatılı okulda okuma, farklı bir şehirdeki üniversiteye başlama gibi ülke içi hareketlilik bağlamında; gerekse yurt dışı eğitim alma, göçmen olarak yurt dışına gitme, eğitim temelli değişim programlarına katılma gibi ülkeler ve

kültürler arası etkileşim bağlamında sosyal hareketlilik artmaktadır. Bazen bu hareketliliğe ülkeler arasındaki ya da ülke içindeki iç savaşlar, doğal afetler, kuraklık, açlık v.b etkenlerde eklenebilmektedir. Tüm bu hareketlilik sürecinde bireylerin yeni yaşamlarına uyum sağlayabilmeleri önemli bir sorun haline gelmekte, uyum sağlayamayan bazı insanlar geçmişi, önceki yaşam koşullarını, evlerini ve arkadaşlarını özlemektedir. Bu özlem süreci sıla özlemi olarak kavramsallaştırılabilir, yuvaya ve köklerine yönelik bir özlem olarak değerlendirilebilir. Sosyal hareketliliğin bir fonksiyonu olarak yaşanabilecek sıla özlemi yaşantısını anlamaya yönelik çalışmalara ve bireylerin sıla özlemi düzeylerini belirleyebilecek bir ölçme aracına gereksinim duyulacağı açıktır. Ülkemiz alan yazınında sıla özlemini ölçecek bir ölçme aracının olmaması, gerek bu sosyal hareketlilikten etkilenen popülasyonu tanıyarak, gerekse bu popülasyona yönelik yapılacak geliştirici ve önleyici psikolojik müdahale çalışmalarını olumsuz etkileyecektir. Bu çalışmayla bireylerin sıla özlemi düzeylerini belirleyebilecek bir ölçme aracını Türkçe'ye uyarlayarak alan yazınındaki önemli bir boşluğun doldurulmasına katkı sağlamak amaçlanmıştır.

*Araştırmanın Amacı:* Utrecht Sıla Özlemi(USÖ) Ölçeği'nin Türk kültürüne uyarlanması bu çalışmanın temel amacını oluşturmaktadır.

*Ölçeğin Türkçe'ye Uyarlanması:* Ölçeğin orijinal İngilizce formu, ölçeği geliştiren araştırmacılardan izin alınarak, önce birinci yazar tarafından Türkçe'ye çevrilmiş, sonra Pamukkale Üniversitesi, Eğitim fakültesinde çalışan, alanda uzman ve iyi derecede İngilizce bilen üç öğretim üyesi tarafından Türkçe'den İngilizce'ye tekrar çevrilmiştir. Ölçeğin son şekli, üç öğretim üyesi tarafından çeviriler karşılaştırılarak elde edilmiştir.

*Araştırmanın Yöntemi:* Araştırmanın çalışma grubunu Pamukkale Üniversitesi Eğitim Fakültesinde farklı bölümlerde öğrenim gören dört grup 1. sınıf öğrencisi oluşturmuştur. Birinci sınıf öğrencilerinin tercih edilmesinin nedeni, ölçeğin orijinal geçerlik ve güvenilirlik çalışmasının yapıldığı gruba benzerliğidir. Araştırmada açımlayıcı faktör analizi, doğrulayıcı faktör analizi, ölçüt bağımlı geçerlik ve iç tutarlılık için dört ayrı çalışma grubu kullanılmış, bir çalışma grubundaki bireyler diğer çalışma gruplarına alınmamıştır. Araştırmaya yaşları 16 ile 27 arasında değişen toplam 1130 kişi katılmıştır. Araştırmada veri toplamak için USÖ Ölçeği, UCLA Yalnızlık Ölçeği, Çok Boyutlu Sosyal Destek Ölçeği, Sosyal Bağlılık Ölçeği ve Yaşam Doyumu Ölçeği kullanılmıştır.

*Araştırma Bulguları:* Analiz sonuçları beş boyut ve 18 maddelik Sıla Özlemi Ölçeği'nin üniversite birinci sınıf öğrencilerinin sıla özlemi düzeylerini belirlemede kullanılabilirliğine yönelik psikometrik destek sağlamıştır. Açımlayıcı ve doğrulayıcı faktör analizi sonuçları ölçeğin faktör yapısını doğrulamıştır. Açımlayıcı faktör analizinde ölçekte yer alan beş faktörün toplam varyansın % 73.25'ini açıkladığı görülmüştür. Açımlayıcı faktör analizi ile elde edilen yapının farklı bir üniversite öğrenci grubu üzerinde benzer bir yapı verip vermediğini test etmek için doğrulayıcı faktör analizi yapılmıştır. Doğrulayıcı faktör analizi sonuçları ölçekteki 18. maddenin uyum indeks değerlerini düşürdüğü görülmüş, bu nedenle bu madde ölçekten çıkarılarak analizler yenilenmiştir. Yapılan yeni analiz sonucunda uyum indeks

değerlerinin yükseldiği görülmüş, ölçeğin 18 sorudan oluşan beş faktörlü yapısı doğrulanmıştır. Benzer şekilde, ölçek yüksek iç tutarlık ve test-tekrar test değerine sahiptir. Analiz sonucu ölçeğin iç tutarlık katsayısının orijinal çalışmaya paralel sonuçlar verdiğini, alt ölçeklerin iç tutarlık katsayılarının .74 ile .91 arasında değiştiğini göstermiştir. Test- Tekrar test sonuçları alt boyutlar arasındaki korelasyon değerlerinin. 45 ile. 75 arasında değiştiğini göstermektedir. Ölçeğin bütününe ilişkin korelasyon katsayısı ise . 80' dir.

Sonuçlar aynı zamanda sıla özleminin yalnızlık, sosyal destek, sosyal bağlılık ve yaşam doyumuyla beklenen yönde korelasyonlar verdiğini göstermektedir. Analiz sonuçlarına göre, daha yüksek sıla özlemi düzeyi, daha yüksek yalnızlık ve daha düşük sosyal destek, sosyal bağlılık ve yaşam doyumunu düzeyiyle ilişkilidir. Bir diğer ifadeyle sıla özlemi düzeyi artarken yalnızlık düzeyi de artmakta, öte yandan sosyal bağlılık, sosyal destek ve yaşam doyumunu düzeyi azalmaktadır.

*Araştırmanın Sonuçları ve Öneriler:* Bu çalışmada, Utrecht Sıla Özlemi Ölçeği'nin üniversite öğrencileri üzerinde psikometrik özellikleri incelenmiştir. Araştırma kapsamında ölçeğin geçerliğini test etmek için sırasıyla açıklayıcı faktör analizi, doğrulayıcı faktör analizi ve benzer ölçekler geçerliği yapılmıştır. Güvenirlik çalışması olarak, ölçeklerin iç tutarlılıklarına bakılmış ve test-tekrar test prosedürü uygulanmıştır. Analiz sonuçları Utrecht Sıla Özlemi Ölçeği'nin üniversite öğrencileri örnekleminde geçerli ve güvenilir bir ölçek olduğunu göstermektedir.

*Anahtar Sözcükler:* Sıla özlemi, güvenilirlik, geçerlik, üniversite öğrencileri, Utrecht Sıla Özlemi Ölçeği