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A Turkish Version of Foreign Language Anxiety Scale: Reliability and Validity

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Abstract

It is evident that some factors such as learners' language proficiency levels, cultural elements, differences regarding teaching and learning contexts may affect the results obtained from the English version of Foreign Language Anxiety Scale (FLAS) (Horwitz, 1986). In addition, the number of factors in the scale administered in different languages does not show a consistency. What is more, the number of those studies on the translated and adopted versions of FLAS is too limited to draw conclusions in terms of English as a foreign language (EFL) context in Turkey. Thus, this study aims to develop a Turkish version of FLAS. Five independent Turkish translations were made and used to develop a single Turkish version. After identifying the discrepancies between English and Turkish versions, the Turkish version was altered accordingly and reached a satisfactory agreement. The FLAS scale in both English and Turkish was administered to 85 EFL learners at advanced level. Results showed that both versions obtained reliability regarding their internal consistency, while the Turkish version seemed to have a higher level of reliability coefficient than the English version. It was also concluded that both versions obtained construct validity. It was recommended that the Turkish version of FLAS is an appropriate instrument to measure the levels of foreign language anxiety among Turkish EFL learners.

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1. Introduction

Foreign language anxiety is one of the significant factors that may affect the language learning process (Aydın, 2008). Thus, it is necessary to measure the level of foreign language anxiety to raise awareness of the sources of foreign language anxiety and how to allay it (Aydın & Zengin, 2008). For this purpose, researchers mainly prefer the FLAS developed by Horwitz (1986) to measure anxiety. However, although English as a global language is taught all over the world, it is not always possible to measure EFL learners' anxiety levels by using a scale in English due to several reasons such as learners' language proficiency levels, cross-cultural issues, cultural elements, differences regarding teaching and learning contexts. Thus, it is necessary to design reliable and valid versions of FLAS in different languages.

The FLAS as a widely-acclaimed anxiety scale was developed as a response to the lack of anxiety scales that could measure foreign language anxiety with precision. Therefore, as a subsequent move to the development of FLAS, Horwitz (1986) aimed to determine whether the anxiety scale is satisfactory in terms of validity and reliability or not. The FLAS, consisting of 33 items, was scored on a 5-point Likert Scale, and was arranged as follows: *strongly agree*, *agree*, *neither agree nor disagree*, *disagree* and *strongly disagree*. The scale was administered to 300 undergraduate foreign language students at the University of Texas. Consequently, the internal consistency, based on Cronbach's alpha coefficient, was measured as .93, and test-retest reliability in 8 weeks was found to be .83 in eight factors.

The FLAS was adapted to be used in different constructs; thus, it was tested by researchers to determine its reliability and validity. For instance, Aida (1994) adapted FLAS for Japanese students to establish both a reliable and valid measuring tool. For this purpose, the FLAS was administered in English and in Japanese. Reliability of the FLAS was measured by internal consistency of .92 using Cronbach's alpha. Then, a factor analysis was run and four factors were found regarding the anxiety of the learners. In another study, Toth (2008) intended to adapt FLAS in the use of Hungarian EFL learners. It was translated and back-translated by multiple translators and was administered to 117 English major and 66 non-English major students. The coefficient of the scale completed by 117 English majors turned out to be .93 and .92 for 66 non-English majors. Furthermore, the study conducted by Yaikhong and Usaha (2012) attempted to develop a Public Speaking Class Anxiety Scale to measure EFL public speaking anxiety in Thai students, and some of the items were adopted from FLAS by Horwitz (1986). Minor changes were made in some of the adopted items in the scale and the reliability was measured as .84, using Cronbach's alpha coefficient. The factor analysis suggested that there were four factors to be considered. Moreover, Paredes and Muller-Alouf (2000) conducted a study to adapt FLAS developed by Horwitz (1986) for the use of Spanish EFL learners. In the process, 198 students were asked to fill in FLAS in English; then, a Spanish version of the scale that was translated by psychologists and linguists was administered to the same group. According to Cronbach's alpha coefficient, reliability was measured as .89. Subsequently, after several attempts to measure validity, the factor analysis resulted in the four factors as components of foreign language anxiety construct.

The FLAS was also implemented in the Turkish EFL context in a way that the FLAS was administered to Turkish EFL students in both English and Turkish languages. For instance, Bas (2013) administered the FLAS to 374 elementary school students after developing a 30-item anxiety scale in the Turkish language. According to the scale, three factors were determined. Based on Cronbach's alpha coefficient, the reliability value of the scale was measured as 0.93. In another study, Batumlu and Erden (2007) administered FLAS to 150 Basic English Department Prep Class students attending Yildiz Technical University, Turkey. Following the procedure, the FLAS was adapted into Turkish. The internal consistency for the original scale was measured as 0.93, while it was measured as 0.90 for the Turkish version.

In conclusion, several reasons guided this study. First, it is necessary to obtain data regarding the administrations of the FLAS in various foreign language teaching and learning context, as researchers mainly use the original form of FLAS. However, it is evident that some factors such as learners' language proficiency levels, cross-cultural issues, cultural elements and differences regarding teaching and learning contexts may affect the results obtained from the original scale. Second, while there is a strong consistency regarding the internal consistency of FLAS administered in different languages, the number of factors in the scale greatly varies. Third, in some studies, it is underlined that the original version is adopted. However, it may not be possible to evaluate the validity and reliability of adopted versions. What is more, it may not be possible to compare the adopted and original versions of

the FLAS in terms of reliability and validity. Last of all, in a Turkish EFL context, the translated versions of the FLAS are mainly adopted. In addition, the factors reached in those studies do not show consistency regarding number of the factors, when they are compared to the original one. As a final note, the number of those studies on the translated versions of FLAS is too limited to draw conclusions in terms of the Turkish EFL context. As a result of the mentioned above, this study aims to obtain data on the reliability and validity of a Turkish version of the FLAS, to compare the values to the FLAS developed by Horwitz and finally to develop a Turkish version of FLAS.

2. Method

2.1. Participants

The participants in the study were students enrolled in the Department of English Language Teaching of Education Faculty of Balıkesir University. All the third- and fourth-year students were invited to participate in the study. The reason why only third- and fourth-year students were preferred was their advanced level of English language proficiency. Among 100 students in total, 85 participants stated that they accepted to participate in the study. Of the participants, 63 (74.1%) were female and 22 (25.9%) were male. Gender distribution of the students was the reflection of the population in the department. Their mean age was 21.09 within the range of 19 and 27. Of the participants, 48 (56.5%) were third- and 37 (43.5%) were fourth-year students.

2.2. Tools

The data collecting tools consisted of a background questionnaire interrogating participants' gender, age and study-year, the English version of the FLAS validated by Horwitz (1986) and the Turkish-translated version of the FLAS. The English version of the FLAS consisted of 33 items that were assessed on a scale that ranged from one to five (strongly disagree=1, disagree=2, neither agree nor disagree=3, agree=4, strongly agree=5). The Turkish version consisted of 33 items with the same content and range as the original English version.

2.3. Procedure

The study consisted of three main steps: Translation, administration and statistical analysis. First, the English version of FLAS was translated into Turkish. Then, both the English and Turkish versions were administered. Finally, a statistical analysis was carried out.

2.3.1. Step 1: Translation

This process has two phases. In the first phase, five translators were asked to translate the English version of the FLAS to Turkish. Among the translators, one had the Ph.D. degree in the field of English language teaching and was experienced in research on foreign language anxiety. Three translators were fully proficient in English and MA students in the department of English language teaching. The last one was a BA student in the same department and had a high grade in translation classes. After they were fully informed about their roles in the procedure, they translated the English version of the FLAS scale into Turkish in a blind session. In the second phase, they compared their translated versions in a panel and aimed to unify those five into one. After three tours of the panel, all of the translators reached a satisfactory equivalence. During the phase, the panelists focused on semantic and conceptual equivalence. In other words, they agreed that the Turkish version ensured the equivalence of meaning and some ideas and notions that do not exist in both English and Turkish.

2.3.2. Step 2: Administration

The background questionnaire and the English version of FLAS was administered to the participants in the middle of the fall semester of the 2015 – 2016 academic year. All of the copies were numbered before the

administration. After four weeks, the Turkish version of FLAS was administered to the same sample group with the same number.

2.3.3. Step3: Statistical analysis

The data collected were analysed using SPSS software. First of all, gender and study-year distributions in percent and mean score for age were computed. Second, to see the extent to which the items in both the English and Turkish versions of the scale represent reliability, Cronbach's alpha was calculated. Third, an exploratory factor analysis was conducted to compare the relationships among the items in two scales. In this process, it was aimed to understand the extent to which the two scales reflect the construct validity within the same sample. For this purpose, a principal component analysis was performed. Then, the Varimax method and two-factor solution were used to see whether the equivalence was established or not.

3. Results

3.1. Internal consistency

Values given in Table 1 show that reliability levels for both English and Turkish versions of the FLAS are acceptable. Cronbach's Alpha for the original version was found to be 0.77, whereas Cronbach's Alpha Based on Standardized Items was computed as 0.75 for the same version. On the other hand, Cronbach's Alpha for the Turkish version was 0.86, whereas Cronbach's Alpha Based on Standardized Items was 0.85. As a result, these values indicated that both versions have reliability, while the Turkish version has a higher level of reliability when compared to the English version.

Table 1. Reliability Statistics.

Versions	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
English Version	0.77	0.76	33
Turkish Version	0.86	0.85	33

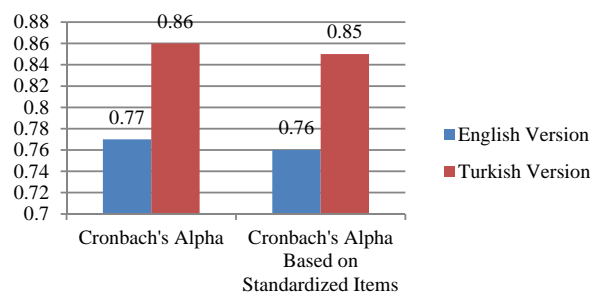


Fig. 1. Reliability coefficients.

3.2. Construct validity

The items and their loadings on each factor are shown in Table 2. In terms of the English version of the FLAS, the rotated two factors explained 67.19 of the variance, whereas the value for the Turkish version was 73.58. In the English version, 21 items loaded on the first factor which explained 35.68%, whereas 23 items in the Turkish

version loaded on the same factor with 41.42% of Variance. For the second factor, one item loaded in the English version (6.51%), while four items loaded in the Turkish version (6.21%), as shown in Table 2 and 3. Cronbach’s alpha coefficient was 0.91 for the first factor in the English version, whereas the value was 0.94 for the first factor in the Turkish version.

Table 2. Total Variance Explained.

English Version						Turkish Version							
Component	Total	Extraction Sums of Squared Loadings		Rotation Sums of Squared Loadings		Component	Total	Extraction Sums of Squared Loadings		Rotation Sums of Squared Loadings			
		% of Variance	Cumulative %	Total	% of Variance			Cumulative %	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	11.77	35.68	35.68	5.49	16.63	16.63	1	13.67	41.42	41.42	5.76	17.45	17.45
2	2.15	6.51	42.19	3.26	9.89	26.52	2	2.05	6.21	47.64	5.16	15.63	33.07
3	1.87	5.65	47.84	3.14	9.52	36.04	3	1.20	6.05	53.69	3.39	10.29	43.36
4	1.49	4.51	52.36	3.05	9.24	45.29	4	1.70	5.15	58.83	2.32	7.03	50.38
5	1.43	4.34	56.69	2.67	8.10	53.39	5	1.43	4.33	63.16	2.01	6.10	56.49
6	1.19	3.61	60.30	1.72	5.21	58.59	6	1.21	3.65	66.81	2.00	6.06	62.55
7	1.18	3.58	63.88	1.50	4.54	63.13	7	1.17	3.56	70.37	1.86	5.63	68.18
8	1.09	3.32	67.19	1.34	4.07	67.19	8	1.06	3.22	73.59	1.79	5.41	73.59

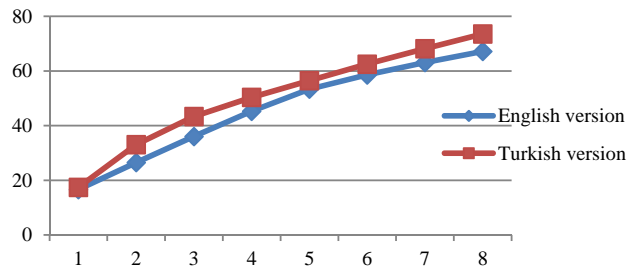


Fig. 2. Rotation Sums of Squared Loadings (Cumulative %).

4. Conclusions and Discussion

Two conclusions can be reached from the study. First, it was concluded that both the English and Turkish versions of FLAS are reliable regarding their internal consistency. However, it should be noted that the Turkish version of FLAS indicates a higher reliability coefficient when it is compared to its original English version. Second, in terms of construct validity, there is equivalence between the English and Turkish versions of FLAS. In other words, both versions indicate a near identical factor loadings on items and factor structure. As a result, it can

be stated that the Turkish version of FLAS is an appropriate instrument to measure the levels of foreign language anxiety among Turkish students who learns a foreign language (See Appendix A).

Several implications can be reached from this study. First, the study suggests that internal consistency is similar to the ones reached by previous research (Aida, 1994; Bas, 2013; Batumlu & Erden, 2007; Horwitz, 1986; Paredes & Muller-Alouf, 2000; Toth, 2008; Yaikhong & Usaha, 2012). On the other hand, the Turkish version of FLAS in the study is consistent to only the original version of FLAS developed by (Horwitz, 1986), as both versions find eight factors. In other words, this finding indicates there is a strong consistency between the Turkish and original versions, while the number of factors found in translated versions considerably differs from the findings reached by Horwitz (1986).

A few recommendations can be noted. First, the translated version reached in this study can be used to measure the level of anxiety among Turkish EFL learners, as it indicates a high level of reliability and validity. Second, as the values found in the study are moderately higher than the results reached by Horwitz (1986), it can be recommended that foreign language anxiety should be measured in scales designed in learners' native language instead of the target language.

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Appendix A. The Turkish version of Foreign Language Anxiety Scale

Yabancı Dil Kaygı Ölçeği

	Hiç katılmıyorum.	Katılmıyorum.	Ne katılıyorum, ne de katılmıyorum.	Katılıyorum.	Tamamen katılıyorum.
1. Yabancı dil derslerinde konuşurken kendimden asla emin olamıyorum.	[1]	[2]	[3]	[4]	[5]
2. Yabancı dil derslerinde hata yapmak beni endişelendirmiyor.	[1]	[2]	[3]	[4]	[5]
3. Yabancı dil derslerinde bana söz verileceği zaman titriyorum.	[1]	[2]	[3]	[4]	[5]
4. Öğretmenin yabancı dilde söylediklerini anlamamak beni korkutuyor.	[1]	[2]	[3]	[4]	[5]
5. Daha fazla yabancı dil dersine girsem bile sıkılmam.	[1]	[2]	[3]	[4]	[5]
6. Yabancı dil derslerinde kendimi dersten başka şeyler düşünürken buluyorum.	[1]	[2]	[3]	[4]	[5]
7. Diğer öğrencilerin yabancı dil konusunda benden daha iyi olduklarını düşünüyorum.	[1]	[2]	[3]	[4]	[5]
8. Yabancı dil derslerinin sınavlarında genellikle rahatım.	[1]	[2]	[3]	[4]	[5]
9. Yabancı dil derslerinde hazırlıksız konuşmam gerektiğinde panik olmaya başlıyorum.	[1]	[2]	[3]	[4]	[5]
10. Yabancı dil derslerinde başarısız olmamın sonuçları beni endişelendiriyor.	[1]	[2]	[3]	[4]	[5]
11. Bazı insanların yabancı dil derslerinde neden mutsuz olduklarını anlamıyorum.	[1]	[2]	[3]	[4]	[5]
12. Yabancı dil derslerinde bildiğim şeyleri unuttuğumda çok sinirlenebiliyorum.	[1]	[2]	[3]	[4]	[5]
13. Yabancı dil derslerinde parmak kaldırmaya utanıyorum.	[1]	[2]	[3]	[4]	[5]
14. Yabancı dilimi ana dili olarak kullanan biriyle konuşurken gerilmezdim.	[1]	[2]	[3]	[4]	[5]
15. Öğretmenimin yaptığı düzeltmeyi anlamadığımda üzülüyorum.	[1]	[2]	[3]	[4]	[5]
16. Çok iyi hazırlanmış olsam bile yabancı dil dersinde kaygılı hissediyorum.	[1]	[2]	[3]	[4]	[5]
17. Sıklıkla yabancı dil derslerine gitmeyi istemiyorum.	[1]	[2]	[3]	[4]	[5]

18. Yabancı dil derslerinde konuşurken kendime güveniyorum.	[1]	[2]	[3]	[4]	[5]
19. Yabancı dil öğretmenim yaptığım her hatayı düzelterek diye korkuyorum.	[1]	[2]	[3]	[4]	[5]
20. Yabancı dil derslerinde bana seslendirildiği zaman kalbimin çarptığını hissedebiliyorum.	[1]	[2]	[3]	[4]	[5]
21. Yabancı dil dersinin sınavına ne kadar çok çalışsam kafam o kadar karışıyor.	[1]	[2]	[3]	[4]	[5]
22. Yabancı dil derslerine çok iyi hazırlanınca kendimi baskı altında hissetmiyorum.	[1]	[2]	[3]	[4]	[5]
23. Diğer öğrencilerin yabancı dili benden daha iyi konuştuklarını her zaman hissediyorum.	[1]	[2]	[3]	[4]	[5]
24. Diğer öğrencilerin önünde yabancı dilde konuşurken çok sıkıldığımı hissediyorum.	[1]	[2]	[3]	[4]	[5]
25. Yabancı dil dersleri öyle hızlı ilerliyor ki geride kalmaktan endişeleniyorum.	[1]	[2]	[3]	[4]	[5]
26. Yabancı dil derslerinde diğer derslerdekinden daha gergin ve sınırlı hissediyorum.	[1]	[2]	[3]	[4]	[5]
27. Yabancı dil dersinde konuşurken sınırlanıyorum ve kafam karışıyor.	[1]	[2]	[3]	[4]	[5]
28. Yabancı dil dersine giderken kendimi rahat ve güvenli hissediyorum.	[1]	[2]	[3]	[4]	[5]
29. Yabancı dil öğretmenimin söylediklerini kelimesi kelimesine anlayamayınca sınırlanıyorum.	[1]	[2]	[3]	[4]	[5]
30. Yabancı dili konuşmak için öğrenmem gereken kuralların sayısı beni boğuyor.	[1]	[2]	[3]	[4]	[5]
31. Yabancı dilde konuşurken diğer öğrencilerin bana güleceklerinden korkuyorum.	[1]	[2]	[3]	[4]	[5]
32. Öğrendiğim yabancı dili ana dili olarak kullananların yanında kendimi muhtemelen rahat hissedirdim.	[1]	[2]	[3]	[4]	[5]
33. Yabancı dil öğretmeni hazırlanmadığım yerlerden sorular sorduğunda sınırlanıyorum.	[1]	[2]	[3]	[4]	[5]

References

- Aida, Y. (1994). Examination of Horwitz, Horwitz, and Cope's construct of foreign language anxiety: The case of students of Japanese. *The Modern Language Journal*, 78(2), 155-168.
- Aydın, S. & Zengin, B. (2008). Yabancı dil öğreniminde kaygı: Bir literatür özeti. *The Journal of Language and Linguistic Studies*, 4(1), 81—94.
- Aydın, S. (2008). An investigation on the language anxiety and fear of negative evaluation among Turkish EFL Learners. *Asian EFL Journal, Teaching Articles*, 30(1), 421—444.
- Bas, G. (2013). Yabancı dil öğrenme kaygısı ölçeği: Geçerlik ve güvenilirlik çalışması [Foreign language learning anxiety scale: A study of reliability and validity]. *Turkish Journal of Social Research*, 1(3), 49-68.
- Batumlu, D. Z., & Erden, M. (2007). The relationship between foreign language anxiety and English achievement of Yıldız Technical University School of foreign languages preparatory students. *Theory and Practice in Education*, 3(1), 24-38.
- Horwitz, E. K. (1986). Preliminary evidence for the reliability and validity of a foreign language anxiety scale. *TESOL Quarterly*, 20(3), 559-562.
- Paredes, P. F. P., & Muller-Alouf, H. (2000). A Spanish version of the foreign language classroom anxiety scale: Revisiting Aida's factor analysis. *Revista Española de Lingüística Aplicada*, 14(1), 337-352.
- Tóth, Z. (2008). A foreign language anxiety scale for Hungarian learners of English. *WoPaLP*, 2(1), 55-77.
- Yaikhong, K., & Usaha, S. (2012). A measure of EFL public speaking class anxiety: Scale development and preliminary validation and reliability. *English Language Teaching*, 5(12), 23-35.