

ADAPTATION AND INITIAL VALIDATION OF THE L2-GRIT SCALE IN TURKISH İKİNCİ DİL ÖĞRENME AZMI ÖLÇEĞİNİN TÜRKÇEYE UYARLANMASI VE ÖN GEÇERLİLİK ÇALIŞMASI

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ABSTRACT

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İkinci Dil Öğrenme
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. Even though grit in language education, as an individual difference among learners, has recently been a very popular field in second language acquisition research, a few language-specific tools rather than domain-general ones to measure this individual difference have only been developed very recently. To add, adapted versions of these tools are needed to examine this notion across cultures and contexts. This study presents psychometric analyses of an adapted version of a language-specific grit scale in the Turkish language: the L2-Grit Scale in Turkish. An adapted scale was translated and administered to 284 university students studying at various universities across Turkey and learning English as a foreign language. Statistical analyses such as item, reliability, and exploratory factor analyses were run. The results showed that the L2-Grit Scale in Turkish is a highly reliable and internally consistent tool with a two-factor solution, and it can not only inform further grit research in the Turkish context but also contribute to this globally bourgeoning field

ÖZ

Her ne kadar dil eğitiminde azim son zamanlarda, bir bireysel farklılık olarak, ikinci dil edinimi araştırma alanının popüler bir konusu olsa da, genel anlamda azim araştırmalarının yanında çok az sayıda dil eğitimi özelinde azmi ölçek araç geliştirilmiştir. Ayrıca bu az sayıda ölçeğin uyarlamaları da bu olgunun farklı kültür ve bağlamlarda araştırılması için gereklidirler. Bu araştırma Türkçe bir dil öğrenme azmi ölçeğinin uyarlamasının psikometrik analizlerini sunmaktadır. Analizleri yapılan bu araç Türkçe İkinci Dil Azmi Ölçeği olarak isimlendirilmiştir. Uyarlama süreci mevcut bir ölçeğin sistematik bir panel süreci sonunda Türkçeye uyarlanması ve uyarlanan aracın yabancı dil olarak İngilizce öğrenen ve Türkiye'deki çeşitli üniversitelerden çalışmaya katılan 284 katılımcıya uygulanmasını içermektedir. Uygulanan istatistiksel analizler madde, güvenilirlik ve temel bileşenler analizlerini içermektedir. Sonuçlar Türkçe İkinci Dil Azmi ölçeğinin yüksek güvenilirlik ve geçerlilik seviyesine sahip olduğunu göstermektedir. İki faktörlü bir yapı ile bu ölçme aracı, yabancı dil eğitiminde azim olgusu ile ilgili hem Türkiye bağlamında yapılacak araştırmalara destek olacak hem de bu yeni oluşan araştırma alanına uluslararası ölçekte de katkı sağlayacaktır.

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Introduction

It has always attracted great interest among second language acquisition (SLA) researchers to understand how individual differences are related to the achievement of language learners. In a recent handbook, Li, Hiver, and Papi (2022) conceptualized individual differences in four categories: Cognitive, conative, affective, and social and demographic differences. All categories have their own established scholarship, and the literature has provided various theoretical underpinnings as well as practical investigations of those individual differences. However, some factors are still emerging compared to the established ones, such as aptitude (Carroll & Sapon, 2002), motivation (Dörnyei & Ushioda, 2010), anxiety (Horwitz, 2010), and investment (Norton & Toohey, 2011; Norton Peirce, 1995). Personality (Dörnyei & Ryan, 2015) is one of these factors, which also has many facets. One particular personality facet has been only very recently examined in SLA research: grit.

Even though it has long been discussed in educational psychology and, more specifically, learner psychology research (see Credé et al., 2017; Duckworth et al., 2007; Pasha-Zaidi et al., 2019), SLA researchers have recently explored it and discussed it in relation to the psychology of language learner (e.g., Feng & Papi, 2020; Khajavy et al., 2021; Sudina & Plonsky, 2021; Teimouri et al., 2020). Defined as the perseverance and passion for long-term goals, Duckworth et al. (2007) conceptualized it as a “*personal quality*” (p. 1087) and an individual difference (and, more specifically, a personality trait) that predicts achievement. Within SLA research, grit has been conceptualized as a conscientiousness facet and linked to achievement in foreign language learning (Teimouri et al., 2020). Language-specific grit has been defined as a special type of domain-specific grit that is related to second or foreign language learners’ academic perseverance (Sudina & Plonsky, 2021). That said, several studies have been conducted recently to develop language-specific scales (L2-grit) (e.g., Alamer, 2021; Ebadi et al., 2018; Teimouri et al., 2020). Those scales, however, need to be tested in further studies from diverse contexts to better understand grit in second language learning processes and its relation to achievement.

As an emerging field of study within SLA, L2-grit requires data from various second and foreign language learning contexts to be more established as a personality trait predicting language learner achievement. One challenge, however, is that the measurement instruments, such as scales, should be in the native languages of the learners. Otherwise, it is possible to include participants mostly with high proficiency in the language of the scale. That said, those participants have naturally achieved learning the target language to some extent. To overcome this oxymoron, it is of critical importance to translate an existing L2 grit scale into other languages to explore this emerging construct contextually.

As a country where English is typically taught and learned as a foreign language, Turkey could provide further local exploration of L2-grit only if a reliable and valid version of an L2-grit scale were available in the Turkish language. In this study, L2-Grit Scale, which was developed by Teimouri et al. (2020), has been translated into Turkish. To add, reliability and exploratory factor analyses of this language-specific grit scale in the Turkish language have been presented.

Literature Review

The most widespread conceptualization of grit was provided by Duckworth et al. (2007), who defined grit as “perseverance and passion for long-term goals” (p. 1087) and stated that gritty individuals see achievement as a “marathon” and her/his grit as “stamina”, and they “[work] toward challenges” and “[maintain] effort and interest over the years despite failure, adversity, and plateaus in progress” (pp. 1087-1088). Their common factor structure of the general grit scale (also known as the Grit-O Scale) demonstrated a two-factor solution: consistency of interest and perseverance of effort. In addition to this 12-item domain-general grit scale, Duckworth and Quinn (2009) developed a shorter, eight-item version of this instrument and called the Short Grit Scale (Grit-S). These two have been the most widely used instruments in educational research.

In educational contexts, grit has been investigated based on Duckworth et al.’s conceptualization to explore this personality construct’s relationship with contextual factors or other personality constructs. For instance, Park, Yu, Baelen, Tsukayama, and Duckworth (2018) underscored that grit predicts academic achievement, and it may encourage students toward long-term goals to establish a mastery-structured school culture context. Furthermore, the growth mindset, another personality construct, was also found to be related to grit and mutually reinforcing (Park et al., 2020). On the other hand, the existing grit research has also been criticized by

Credé (2018), who argued that, albeit being a good predictor of success in educational settings, the concept of grit is constituted by a combination of perseverance and passion for long-term goals and lacks theoretical clarity. To add, Credé et al. (2017) found in a meta-analytical study that the construct validity of grit (as the combination of perseverance and passion) is still unclear and problematic.

Despite this controversy, though, grit has been explored in the SLA quite recently as a personality construct. Grit was shown to be positively linked to foreign language achievement and overlapped with intended effort; however, it was not as strongly correlated to foreign language buoyancy and conscientiousness (Sudina & Plonsky, 2021). In addition to achievement, L2 grit has drawn a lot of attention from second language acquisition researchers in terms of its relationships to other individual differences. For instance, grit was investigated in relation to motivation, another major individual difference, by Feng and Papi (2020); they found that perseverance of effort significantly and positively predicted the motivational intensity of learners learning Chinese as a foreign language in the U.S. context. Furthermore, Khajavy et al. (2021) used the two-factor conceptualization of grit and investigated its interest in the growth and fixed mindsets of English language learners in Iran. They found that the growth language mindset predicted only one factor of grit (perseverance of effort) positively but not the other one (consistency of interest), whereas the fixed language mindset negatively predicted consistency of interest. Finally, Pawlak et al. (2022) investigated the relationship between grit and language learning enjoyment (among other individual differences) and found that language learning enjoyment was a direct predictor of L2 grit among younger learners, and domain-general grit was a predictor only for older language learners. Pawlak et al.'s study was significant in that they used data collected from both language-specific and domain-general grit scales in their analyses and found statistical evidence showing that L2 grit and general grit are related, but they may also assume varying levels when grit regarding learning particular languages is measured.

In another context, H. Wei, Gao, and Wang (2019) combined these two veins of research (investigating the relationship between (1) grit and performance and (2) grit and other individual differences). They examined the effect of grit on foreign language performance, foreign language enjoyment, and classroom environment among middle school students in China. They found that grit promoted foreign language performance both directly and indirectly (by promoting foreign language enjoyment). They also found that grit's impact on foreign language enjoyment and performance influenced the classroom environment positively. In this study, though, an adapted version of a domain grit scale, The Grit Scale-Short Version developed by Duckworth et al. (2007) was used.

In the Turkish context, grit has also attracted attention in educational psychology research. The research studies that focused on grit showed two major concerns the first dealing with the psychometric features of the Grit scales and the second dealing with the relationship between grit and other related constructs. In terms of the psychometric features, Sarıcam et al. (2016) and Argon and Kaya (2018) separately conducted the adaptation and validation studies of Grit-S scale developed by Duckworth and Quinn (2009). In these studies, the confirmatory and exploratory factor analyses were run for the Grit-S scale, and both adapted versions were found to be reliable and valid as a data collection instrument in the Turkish context. Regarding the studies based on the relationship between grit and other constructs, Arslan, Akın, and Çitemel (2013) found that grit and metacognition are positively correlated among undergraduate university students in Turkey. In a more recent study, Pasha-Zaidi, Afari, Sevi, Urgancı, and Durham (2019) presented a cross-cultural examination of how grit is related to motivational belief and self-regulation among university students in the U.S., United Arab Emirates, and Turkey. In the Turkish context, grit significantly and positively predicted task value, self-regulation, and self-efficacy, among which self-regulation was predicted by grit the most strongly. At the same time, Erarslan (2023) conducted a study on English language teachers in Türkiye and found that during crisis times, grit triggered teachers' cognitive flexibility to cope with stressors. He also found that grit as a non-cognitive or soft skill was positively linked to cognitive flexibility as a cognitive one. However, these studies focused on grit as a general personality trait, and grit studies in Turkey have not been particularly focused on L2-grit. Thus, more contextual investigations are needed to better understand the L2-grit among language learners in Turkey.

As the previous studies demonstrate, further exploration of grit and its constructs in various countries and language learning contexts is very important, and the Turkish context does not provide any empirical study on

L2-grit. Therefore, studies investigating L2-grit are important if the two-factor construct of L2-grit can be confirmed in the Turkish context, and how L2-grit is related to L2 learners' achievement and success, other individual differences, or more specifically, personality constructs of language learners in Turkey. To do so, L2-Grit Scale in Turkish, an adapted language-specific grit scale in the Turkish language, is needed, and the current study intends to report on the translation and validation processes of an attempt in this regard. In tandem with this aim, this study explores the reliability and validity of L2-Grit Scale in Turkish.

Method

This article reports on the adaptation process of the L2-Grit Scale (Teimouri et al., 2020) in the Turkish language and the evaluation of the *L2-Grit Scale in Turkish*. After having the Institutional Review Board's approval, the L2-Grit Scale was translated, administered to Turkish L2 learners, and evaluated in terms of the adapted version's psychometric properties. In addition, the factorial structure was analyzed and reported.

Participants

As a part of the project that intended to explore the L2 grit of the university students studying at Balıkesir University, university students were the target audience of *the L2-Grit Scale in Turkish*. Relatedly, only university students ($N = 284$) all around Turkey were included in the study. Of the participants, 194 of them (68.31%) identified themselves as women and 87 of them (30.63%) as men, whereas 3 of the participants identified themselves as non-binary or opted not to disclose gender information.

Tool

The L2-Grit Scale (Teimouri et al., 2020) was developed to measure the language-specific grit of English as a foreign language (EFL) learners. The participants in the original study ($N = 191$) were Persian EFL learners. The five-point Likert scale was composed of nine statements that included responses such as “*Not like me at all*”, “*Not much like me*”, “*Somewhat like me*”, “*Mostly like me*”, and “*Very much like me*”. As for the factorial structure of the scale, the authors reported that it had two factors (namely, perseverance of effort and consistency of interest). Five items loaded to the perseverance of effort, whereas four items loaded to the consistency of interest. The possible score ranged from nine to 45, and the researchers indicated that when the total score was divided by nine, the score should fall from one to five; scores closer to five mean extremely gritty in L2 learning, whereas those closer to one indicate not gritty at all in L2 learning. The materials of this scale have been made public by the authors and accessible through the Iris Database. In a recent study, Sudina et al. (2021) further investigated the factor structure of the L2-Grit Scale in a U.S. university context. As a result of the exploratory analysis, they confirmed the two-factor solution. Moreover, they ran confirmatory factor analysis and found that the standardized factor loadings were significant ($p < .001$) were significant but advised further investigation of the hypostasized two-factor solution (*perseverance of effort* and *consistency of interest*) with wider samples from different contexts.

Translation

The principles of good practice for the translation and cultural adaptation of psychometric tools and for patient-reported outcomes, as suggested by Wild et al. (2005), were ensured in this study while translating Teimouri et al.'s (2020) L2-Grit Scale into Turkish. These principles provided eight-step guidelines for researchers who intend to adopt a holistic approach in translating and/or adapting scales to other languages and cultures. In tandem with Wild and colleagues' guidelines (2005), (1) in the preparation step, permission to use the instrument was obtained, and two panelists who are experienced in scale development and educational research and who are Turkish native speakers with high English proficiency were recruited. Second (2), the two panelists and the author of this article translated the L2-Grit scale independently. As an integral part of this step, a bibliography that includes explanations of key concepts of general and language-specific grit was shared with the panelists (e.g., Alamer, 2021; Duckworth et al., 2007; Ebadi et al., 2018; Sudina & Plonsky, 2021; Teimouri et al., 2020). Later (3), the panelists met up to reconcile the three independent translations into one agreed upon by all parts. In the fourth step, (4) the reconciled version was back-translated into the original language by the two panelists and the author independently (English). Fifth, (5) the translations were reviewed against the original version. This was followed by the sixth step (6), in which the author harmonized the translations and the original scale.

This harmonized version was later (7) piloted by three university students who were learning EFL to assess the level of comprehensibility and cognitive equivalence. Finally, (8) the two panelists and the author reviewed the whole process and the earlier debriefing with the representatives of the target population.

Procedure

Following the translation of the *L2-Grit Scale in Turkish*, the instrument was transferred into an online survey by using Microsoft Teams' Forms tool for its convenience. The author utilized snowball sampling, which typically begins with purposive sampling (Rose et al., 2020). Accordingly, the form's link was shared with EFL instructors at Balikesir University to be disseminated. Each participant was also invited to share the link with their fellow students who learn EFL; therefore, the data that were used to measure the psychometric properties and the factorial structure of the translated L2-Grit Scale also included university students that study at Turkish higher education institutions and other than Balikesir University. The link was circulated for a month. The initial aim was to reach a number of participants that were not less than Teimouri et al.'s (2020) original study, which was 192. Having reached this criterion, the author began the data analyses.

Data analysis

Having downloaded the online survey data into an Excel file, all nine items were set as variables. All items had been marked as a required space for completing the online survey; therefore, there was no missing value. Demographic information was only used to determine if the participant was an active university student in Turkey. At this stage, the descriptive information was not evaluated and thus not reported in the current study.

R Studio was used to analyze the quantitative data. Along with the base functions, *psych* (Revelle, 2022), *corrplot* (T. Wei & Simko, 2021), *ggplot2* (Wickham, 2016), *nFactors* (Raiche & Magis, 2020), and *FactoMineR* (Lê et al., 2008) were utilized. Utilizing these packages, the reliability analyses and exploratory factor analysis using the principal component analysis technique were run to answer the research questions.

Results

Table 1 demonstrates the results for the first research question. Using the *psych* package, reliability coefficients for the scale, which includes nine items, were calculated. The total ω -value for the L2-Grit Scale in Turkish was .92, which indicated that the Turkish version of the L2-Grit Scale demonstrated adequate internal consistency. The α -value, on the other hand, was found .87. This value shows that the reliability coefficient of the scale was *very good* (.80 - .90) (DeVellis, 2016).

Table 1: Reliability Statistics

	ω	α	95% CI
L2-Grit Scale	.92	.88	.86-.90
Perseverance of Effort Subscale	.93	.90	.88-.92
Consistency of Interest Subscale	.85	.84	.81-.87

The second research question aimed to figure out how valid the scale is. Before running the principal component analyses, the correlations among the variables were calculated. The matrix was created by using the *corrplot* package in R.

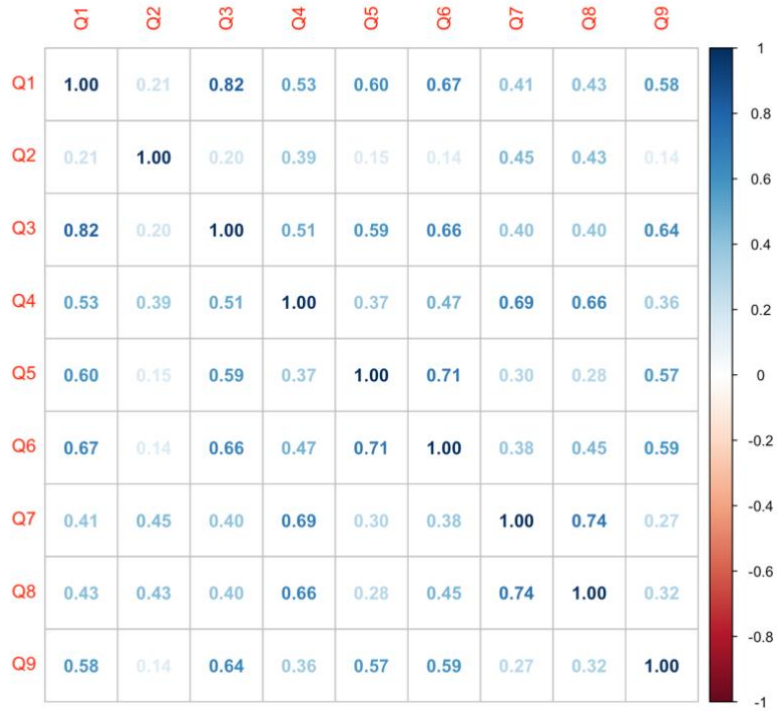


Figure 1. Correlation matrix of variables

In Figure 1, the correlation matrix including all nine variables (i.e., items of the L2-Grit Scale in Turkish; Q1-Q9) was presented. Based on the strong correlations among the variables, it can be determined that it was appropriate to initiate the principal component analyses.

It was also important to figure out if the number of observations was adequate. To calculate the sampling adequacy, The Kaiser-Meyer-Olkin (KMO) factor adequacy test was executed using the *psych* package in R. The overall KMO measure of sampling adequacy value was .86. This indicated a high probability to run principal component analyses. Table 2 summarizes the KMO measure of sampling adequacy and the results of Bartlett's Test of Sphericity.

Table 2: Results of Kaiser-Meyer-Olkin Test and Bartlett's Test of Sphericity

KMO Measure of Sampling Adequacy		.86
Bartlett's Test of Sphericity	Chi-Square	1527.774
	<i>df</i>	36
	Sig.	.000

To determine the number of factors to extract, a scree plot was created by using the *ggplot2* package in R. As shown in Figure 2, two factors emerged in the data since two factors demonstrated initial eigenvalues greater than 1.

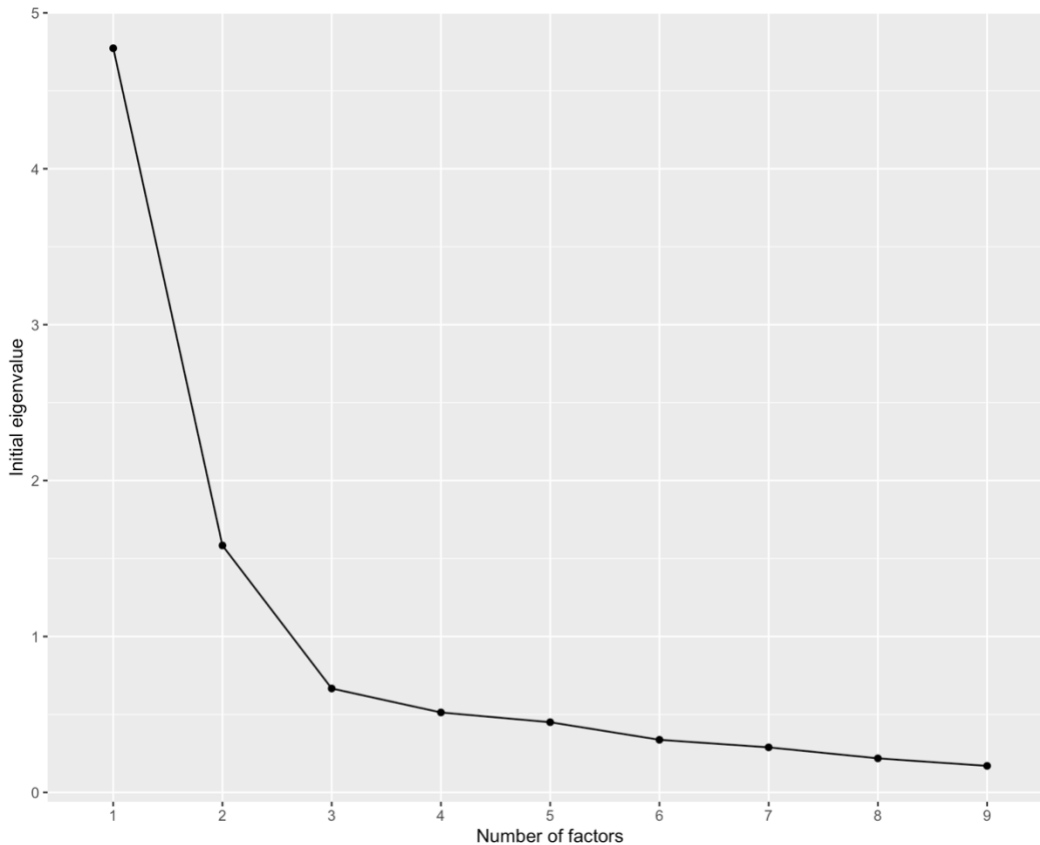


Figure 2. Scree plot

When the principal component analysis with varimax rotation was run, a two-factor structure was yielded. The items and item loadings on each factor are presented in Table 3, and the parallel analysis plot is presented in Table 4.

Table 3: *The principal component analysis results*

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.773	53.036	53.036	4.773	53.036	53.036
2	1.583	17.594	70.629	1.583	17.594	70.629
3	.666	7.403	78.032			
4	.513	5.695	83.728			
5	.450	5.000	88.728			
6	.337	3.749	92.477			
7	.289	3.209	95.685			
8	.218	2.426	98.112			
9	.170	1.888	100.000			

In sum, a two-factor solution accounted for the cumulative percentage of 70.63% of the variance. Parallel analysis using the psych package also supports this two-factor solution, as shown in Figure 3. To add, a factor graph created by the *FactoMineR* package also illustrates a factor map showing.

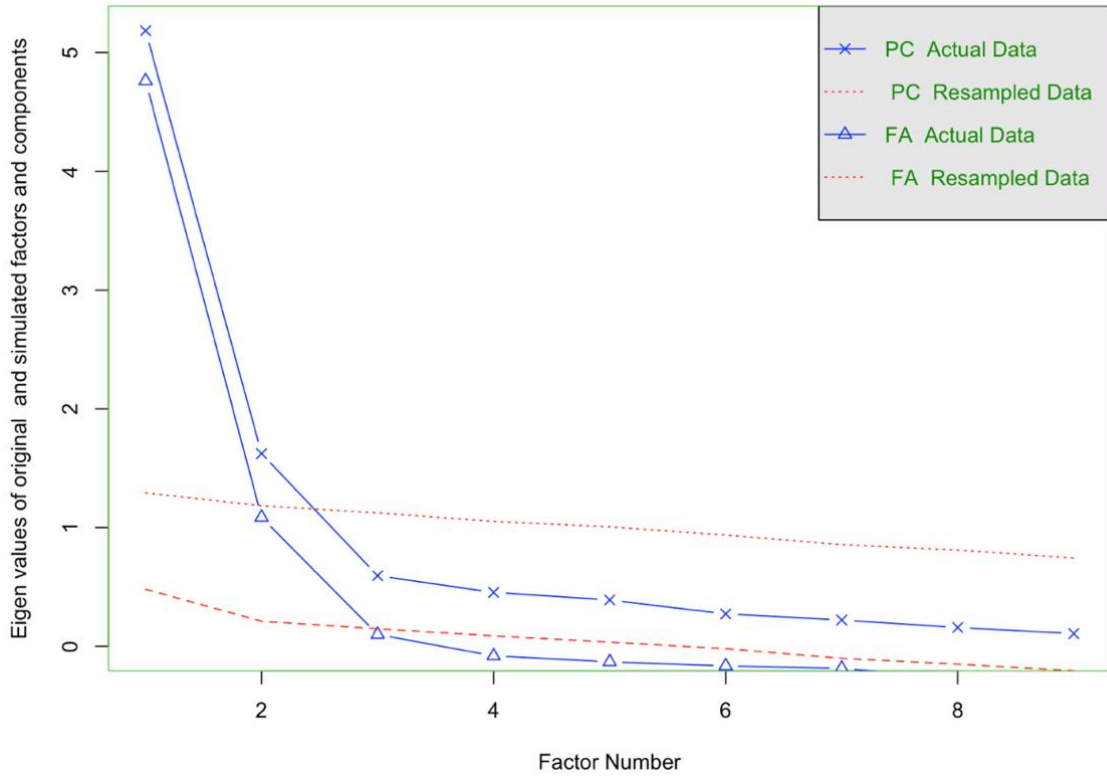


Figure 3. Parallel analysis

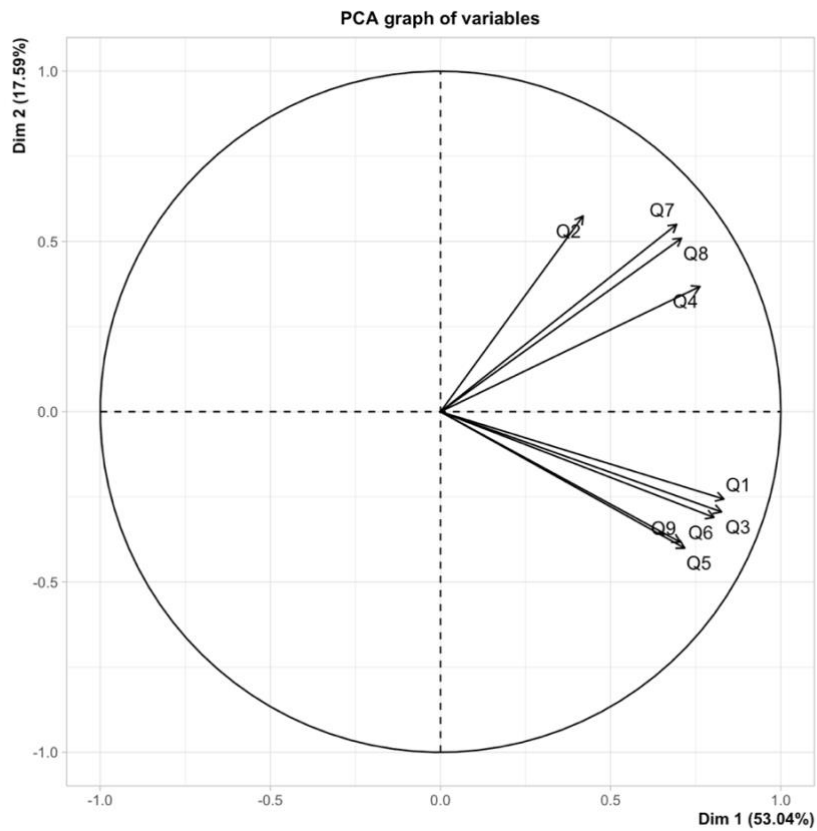


Figure 4. Principal component analysis graph showing variables in a two-factor structure

Similar to the number of factors, The L2-Grit Scale in Turkish also demonstrated a similar distribution of the variables to the same two-factor structure as in the original study by Teimouri et al. (2020). As shown in Figure 4, Q1, 3, 5, 6, and 9 are composed under one factor (Dim 1), whereas Q2, 4, 7, and 8 are under another (Dim 2). Below, Table 4 illustrates the rotated component matrix of the scale with individual values of each item.

Having reached the two-factor solution, the reliability analyses of the subscales were also run. As shown in Table 1, both the *Perseverance of Effort* and *Consistence of Interest* Subscales demonstrated a very good reliability score (>.80) (DeVellis, 2016).

Discussion and Conclusion

In this study, the author examined the L2-Grit Scale in Turkish, which was translated into the Turkish language from Teimouri et al.'s L2-Grit Scale (2020). In two research questions, the reliability and validity of the translated scale were examined. Results show that the translated scale is a reliable tool. Both the original and the translated scales have nine items and have similar reliability scores. The original scale's reliability score was calculated as .80 using Cronbach's Alpha (Teimouri et al., 2020), while the L2-Grit Scale in Turkish performed a reliability coefficient of .88 using the same method.

In addition to the original study, the results of the L2-Grit Scale in Turkish were also in alignment with Pawlak et al.'s study (2022), in which the researchers utilized the 2020 scale in the Polish context. They calculated the high reliability of the language-specific scale in Cronbach's Alpha (.82).

As for the validity of the adapted scale, exploratory factor analysis using the principal component analysis method was run using R. The L2-Grit Scale in Turkish resulted in a two-factor solution showing the same theoretical structure as the original one. Accordingly, the first factor was loaded with five variables and was called the perseverance of effort (*Çabada direnç*¹ in Turkish and the consistency of interest (*İlgide tutarlılık* in Turkish).

Table 4: Rotated Component Matrix

Factors	Items	Component	
		1	2
Perseverance of effort [<i>Çabada direnç</i>]	1. Ben gayretli bir İngilizce öğrencisiyim.	.82	.29
	3. İngilizce konusunda çalışkan bir öğrenciyim.	.84	.25
	5. İngilizce öğrenmeye karar verdiğimde hedefime ulaşmamı hiçbir şey engellemez.	.81	.10
	6. İngilizce öğrenmedeki ilerleyişimi hiçbir şeyin engellemesine izin vermeyeceğim.	.82	.23
	9. İngilizcedeki zayıf noktalarımı geliştirmek için çok zaman ve çaba harcarım.	.79	.11
Consistency of interest [<i>İlgide tutarlılık</i>]	2. İngilizce öğrenme ilğim yıldan yıla değişir.	.00	.71
	4. Sanırım İngilizce öğrenmeye ilgimi kaybettim.	.39	.75
	7. İngilizce öğrenmeye eskisi kadar ilgi duymuyorum.	.23	.85
	8. Geçmişte İngilizce öğrenmeye çok ilgiliydim ancak son zamanlarda bu ilgimi yitirdim.	.27	.83

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization. Rotation converged in 3 iterations

As both the principal component analysis in Figure 4 and the rotated component matrix in Table 4 demonstrate, the data that were used to examine *L2-Grit Scale in Turkish* support the original nine-variable and two-factor solution. This shows that the theoretical background of the translated scale is similar to the original one. Similarly, Sudina et al. (2021) further investigated the validity of the L2-Grit Scale in a different context, including two different samples (one including learners learning English as a foreign language and the other

¹ Both factor names were also translated by the same panel that translated the items from English to Turkish.

with learners learning English as a second language). Having run exploratory factor analysis, they confirmed the hypothesized two-dimensional solution even though they called for studies with wider samples from diverse contexts to repeat confirmatory factor analyses. That said, the results of their exploratory factor analysis were in alignment with the principal component analysis of the L2-Grit Scale in Turkish, as both studies confirmed the two-factor solution. All in all, the translated scale is also valid to be used in the Turkish context among adult EFL learners (e.g., university students as in this study).

The results and their discussion indicated that L2-Grit Scale in Turkish is ready to be used and can be used to inform EFL education in Turkey. As discussed earlier in this article, it was of critical importance to have a Turkish version of the language-specific grit scale to explain and explore this phenomenon, which has been becoming increasingly popular in the second language acquisition field in the Turkish context. This need was related to the fact that EFL learners with lower proficiency may not understand and answer the scales in English; thus, only those with relatively higher proficiency levels (at least those with enough reading comprehension to deal with the scale items in English) could be included in L2-Grit studies in Turkey. With the L2-Grit Scale in Turkish, this vein of research can get more inclusive and represent a more diverse learner group.

There are, however, a number of limitations of this study that should be taken into mind by further studies. Methodologically, this study reported only the principal component analysis of the translated scale, and further studies may run confirmatory factor analyses to confirm or refute the results reported in the current study, or to bring alternate explanations regarding the construct of L2-grit. Moreover, this study included only university students studying in Turkey, and it naturally cannot represent all adult learners.

At this juncture, it is important to note that this article is a part of a larger research study that intends to explain the language-specific grit of EFL learners at various faculties/colleges at Balıkesir University. Therefore, descriptive analyses may shed further light on this individual difference and how it is related to the success and/or learning experience of those who learn EFL. The author recommends the authors of future studies use this scale, run confirmatory factor analyses, test it out in different contexts, and report descriptive results from these contexts. One last implication for future studies would be the need for explanatory mixed-method studies to better and further understand language-specific grit. Accordingly, the data collected through L2-Grit Scale in Turkish can be supported by qualitative data to understand whether and how L2 grit is related to the existing theorization of this phenomenon.

Ethics Committee Permission Information: This research is carried out with the permission obtained with the 2022/02 numbered decision of the Institutional Review Board of Balıkesir University Institute of Social Sciences board in 17/03/2022.

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GENİŞLETİLMİŞ ÖZET

Eğitim psikolojisi alanında azim, bir bireysel özellik olarak, başarı ile ilişkisi bağlamında tartışılmalı bir konudur. Eğitimsel dilbilim ve ikinci dil edinimi alanlarında da azim konusu, özellikle son yıllarda çok ilgi çekmektedir. Son zamanlarda ikinci dil edinimi araştırma alanının popüler bir konusu olsa da, genel anlamda azimden ziyade dil eğitimine odaklı çok az ölçme aracı geliştirilmiştir. Bu durum şüphesiz, azmi farklı amaçlarla inceleyen ikinci dil araştırmacılarını çoğunlukla genel azim ölçeklerini kullanmaya itmiştir.

Bununla birlikte özelde dil öğrenen kişilerin azmine odaklanan araştırmacılar ancak son yıllarda öğrencilerin azmini ölçen araçları geliştirmeye başlamışlardır. Ayrıca bu az sayıda ölçeğin uyarlamaları da bu olgunun farklı kültür ve bağlamlarda araştırılması için gereklidir. Bu araçların bir kısmı farklı dillere çevrilip uygulansa da Türkçe bir yabancı dil öğrenme azmi ölçeği geliştirilmemiş ya da uyarlanmamıştır.

Bu eksikliğe binaen bu çalışmada ikinci dil öğrenme azmine yönelik mevcut bir ölçek Türkçeye çevrilip uyarlanmıştır. Bu uyarlamadan sonra psikometrik yöntemler ile ölçeğin güvenilirlik ve geçerlilik değerleri incelenmiştir. Aynı zamanda temel bileşenler analizi yöntemiyle psikometrik ölçme aracının yapısal analizi de yapılmıştır. Uyarlanan araç, *Türkçe İkinci Dil Azmi Ölçeği* olarak isimlendirilmiştir.

Uyarlama süreci mevcut bir ölçeğin Türkçe diline uyarlanması süreci çeviri paneli yöntemi ile başlamıştır. Bu süreçte ilk olarak Türkçeyi ana dili olarak konuşan, ileri derecede İngilizce bilen ve dil eğitimi konusunda uzmanlaşmış iki panelist sürece davet edilmiştir. Panelistler ve yazar uyarlanacak ölçeği kendi başlarına çevirmişler ve sonra bir araya gelerek bağımsız olarak yaptıkları çeviriler üzerinden fikir birliğine varana kadar maddeleri incelemişlerdir. Sonrasında ortaklaşan çeviri metin Türkçeye geri çevrilerek tekrar orijinal ölçek ile karşılaştırılarak incelenmiştir. Son olarak da üç pilot katılımcı çevrilen ve üzerinde mutabık kılınan Türkçe uyarlamayı incelemiş ve maddelerin anlaşılabilirliği ve uygulanabilirliği ile ilgili geribildirim sağlamışlardır.

Uzlaşılacak versiyon bir elektronik anket sistemi ile üniversite veri tabanı üzerinden, kartopu örnekleme tekniği kullanılarak katılımcılara ulaştırılmıştır. Bu bağlamda toplanan veri yabancı dil olarak İngilizce öğrenen ve Türkiye'deki çeşitli üniversitelerden çalışmaya katılan 284 katılımcının anket sonuçlarını içermektedir. Uygulanan istatistiksel analizler madde, güvenilirlik ve temel bileşenler analizlerini içermektedir. Tüm istatistiksel hesaplamalar ve psikometrik analizler açık kaynak bir yazılım olan R Stüdyo ve sosyal bilimler alanında istatistiksel hesaplamalara olanak veren, yine açık kaynak R paketleri kullanılarak incelenmiştir.

Sonuçlar Türkçe İkinci Dil Azmi ölçeğinin yüksek güvenilirlik ve geçerlilik seviyesine sahip olduğunu göstermektedir. Dokuz maddeden oluşan ölçeğin tamamının güvenilirliği incelendiğinde Cronbach Alfa değeri .86-.90 güven aralığında .88 olarak hesaplanmıştır. Kaiser-Meyer-Olkin testi incelendiğinde toplanan verinin faktör analizine yeterli olduğu anlaşılmıştır. Bu noktada temel bileşenler analizi yöntemi ile uyarlanan anketin yapısal özellikleri incelenmiştir. Aynı zamanda paralel analiz de yapılmıştır. Bu analiz sonucunda toplamda iki faktörlü bir yapı bulunmuş ve faktörler çabada direnç ve ilgide tutarlılık başlıklarıyla tanımlanmıştır.

Bu çalışmada uyarlanan ve Türkiye bağlamında yabancı dil olarak İngilizce öğrenen yetişkinler özelinde uygulanan bu aracın, yapılan analizler sonrası yeterli güvenilirlik ve geçerlilik değerlerine sahip olduğu görülmüştür. Orijinal ölçekteki madde ve faktör yapıları Türkçeye uyarlanan versiyonunda da benzer şekilde bulunmuş ve tanımlanmıştır. Ayrıca uyarlanan ölçek orijinal çalışmadaki ölçeğin düzeyinde bir güvenilirlik değeri gösterebilmiştir. Çabada direnç ve ilgide tutarlılık faktörleri ile de orijinal çalışmaya benzer sonuçlar bulunmuştur.

Özellikle başarı olgusu ile ilişkisi bağlamında çokça tartışılan bu bireysel özelliği inceleyen araştırmacıların, henüz İngilizce seviyesi düşük olan yabancı dil öğrencilerinin de incelenmesi için Türkçe bir versiyona ihtiyaç duyması kaçınılmazdır. Sonuç olarak orijinal ölçeğe uygun şekilde iki faktörlü bir yapı gösteren *İkinci Dil Öğrenme Azmi Ölçeği*, yabancı dil eğitiminde azim olgusunun Türkiye bağlamında yapılacak araştırmalara destek olacaktır.

Şüphesiz bu çalışma, incelenen veri seti ve örneklem ile sınırlı bir tartışma sunmaktadır. Bundan sonraki çalışmaların açılımcı ve doğrulayıcı faktör analizi yöntemleri ile benzer katılımcılardan toplanan ancak daha geniş olan veri setleri içermelidir. Aynı zamanda Türkiye bağlamında yabancı dil azminin daha iyi anlaşılabilmesi için karma yöntemde çalışmalar ile nitel veri de bu tartışmaya dahil edilmelidir. Günün sonunda, ileride yapılacak bu çalışmalarda *İkinci Dil Öğrenme Azmi Ölçeği* geçerli ve güvenilir bir ölçme aracı olarak kullanılabilir olacaktır.