

# An Examination of Immigrant Primary School Students' Target Language Listening and Reading Anxiety

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## Abstract

This study examined the Target Language Listening Anxiety (TLLA) and Target Language Reading Anxiety (TLRA) of immigrant primary school students in Türkiye. The primary objective was to modify two instruments, initially developed to assess reading and listening anxiety in the target language among adult learners, for use with immigrant primary school students, addressing a gap in receptive skills measurement. The second was to analyse the students' TLLA and TLRA levels based on gender, grade level, and native language alphabet, and to examine predictive influence of TLLA on TLRA. In line with these two research purposes, the study was conducted in two phases. In Study 1, after assessing content validity, construct validity of the scales was ensured using Structural Equation Modelling (SEM). Exploratory (EFA) and confirmatory factor analyses (CFA) were conducted on distinct groups, with samples of 132 and 219 immigrant students, respectively. Participants were selected through convenience sampling from foreign students enrolled in private and public schools during 2022-2024. In Study 2, the analyses utilized data from the sample group employed for confirmatory factor analyses (CFA). Independent sample t-test was conducted to examine the differences in means between TLLA and TLRA with respect to gender. Additionally, one-way ANOVA was employed to compare the means of TLLA and TLRA across different grade levels and native language alphabets. Furthermore, simple linear regression analysis was utilized to determine whether the TLLA of immigrant primary school students serves as a significant predictor of their TLRA. The findings revealed that immigrant primary students exhibited moderate-high anxiety in TLLA and TLRA. No significant differences in TLLA emerged across gender, grade level, or native language alphabet. TLRA was consistent across grades and native alphabets but differed by gender. Furthermore, TLLA emerged as a significant predictor of TLRA. This study may provide valuable insights for researchers, administrators, and educators into immigrant primary school students' listening and reading anxiety, and can pave the way for further scholarly inquiry, offering measurement tools to identify receptive language-related anxiety affecting target language comprehension and acculturation.

## Keywords:

Target Language Listening Anxiety, Target Language Reading Anxiety, Immigrant Primary School Students



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## Introduction

The necessity for individuals to acquire languages beyond their native language has emerged from the need to participate in a globalized society and contemporary living circumstances, as well as migration driven by diverse factors, such as economic improvement, job opportunities, educational opportunities, family reunions, political persecution, natural disasters, war, and conflicts (Altıntaş & Kutluca Canbulat, 2024; Dixon & Wu, 2014). This new language, which refers to the native language of their host countries, is termed the target language (TL) (Saville-Troike, 2006). Target language acquisition as a second language acquisition refers to the process of learning subsequent languages in addition to one's native language. It is distinguishable from foreign language learning in that the second language plays a major functional role in the country or region of the L1-speaker (e.g. immigration) (Engel de Abreu & Gathercole, 2012). The acquisition of target language (TL) is crucial for acculturation, which refers to the process of adapting to new cultural norms and rules governing interpersonal interactions (Suarez-Orozco & Suarez-Orozco, 2001), the simultaneous occurrence of second culture contact and second language contact results in overlapping acculturative and linguistic demands (Toppelberg & Collins, 2010). Immigrants often face significant challenges, with the acquisition of the host country's language and culture being among the most profound. This is particularly concerning for young immigrant children, as failure to address these challenges can lead to severe consequences. Limited language competence is a critical factor contributing to acculturation stress and adverse social and educational outcomes, significantly influences the comprehension and articulation of immigrants' academic success. Many immigrant children are at an increased risk of academic underachievement, early school dropout, and, ultimately, lower-paid employment or unemployment (e.g. Dixon & Wu, 2014; Levin & Shohamy, 2012).

Due to migration, a significant and increasing number of immigrant children are enrolled in educational institutions within host countries. The classroom setting in schools serves as the primary environment where immigrant children acquire the target language (TL) (Birman, 2006; Saville-Troike, 2006). Language serves as a crucial medium for cultural transmission as well as the conveyance of emotions and thoughts (Gleason, 2009; Kuhl, 2004). Consequently, the school environment plays a vital role in TL acquisition, as it offers substantial opportunities for communication in the language being learned (Altıntaş & Kutluca Canbulat, 2024). However, children often navigate between different linguistic environments throughout the day, as the linguistic characteristics vary significantly from the classroom to other settings, resulting in a notable

contrast in the language competencies required. Language utilized within a native environment is typically contextualized, incorporating numerous references to shared physical, familial, social, affective, and communicative contexts, and relying on shared knowledge (long-term memory). Conversely, classroom language is generally decontextualized, characterized by its abstract nature, a heavy reliance on linguistic and cognitive processing, and a detachment from common external references (Toppelberg & Collins, 2010).

The processes of TL acquisition in classroom setting can be outlined as follows: acquiring language structure, developing language and intercultural communicative competencies, recognizing cultural elements of the target language, understanding language usage in diverse social contexts, communicating effectively by combining language structure and social context, as each language offers a unique interpretation of the world, leading to the development of distinct value systems, perceptions, and cognitive processes (e.g. Baker, 2012; Cullhane, 2004; Holliday, 2013; Polat & Dilidüzgün, 2015). Proficiency in TL necessitates the development of receptive and productive language skills. Receptive language encompasses the ability to distinguish auditory stimuli, comprehend words, interpret commands, and execute them (Diken, 2011). Productive language, conversely, entails articulating thoughts and desires, producing phonemes, forming words and sentences, and applying grammar rules (e.g. Konrot, 2011). Hence, listening and reading skills as receptive language skills, constitute the two primary channels for TL acquisition (e.g. Grabe & Stoller, 2002; Mohammadpur & Ghafournia, 2015; Saville-Troike, 2006).

Language learning, inherently practical and dynamic, necessitates examining emotional factors beyond cognitive and behavioural aspects (Capan & Karaca, 2013). Jalongo and Hirsh (2010), referencing various studies, elucidated the impact of emotions on the learning process as follows: Emotions significantly affect thought by initiating, halting, or accelerating information processing (Izard, 2007), shaping learning engagement (Jalongo, 2007), focusing attention and regulating memory recall (Kensinger, 2007). Negative emotions can hinder processing as the brain suppresses them (Fenske & Raymond, 2006), and lead to give up easily (Frenzel et al., 2007).

Defined as a negative emotion linked to helplessness against perceived threats, anxiety is a significant cognitive challenge in learning and reduces attention span and self-esteem (Khan & Zafar, 2010; Jalongo & Hirsh, 2010; Sellers, 2000), posing persistent concerns for L2 educators due to its harmful effects on learners (Elkhafaifi, 2005). Anxiety regarded as an affective variable in the language learning process can also

be a crucial filter for students as they attempt to comprehend reading or listening passages, thereby hindering the learning process for TL/L2 learners (Lien, 2011). Furthermore, anxiety exhibits significant correlations among receptive skills (e.g. Chow et al., 2018; Öztürk, 2023).

### ***Second/Target Language Listening Anxiety***

Listening skill is considered the most fundamental language and communication skill (Gilakjani & Ahmadi, 2011). According to proponents of the naturalistic and cognitive approaches, listening skill encompasses a complex and active comprehension process and functions as the primary mechanism through which learners can access additional TL input (Kim, 2011), and additionally exert a positive influence on the development of other skills (Rost, 2001; 2024).

Comprehension of oral input requires the activation of pre-existing schemas (e.g. Mai et al., 2014). According to the interactive top-down and bottom-up processing model, two groups of resources interact in a listening task to enable listeners to interpret the text: the listener's schematic knowledge, and the knowledge of both the intellectual and textual information contained in the actual listening text. Within an interactive model, listeners virtually simultaneously "perceive" and "parse" the incoming speech stream, matching it (or mismatching it) with the elaborations previously activated (Graham & Macaro, 2008). Hence, several factors pertaining to the characteristics of the listener and characteristics of the input influence TL/L2 listening comprehension. The factors associated with the characteristics of the listener encompass the extent of prior exposure to the language; schematic knowledge regarding formal, content and linguistic schemas which include pre-existing knowledge such as non-native language's phonology; lexical breadth; grammar; topic, rhetorical patterns and text structure, genre, and cultural context (Bloomfield et al., 2010; Ghahri & Zarei, 2022). The factors related to characteristics of the input include length of the input and information density; complexity of input, such as syntactic features and pragmatic information; organization, such as orality, text type, lack of visual support and coherence, lack of repetition; and auditory features, such as speaker accent and the rate of speech (e.g. Bloomfield et al., 2010; Yamauchi, 2014). These complexities may affect students' ability in their listening comprehension (Xu, 2008). Inadequate listening comprehension often causes listening anxiety in TL/L2 learners (e.g. Capan & Karaca, 2013; Mirza et al., 2021), which encompasses feelings of restlessness and anxiety triggered by various stimuli during the listening process (Polat & Erişti, 2018), and distracts listeners' attention from the material, reduces auditory sensitivity and response, limits comprehensible input, impairs listener's comprehension of spoken information

and consistently hinders the learning process (e.g. Pan, 2016; Zhang, 2013).

### ***Second /Target Language Reading Anxiety***

Reading, a receptive language skill, is a cognitive process that involves the reader's interpretation of a text based on prior knowledge and recognised as another major way of acquiring new knowledge (Grabe & Stoller, 2002), as well as the vocalization of written symbols according to specific rules (Sever, 2015). Students require proficient reading skills to access essential information and expand their knowledge base (Mohammadpur & Ghafournia, 2015). Reading functions as a critical source of input and provides extensive exposure to literature and cultural aspects of the target language (TL) (Saville-Troike, 2006). Both reader characteristics and the features of text exert influence on the development of reading in TL (Zhao et al., 2013). For instance, individuals' cultural backgrounds increase their difficulties with TL (Sellers, 2000). Diverse features of a TL text, such as unfamiliar scripts, orthography, graphemic-phonemic decoding, syntactic and discourse features, and unfamiliar cultural material/cultural background, all tend to cause TL learners difficulties in reading (Saito et al., 1999; Zhao, et al, 2013). When TL readers engage with texts in their non-native language, they attempt to decipher unfamiliar scripts, writing systems, and cultural materials. Should they encounter difficulties in processing these elements and fail to render them comprehensible, they may experience frustration with reading and develop anxiety (Ghonsooly & Elahi, 2010; Saito et al., 1999; Shi & Liu, 2006). This creates a vicious circle for reading performance as it adversely impacts reading performance by diverting attention from the reading process, decelerating letter and word recognition, and impairing decision-making processes, such as interpreting meaning or selecting strategies (Sellers, 2000). The psychological state characterized by restlessness, confusion, frustration, worry, and stress occurs when an individual fails to comprehend a text in the process of reading L2 texts, which results in a decrease in cognitive performance, is generally referred to as foreign language reading anxiety (Capan & Karaca, 2013; Mardianti et al., 2021; Saito et al., 1999), which is aggravated in TL contexts (Sellers, 2000).

### ***Current Study***

In recent years, Türkiye has emerged as a significant destination for migrants. People migrate to Turkey for various reasons, including tourism, work, and education. Notably, there has been a significant wave of migration to Türkiye, particularly in 2011 from Syria and in 2021 from the Russian Federation and Ukraine, largely driven by conflicts and wars in the migrants' home countries. According to the latest data from the Republic of Türkiye, Ministry of

Interior Presidency of Migration Management (2024), there are approximately 1.056.632 foreigners residing in the country (Altıntaş & Kutluca Canbulat, 2023). Demographic changes in Türkiye in recent years have resulted in a growing population of immigrant students in schools nationwide.

In the process of acquiring Turkish language proficiency, these non-native learners encounter various challenges, including pronunciation errors, superfluous additions, inadequate and inaccurate self-expression, difficulties in comprehending or misinterpreting spoken language, and limited lexical knowledge (e.g. Güngör & Şenel, 2018; Karaağaç & Güvenç, 2019). TL is acquired within a cultural context and thus necessitates cultural competence as well as linguistic competence. In this context, target language learners must acquire the grammatical features of that language and the requisite skills to utilize these elements in culturally appropriate ways during communication (Culhane, 2004).

The primary school years establish the foundation for subsequent educational experiences, as students' perceptions and experiences during this period significantly influence their future educational trajectory (Liu et al., 2015). Furthermore, proficiency in TL is a crucial element for successful and sustainable integration (Kanas et al., 2022). Therefore, the development of TL receptive language skills is also essential for both the integration and the quality of the educational experience of immigrant primary school students. Language anxiety is a significant construct that merits investigation in primary education, as anxiety related to language skills at this early stage can lead to long-term negative consequences (Mihaljević Djigunović, 2009). Identifying listening and reading anxiety in immigrant primary school students is crucial, as these factors can impede language proficiency and integration. Immigrant children's proficiency in the host country language and educational attainment plays a key role in cultural and social integration (e.g. Dustmann & Glitz 2011; Chiswick & Miller, 2015). Language competence predicts social competence and school achievement. Poor language skills often predict poor social skills and adaptation. Child language competence has internal and interpersonal functions relevant for adaptation (Bredtmann, et al, 2021; Toppelberg & Collins, 2010). Hence, language anxiety in the immigrant context is more complex than the foreign language classroom, with its confluence of social, cultural, psychological and political currents. When immigrants fail to construct social networks within the majority group due to linguistic or sociocultural obstacles, they are more likely to maintain contact within the ethnic group or with people in the home country. Immigrants may avoid using the language they are anxious about, leading to less practice and social interaction, which

causes limited proficiency—actual or self-perceived—, resulting in further language anxiety and avoidance (Sevinç & Backus, 2019).

### **Purpose**

This study had two primary objectives: first to modify the instruments, originally developed to assess anxiety related to reading and listening in the target language among adult learners, for application among immigrant students at the primary school level,- to the authors' knowledge, no such instruments currently exist for this target population, thereby addressing a gap in the measurement of anxiety in target receptive language skills among immigrant primary school students- and second to analyse students' anxiety levels by gender, grade level, and their native language alphabet. For the initial objective, a validity and reliability study of listening and reading anxiety scales in the target language for primary school students was conducted. For the subsequent objective, this study addressed the following research questions:

1. To what extent do immigrant primary school students experience listening and reading anxiety in the target language?
2. Do immigrant primary school students' Target Language Listening Anxiety (TLA) vary according to gender, grade level, and native language alphabet?
3. Do immigrant primary school students' Target Language Reading Anxiety (TLRA) vary according to gender, grade level, and native language alphabet?
4. Does immigrant primary school students' Target Language Listening Anxiety (TLA) predict their Target Language Reading Anxiety (TLRA)?

### **Method**

#### **Study 1**

In the process of data collection, researchers may choose to utilize an existing scale in its original form, modify a scale, adapt scales originally developed for a different linguistic and cultural context to their own, or develop a new scale, depending on the scale's suitability for the intended purpose and target audience (e.g., Özdamar, 2017; Seçer, 2018). In this study, the modification of two scales originally developed for adult target language learners in the national context was preferred because no scale developed for immigrant primary school students in a different language and cultural context was encountered. In the international literature, scales developed for adults, however, typically assess anxiety within the context of foreign language rather than the target language, but language and cultural structure may exhibit distinct characteristics concerning language

anxiety in foreign and target language contexts. This is because acquiring a foreign language, as opposed to a target language, involves learning another language in an environment where one's native language is predominantly spoken (Baghaei, 2013). Furthermore, the adaptation process necessitates that a scale initially developed in a different cultural and linguistic context be prepared for use in another context by undergoing certain procedures, such as language validation (e.g. Özdamar, 2017).

Modification is a revision process employed in instances where a nationally utilized scale is inadequate for measuring the trait or phenomenon under investigation, a concise version of the scale is desired, alterations are necessary for the current target group (differing in age, gender, educational level, etc.), or scoring requires adjustment (e.g. Koçar, 2020; Özdamar, 2017). In modification process, the fundamental wording remains unchanged; however, procedures such as reducing the number of questions (short-form development), item object changes, and adaptation to different target groups can be implemented (e.g. McKim, 2022).

The modified scales were selected by examining the content validity among the instruments developed to measure the listening and reading anxiety of those learning Turkish as a foreign language within Turkish literature. The scales were as following: "The Listening Anxiety Scale in a Foreign Language" developed by Polat and Erişti (2018), and "Reading Anxiety Scale for Turkish as a Foreign Language Learners" developed by Altunkaya & Erdem (2016). Both scales employed a 5-point Likert format. The relevant researchers were informed about the research, and permission was obtained via e-mail. To determine the content validity of the scales regarding listening and reading anxiety of immigrant primary school students and to ascertain whether the items of the instruments sufficiently represented the content domain (e.g. Zamanzadeh et al., 2014), the opinions of three experts working in the field of language education were sought regarding whether it covered factors relating to the characteristics of the listener and the input that can influence TL listening and reading competence. The content validity of items (CVI) was determined by requesting experts to rate each instrument item in terms of clarity and relevance on a three-point scale from 1 to 3: "not relevant / not clear, relevant but need minor revision, highly relevant and clear". The total score of the items evaluated as relevant and "relevant but needing minor revision was divided by the number of experts to determine content validity. The inter-rater agreement of the two scales exhibited a value greater than .80, which indicates that the scales possess content validity (e.g. Yeşilyurt & Çapraz, 2018; Zamanzadeh et al., 2014).

In Likert scales, responses are assigned numerical values and summed or averaged for concept expressions (Baka et al., 2012). The number of options affects comprehension and response accuracy; thus, they should be formulated to allow respondents to identify their answer (Krosnick & Presser, 2010; 2011). Too many options make choosing between responses difficult. Labelling and sequencing options are as crucial as determining option count. Inclusion of a middle option allows respondents to indicate an opinion between agreement and disagreement, improving reliability assessments, but must be explicitly defined (Nadler et al., 2015) (Cited in: Dursun & Alnıaçık, 2019). At this juncture, based on recommendations from the literature and expert opinions, it was determined that modifying the scales from the original five-point Likert format to a 3-point Likert format, comprising the options "disagree," "undecided," and "agree," would better align with the comprehension levels of immigrant primary school students.

After obtaining approval from the ethics committee, authorization was secured to collect data from schools via the Research, Competition, and Social Activity (RCEA) unit, which is affiliated with the Ministry of National Education. Participants were selected through convenience sampling. Both exploratory and confirmatory factor analyses were performed on the two scales undergoing modification, utilizing Structural Equation Modelling (SEM) within the LISREL framework. Exploratory (EFA) and confirmatory factor analyses (CFA) of the scales were conducted on distinct groups of students, with sample sizes comprising 132 and 219 immigrant students, respectively. Prior to data collection, students were informed that participation in the study was voluntary. The data collection process lasted for one lesson hour (40 min). Prior to the administration of the scales, students were provided with information regarding the scale options. They were informed that selecting the "agree" option indicated that the items on the scale were applicable to them, whereas choosing "disagree" signified that the statement did not pertain to them. Additionally, they were made aware that "undecided" was an available option for instances where they could not definitively choose between "agree" and "disagree," serving as a middle ground for statements with which they sometimes concurred and sometimes did not. While most of the students comprehended the scale items, a small number of students, particularly those in their second grade, encountered difficulties with certain items. In these instances, examples were provided to facilitate understanding.

#### **Exploratory Factor Analysis**

The scales were applied to 132 immigrant primary school students for an exploratory factor analysis. Prior to conducting exploratory factor analysis, outliers,

normality, and multicollinearity were assessed, and data suitability was verified using KMO and Bartlett's tests. The KMO values for the Foreign Language Listening Anxiety Scale (TLLA) and the Foreign Language Reading Anxiety (TLRA) Scale were .90 and .78, respectively. Bartlett's test chi-square values were significant at the .01 level, confirming the appropriateness of the dataset for factor analysis (e.g. Çokluk et al., 2025). To examine the factor structure of the scales, principal component analysis was employed as the factorization method, and varimax, an oblique rotation method, was utilized as the rotation technique. The scales were administered to immigrant primary school students using the original number of items. During the exploratory factor analysis, items with a variance explanation rate of less than .10 and a factor loading value below the acceptance threshold of .32 were excluded from the scales (Çokluk et al., 2025).

**TLLA Scale**

The results of the total variance explained by the items

**Table 1**

*TLLA Total Variance Explained*

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.657	46.572	46.572	4.657	46.572	46.572
2	.873	8.733	55.305			
3	.772	7.716	63.021			
4	.731	7.311	70.332			
5	.644	6.443	76.775			
6	.611	6.109	82.884			
7	.535	5.351	88.235			
8	.425	4.249	92.484			
9	.405	4.050	96.534			
10	.347	3.466	100.000			

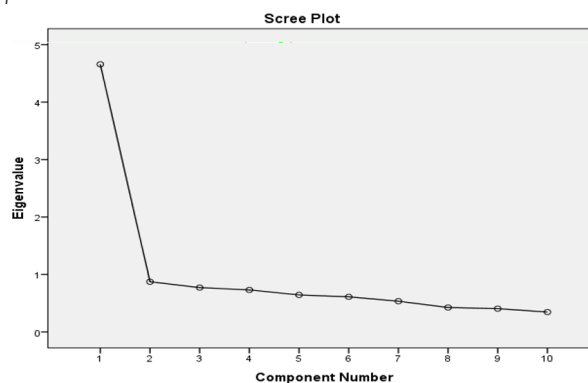
in the TLLA scale, following the removal of items with a ratio of variance explanation in the factor less than .10 and loading values below the acceptance threshold of .32 (Çokluk et al., 2025), are as follows.

Analysis of Table 1 revealed that TLLA exhibited a unidimensional structure, with an initial eigenvalue exceeding 1 and a contribution to the total variance of 46.572%. In single factor designs, an explained variance of 30% or greater is generally considered sufficient (Büyükoztürk, 2010). The explained variance of TLLA exceeds this threshold. The Scree Plot Graph, which is another indicator of the factor structure of the TLLA, is presented in Figure 1.

The Scree Plot Graph illustrates that the components on the Y-axis represent points contributing to the variance, which diminish along the X-axis, with the intervals between points denoting the factors (Çokluk et al., 2025). Figure 1 indicates that the TLLA scale is unidimensional. The component matrices of the scale are presented in Table 2.

**Figure 1.**

*TLLA Scale Scree Plot Graph*



**Table 2**

*TLLA Components Matrix*

		Component
		1
TLLA	I become fearful that I will not understand Turkish speech content correctly.	.756
TLLA	Factors such as the speaker's tone of voice, intonation and pronunciation worry me.	.746
TLLA	When I try to make sense of what I listen to, I fear that I will miss the flow of the conversation.	.724
TLLA	When I cannot understand what I'm listening to, being unable to stop the conversation's flow causes me to experience tension.	.724
TLLA	Not being able to interfere the speaker's speech rate increases my anxiety.	.697
TLLA	When listening to content with unfamiliar words, phrases and sentence structures, my tension increases.	.688
TLLA	It's worrying to know that I must understand what I'm listening to.	.664
TLLA	I feel a sense of helplessness when I listen to content on subjects about which I have no knowledge.	.625
TLLA	When I cannot understand spoken Turkish, the thought that I will fail in exams makes me anxious.	.599
TLLA	Knowing that there will be an evaluation study after the Turkish listening activity increases my tension.	.577

\*The original language of TLLA is Turkish; however, for the purpose of comprehensibility, an English translation was provided.

Table 2 demonstrates that the factor loadings of the items in the unidimensional and 10-item scale surpassed the acceptability threshold of .32 (Çokluk et al., 2025) and ranged from .57 to .75.

#### TLRA Scale

The results of the total variance explained by the items in the TLRA scale, following the removal of items with a ratio of variance explanation in the factor less than .10 and loading values below the acceptance threshold of .32 (Çokluk et al., 2025), are as follows.

Analysis of Table 3 revealed that TLRA exhibited a unidimensional structure with an initial eigenvalue exceeding 1 and a contribution to the total variance of 45.388%. In single factor designs, an explained variance of 30% or greater is generally considered sufficient (Büyüköztürk 20). The explained variance of TLRA exceeded this threshold. The Scree Plot Graph, another indicator of TLRA's factor structure, is presented in Figure 1.

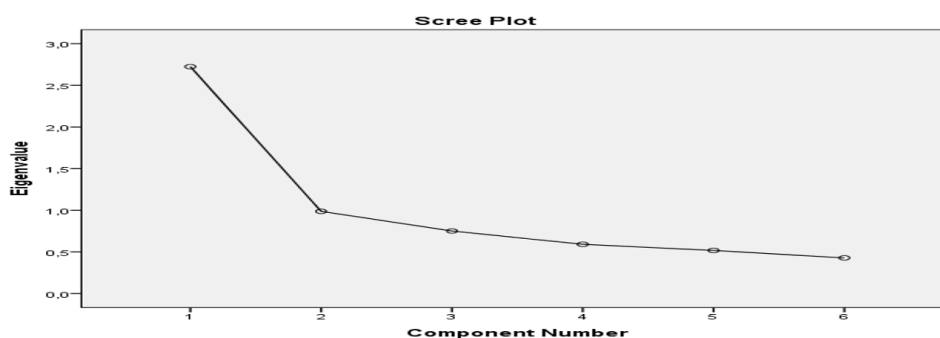
**Table 3**

*TLRA Total Variance Explained*

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.723	45.388	45.388	2.723	45.388	45.388
2	.987	16.541	61.840			
3	.751	12.524	74.364			
4	.592	9.863	84.226			
5	.518	8.633	92.859			
6	.428	7.141	100.000			

**Figure 2.**

*TLRA Scale Scree Plot Graph*



**Table 4**

*TLRA Components Matrix*

		Component
		1
TLRA	I am worried about not understanding idioms when reading Turkish.	.760
TLRA	I feel nervous if I can't understand what I read in Turkish.	.706
TLRA	When I can't understand every word when I read Turkish, I feel both confused and tense.	.705
TLRA	I worry about encountering words that I cannot vocalise while reading Turkish.	.670
TLRA	The order of subject, object, predicate in Turkish sentences makes it difficult for me to read.	.612
TLRA	When I read Turkish, I worry when I encounter unfamiliar grammar structures and unfamiliar rules.	.570

\*The original language of TLRA is Turkish; however, for comprehensibility, an English translation has been provided.

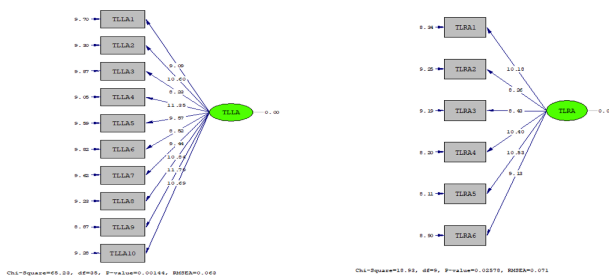
**Table 5**  
*CFA Findings of the Scales*

	$\chi^2$	df	$\chi^2/df$	RMSEA	SRMR	NNFI	NFI	CFI
TLLA	65.23	35	1.8	0.06	0.04	0.97	0.96	0.98
TLRA	18.92	9	2.1	0.07	0.03	0.97	0.97	0.98

$\chi^2/df \leq 3$  = Absolute fit (Kline 2005) / SRMR  $\leq 0.05$  Absolute fit (Brown, 2015)/ RMSEA  $\leq 0.08$  Good fit (Jöreskog & Sörbom, 1993)/ NFI/NNFI  $\geq 0.95$  Absolute fit (Hu & Bentler, 1999) /CFI  $\geq 0.95$  Absolute fit (Hu & Bentler, 1999)

As presented in Table 5, the scales exhibited absolute/good fit indices. The path diagrams (t values) of the scales are presented in Figure 3.

**Figure 3.**  
*TLLA and TLRA Scales Path Diagrams (t Values)*



**Reliability**

The calculated internal consistency coefficients and construct reliability for TLLA and TLRA are presented in Table 6.

**Table 6**  
*Reliability results of the TLLA and the TLRA Scales*

	N	Cronbach's Alpha	CR
TLLA	10	.86	.89
TLRA	6	.80	.83

As illustrated in Table 3, the scales demonstrated reliability with values  $\leq .80$  and CR  $\geq 0.7$  (George & Mallery, 2024; Hair, et al, 2014).

**Study 2**

**Participants**

The investigation of immigrant students' listening and reading anxiety with respect to gender, grade level, and alphabet differences was predicated on data collected from 219 students. The participants consist of children from families that have migrated from distinct countries, including Russia, Ukraine, Germany, England, Bulgaria, Romania, Hungary, France, Sweden, the Netherlands, Kazakhstan, Uzbekistan, Lithuania, Poland, Moldova, Syria, Iran, and Afghanistan. The demographic information pertaining to the students is presented in Table 7.

**Table 7**  
*Demographics of immigrant students*

Grade Level	Gender	Native Language Alphabet			Total
		Latin	Cyrillic	Arabic	
2 <sup>nd</sup> Grade	Female	1	8	8	17
	Male	7	11	5	23
	Total	8	19	13	40
3 <sup>rd</sup> Grade	Female	3	25	8	36
	Male	6	30	8	44
	Total	9	55	16	80
4 <sup>th</sup> Grade	Female	5	30	11	46
	Male	8	37	8	53
	Total	13	67	19	99
Total		30	141	48	219

As illustrated in Table 7, the study participants comprised 40 second-grade, 80 third grade, and 99 fourth-grade students. The sample consisted of 99 female and 120 male students. The distribution of native language alphabets among the participants is as follows: 30 use Latin, 14 use Cyrillic, and 48 use Arabic.

**Data Analysis**

Data were normally distributed with skewness and kurtosis between  $\pm 1.5$  (Tabachnick & Fidell, 2013). Consequently, an independent sample t-test was employed to compare the differences between Target Language Listening Anxiety (TLLA) and Target Language Reading Anxiety (TLRA) means with respect to gender. Given that the assumption of homogeneity of variance (Levene's test  $> 0.05$ ) was satisfied, a one-way ANOVA was utilized to compare TLLA and TLRA means by grade level and native language alphabet. Furthermore, simple linear regression analysis was employed to assess whether the TLLAs of immigrant primary school students serves as a significant predictor of their TLRA's.

**Results**

*Findings related to the first research question*

The findings concerning the first research question, which examines the listening and reading anxiety levels of immigrant primary school students in the target language, are presented in Table 8.

Various methodologies exist for assessing participants' positions on scales (e.g. Sayili et al., 2024; Sellers,2000). In this study, akin to the research conducted by Sellers (2000), the mean  $\pm 1$  standard deviation or more was employed as a cutoff point for determining anxiety levels. Accordingly, participants whose individual mean scores on each of the scales exceeded the overall mean by one or more standard deviations were categorized as "high-anxiety." Conversely, those whose mean scores fell one or more standard deviations below the overall mean on each of the scales were classified as "low-anxiety." The remaining participants were designated as "mid-anxiety." In this

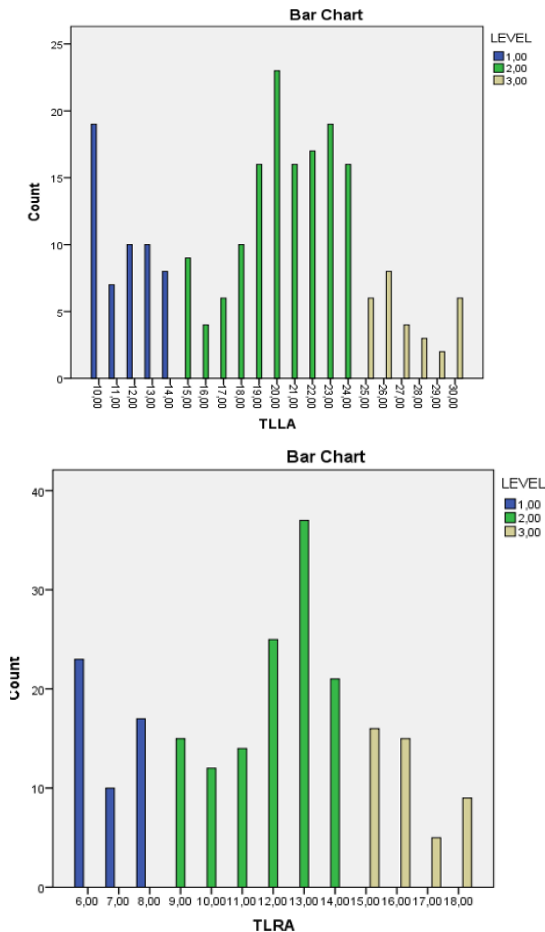
context, the TLLA and TLRA levels were classified as follows: For TLLA, scores ranging from 10 to 14 signify low-anxiety, 15 to 24 signify mid-anxiety, and 25 to 30 signify high-anxiety. For TLRA, scores ranging from 6 to 8 indicate low-anxiety, 9 to 14 indicate mid-anxiety, and 15 to 18 indicate high-anxiety. Table 8 provides descriptive statistics for participants, and a summary of the number and percentage of students assigned to each anxiety category. The Figure 1 also illustrates the distribution of students' anxiety levels based on their scores.

**Table 8**  
Descriptive Statistics for TLLA and TLRA and Distribution of Participants Assigned to Each Anxiety Category

	N	Min	Max	Mean	Sd	Low		Mid		High	
						N	%	N	%	N	%
TLLA	219	10	30	19.14	5.34	54	24.7	136	62.1	29	13.2
TLRA	219	6	18	11.66	3.37	50	22.8	124	56.7	45	20.5

Analysis of Table 8 indicates that the majority of immigrant primary school students in the present study demonstrated mid to high levels of anxiety related to listening and reading in the target language. The distribution of students' anxiety levels in relation to their scores is depicted in Figure 4.

**Figure 4.**  
The distribution of students' anxiety levels in relation to their TLLA and TLRA scores



Based on Table 8 and Figure 4, it can be concluded that most of these students experienced moderate-high levels of anxiety.

**Findings related to the second research question**

The findings pertaining to the second research question, which investigates whether the listening anxiety of immigrant primary school students in the target language vary according to gender, grade level, and native language alphabet, are presented in Table 9 and Table 10.

**Table 9**  
Independent groups t-test results regarding TLLA

	Gender	N	$\bar{X}$	SE	t	df	p
TLLA	Female	99	19.52	5.30	.954	217	.341
	Male	120	18.83	5.27			

Table 9 reveals no statistically significant difference between genders in terms of immigrant students listening anxiety; however, the mean score of female students ( $\bar{X} = 19.52$ ) is higher than that of male students ( $\bar{X} = 18.83$ ).

**Table 10**  
Descriptives and ANOVA results for TLLA by grade level and the native language alphabet

	N	$\bar{X}$	Sd		Sum of Squares	df	Mean Square	F	p	
Grade	2 <sup>nd</sup> grade	40	19.50	5.68	Between Groups	7.44	2	3.72	.129	.879
	3 <sup>rd</sup> grade	80	19.16	5.00	Within Groups	6215.87	216	28.77		
	4 <sup>th</sup> grade	99	18.98	5.50	Total	6223.32	218			
Alpha-bet	Latin	30	20.80	6.29	Between Groups	128.49	2	64.24	2.277	.105
	Cyrillic	141	18.63	5.15	Within Groups	6094.83	216	28.21		
	Arabic	48	19.60	5.10	Total	6223.32	218			

Table 10 illustrates that there is no statistically significant difference in students' listening anxiety regarding grade level and their native language alphabets.

**Findings related to the third research question**

The findings addressing the third research question, which examines whether immigrant primary school students' reading anxiety in the target language varies with respect to gender, grade level, and the alphabet of their native language, are presented in Table 11 and Table 12.

**Table 11**  
Independent groups t-test results regarding TLRA

	Gender	N	$\bar{X}$	SE	t	df	p
TLRA	Female	99	12.98	3.18	2.48	217	.014
	Male	120	11.25	3.44			

Table 11 indicates that female students demonstrate higher reading anxiety in comparison to male students, with the observed difference being statistically significant.

**Findings related to the fourth research question**

The findings for the fourth research question, which examines whether immigrant primary school students' Target Language Listening Anxiety (TLLA) significantly predicts their Target Language Reading Anxiety (TLRA), are presented in Table 13.

A correlation coefficient between 0.70-0.30 can be defined as a medium level relationship (Büyüköztürk, 2010). Table 13 demonstrates that there is a moderate (.42>.30), positive and significant relationship between students' reading and listening anxiety, and the Target Language Listening Anxiety (TLLA) is a significant predictor of Target Language Reading Anxiety (TLRA). Specifically, TLLA ( $F(1, 217) = 47.011, p < .001$ ) accounted for 17% of the variance in TLRA.

**Discussion**

This study explored the listening and reading anxiety experienced by immigrant primary school students in the target language. This was accomplished by modifying two scales, initially developed for adult foreign language learners, to be appropriate for this specific demographic.

The findings revealed that immigrant primary school students demonstrated moderate- high levels of anxiety associated with listening and reading in Turkish as the target language.

Second language (L2) anxiety is related to language competence in L2 (Sparks et al., 2018). Studies reveal that immigrant students' main problem in Turkey's education process is Turkish language incompetence

(e.g. Güngör & Şenel, 2018; Karaağaç & Güvenç, 2019). Language competence comprises domains like phonology (sound system), syntax and morphology (word order/formation), and lexicon/semantics (vocabulary, meaning), which interface with language usage (pragmatics, discourse) (Toppelberg & Collins, 2010). L2 competence, encompassing language proficiency in the four language skills (Zhou, et al, 2023), is primarily contingent upon listening and reading comprehension in a second or target language. Listening comprehension is the ability to interpret auditory messages and draw inferences (Wagner, 2004). Poor listening comprehension often leads to listening anxiety in TL/L2 learners (Capan & Karaca, 2013; Chow et al, 2018). Schema Theory posits that language users activate schemata to attain meaningful comprehension (Huang, 2009). The amount of domain-specific knowledge may affect how metacognition influences task performance. Metacognition does not become helpful for cognitive activities (i.e., listening comprehension) until domain-specific knowledge is acquired (Borkowski et al., 2000). For listeners with limited linguistic knowledge, metacognition would not help overcome comprehension problems because listeners are busy processing what they hear at early stages (i.e., perception and parsing). This leaves little cognitive space for metacognitive resources (Wallace, 2021).

Reading necessitates integrating comprehension with word recognition, including phonological decoding and orthographic knowledge (Konstam & Neuhaus, 2011; Soares et al, 2022). The quantity, diversity, and exposure to words can influence children's oral language skills, including vocabulary and listening comprehension, which affect their reading abilities when comprehension becomes challenging. Language minority children may encounter linguistic inputs solely within school settings. This disparity impacts their second language acquisition and reading comprehension (Aukrust, 2008), which can

**Table 12**

*Descriptives and ANOVA results for TLRA by grade level and the native language alphabet*

Variable		N	$\bar{X}$	Sd		Sum of Squares	df	Mean Square	F	p
Grade	2 <sup>nd</sup> grade	40	11.27	3.41	Between Groups	43.06	2	21.53	1.91	.150
	3 <sup>rd</sup> grade	80	12.25	3.19	Within Groups	2433.60	216	11.26		
	4 <sup>th</sup> grade	99	11.35	3.46	Total	2476.66	218			
Alphabet	Latin	30	12.23	3.81	Between Groups	18.030	2	9.015	0.792	.454
	Cyrillic	141	11.68	3.27	Within Groups	2458.63	216	11.383		
	Arabic	48	11.25	3.38	Total	2476.66	218			

**Table 13**

*Regression Analysis Results for the Predictive Effect of TLLA on TLRA*

Variables	B	SE	$\beta$	t	R	R <sup>2</sup>	F
(Constant)	6.570	.772		8.514*	.422	.178	47.011*
TLLA	.266	.039	.422	6.856*			

\*p<.001; R<sup>2</sup><sub>adjusted</sub> = .17

trigger reading anxiety (Ghonsooly & Elahi, 2010; Saito et al., 1999; Mardianti et al, 2021; Shi & Liu, 2006). Heightened reading anxiety may further contribute to diminished academic achievement (Marx & Stanat, 2011; Soares et al, 2022).

Furthermore, no statistically significant differences were observed in TLLA levels among participants when analysed by gender, grade level, or native language alphabet. Conversely, TLRA remained consistent across grade levels and native language alphabets but exhibited significant difference by gender. Specifically, female students exhibited significantly higher levels of reading anxiety compared to their male counterparts.

While no studies involving primary school students were found, research at other educational levels has shown varying results on gender's influence on TL/L2 listening and reading anxiety. Karataş and Kaya (2023) concluded that anxiety levels of bilingual secondary school students regarding Turkish listening did not differ by gender. Kimura (2008) found no gender difference in FLLAS among Japanese learners of English. Golchi (2012) found female Iranian IELTS learners had higher levels of listening anxiety than males. Liu and Thondhlanā (2015) showed that among Chinese university students, males felt more anxiety than females during listening activities. Zhao et al. (2013) and Zhou (2017) found that among English-speaking university students learning Chinese as a foreign language, reading anxiety was not associated with gender.

It was concluded that TLLA and TLRA of immigrant students showed no statistically significant difference by grade level. However, anxiety scores of third grade students are higher than 2nd and 4th grade students.

A possible reason may be that in third grade they first encounter a subject not seen in earlier grades. In the first two grades, students acquire basic knowledge in Life Science, but Science is first taught in third grade. Basic concepts about matter begin to be taught from third grade. During this period, the properties that characterise matter, states of matter, and measurable properties of matter are main subjects' students must learn. Immigrant students have difficulty understanding basic information about matter when they hear the word 'matter', most students think of solid and liquid substances they frequently see or use like curtains, chairs, petrol and substances they see with their eyes (Coşgun & Karamustafaoğlu, 2017).

Moreover, no statistical difference was found in native alphabets in both TLLA and TLRA of participants.

Research shows that target language (TL) text characteristics, including writing systems, unfamiliar orthography, syntactic and discourse features, along

with individuals' vocabulary knowledge, graphemic-phonemic decoding ability, cultural background, unfamiliar scenarios, and novel topics, contribute to difficulties TL learners face in reading, often causing reading anxiety (Cheng & Matthews, 2018; Du & Man, 2022; Saito et al., 1999; Shi & Liu, 2006; Zhao et al., 2013; Wallace, 2021).

Each language's alphabet contains unique symbols and phonemic characteristics. Even when languages use identical symbols, their pronunciation may differ (Tüm, 2014). Research shows that similarities between first language (L1) and second language (L2) phonological systems influence L2 sound perception and production. L1 plays a pivotal role in L2 acquisition (e.g., Davidson 2011; Furnes & Samuelsson 2011). In this study although no statistically significant difference was found in listening and reading anxiety according to the native language alphabet, participants whose native language employs the Latin alphabet — the target language also employs the Latin alphabet— exhibited higher mean scores in listening and reading anxiety compared to those who used Cyrillic and Arabic alphabets. Similarly, Saito et al. (1999) observed that English speakers experienced higher levels of L2 reading anxiety when learning French, which employs the same alphabetic writing system, compared to Russian, which utilizes a different writing system. The researchers attributed this phenomenon to the phonetic complexity and differences between French and English, suggesting that L2 reading anxiety levels are influenced by the specific writing systems of the target languages.

Writing systems of languages require different graphic, phonological, and semantic processing activities in word recognition (Feng et al., 2009; Perfetti & Liu, 2005; Smythe et al., 2008). Word decoding has been identified as a significant predictor of minority language children reading abilities (e.g. Lervåg & Aukrust, 2010).

Many studies conducted with adolescents or adults learning Turkish as a foreign/target language (e.g. Açık, 2008; Çiftçi & Demirci, 2019 a, b; Genç, 2017; Kulamshavaeva; 2018; Tüm, 2014; Yağcı, 2017) revealed that, the absence of Turkish-specific symbols and phonemes (ı,ğ,ç,ö,ü) in the learner's native language may cause struggles with unfamiliar sounds. When producing phonemes /ı-i/, /g-ğ/, /c-ç/, and/s-ş/, learners may perceive similar symbols as identical. These unfamiliar phonemes affect pronunciation, with /ı/ vocalised as /i, ü, a/; /ü/ as /ö, u/; /ö/ as /o, u, e/; /ğ/ as /ø, c, g, j/; /ç/ as /j, ç/. Phonemic differences between L1 and L2 cause pronunciation errors: /c/ as /k, s, ç /; /e/ as / y, i, ü, ø/; /y/ as / i, ü, ø/; /ş/ as /s/; /k/ as /g/; /g/ as /c/; /y/; /h/ as /ø, k, y/; /s/ as /ş/; /a/ as /ı/; /v/ as /vv/. For instance, the vowels "ç, ğ, h, y, p, ş" missing from the Arabic alphabet may cause difficulty

distinguishing these sounds and pronunciation mistakes. Letters “b, p, o, ö, u, ü, a, e, ğ, y, ç, f, ş” are confused in pronunciation. Additionally, Turkish vowels (a, e, ı, i, u, ü, o, ö) corresponding to multiple sounds in Arabic may cause vowel comparison issues. Turkish learners using the Cyrillic alphabet may face difficulty pronouncing consonants (b, p, c, ç, r, ğ, y, ş). Letters ‘c, ğ, ö, ü’ in Turkish lack equivalents in Cyrillic, and vowels “ı-i, o-ö, u-ü” having single signs cause pronunciation issues. Letters with same symbols but different sounds “b-v, p-r, c-s” in both alphabets create difficulties. Students using the Latin alphabet may struggle with vowels “e, ı, ö, ü” and consonants “c, ç, ğ, k, ş”. Letters present in Latin but not Turkish (q, w, x) and letters absent in some western languages “g, ç, ş” cause pronunciation challenges. All can lead to incomplete word pronunciation (i.e. Hüseyin (male name) instead of Üseyin (first letter ø), or lead to different meanings from incorrect pronunciation, such as “kötü (bad)” instead of “kutu (box)” and “soğuk (cold)” instead of “sucuk (sausage), “eçe (queen)” instead of “ege (Aegean region)”; ‘bas (to step on something) instead of “head (head)”; “iş (job)” instead of “eş (mate)”, thereby affecting word decoding and comprehension. wrong pronunciation may lead to misunderstanding of sentences and difficulties in understanding. For example, “Eşini kaybeder (He loses his mate)” instead of “İşini kaybeder (He loses his job)”. Consequently, word decoding challenges may affect learners’ construction of effective meanings from L2 words. Since word recognition is crucial for L2 reading (Bernhardt, 1990), difficulty adapting to word decoding can create problems for learners reading in the target language (TL), potentially increasing anxiety as a key psychological factor (Zhao et al., 2013). The results of this study regarding the listening and reading anxiety of the elementary school students may be due to these reasons.

Moreover, L1 prosodic systems such as length, stress and accent, tone, intonation (Fox, 2000) influences the perception of suprasegmental contrasts of non-native languages (e.g. Hirata, 2004) and drives their perception of non-native tones (Wayland & Guion, 2004 as cited in: So & Best, 2010). Hence, L2 learners often struggle with pronunciation and intonation patterns (Brown, 2000), which may cause L2 reading anxiety. Proficiency in receptive vocabulary and orthographic word recognition facilitates form-meaning associations crucial for comprehending written language, or insufficient phonological knowledge can impede listening ability, even when words are familiar in written form (Cheng & Matthews, 2018). In this study, participants’ listening and reading anxieties may have been influenced by Turkish stress and intonation patterns. For example, as shown in studies (e.g., Tüm, 2014), while reading “bir” (one) may be pronounced as “biir” (with a long ‘i’ when it should be short), and “acil” (urgent) with a short ‘a’ when it should be long.

Additionally, among the participants of this study there are sharing cognates with Turkish although they use the Cyrillic alphabet (i.e. Kazakhstan, Uzbekistan). Long-term lexical knowledge in L1 may play a crucial role in acquiring a familiar L2 (Engel de Abreu & Gathercole, 2012). For languages sharing cognates, similarities offer an opportunity to transfer L1 vocabulary to the target language lexicon (e.g. August, et al., 2005), or students’ morpho-syntactic knowledge can impair reading acquisition in L2 (Marx & Stanat, 2011). For instance, many words in Turkish and Arabic share equivalent pronunciation and meaning. However, over time, certain words have undergone semantic shifts, resulting in false equivalences between languages. Consequently, Arabic-speaking students may encounter difficulties with such words due to their meanings in Arabic. While common words facilitate Turkish learning for native Arabic speakers, this can also present challenges (Lababidi & Ökten, 2021). Furthermore, as indicated in studies (e.g. Çiftçi & Demirci, 2019a), difference in L1 writing direction from Turkish (right to left / left to right) can make reading difficult. Arabic writing is right to left while Turkish is left to right. Language structure differences between L1 and Turkish (tenses, sentence structure, verb conjugation, affixes - prefixes or suffixes) can make comprehension difficult. In Turkish, the verb occurs at sentence end. For instance, “Bunu biliyorum (verb) - I know that”), or in “take this” Turkish uses an affix (bunu; ‘nu’ suffix) while English does not (thisø) (Abdulqader, 2024; Tüm, 2014).

Moreover, Target Language Listening Anxiety (TLA) was found to be a significant predictor of Target Language Reading Anxiety (TLRA).

This result aligns with studies showing a significant relationship between L2 listening anxiety and reading anxiety (e.g. Chow et al., 2018; Öztürk, 2023). This result may reflect the relationship between listening and reading comprehension. Second language (L2) listening comprehension correlates with L2 reading comprehension as both predictor and companion variable, sharing subcomponents that influence reading comprehension. For instance, Proctor et al. (2005) found listening comprehension was the strongest proximal cause of L2 reading comprehension in L1 Spanish–L2 English bilingual students. The oral skills are crucial for students’ reading outcomes, aligning with the simple view of reading model (e.g. Gough et al., 1996), where reading comprehension is determined by decoding and linguistic comprehension. Decoding and listening comprehension predict poor reading comprehension if either skill is insufficient. Research with elementary students (e.g. Droop & Verhoeven, 2003; Limbird, 2007) showed reading comprehension was more affected by listening skills in L2 than L1 students and listening comprehension predicted reading comprehension in bilingual primary students (Marx & Stanat, 2011).

### Limitations and Recommendations

This study's findings may provide valuable insights for researchers, administrators, and educators into the listening and reading anxiety faced by immigrant primary school students, a topic not previously explored. This research can pave the way for new research opportunities by offering appropriate measurement tools for this specific target group. For instance, TL/ L2 anxiety in classrooms, and relevant to investigate in primary school, as it may have negative long-term effects. These aspects interact with contextual factors like classroom atmosphere, teaching approach and assessment practices (Gkonou, 2017; Gregersen & MacIntyre, 2014; Horwitz et al., 2010; Mihaljević Djigunović, 2009; Rubio-Alcalá, 2017). In this context, future research may explore methods and techniques aimed at alleviating anxiety among immigrant primary school students, particularly in relation to their receptive language skills, to provide guidance for primary school educators. However, this study is subject to several limitations, as follows.

Research indicates that competence in a second/ target language is largely contingent upon comprehension, and inadequate comprehension often causes listening and reading anxiety in TL/L2 learners (Chow et al, 2018; Mardianti et al, 2021). This study did not investigate the correlation between listening and reading comprehension among immigrant primary school students and their anxiety related to listening and reading in the target language. Future research could explore the relationship between these variables.

Additionally, in the discussion section, the research findings concerning the alphabet of the native languages have been interpreted in a hypothetical manner. However, subsequent studies may yield a comprehensive understanding of the characteristics and potential effects of the native languages of immigrant students enrolled in primary school.

Research also indicates that comprehension difficulties heighten reading anxiety and may contribute to diminished academic achievement (Marx & Stanat, 2011; Soares et al, 2022). Several factors explain immigrant students' L2 reading comprehension and academic challenges, including family social background, home language, and limited vocabulary and morpho-syntactic knowledge (Marx & Stanat, 2011). Immigrants' backgrounds may increase L2 difficulty (Sellers, 2000), and may affect their children's educational outcomes, though research findings remain mixed (Dixon & Wu, 2014). Some studies argue that home literacy environment links to language development, reading ability, vocabulary skills and ultimately children's school success (Gonzalez & Uhing, 2008; Maier et al., 2016; Xu et al, 2017). Some posit that immigrant children are academically

at-risk due to limited parental education and target language proficiency (Crosby & Dunbar, 2012). They may suffer acquiring host country language when growing up in regions with low-educated immigrants of their ethnicity (Danzer et al., 2022). Some studies, on the contrary, suggest that Immigrant family's home language determines young children's development in both languages, but after schooling begins, instruction language may dominate, and home language may not affect societal language development (Duursma et al. 2007; Hammer et al. 2009). This study could not examine the listening and reading anxiety of immigrant primary school students in terms of the variables listed above. Future studies can evaluate listening and reading anxiety in terms of these variables and discuss their results in terms of academic success.

Moreover, studies suggest that proficient language competence in TL is essential for cultural and social adaptation following migration immigrants' language competence as it is also a predictor of social competence and schooling success, conversely low language competence as a determinant of acculturative stress and poor social and educational outcomes (Bredtmann, et al, 2021; Chiswick & Miller 2015; Dustmann & Glitz 2011; Isphording et al., 2014; Toppelberg & Collins, 2010). Anxiety about listening and reading in TL can pose a significant challenge to integration, one of the crucial acculturation paths, defined as high self-identification with the core group and strong primary relations in the host society (Wu et al, 2012), hindering social and civic participation and increasing perceived social distance between immigrants and the host community. Studies also indicated that lack of vocabulary and poor comprehension in listening or reading significantly hinders L2 speakers' intention to communicate in the target language (e.g. Peng, 2012). Further research on immigrant primary school students' listening and reading anxiety in the target language could include children's cultural background, vocabulary and effects on adaptation processes.

### Ethics approval statement

The author confirm that this research was conducted according to the Declaration of Helsinki and the legal requirements of the study country. APA ethical standards were also followed in the conduct of the study, and the authors received approval from the Akdeniz University Rectorate Social and Human Sciences Scientific Research and Publication Ethics Committee, under approval number 09.09.2022-448147.

### ORCID Author Statement

The research and investigation process, specifically the execution of experiments and data/evidence

collection, was conducted by Gizem ÖZEL as part of a master's thesis. Ayşe Nur KUTLUCA CANBULAT, the corresponding author, served as the thesis advisor responsible for the management and coordination of the planning and execution of the research activity. Furthermore, the presentation of the published work, specifically the composition of the initial draft (including substantive translation), as well as the revision and editing of the text, was undertaken by Ayşe Nur KUTLUCA CANBULAT.

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